

### ARCHAEOLOGICAL INSTITUTE of AMERICA

THE AIA ANNUAL MEETING BRINGS TOGETHER PROFESSIONAL AND AVOCATIONAL ARCHAEOLOGISTS FROM AROUND HE WORLD TO LEARN MORE ABOUT THE LATEST DEVELOPMENTS FROM THE FIELD

# 113<sup>TH</sup> ANNUAL MEETING ABSTRACTS



JANUARY 5-8 2012 PHILADELPHIA | PENNSYLVANIA

### Archaeological Institute of America

# 113<sup>th</sup> annual meeting ABSTRACTS

VOLUME 35

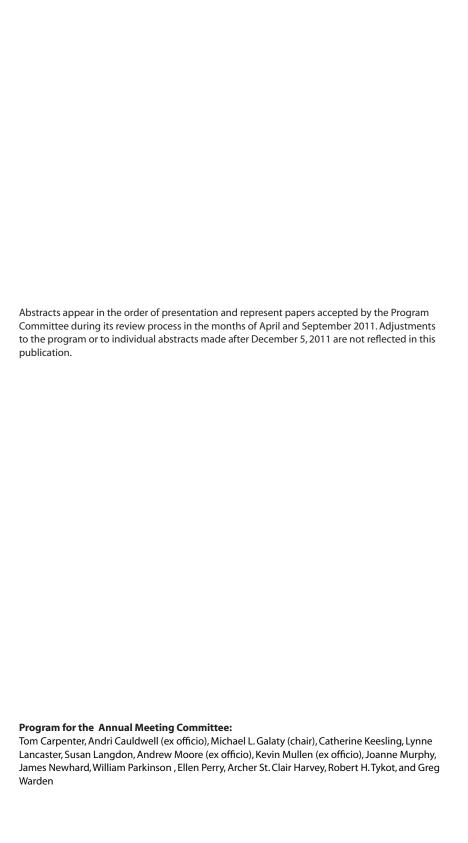


Published by the Archaeological Institute of America Located at Boston University 656 Beacon Street Boston, Massachusetts 02215-2006 www.archaeological.org

Copyright © 2012 by the Archaeological Institute of America All rights reserved

Cover Illustration: View of the Philadelphia skyline in the evening. Courtesy of the Philadelphia Convention & Visitors Bureau

Printed in The United States of America ISBN-10: 1931909245 ISBN-13: 978-1931909242



### **CONTENTS**

-				٠			-
5	е	S	S	ı	O	n	1

1A	Recent Research in the Balkans	1
1B	Recent Research in the Elmalı Basin: A Memorial Colloquium for	
	Machteld J. Mellink (Colloquium)	5
1C	Recent Field Research in the Near East	11
1D	Greek Architecture	
1E	Religion in Late Antiquity	22
1F	Gold Medal Session: Monuments and Topography:	
	Pompeii and Rome (Colloquium)	26
1G	Recent Fieldwork in Aegean Prehistory	
1H	Cultural Heritage Preservation in a Dangerous World:	
	Humanitarian Crises and Revolutions (Workshop)	39
1I	Presenting the Past in the 21st Century (Workshop)	40
Ses	sion 2	
2A	Roman Sculpture	41
2B	Greek Arts	
2C	Cyprus Capta: New Approaches to the Archaeology of Empire in	
	Hellenistic and Roman Cyprus (Colloquium)	47
2D	Prehistoric Messenia	
2E	Greek and Etruscan Religious Contexts	
2F	Roman Britain	
2G	Comparative Urbanism in the Ancient Mediterranean	
	World (Colloquium)	59
2H	Beyond Iconography: Materials, Methods, and Meaning in	
	Ancient Painting Studies (Workshop)	64
2I	Site Preservation: The Future of Saving the Past (Workshop)	65
2J	Poster Session	66
Ses	sion 3	
3A	Minoan Studies	87
3B	Sicily	89
3C	Architecture and Topography of Rome	93
3D	Pomerance Award Session: D.P.S. Peacock's Model for the	
	Organization of Roman Pottery Production: Impact and	
	Responses over Three Decades (Colloquium)	98
3E	Sailing Away from Byzantium: People, Goods, and Ideas at the	
	Edges of Empire (Colloquium)	104
3F	Silent Participants: Terracottas as Ritual Objects (Colloquium)	108
3G	Placing Jordan in the Mediterranean: A DAI and AIA	
	Collaboration (Colloquium)	112
3Н	Discussions and Strategies Regarding Applying for Grants.	
	Fellowships, and Post-Docs (Workshop)	115
3I	The Protection of Cultural Heritage in War-zones and the Role of	
	the Media (Workshop)	116

### Session 4

4A	The Economic Role of Greek Fineware Pottery in the Ancient	
	Mediterranean Sixth–Fourth Centuries B.C.E. (Colloquium)	117
4B	Recent Work in the Near East	
4C	Roman Dacia and Moesia: Developments in Archaeology and	
	Heritage Preservation in Romania (Colloquium)	125
4D	Contacts and Exchange in the Eastern Mediterranean	
4E	Staging Death: Funerary Performance, Architecture, and	
	Landscape in the Aegean (Colloquium)	134
4F	Pre-Roman Italy	
4G	Epigraphy	144
4H	Current Research at Nemea: New Finds and	
	New Insights (Colloquium)	150
4I	Aphrodisias	154
4J	Creating Collective Memory in the Greek City	
	(Joint AIA/APA Colloquium)	160
Sess	sion 5	
5A	Pompeii and Ostia	166
5B	Roman Trade in the Mediterranean	
5C	Central Greece from the Bronze Age to the Iron Age	
5D	Greek Sculpture	
5E	New Digital and Visual Approaches to Archaeology	
5F	The History of Archaeology	
5G	Western Provinces	
5H	Crafts, Specialists, and Markets in Mycenaean Greece (Colloquium)	
5I	Greek Iron Age	
5J	Finding Peasants in Mediterranean Landscapes: New Work in	
-,	Archaeology and History (Joint AIA/APA Colloquium)	196
C	sion 6	
		201
6A	Cycladic Interactions	
6B	Roman Iconography	205
6C	Bronze Age Helladic Mainland Greece	
6D	Landscape and Settlements	
6E	Roman Italy	
6F	Fraught Antiquities: Fakes and Forgeries (Colloquium)	221
6G	Performing Politics: Ritual, Space, and Performance in the	225
<b>(TT</b>	Bronze Age Aegean and Near East (Colloquium)	
6H	The Politics of Archaeology	
6I	Beyond Thrace: Recent Fieldwork in Bulgaria (Colloquium)	232

### Session 7

7A	The Archaeological Significance of Herod the Great (Colloquium)	237
	Roman Funerary Images and Ritual	
7C	Post-Pharonic Egypt	.247
7D	Recent Research in Central and East Asia	.251
7E	New Models of Trade and Supply in the Roman Empire (Colloquium)	255
	Athens	.259
7G	Gender Identities in Pre-Roman Italy (Colloquium)	.263
7H	Reading between the Lines: Word, Image, and	
	Architecture (Colloquium)	.268
7I	Hittite Anatolia: Beyond the Bridge (Colloquium)	.272
Auth	nor Index	.277

### SESSION 1A Recent Research in the Balkans

CHAIR: Andrew Moore, Rochester Institute of Technology

## Wetlands and the Transition to Agriculture in Europe: The 2010 and 2011 Excavation Seasons of the Southern Albania Neolithic Archaeological Project at Vashtëmi, Albania

Susan E. Allen, University of Cincinnati, and Ilirian Gjipali, Institute of Archaeology, Centre for Albanalological Studies, Albania

With funding from the National Science Foundation (BCS#091760) and permission from the National Board of Archaeology within the Ministry of Tourism, Culture, Youth, and Sports of the Republic of Albania, the University of Cincinnati and the Institute of Archaeology of Tiranë conducted joint excavations in 2010 and 2011 at the Early Neolithic site of Vashtëmi, Albania for the Southern Albania Neolithic Archaeological Project (SANAP). The SANAP excavations at Vashtëmi have shed new light on the transition to agriculture in southern Europe. In particular, the first systematically recovered assemblages of plant and animal remains from the open-air site are informative about the environmental conditions that early farmers had to negotiate in this former wetland setting, as well as the choices they made in exploiting and managing the landscape. Geoarchaeological, micromorphological, zooarchaeological, and archcaeobotanical data are of particular importance in this regard. Radiocarbon dates from the site place its earliest occupation in the mid seventh millennium B.C.E., contemporary with Early Neolithic sites in northern Greece. Data recovered from the site support a two-wave model of the colonization of the Balkans by early farmers, with an initial focus on well-watered wetland edges.

### Pottery and Early Farming in Coastal Croatia: Impresso and Danilo Wares from Central Dalmatia

Sarah B. McClure, The Pennsylvania State University, and Emil Podrug, Sibenik City Museum, Croatia

Recent research on the transition to agriculture in central Dalmatia at the sites of Pokrovnik and Danilo Bitinj revealed large assemblages of pottery dating to the Early and Middle Neolithic. Typical for the Early Neolithic, or Impresso, phase (ca. 6000–5500 B.C.E.), is an assemblage consisting of pots and bowls decorated with impressed motifs using various tools such as shell edges (e.g., Cardial), teeth, fingernails, bone tools, flint tools, roulettes, and combs. This pottery fits into a broader Mediterranean impresso-decorated phenomenon that spans the Adriatic to the western Mediterranean, although it also shows some local characteristics.

The Middle Neolithic, or Danilo, phase (ca. 5500–4500 B.C.E.), is dramatically different. Pottery shifts stylistically in form, with the introduction of new shapes such as cups and plates in addition to bowls and pots, and in decoration. Fine wares consist of smudged burnished wares with incised geometric designs. Spi-

rals, usually encircling the entire vessel, are a typical motif. Other motifs include meanders, triangles, and nets, and often these incisions are filled with red or white incrustations. Danilo is also known for its peculiar wares known as Ripoli, or Figulina, Ware. This type of pottery is very different from the typical Danilo Wares as it is a pink or light orange buff ware made from fine, inclusion-free clays and painted before firing. Finally, unusual shapes such as rhytons and "altars" round out the Danilo assemblages.

Excavations at Pokrovnik and Danilo Bitinj resulted in stratified assemblages from a variety of locations within the sites. More than 900 kg of potsherds were uncovered from Pokrovnik that span the Early and Middle Neolithic phases. Danilo Bitinj revealed 600 kg of pottery from the Middle Neolithic. The size and quality of the assemblages provide a unique opportunity to study stylistic and technological change in pottery production. They allow us to address questions of the timing and nature of stylistic change, characterize technological shifts, and investigate the relationships of pottery types throughout the region.

In this paper, we present the results of stylistic analyses of these wares and discuss the timing of identified shifts. The goal of this study is to identify the relationship between Impresso and Danilo ceramic technologies, and their roles within farming communities in Dalmatia. Finally, we highlight future directions of analyses and how these will contribute to our knowledge on early farming societies in Dalmatia.

### Rock-Cut Sanctuaries in the Eastern Rhodope Mountains: The Gloukhite Kamani Cult Complex

Lynn Roller, University of California, Davis, Maya Vassileva, New Bulgarian University, and Georgi Nehrizov, National Archaeological Institute and Museum, Bulgarian Academy of Sciences

Investigations at the site of Gloukhite Kamani ("Deaf Stones") are conducted under the auspices of the Bulgarian Ministry of Culture by a joint team of Bulgarian and American scholars, with financial support from the America for Bulgaria Foundation. The site is located on a mountainous ridge above the village of Malko Gradishte, near the town of Lyubimets in the Rhodope Mountains in southeastern Bulgaria. This area is rich in archaeological sites, where the natural rock of the terrain has been shaped by human activity into distinctive formations for purposes of religious cult. The current project is investigating one such complex with a variety of rock carvings, including niches carved into a cliff face, a large cistern on a mountain peak with a series of steps leading up to it, and an artificially enlarged cave with a domed ceiling. Preliminary investigations at Gloukhite Kamani conducted by Nekhrizov revealed evidence for Thracian occupation at the site from the late second millennium through the first millennium B.C.E., with secondary occupation during the early Byzantine era. Parallels between the Gloukhite Kamani rock carvings and other sites with comparable features indicate that this was a substantial Thracian cult sanctuary, but the site has never been accurately mapped, and the function and symbolism of the rock cuttings are poorly understood. The relationship of the cult installations to local and regional settlements is also unknown. Survey at the site during August and September 2011 aimed to locate and

record the rocks and natural caves with niches, other cult features, and evidence for settlement in the immediate vicinity of Gloukhite Kamani. The survey team walked the ground, fanning out from the central cult complex, using GPS to plot the location of the cult features on topographical maps, and coordinated the data with information on habitation sites. This was the first of a projected three seasons of comprehensive survey. The long-term goal is to gain a clearer understanding of the function of cult sites and their relationship to settlement patterns and to use this information to examine Thracian cult activities, an important feature of Thracian society. The Thracians, on the northern edge of the Greek world, exerted substantial influence on Greek civilization, including Greek cult practices, and so the project will contribute to a broader understanding of cultures on the periphery of the Greek world and their interactions with Greek society.

### Discovery of a Late Bronze Age Fortified Site and a Hellenistic Farmstead near Butrint: Recent Excavations at Mursi (Albania)

David Hernandez, University of Notre Dame

Recent excavations on a hilltop site at Mursi, near the ancient city of Butrint in southern Albania, discovered a Late Bronze Age (LBA) fortified site and part of an early Hellenistic farmstead. The Mursi Archaeological Research Project, directed by the author and Dhimitër Çondi (Institute of Archaeology, Tiranë), was funded by the University of Notre Dame, in partnership with the Butrint Foundation and the Albanian Institute of Archaeology.

The excavations yielded the first absolute dates for prehistoric and ancient deposits in southwestern Albania. Charcoal recovered from four separate deposits was subjected to Accelerator Mass Spectrometry (AMS) radiocarbon dating. Two excavated LBA deposits date to 1260 + /-120 cal. B.C.E. and 1130 + /-120 cal. B.C.E. A complete handmade cooking pot was found in situ in the later deposit. The assemblages recovered from the LBA layers contained pottery and a number of stone tools, including scrapers and blades. These deposits represent the only known stratified LBA contexts in the environs of Butrint.

A large wall of monolithic limestone blocks appears to have served as the fortification wall of the LBA site. The stones and construction technique of the enceinte are unparalleled in the Butrint region. Later, the wall was dismantled and its stones reused for the construction of a building complex. This event is dated to either 375 +/-25 cal. B.C.E. or 255 +/-45 cal. B.C.E. by AMS radiocarbon dating of charcoal from the fill of the robbing trench, which was dug during the removal of the fortification wall. A date in the fourth or third century B.C.E. is also supported by ceramic and numismatic evidence. Black-slipped kantharoi were found in deposits associated with the earliest phase of the Hellenistic complex, dated also by AMS radiocarbon dating to the same time. The established absolute chronology thus supports the traditional view that urban settlement in ancient Epirus arose around the fourth century B.C.E.

The early Hellenistic complex functioned as a productive and opulent farmstead, controlling a lowland fertile alluvial plain and upland pasture. As the largest Hellenistic farmstead identified in the region, the site should be considered a good candidate for the latifundia established by T. Pomponius Atticus at Butrint in the first century B.C.E. Land redistribution of the alluvial plain after the Roman colonization of Butrint in 44 B.C.E. might be linked to the abandonment of the site and to the rise of the villa rustica at Diaporit.

### Developing an Open and Accessible Geospatial Dataset for Roman Ilidža (Bosnia and Herzegovina)

*Christopher Sevara*, University of Vienna, *Christine Atiyeh*, Kutztown University of Pennsylvania, and *Mark Alonge*, Boston University

In this paper, we discuss the development of a geospatially oriented, multilingual online data archive for the first through fifth century C.E. Roman site at Ilidža, located near Sarajevo, Bosnia, and Herzegovina. Founded in the first century, the settlement at Ilidža seems to have been associated with the nearby sulfur springs at the mouth of the Bosna River. Excavations at Ilidža in the early and mid-20th century revealed the remains of a large bath complex of the third century C.E. and several adjacent third- and fourth-century houses. Unpublished excavations and surveys were carried out at the site in the early 1990s; however, these works were interrupted by the Balkan conflict. In an effort to renew scholarly interest in the site's archaeological history and future preservation, geophysical surveys, extensive mapping, and limited testing at the site were carried out in 2008 and 2009, under the auspices of a partnership between Kutztown University of Pennsylvania and various local, regional, and national Bosnian academic and governmental agencies.

Through the use of numerous freely available opensource technologies and applications, results of the 2008–2009 investigations have been combined with digitized archival materials to produce a georeferenced, interactive site dataset that can be viewed, queried, printed, and easily incorporated into other spatial datasets for research and visualization purposes. The principle aim of this application is to create a centralized, web-accessible archive of both current and past data relating to Ilidža, much of which has previously been difficult to access. This database application is intended to replace a more traditional report, as the authors believe that the interactive, scalable nature of a GIS-based web application is better suited to the dissemination of data from Ilidža than a conventional print report. Though the data currently available in the application are by no means entire, the online application is intended to serve as a central point where researchers can upload more information about Ilidža as it becomes available.

### Excavation in the Late Antique City at Golemo Gradište, Konjuh, 2010–2011

Carolyn S. Snively, Gettysburg College, and Goran Sanev, Museum of Macedonia

The anonymous Late Antique city at the site of Golemo Gradište near the village of Konjuh, Republic of Macedonia, has been under investigation by an international project sponsored by Gettysburg College and the Museum of Macedonia in Skopje since 1998. Excavation during the 2010 and 2011 seasons took place on the northern terrace, where the lower town was located between the foot of the

acropolis and the Kriva River. On the central area of the terrace, a large residence and a Christian basilica have been under investigation for several seasons.

The residence shows two phases of construction; in the deposits above its buried remains a child's burial, a terrace wall, and several small structures were found. At the north side of the residence the south and east sides of a courtyard have been uncovered. A colonnade along the east side of the courtyard separated it from a covered portico and, apparently, from a row of rooms along the east edge of the building. From an open passage along the south side of the courtyard, doorways provided entrance to a large room in the southeast corner of the building and to a broad, stone-paved hallway running along the west side of the large room. On the floor of the room numerous smashed vessels were found, from small cooking pots to a sizeable pithos, as well as 10 coins, several metal objects, and a carved bone object of unknown purpose. The residence dates from the second half of the fifth and the first half of the sixth century.

The three-aisle basilica measures 33 m in length from apse through narthex, but the north and west boundaries of the ecclesiastical complex, whose south side is marked by a massive terrace wall, remain undefined. Unusual features of the church include two ambos: a small one in the presbyterium and a second, larger one at the south side of the nave. West of the large ambo stands a low, semicircular wall, around which are cuttings for the insertion of a wooden or metal screen. Between columns of the stylobates, screen slabs decorated with crosses rested on a low wall. Annex rooms have been partly investigated on both the north and south sides of the basilica, which was almost certainly the seat of a bishop in the sixth century.

# SESSION 1B: Colloquium Recent Research in the Elmalı Basin: A Memorial Colloquium for Machteld J. Mellink

ORGANIZERS: *Elizabeth P. Baughan*, University of Richmond, and *İlknur Özgen*, Bilkent University

#### **Colloquium Overview Statement**

Machteld Mellink's work in the Elmalı Plain continues to propel and inspire research in this fascinating region of northern Lycia. The Elmalı Basin lies amid the Taurus Mountains and remained culturally distinct throughout antiquity while also serving as a crossroads for travel and exchange among diverse cultures of southwestern Anatolia. In this memorial colloquium, scholars who are currently working to publish results of Mellink's studies come together with those engaged in new research in the region to present an overview of current work and to consider questions relevant to all periods of settlement in the area: To what extent were the inhabitants of the Elmalı Basin culturally connected with neighboring peoples of western Anatolia? Were they ever "Lycians"? And what was the significance of the region's largest settlement, Hacımusalar Höyük (ancient Choma), in its long history of occupation (Early Bronze Age through Byzantine)? One paper focuses on the seals and sealings from Mellink's excavations at the Early Bronze

Age settlement of Karataş, and another presents recent discoveries of similar levels at Hacımusalar Höyük. This juxtaposition invites comparison of the two sites and facilitates consideration of their different occupation histories. Another paper discusses how the Iron Age levels at Hacımusalar relate to other sites in the region, especially the well-known Bayındır tumuli, and assesses what these finds can tell us about the cultural affinities of the region's inhabitants in this period. Two papers focus on tombs of the Archaic and Classical eras: an update on the well-known painted tomb at Karaburun that has recently suffered from looting and vandalism and a study of the distribution and significance of Lycian-style rock-cut tombs in the Elmalı Basin. The last two papers return to Hacımusalar/Choma for presentation and discussion of recently discovered inscriptions and their significance for understanding the role of this city in Roman province of Lycia.

DISCUSSANT: Ann C. Gunter, Northwestern University

### Seals and Sealing Practices at Early Bronze Karataş-Semayük

Marie-Henriette Gates, Bilkent University

The Early Bronze Age site at Karataş-Semayük, excavated by Mellink from 1963–1974, records a representative evolution of village structure in western Anatolia during the third millennium B.C.E. The settlement began life in EB I as an agricultural estate, attested by a single building with storage facilities and protected access (the Central Mound Complex). The first two versions of this building (Periods I–II) preserved its layout and furnishings, while the third version (Period III) is known from finds recovered in the thick ash layers of its destruction, the building itself long lost to erosion. The central complex made its final appearance at the onset of EB II (Period IV), becoming the nucleus of a true village when houses were founded around it. The village's marked expansion (Period V), contraction (Period VI), and abandonment during EB III occurred under a different social system, after the demise of the centralized estate and its replacement by a farming community.

Evidence for the social organization at Karataş, and its transformation from centralized estate to residential village, comes most visibly from architectural remains and extensive cemeteries on its periphery. This evolutionary pattern is matched elsewhere in Early Bronze Age central and western Anatolia, and the site's material culture conforms closely with those regions. Karataş is exceptional, however, in the precisions it can offer on the management of this community and its resources, thanks to a remarkable quantity of terracotta stamp seals recovered from informative contexts. As types, the seals fit comfortably in the Anatolian repertoire. However, their numbers (96, plus two impressions) and distribution are unequaled by any other Early Bronze Age Anatolian site, regardless of size or status. This paper discusses the functions that these seals may have fulfilled on the basis of their findspots at Karataş and the administrative procedures that lay behind these sealing practices. The conclusions drawn from the Karataş sample suggest a systematic level of economic management that was known and applied throughout third-millennium Anatolia.

#### Preliminary Report on Hacımusalar Höyük in the Early Bronze Age

Elizabeth P. Baughan, University of Richmond

Excavations on the northern rim of Hacımusalar Höyük in recent years have shed important new light on the occupation of the site in the Early Bronze Age (EBA). It is the largest of eight prehistoric mounds in the Elmalı Plain, and it appears that much of its elevation above the surrounding plain accumulated during this period. At least seven EBA architectural levels have been identified through limited excavation in a deep stratigraphic sounding and in a roughly 10 x 20 m area along the slope of the mound. The successive occupation phases chart a development of building style from mud walling with reed infrastructure and timber supports to stone foundations supporting mudbrick. The earliest of the EBA levels so far documented appears to be contemporary with the EB II-III levels at nearby Karataş, but occupation at Hacımusalar evidently persisted through more subphases of the late Early Bronze Age than attested at Karataş and included a greater range of architectural styles. One of these later phases includes a "megaron" with a buttressed wall composed of regular, mold-made mudbricks founded on stone. The pottery styles are similar to those found at Karataş, but there are fewer close parallels than expected. This paper presents a preliminary analysis of the Early Bronze Age levels of Hacimusalar and begins to explore some of the questions they raise: for example, what factors may explain the continuation of settlement here in the latest EB phases when other sites in the region were abandoned? How closely connected were the Early Bronze Age inhabitants of Hacımusalar Höyük to residents of nearby villages like Karataş and to other Anatolian Bronze Age cultures? And what preliminary conclusions can be made about social organization at this largest Bronze Age site in the Elmalı basin and about its role in the region?

### The Iron Age in the Elmalı Plain: A View from Hacımusalar Höyük İlknur Özgen, Bilkent University

The Elmalı Plain in north central Lycia is of major importance to the development of Anatolian cultural sequences. Hacımusalar Höyük is the largest mound on the plain and was identified on epigraphic evidence in 1963 as ancient Roman Choma, a city first mentioned by Pliny and later by Ptolemy, Hierocles, and the bishop lists. This site was chosen as a focus of research in this region, a welldefined topographic unit where little is known archaeologically. After 17 seasons of research, it is appropriate to set out the aims and the results of the Hacimusalar project for the Elmalı Plain and to assess the goals that have been achieved so far. The multicultural aspects of this region have already been illustrated by the Phrygian and Lydian finds from the nearby Bayındır tumuli, by the Persian style of the Karaburun tomb, and by the "East Greek," or Lycian, style of the Kızılbel tomb. These remarkable tombs and their contents clarify some persistent iconographical problems and present new stylistic formulas, they thus refine and amplify the typology of Anatolian art, particularly in the Iron Age and Archaic period, and shed light on the cultural affiliations of the tomb owners. Hacımusalar Höyük seems to be a logical candidate for the home of one or more of the local elites who built

these tombs. Finds from the Hacimusalar excavations and surrounding investigations prove to be of major importance in providing evidence about the enigmatic people (Milyans?) who occupied this region in the Iron Age.

#### A Persian-Period Painted Tomb at Karaburun in the Elmalı Plain

Stella G. Miller-Collett, Bryn Mawr College

A painted chamber tomb at Karaburun, dating to ca. 475 B.C.E., is furnished with a painted kline, a table, and grave goods of which only bits of alabaster, ivory, and metal survive from an originally rich assemblage. Fragmentary skeletal remains identify the deceased as a man in his 40s or 50s. Investigation of the tomb began in 1970 as a joint project of Bryn Mawr College and the Antalya Museum. I am currently undertaking its publication as part of a targeted international venture.

The wall paintings have suffered from environmental factors as well as human destruction. Yet, despite gaps, they are quite intelligible, thanks to the clarity of the composition that stands as a uniquely vivid document of its time and place. Three major episodes seemingly eulogize the dead. The focal point is a banqueting scene roughly two-thirds life-sized, that is flanked on the side walls by scenes in smaller scale of military conquest and what may well be funerary rites.

The bearded dignitary, shown semi-reclining at banquet and dressed in purely Achaemenid Persian fashion, is accompanied by four male servants also in Eastern garb and who bear Persian-type implements. In stark contrast, the lone female, possibly another servant or perhaps the dignitary's wife, wears typically East Greek garments. Furnishings combine Greek and Persian designs.

One side wall features the mounted dignitary in battle leading his Eastern troops to victory over Greeks unmistakably identified by their costume. On the opposite wall, is a convoy, perhaps to be interpreted as an ekphora, that consists of horses and horse-drawn chariots with assorted attendants. In the center of the convoy is a bearded figure in Eastern dress enthroned in the first chariot. One interpretation recognizes him once again as the deceased dignitary in a kind of epiphany at his own funeral. Suggested alternatives, however, see him as a successor, a relative of the deceased, or even a priest charged with conducting funeral rites. A second chariot bears a large domed object that is variously interpreted as a coffin or possibly a chest containing worldly goods or even religious paraphernalia.

Stylistically, the Karaburun cycle is a striking Anatolian hybrid that combines features from Eastern and Western sources. The question remains open whether the deceased was a Persian or, perhaps more likely, a Persizing Lycian emulating the customs of the Persian overlords.

### Lycian Tombs and Political Change in the Elmalı Basin in the Fourth Century B.C.E. Sean Lockwood, Trent University

Archaeological research shows that the fourth century B.C.E. witnessed a watershed change in the mode of aristocratic burial in the Elmalı Basin. From the eighth to fifth centuries B.C.E., the aristocratic residents of the basin conformed to a tradition of constructing tumuli to house their dead. These tumuli have been

recorded primarily in the northern part of the basin, and their forms, decoration, and the archaeological finds excavated in them suggest that the most important cultural connections of the tomb owners were with Anatolian groups such as the Phrygians and Lydians. In the fourth century, however, rock-carved house tombs and sarcophagi of the types found in Lycia appear in the basin. These new tombs represent a significant change in the local conception of aristocratic burial, from underground chambers covered by mounds resembling natural topographic features to monumental carved facades clearly visible within the landscape and unmistakably man-made. The new tombs are also more widely distributed throughout the basin. This transformation of funerary culture signals more than a preference for new tomb types among an existing aristocracy. It suggests a shift in the importance of cultural connections with Lycia and may be evidence of significant changes to the population and the political situation of the basin, including an immigration to and control of the region by Lycian aristocrats. A shift to a Lycian control of the region is supported by the texts of ancient historians and archaeological evidence, in addition to the tombs. The numbers of Lycian aristocrats in the basin may not have been great, since only 11 Lycian-type rock-cut tombs and a small number of sarcophagi have been located, but the distribution of these monuments, in a line concentrated through the center of the basin, may reflect the Lycian control of the entire region. The origin of the proposed Lycian overlords cannot, however, be ascertained; evidence points to ties with the dynasties of both Xanthus and Limyra. What also cannot be discussed, based on the available evidence, is the native reaction to this new and relatively short-lived political control.

#### Hellenistic and Roman Choma in its Epigraphic Context

Gary Reger, Trinity College

Inscriptions published in 1967 by Bean and Harrison strongly suggest that the ancient northern Lykian town of Choma, known from a few references in literary sources, should be identified with the large mound just outside the village of Hacimusalar, Turkey. Excavations undertaken since the mid 1990s have recovered inscriptions and coins confirming this identification, as well as a number of texts that considerably increase our knowledge of this town and its relations with the other Lykian towns with which it was joined in the Lykian koinon. The earliest of these texts, though very fragmentary, seem to be Hellenistic in date. More substantive texts—as in many Lykian towns—are of Roman imperial date and attest to the roles of citizens of Choma, both locally and in the koinon. Of these, the most important records "The boule and the demos of the Chomateiteis" honoring "the most worthy first citizen of the polis Apios Aurelios Diogenikastos" who served both Choma and the Lykian League. Funerary inscriptions found in the vicinity of the mound, one of which likewise speaks explicitly of a citizen of Choma, provide evidence for the extent of Choma's territory.

Relations with the wider world are attested in statue bases, including one for a Severan emperor, and, notably, a letter to the Lykian koinon from Septimius Severus in 197 C.E., setting up mechanisms for adjudicating disputes with soldiers. It seems likely that this inscription belongs in the context of Septimius' second Parthian campaign.

Epigraphic discoveries elsewhere have expanded our knowledge of Choma in the Lykian world. Two are especially notable. The regulation creating the province of Lykia, published by Mitchell, proves that Choma belonged to the province from the beginning, and so to the koinon. The so-called Stadiasmus Patarensis records the distances from city to city along the Lykian road network and establishes the connections between Choma and its neighbors; this helps us understand how Choma fit into its regional context.

These new discoveries, both at Hacimusalar and elsewhere, add new texture to our understanding of this small northern Lykian city. We can see in what ways it was typical of such towns, and some of the ways it contributed to and benefited from its connection with the koinon (not forgetting the contributions made to it by the famous Lykian benefactor Opramoas) and the Roman state.

### Four New Inscriptions from Choma (Hacımusalar Höyük)

Jacques Morin, Bilkent University

This paper discusses, in preliminary form, four Greek inscriptions recently uncovered in several excavation campaigns at Hacimusalar, Antalya province, Turkey. Two of the inscriptions are spolia from Byzantine buildings, one is an epitaph from a sarcophagus discovered near the mound, and the other is an inscribed mosaic medallion from the atrium of a church at the center of the settlement. The inscriptions are presented chronologically.

The most important text features a letter of Septimius Severus sent by the military post in 197 C.E. to the koinon of the Lycians in response to a Lycian petition concerning mischief by soldiers posted in the Lycian cities. The stone on which it is carved was reused as the threshold of the side door to a church on the west edge of the site; the thickness of the stone suggests it came originally from a public building of the Roman town rather than from a stele. A second inscription was built in one of the pillars of the central church. Although only a small portion of the text remains and its subject as a whole is obscure, it records a large land donation by one or several citizens as well as the grant of a statue to at least one of the individuals concerned. The shape of its letters matches a dedication on a statue base so that both must relate to the same event. The third inscription is an epitaph with an imprecation carved on a sarcophagus. The careless carving of the letters on the first half of the inscription shows that this portion of the original epitaph was erased and the name of the (new) occupant of the sarcophagus was written in place of the original one when it was reused. The latest inscription appears to be a prayer. The text seems to have been written by a semi-literate mosaicist copying text, since it includes crossed-out words and mixes letter forms. Although these texts have little in common, they offer a glimpse of the history of Choma and its integration to the Lycian commons.

### SESSION 1C Recent Field Research in the Near East

CHAIR: Eric H. Cline, The George Washington University

#### Results of the 2009-2011 Seasons at Tel Kabri, Israel

Eric H. Cline, The George Washington University, and Assaf Yasur-Landau, University of Haifa

Continued excavations at the site of Tel Kabri, located in the western Galilee region of modern Israel, have revealed more of the remains of a Canaanite palace and other buildings dating to the Middle Bronze period. Initial results from the 2005–2008 seasons were presented at the AIA Annual Meetings in January 2009, but subsequent seasons have yielded additional interesting data. During the 2009 season, more than 60 fragments of Aegean-style painted plaster were found, some of which have been published in the AJA (April 2011); additional fragments, probably joining, were recovered during the just-completed 2011 season. In addition, during the 2009, 2010 (winter), and 2011 seasons, additional architectural features were uncovered, including an underground (and possibly secret) passageway through a basement wall in the palace leading to a previously unknown room; a complete room with crushed limestone floor on which the painted plaster fragments were found; a strange zigzag causeway or wall to the north of the palace; and, most recently, a building, possibly to be identified as a temple, adjacent to the external western face of the palace, complete with orthostat blocks still in situ and with a paved and plastered back room. The palace itself is now estimated to be at least 6,000 m<sup>2</sup>, far larger than thought by the original excavators, and continues to produce features perhaps influenced by the Bronze Age Aegean.

#### The Çaltılar Archaeological Project

Tamar Hodos, University of Bristol

The Çaltılar Archaeological Project, a collaboration between the Universities of Bristol, Liverpool, and Uludağ (Bursa), with the support of the British Institute at Ankara, is examining the material culture, environment, and settlement history of preclassical Lycia, contributing significant new knowledge concerning the occupation and development of this region of Turkey. Çaltılar Höyük is a substantial and long-lived settlement mound located in the summer pastures of northern Lycia, close to the Graeco-Roman cities of Oinoanda and Balboura. Its main phases of occupation date from the Late Chalcolithic (late fourth millennium B.C.E.) to the Late Iron Age (sixth century B.C.E.), with little evidence of later occupation or

Between 2008 and 2010, we conducted an intensive survey of the höyük. Results suggest that occupation was most significant in the Late Chalcolithic, Early Bronze Age, and Middle and Late Iron Age, although Late Bronze Age material was also collected, which is significant in view of references to the Lukka people and settlements in this area recorded in contemporary Hittite, Egyptian, and

Ugaritic documents. The majority of our material dates to the Iron Age, mostly to between the 10th and sixth centuries, and petrographic analysis suggests that most of this comes from beyond Çaltılar's immediate environs, revealing connections with Anatolia (Phrygia, Lydia, Caria and the western Anatolian littoral) and the wider Mediterranean (Athens, Corinth, Euboea, Chios). Many of these are large, highly decorated vessels, suggesting that the site was not for seasonal occupation, at least during its later periods. Geophysical results indicated a substantial stone structure of  $10 \times 20$  m, with stone walls at least 2.5 m in height in the northeastern sector of the top of the mound, as well as a possible fortification wall. Collectively, these hint at the site's potential status within the landscape and the role it played as the interface between Anatolia and the Mediterranean.

#### Seyitömer Mound: A General Evaluation with the Recent Findings

A. Nejat Bilgen, AIA Member-at-Large

Results of the 2007 excavation of the Seyitömer Mound were presented at the Archaeological Institute of America's 109th Annual Meeting in 2008. The mound has been systematically excavated since then, and all the architectural remains and other finds are determined to belong to the following periods: Roman period (layer I); Hellenistic period, 334–30 B.C.E. (layer II [late phase, II-A; early phase, II-B]); Achaemenid period, 500–334 B.C.E. (layer III [fourth century B.C.E., III-A; fifth century B.C.E., III-B]); Middle Bronze Age (layer IV [1750–1700 B.C.E, phase IV-A; 1790–1750 B.C.E., phase IV-C]); Early Bronze Age (layer V). The seasons' fieldwork has determined 30 buildings (A phase), 69 buildings (B phase), and 80 buildings (C phase) date to the Middle Bronze Age. Fifty-three buildings date to the Early Bronze Age.

In the Middle Bronze Age layers, the findings are not significantly different from one another. Almost all the buildings in this layer were burnt in a large fire that was possibly the result of an earthquake. Our assertion is further supported by many human skeletons found under the destroyed buildings.

In layer IV, House 13, a complex building, is the best sample. The rooms of the buildings and the building complex in general underwent maintenance and repair, indicating that the earthquake and the fire were large. Human skeletons remained under the debris of Room A supports this idea. In the skulls of five of the six skeletons found in the room, carbonized brain remains survived to present day.

The buildings in the Early Bronze Age layer were settled in a northeast–southwest direction. The buildings on the north of the mound were northwest–southeast direction, forming a straight angle. This application indicates a systematic settlement. A building constructed at the center of the mound is the first megaron found here. The megaron was identified as a sanctuary due to the precence of religious potteries: rhytons, double-beak jugs etc.

Seyitömer mound was important especially in the Middle Bronze and Early Bronze Ages for west and central Anatolian archaeology. It might be asserted that the Seyitömer mound will be one of the rare settlements exhibiting large areas of buildings from different ages given that the expected discoveries in the forthcoming years.

### The Late Hellenistic and Early Roman Periods at Madaba, Jordan: The Archaeology of an Ancient Bordertown

Jonathan Ferguson, University of Toronto

The University of Toronto's Tall Madaba Archaeological Project (TMAP) has studied urban life in the central highlands of Jordan since 1996. Ongoing excavations within the modern city of Madaba have revealed occupational phases from the Early Bronze Age to the Late Ottoman period. I here present a précis of my doctoral dissertation, which focuses on remains from the classical phases in field B, on the western slope of the city's acropolis. These excavations allow historical and epigraphic sources for the Classical periods at Madaba to be complemented by new archaeological evidence. The 1998-2000 TMAP excavations in field B yielded the remains of four classical phases, including architecture, installations, and more than 25,000 diagnostic pottery sherds. These four Late Hellenistic and Early Roman phases span three periods in the city's political history: local Arab autonomy under the Beni 'Amirat tribe (mid second century B.C.E.), control from Jerusalem as part of the Judaean Peraea (129-63 B.C.E.), and incorporation within the kingdom of Nabataea (63 B.C.E.-106 C.E.). Phase 6 shows that Madaba's acropolis was a fortified citadel in the second century B.C.E., possibly rebuilt after John Hyrcanus I's six-month siege in 129 B.C.E. Occupation continued into the first century B.C.E. with phase 5, although the spaces were subdivided for more domestic uses. After the Nabataean takeover of Madaba around 63 B.C.E., under Aretas III, the same general layout was kept in phase 4, although the ceramic corpus shows a shift from Late Hellenistic to Early Roman pottery assemblages, as well as more specific typological trends like a decrease in Mediterranean imports and an increase in Nabataean wares. The people of Madaba began to import considerable quantities of Nabataean fine wares from Petra and produced a local imitation thereof, while other wares reveal that ties were maintained with the Judaean Peraea, across the Nabataean border. In the late first century B.C.E., the architecture was redrawn with less emphasis on fortification, and domestic occupation continued through the first century C.E. in phase 3. The Tall Madaba excavations reveal aspects of both change and continuity, reflecting the site's complex history as a border community that was traded between political masters.

**The Jezreel Valley Regional Project: Survey and Excavations at Tel Megiddo East** *Matthew J. Adams*, Bucknell University, *Jonathan K. David*, Gettysburg College, *Robert Homsher*, University College London, and *Margaret E. Cohen*, The Pennsylvania State University

This paper reports on the first two seasons of the Jezreel Valley Regional Project (JVRP) excavation of the Early Bronze Age town of Megiddo, Israel. The JVRP is a long-term, multidisciplinary survey and excavation project investigating human activity in the Jezreel Valley from the Paleolithic through the Ottoman period. This project strives for a total history of the valley using the tools and theoretical approaches of such disciplines as archaeology, anthropology, ethnography, geography, history, and the natural sciences within an organizational framework provided by landscape archaeology. In addition to several other research endeavors,

the JVRP is currently excavating Tel Megiddo East, one of the most significant Early Bronze Age towns in the valley (carried out under the auspices of American Archaeology Abroad and with the cooperation of the Tel Aviv University Megiddo Expedition).

From 1996–2010, the Tel Aviv University Megiddo Expedition uncovered a massive temple dating to the Early Bronze Age I (ca. 3000 B.C.E.) on the cultic acropolis of Tel Megiddo. The data from the compound demonstrate an unprecedented leap in monumental building activity late in EB I, with the construction of the 1100 m² Great Temple. Ranking in size and sophistication on par with the temples of early urban Mesopotamia, the Great Temple represents the best evidence for the development of state-level society in the Levant in this early period. This Great Temple is now well understood, but the larger settlement landscape, the home of its builders, has never been explored.

Tel Megiddo East is the site designation for the area of settlement directly east of Tel Megiddo, which includes a wide variety of loci of human activity dating primarily to the Early Bronze Age and Roman period. Guided by survey data collected by the Israel Antiquities Authority and the Tel Aviv University Megiddo Expedition, the JVRP conducted an initial trial season and a ground-penetrating radar survey in 2010, followed by full-scale excavation in 2011. The results of this work confirm the location of the town associated with the Great Temple and bear witness to the social changes that coincided with the monumental changes on the acropolis.

This paper also presents new paleoenvironmental and archaeological data pertaining to the rise and fall of EB I society responsible for the construction of the Great Temple and discusses new avenues for research on the nature of early urbanism and state formation in the southern Levant.

### Tel Akko and Electric Resistivity Tomography: Results of the 2011 Season

Michal Artzy, University of Haifa, and Paul Bauman, WorleyParsons

Tel Akko was settled for at least 1,700 years before the city moved to its present location, Akko, erroneously called Acre, on the northern bay of Haifa. Its first urban defense was constructed in the early decades of the second millennium B.C.E. Akko was included in the Egyptian Exorcism Texts attributed to that era.

Habitation on the site in the following periods—as well as damage caused by earthworks for drying the swamps associated with the Na'aman River carried out in the 1940s by the British Mandate—obscured the landscape associated with the rampart fortifications of the Middle Bronze period. Previous excavations by M. Dothan and A. Raban have unearthed an impressive artificial rampart and a mudbrick city gate belonging to that period on the northern part of the site.

However, little could be gathered about the defenses facing, what is now, the "Old City" of Akko, the area eventually used by the Crusaders as their main harbor or other areas of the tell. The situation of the site in relation to the changing coastline and a river encouraged alteration in settlement patterns over the centuries. Anomalies attributable to the Persian period in the mid first millennium were noted, calling into question prevailing assumptions of the plan of the site and its artificial harbor.

Building upon data from previous excavations and salvage projects results, Electric Resistivity Tomography was applied to a section in the westernmost part of the site in the summer of 2011. The results of the ERT have shed surprising light on the defense consideration of the engineers of the urbanized site.

#### Israel Coast Explorations Project: 2011 Season

William Krieger, University of Rhode Island, Jacob Sharvit, Israel Antiquities Authority, Bridget Buxton, University of Rhode Island, and John R. Hale, University of Louisville

The Israel Coast Exploration (ICE) Project is a joint venture under the auspices of the Israel Antiquities Authority (IAA), codirected by Yaakov Sharvit, head of the IAA Underwater Unit, and William Krieger of the University of Rhode Island (URI). Bridget Buxton of URI leads the URI underwater program in collaboration with John Hale of the University of Louisville. Dror Planar of the IAA is our terrestrial program's field director.

Our goal is to combine terrestrial and maritime archaeological approaches into an integrated field school focusing on coastal problems. Our team will begin each season on land, teaching our students archaeological theory and field methods, giving them a firm grounding in stratigraphy, and establishing the site's regional and historical significance. After this grounding, our terrestrial team will continue to excavate on land while our underwater team moves to the sea, bringing to bear a different set of tools to help understand the coast as it once was, both in its paleoenvironmental and maritime importance.

Season 1 was conducted from 22 May to 21 July 2011. This year, for logistical reasons, we decided to focus on each piece of our program in separate locations.

For our terrestrial project, after a survey conducted by Sharvit and Planar, our team excavated at Hirbet Mitle, opening three areas: a network of caves, a Romanperiod settlement (Area A), and a plaster floor exposed by a construction crew in the area (Area B).

Our underwater project was a coastal survey in a variety of depth environments between Atlit and Akko, primarily serving as a "proof of concept" for locating buried cultural sites using a Syqwest Stratabox geophysical survey instrument. Known targets in Akko's harbor were investigated, expanding on Sharvit's discovery of submerged Hellenistic construction features. Multiple new targets of interest were also discovered using the Stratabox, one of which (a large shipwreck) was partially uncovered and investigated by scuba divers.

Our first season was successful on all counts. In this paper we summarize the results of our land and sea projects and speak to our plans for the future.

Stepping into the Mountains: Sinop Regional Archaeological Project 2011 Report Owen Doonan, California State University Northridge, Alexander Bauer, Queens College, The City University of New York, Susan Sherratt, Sheffield University, Aksel Casson, Slippery Rock University, and Matthew Conrad, California Polytechnic University, Pomona

The 2011 season of the Sinop Regional Archaeological Project investigated the articulation of the coastal plains with the highlands based on systematic pedestrian survey. A particular interest this season was the impact of a Roman road system through the mountains that can be traced by a concentration of Roman milestones near the highland village of Tingiroglu. Our working hypothesis was that a Roman road was established along the Kirgecit-Kabali river system in the late first century C.E. and expanded in the fourth century C.E. The 2010–2012 seasons are investigating three related questions:

- (1) Did the road system connect an established path or network of pre-existing sites, or was it built through a relatively empty space?
- (2) Can we trace settlement patterns in areas near the proposed road that contrast with those near other possible mountain routes? Did the Roman road have a discernible impact on settlements in a sparsely populated area?
- (3) Was there a port of any consequence at the mouth of the Kirkgecit-Kabali cay system?

Results from the 2010–2011 seasons suggest that there is a clear pattern of settlement near the proposed road that is not seen around similar passes through these mountains. Thus far, it appears that the pattern changed significantly after the fourth-century expansion of the road. A large settlement area was recorded at the mouth of the river system, along with nearly 30 other sites from the coast to the highland village of Tingiroglu, approximately 10 km inland.

### SESSION 1D Greek Architecture

CHAIR: David Romano, University of Pennsylvania

#### The Archaic Temple at Isthmia Reconsidered

Cornelis J. (Neil) Baljon, AIA Member at Large

Initially reconstructed by Broneer as a virtually complete Doric temple, with all the missing parts in wood, the Archaic Temple at Isthmia today is more commonly taken for nonperipteral. The idea was forcefully championed first by Rhodes in 1984, but little progress has since been made in fleshing it out. Unanswered questions are so numerous and so resilient that the contrary hypothesis deserves a second chance.

Admittedly, what speaks against a pteron is that no traces of columns in any material were found, except for one that must have been internal. What is more, "Group-10 blocks" tend to be understood as geison blocks, the logical place of which is under the eaves, on top of a stone wall, which rules out a pteron. Other

than that, all material evidence points the other way. As a way out, one might think of a "pteron" as made up of rectangular posts. Group-10 blocks must then be understood as something other than geison blocks, for which indeed there is much to say.

Remarkably, under these new hypotheses, all the material evidence fits. In an alternative reconstruction I present here, exterior posts are 1 ft. square and are spaced at 2.26 m, to be understood as 7 ft. Those units of measurements recur throughout the structure. In its layout the temple reflects an intricate scheme based on the numbers seven and 11. This has a striking parallel in the South Stoa at the Samian Heraion, except that there, the foot length is fractionally larger and the number seven is interwoven with higher prime numbers, 13 and up. This, plus rectangular posts, which at the South Stoa are clearly attested, suggests actual influence, with the South Stoa, being the older of the two, in the donor role.

Even with a date around 625 B.C.E.—which is more realistic than a more commonly accepted one around 650 B.C.E.—the Archaic Temple at Isthmia and its Corinthian counterpart hold strong claims as being the earliest incarnations of the new type of the peripteral temple. If so, the first pteron did not come as a rich display of columns but, echoing an earlier stoa, remained subordinate to the roof it carried.

### The Small Temple in the Sanctuary of Athena at Sounion

Barbara A. Barletta, University of Florida

Excavations conducted at the end of the 19th century at Sounion uncovered two temples in the Athena precinct. Stais believed that both served Athena, but in succession. He dated the Small Temple to the sixth century B.C.E. and assigned to it a Doric column capital in the sanctuary and some architectural terracottas found in the fill on which the larger temple was built. Subsequent authors, including Dinsmoor, have questioned these assignments and the early chronology, as well as the dedication to Athena.

This paper presents the results of a thorough re-examination of the temple. It argues that the Doric capital is, contrary to some suggestions, of appropriate size for the building. The capital is of a type paralleled around 500 B.C.E. in Cycladic architecture. This not only supports Stais' original date but also suggests a source of influence for the building. The terracottas, which were never properly published in the past, show a profile and decoration consistent with this time, although they differ in many ways from known examples. The statue base is also unusual in its material and form but fits into the Late Archaic period. Other characteristics, such as the wall construction, frontal emphasis, and prostyle columns, are more difficult to date, but they appear already in the archaic architecture of the Cyclades.

This paper concludes that the evidence strongly favors Stais' original assignment of the components and date for the temple, although it argues for a more specific placement in the late sixth century. Since the Small Temple precedes in date the better-known Temple of Athena, but was destroyed before the latter was begun, nothing prevents it from being dedicated to the same deity. In addition, its Cycladic traits make it a stylistic predecessor to the Ionic temple that succeeded it.

### Swimming in the Mediterranean World of the Fifth to First Century B.C.

Monika Truemper, The University of North Carolina at Chapel Hill

In his 1996 article "Quand la nage devint natation...." Auberger argues, based on a semantic study of literary sources, that the Greeks did not know swimming as a sportive and leisure activity. He is followed by Handy in his research on swimming in the Roman world, who defines swimming as physical training and purposeful locomotion in water, in contrast to simple plunging and splashing. While the few ancient artworks representing diving and swimming are well studied, but still remain much debated, the archaeological evidence has not yet been systematically investigated. In this paper, I critically reassess the existence of sportive and leisure swimming in the Mediterranean world of the fifth to first century B.C.E. by examining pools. I argue that, while the exploitation of natural waters for swimming can naturally no longer be evaluated, some pools clearly testify to the existence of swimming as a sociocultural concept and activity in various societies.

First, I define, based on cross-cultural comparisons, which size and depth suggest that pools were certainly or possibly used for swimming and not just for immersion. Then I examine the architectural context, design, decoration, water management, and possible function of selected swimming pools that are located in sanctuaries, gymnasia, and royal palaces. Although the chronological, geographical, and cultural context of the 16 known swimming pools varies widely, some general observations are possible. The earliest example was constructed in the prestigious Panhellenic sanctuary of Olympia, which may have served as a model for later pools. The location of swimming pools in sanctuaries with athletic contests and gymnasia suggests a close connection between athletic training and swimming. Thus, while swimming was not a formal competitive discipline, athletes may still have swum regularly for exercise, mostly—faute de mieux—in natural waters but preferably in the rare exclusive swimming pools. By contrast, swimming pools in palaces were clearly conceived for the leisure and entertainment of royal families and their guests, serving as prime symbols of conspicuous consumption, especially in arid climates. In sum, purpose-built swimming pools never became standard in any urban context in the fifth to first centuries B.C.E., but were a costly luxury that only few could afford.

### **Scaling New Heights: A Revised Date for the Fortifications of Ancient Alea, Greece** *Matthew P. Maher*, University of British Columbia

This paper presents a revised chronology for the construction of the fortifications at Alea based on new considerations provided by local comparanda from a detailed field study of the surviving fortifications of every Arkadian polis.

Although small and relatively unknown, the polis of Alea possesses the best preserved fortification circuit in all of Arkadia, and with Messene, among the best in all of the Peloponnese. Yet neither this site nor its considerable walls has ever been studied in significant detail. Until recently, the only noteworthy contribution on the walls, was by Meyer (*Peloponnesische Wanderungen* [Zurich 1939]). In this book, a single chapter (ch. 2) is devoted to Alea, the majority of which is given to the fortifications and include measurements, an accurate site plan, as well as

discussions regarding the chronology of construction. For a number of primarily architectural reasons, Meyer proposed a Hellenistic date for the walls, and this date has been generally followed and perpetuated for the last 70 years.

Yet these same 70 years have witnessed our understanding of Greek fortifications increase considerably as new sites were uncovered, their walls were studied, and published comparanda became available. Based on the known history of the site, architectural elements, and the masonry style, this paper argues that the walls of Alea belong to the early fourth century, not the Hellenistic period. The well-preserved walls of Alea not only provide important (if seldom used) comparanda for the study of other Greek fortifications but also in light of historical probability, the location of the site, and Alea's attested Arkadian League membership, an early fourth-century date invites the possibility that they belonged to the same defensive building program as Megalopolis and Mantinea, instigated by Epaminondas and Thebes after the Spartan defeat at Leuktra.

#### The Hellenistic Theater at Corinth: New Evidence

David Scahill, American School of Classical Studies at Athens

Levels of the earlier Hellenistic theater were uncovered in the course of this year's Corinth training excavations for the American School conducted by Charles K. Williams, which focused on the west hall and area of the Roman parodos on the west side of the theater. The foundations of the west parodos in the Hellenistic period are made of breccia extending out from the orchestra. The preservation of these foundations provides secure evidence for the slope of the parodos on the west side and further information for the projection of its line and axis of orientation in relation to the orchestra. This information adds to what was previously known regarding the Hellenistic theater.

A reconstruction of the Hellenistic cavea is presented here to show how the orchestra was built into bedrock and posits at what point there must have been a terrace wall constructed at the back of the theater, still buried under the fill of the Roman cavea. In addition, examination of blocks of Hellenstic date reused in the Roman period in the west hall of the theater supports a construction date of the Hellenistic phase of the theater in the late fourth century, most likely during or around the same time that the South Stoa at Corinth was constructed.

### Recent Excavations at the Site of the Hellenistic-Roman Theater of Nea Paphos in Cyprus

Craig Barker, Sydney University Museums, University of Sydney

Archaeological excavations have been conducted in the theater of Nea Paphos by the University of Sydney under the auspices of the Department of Antiquities of Cyprus since 1995. The theater was carved into the southern slope of Fabrika Hill, in the northeast quarter of the ancient city. The theater's probable earliest form was constructed shortly after the foundation of Nea Paphos in the late fourth century B.C.E. and, as such, demonstrates the significant role of theater in developing the concept of the koine in the Hellenistic eastern Mediterranean. Five

phases of architectural development have been identified reflecting Alexandrian architectural influences, then centralized control from Antonine Rome, and finally its use for local and base forms of entertainment such as animal displays and water spectacles. At its pinnacle, the theater was able to accommodate an audience of 8,500 spectators. The eventual destruction of the theater in the earthquakes of the late fourth century C.E. and the changing moral and religious attitudes in Late Antique Cyprus saw the building abandoned and most of the stage building's marble and other architectural stone robbed away to be reused in the construction of the nearby basilica of Chrystopolitissa. The ruins of the theater precinct were used for agriculture, quarrying, and semi-industrial purposes for centuries as the population of urban Paphos receded to the harbor front until the Middle Ages.

More recent excavations in the surrounding precinct have now revealed the remains of a fountain house and part of the northeastern road system laid out on a Hippodamian grid plan. Ongoing investigations are beginning to reveal the changes to these structures when the theater was abandoned, and they are used as a storage facility for stripped architectural stones.

This paper presents an overview of the archaeological evidence of the changing use of the theater and the ongoing investigation of the surrounding precinct over a period of several centuries.

#### More than a Theatre! Archaeological Survey in Aspendos

Veli Köse, Hacettepe University

In Pamphylia, as in other regions of southwest Turkey, significant changes in the material culture of the indigenous peoples can be observed as political conditions evolved from the Hellenistic era to the Roman imperial period. Because of its location at the heart of the Pamphylian coastal plain and its harbors, known from literary sources, Aspendos was exposed to different cultures simultaneously and is therefore particularly suitable for research on acculturation processes. In addition, the city's two harbors offer a great opportunity to grasp the nature of economical processes of a port in Pamphylia and, more broadly, Asia Minor. The city with its harbors was vital, not only for Pamphylia but also for cities in the neighboring regions such as Pisidia.

In 2008, a new archaeological survey project, the Aspendos Project, was started under my direction in the ancient city of Aspendos and its territory. The site is being studied by an international and interdisciplinary team, who are examining the material culture including architecture, sculpture, and ceramics, carrying out detailed ceramic surveys and geophysical surveys. In addition, written sources are reexamined, to comprehend the development of the city from its foundation onwards. In the course of four fieldwork seasons, the first ever topographical map was created, and individual buildings such as the bath complexes, the nymphaeum, the double storied shops/market building, the Roman basilica, the honorific arch as well as the world-famous theater building were studied. The theater building was thoroughly documented by a combination of classical and modern techniques and has created state of the art plans, sections, and elevations, as well as 3D visual representations using 3D laser scanning. Geophysical survey provided answers to questions such as the location of the river harbor, the extension of the

city, and allowed us to map earlier remains of the city. Four years of fieldwork in Aspendos also brought breathtaking discoveries such as traces of a mudbrick Hekatompedon, found by geophysical survey, the harbor on the Eurymedon, the first-ever discovered archaic-classical remains, as well as new Hellenistic, Roman, Byzantine, and Seljuk monuments in the city. The Hekatompedon is unique in Asia Minor and is vital not only for the study of Iron Age in Asia Minor but also for the entire Mediterranean.

In my paper, I summarize methods and results of four years of research of the Aspendos project in the city and its territory.

#### The Southeast Building at Corinth: Recent Investigations

Paul D. Scotton, California State University, Long Beach

Although parts of the Southeast Building were discovered in 1896 during the first excavation season at Corinth by the American School of Classical Studies, and four subsequent seasons led to the publication of the building in 1960, much has remained unsettled and problematic. At least three different plans of the building have been published and, to date, no one has offered a restored section or elevation. Recent studies have identified key blocks from the Roman period that have led to the recognition of its design module and, in turn, the plan and interior elevation of the Roman-period building.

A series of pier blocks with engaged Doric columns on one side have been found built into the east wall of the fifth- or sixth-century C.E. rebuilding of the structure. These blocks formed the piers of an arcade that ran the width of the building, dividing it into two segments, each 40 Roman feet square. As indicated by the engaged columns on the piers, each wall of the 40 foot squares was divided into five bays 8 Roman feet wide. Two east—west running foundations trenches, one in each half of the building, mark the subdivision of each square into two rooms, one two bays wide and the other three.

On the north end of the Southeast Building, the plan was modified to accommodate the south exedra of the Julian Basilica and to reconcile the different orientations of the two buildings. That is, in the north half of the building, the smaller room was generally filled by the south exedra of the basilica in which stood the tribunal. On either side of the tribunal were doorways connecting the basilica and the Southeast Building. The wall dividing the northern half of the Southeast Building in two acted as a screen wall and masked the transition from one orientation to another between the two buildings. On the exterior, this same transition was smoothed by the addition of the colonnade on the west side of the building.

With the recognition that the Julian Basilica and Southeast Building were not only adjacent but also adjoining and connected, we should understand there were related activities in them. The Julian Basilica has been identified as the seat of the imperial court of law in Corinth. This identification supports the suggestion of Oscar Broneer that the Southeast Building was the records hall of the Roman colony.

### SESSION 1E Religion in Late Antiquity

CHAIR: Kim Bowes, University of Pennsylvania

#### Byllis and its Bishop in the Sixth Century C.E.

Nicolas Beaudry, Université du Québec à Rimouski, and Pascale Chevalier, Université Blaise-Pascal Clermont-Ferrand II

Sitting on top of a hill in south-central Albania, Byllis was an independent episcopal see in the fifth century C.E. and one of the most important cities of Epirus Nova in the sixth century. Five churches were built in the city during this period, either on the ruins of disused public monuments or on leveled private houses. This new Christian cityscape included a cathedral, as well as an episcopal complex that gradually expanded into the urban fabric and that has been the main focus of recent fieldwork in Byllis.

The expansion of the complex led to the privatization of an east-west street, south of the cathedral, that became the complex's main thoroughfare and the pivot of its development. After a massive reduction of the defended perimeter of the city under Justinian, the episcopal complex dominated the northern half of the remaining intra-muros city, while to the south, the former civic center was built over, or quarried for, spolia. In addition to the cathedral and to the bishop's palace, the complex comprised an enclosed area dedicated to habitat and economic activities that included wine production and storage, large-scale cooking, and animal rearing. While the scale of the complex is impressive, evidence of decline in the late sixth century and abandon in the early seventh indicate that this community at the bishop's service could not maintain itself in Byllis under the pressure of migrations and insecurity.

This paper reports the results of recent fieldwork in the episcopal complex of Byllis.

### The Lord and the Ring: A New Interpretation of a Corinthian Finger Ring with an Inscribed Cruciform Invocative Monogram

Jeremy Ott, Institute of Fine Arts, New York University

At some point in Dark Age Corinth, a man was buried with a bronze finger ring, an object traditionally dated to the seventh century C.E. and bearing on its bezel a unique inscribed cruciform monogram. In this paper, I propose a new reading of the monogram and a revised chronology based on sigillographic comparanda. The social dimensions of the ring's use are then analyzed through (1) comparison with contemporaneous jewelry, (2) an appraisal of the relationship between the monogram and lead seal inscriptions, and (3) a contextualization of the ring within the complete mortuary assemblage.

New photographs of the ring make clear that its inscription is an invocative monogram....appealing for divine assistance....of a distinctive type well-known from a substantial body of late seventh- to eleventh-century Byzantine lead seals.

The relatively early form of the monogram and accompanying symbols, as well as the presence in the same multiple burial tomb of a Corinth-type belt buckle of the late seventh to eighth century, suggest an eighth-century date of manufacture. Although apotropaic symbols or texts are not unusual for finger rings, the adoption of this type of cruciform invocative monogram, borrowed directly from lead seals, is unprecedented in ring iconography. I argue that the reproduction of a lead seal obverse is a symbolic appropriation of the status of individuals who possessed such seals, persons of relatively high rank ranging from spatharioi and wealthy merchants to Constantinopolitan bishops. The deceased at Corinth is unlikely to have held such a status and may have sought, through his choice of ring decoration, a symbol not only protective but also one that conveyed a desired social position. Such an interpretation accords well with the entire funerary assemblage of this tomb in which the ring's owner was one of the middle interments. While the tomb's structure and location conform to local custom, the persons laid within it were clearly not Greek. The presence of numerous weapons and other objects, unknown to Greek mortuary practice but common to those of a variety of migratory groups in southeastern Europe, suggests a migratory origin for the deceased. The ring's owner is therefore best understood as a semiacculturated non-Greek who adopted a monogram of apotropaic value that expressed the owner's wish to be associated with the Greek elite.

#### The Round Church at Beth-Shan: Architectural Features and Date

Daira Nocera, University of Pennsylvania

The Round Church in Beth-Shan (northern Palestine) was excavated by the University of Pennsylvania Museum of Archaeology and Anthropology from 1921 to 1933 by A. Rowe and G.M. Fitzgerald. Among the first features to be brought to light was a section of a curved wall that was later interpreted as the foundation of the church. Six Corinthian capitals were recovered in the church, and 11 additional capitals, smaller and with different decoration, were found in the debris of the surrounding areas.

The remains suggest a unique architectural arrangement of the church: a large rotunda containing an ambulatory with a projecting apse in the eastern side. The building was likely an hypaethral building whose inner wall was supported by columns topped by the Corinthian capitals. Six of the other, smaller capitals, may have been installed in pairs to create a hexagonal ciborium such as that found at the fifth-century church of St. Demetrios in Thessaloniki.

The excavators based their initial dating of the church (C.E. 431–438) solely on the criteria of the stylistic analysis of the six Corinthian capitals, which were thought to bear strong similarities to two capitals from the church of St. Stephen in Jerusalem. In this paper, I analyze the decoration of the capitals and the architectural features to place the dating of the church in the last quarter of the fifth to early sixth century C.E. I argue that the Corinthian capitals found in the Round Church in Beth Shan are spolia from Roman buildings dating to the third and fourth century C.E. and therefore do not provide accurate evidence for dating. A more accurate dating for the church can instead be based on comparison of the two capitals found in the debris around the church, which suggest, a date in the last quarter of the fifth century C.E.

#### Death and Burial in Early Byzantine Chryssi, Crete

Susan Kirkpatrick Smith, Kennesaw State University, Melissa Eaby, Institute for Aegean Prehistory, Study Center for East Crete, and Stavroula Apostolakou, 24th Ephorate of Prehistoric and Classical Antiquities

In 2008 and 2009, rescue excavations were conducted by the 24th Ephorate of Prehistoric and Classical Antiquities of the Greek Ministry of Culture in the northwestern part of Chryssi Island (located eight nautical miles south of the town of Ierapetra, Crete). While surface survey (dissertation by Chalikias at the University of Heidelberg) has revealed evidence of activity in various parts of the island during the Final Neolithic, Bronze Age, Hellenistic, Roman, and Early Byzantine periods, the excavated area includes only a small portion of a Late Minoan IB (ca. 1625–1500 B.C.E.) settlement. Excavation in House A.2, however, revealed a single, roughly oval-shaped, built cist grave, that had been dug into the remains of a Late Minoan room at a later date. Although no grave goods were present, the tomb can be roughly dated on the basis of architectural style and burial features to the Early Byzantine period (fourth-seventh century C.E.). The grave contained multiple inhumations that were generally still articulated and laid out on their backs, with the feet to the east and heads at the west end. A minimum of 13 individuals were buried in the small grave, ranging in age from neonatal to older adult. Both males and females were represented. The skeletal remains are remarkable for the extensive pathology present in multiple individuals on many parts of the body. The individuals at the top of the grave, those buried last, have the most pathological lesions, while the bones recovered from the bottom of the grave have fewer lesions. Many of the bones in the lower level are still in anatomical position indicating that complete decomposition of the first burials had not occurred before the subsequent individuals were buried in the tomb. The rapid sequential burials and widespread skeletal pathology suggest that a contagious infectious process killed these individuals. The greater bone involvement suggests that those buried last were able to withstand the illness for a longer period of time and thus developed more skeletal lesions. Archaeological remains from this period on Crete have only recently begun to be investigated and published; this study thus provides a significant addition to the growing scholarship, providing potentially new information about life and death on the island during the Early Byzantine period.

### Doorways and Mosaic Inscriptions: Delimiting Privileged Social Spaces in the Eustolios Complex at Kourion, Cyprus

David W. Rupp, Canadian Institute in Athens

A palatial building complex (est. 1,065  $m^2$  covered interior space), located on the acropolis of ancient Kourion in southern Cyprus, was excavated by the University Museum of the University of Pennsylvania. The Eustoilos complex was built in the later part of the reign of Theodosius II (408–450 C.E.) on top of the walls of a previous building from the reign of Valens (364–378 C.E.). An adjacent, earlier bath suite was refurbished and joined to it. It was a private, secular building for a wealthy Christian, possibly one named Eustolios. It was a planned, single-story structure

with diverse yet related series of architectural spaces that were arranged around two unequal focal points: an open entrance forecourt and an open central court.

Nine of the rooms have polychrome mosaic floors preserved in some fashion. The evidence of floor subfoundations in the main section indicates that another six rooms also had mosaic floors. In the bath suite, five had additional rooms must have either mosaic or *opus sectile* floors. Thus, the complex had at a minimum 363 m² of decorated floors and probably as much as 763 m². The complex's overall size, complexity of the layout, polychrome mosaic floors and their decorative compositions, and the emphasis on a large dining space and large reception hall put it on the level of the sophisticated houses and villas in contemporary Antioch and in the urban centers of Syria.

Access to the components of the complex was regulated by a series of doors. As a visitor moved from west-northwest to east-southeast, the general public spaces gave way to specialized privileged spaces: the entertainment suite and the audience hall suite. Three long inscriptions and a fragment of another were situated at pivotal points of transition. The texts demonstrate the spirit of tolerance as paganism gave way to Christianity. They signaled to the visitor the importance that the owner placed on the spaces that followed, as well as on the inherent social and political meanings of such spaces.

As there is a pattern in the disposition of the four preserved inscriptions, there may have been up to three other inscriptions in the missing mosaics to complete this delimitation at entrance points to the privileged spaces of the entertainment suite and of the audience hall suite. Eustolios, well versed in romanized Greek culture, commissioned an ambivalent, polyvalent, and erudite style of decoration for the complex's social spaces and their pavements.

### Dining With the Sun: Rethinking the Meal(s) in the Roman Cult of Mithras *Emanuela Bocancea*, Brown University

The publication of Cumont's seminal work *Textes et Monuments Figurés Relatifs aux Mystères de Mithra* (Bruxelles 1896–1899) sparked intense scholarly interest in the Roman cult of Mithras. This mystery cult dedicated to the worship of Sol Invictus Mithras (Mithras the Unconquered Sun) thrived throughout the Roman world from the first to fourth centuries C.E., leaving behind an array of material evidence. Following in Cumont's footsteps, and with an ever-growing archaeological data set, scholars have spent more than half a century deciphering the enigmatic cult's material culture, rituals, and beliefs. However, this research trajectory has largely neglected the significance and nature of meals and dining within the cult. Scholars have only in passing described an assumed "cult meal" shared by initiates within the Mithraeum (the sacred space dedicated to the worship of the deity). This meal has consistently been presented (implicitly or explicitly) as a strange imitation of the Eucharist. This view, pioneered by Cumont, is based entirely on the uncritical acceptance of descriptions in early Christian accounts.

By drawing on the extant archaeological and iconographic evidence for the cult, this paper argues that the widely perpetuated narrative of a Eucharistic meal is limited, untenable, and fails to take into account the range of material evidence for different forms of "meal" within the cult of Mithras as a whole. I demonstrate

that there was a plurality of "Mithraic" meals, functioning on multiple levels, all indicating the extent to which dining was fundamentally more significant in the material culture, rituals, practices, and sacred space associated with the worship of Roman Mithras than has hitherto been acknowledged.

### The Temple of Artemis at Messene: A Late Antique Display Case

Olympia Bobou, University of Oxford

Messene, the city founded by the formerly exiled and enslaved Messenians with the help of the Thebans after the defeat of Sparta at the Battle of Leuctra (369 B.C.E.) was a prosperous town in the Hellenistic and the Roman periods. At its heart was the Asklepieion complex, built soon after the city's foundation, remodeled slightly during the Roman Imperial period, and continually in use until the city's decline in the sixth–seventh century C.E.

One of the most interesting and well-preserved archaeological areas of the Aklepieion is the small Temple of Artemis Phosphoros, whose cult statue was created by the second-century B.C.E. sculptor Damophon. Inside, a group of statues of priestesses and young female cult agents were found arranged in a circle near the cult statue of the goddess. The date of the statues reveals the Late Antique remodelling of the space: the statues of the young agents date to the first century B.C.E./C.E., while those of the priestesses date in the third–fourth century C.E.

The arrangement of the statues of the cult agents shows a distinctly Late Antique interest in traditional civic values as well as a Late Antique taste for displaying objects. Comparison with other fifth–sixth century displays of art works in Messene and other areas reveals that the Temple of Artemis redisplay was unusual to the extent that it promoted pagan ideas and ideals and allowed them to be visible in the Christianised urban landscape of the city. Therefore, in this paper I examine the meaning and significance of this cult space in this later, archaeologically visible, phase and investigate the interaction between Christian and pagan visual culture in a Late Antique environment.

# SESSION 1F: Colloquium Gold Medal Session: Monuments and Topography: Pompeii and Rome

ORGANIZER: R.T. Scott, Bryn Mawr College

### **Colloquium Overview Statement**

During his long and distinguished career, Lawrence Richardson, Jr. has given special attention to the monuments and topography of Pompeii, Rome and its environs. To complement the recognition of his career achievements by the Gold Medal Committee of the Archaeological Institute of America, this panel has accordingly been proposed for the Philadelphia meeting of the Institute in January 2012. The colloquium features papers on Pompeii and Rome presented by colleagues and former students of Richardson, all of whom are active researchers in these areas and who have drawn inspiration from his work for their presentations.

Boatwright in her paper, "Not the Porticus Minucia Frumentaria? A Long-Standing Topographical Puzzle," applies Richardson's animated, wide-ranging, and thoroughly informed approach to a notorious problem of Roman topography. Evans, with "The Problem of Pedum," further illustrates Richardson's firm belief that literary text and archaeological evidence should be used together; had the 17th-century topographers done so, rather than enshrine polemic, he argues, the site of Pedum might now be known.

Dobbins' "Some Roman Architectural Influences at Pompeii," an investigation of "Capital" influences on Pompeian public architecture and the operation of patronage in the early Julio-Claudian period, is fruitfully based both on his own Pompeii Forum Project and on Richardson's "Concordia and Concordia Augusti: Rome and Pompeii."

Leach draws on Richardson's analysis of Pompeian painters to advance the study of artists, patrons, and intended audiences there in her "Lawrence Richardson and the Painters of the Fourth Style." De Grummond applies this analysis to a different art form in "The Gemma Augustea: Not Made for Rome," for which she posits a provincial solution.

Frischer's "A New Feature of 'Rome Reborn': The Statue Group from the Roman Forum Illustrated in the Trajanic Anaglyphs" follows the lead of Richardson's study of the program and monuments of the Arch of Constantine, applying to it a technology that Richardson was among the first to champion.

With Professor Laidlaw's paper "The House of Sallust, 1970-71, 2005-11: Excavations and Some Surprising Results" and Parslow's "The Nymphaeum in the Praedia Iuliae Felicis in Pompeii," we return to excavations at Pompeii carried on with Richardson's enthusiastic encouragement. Both projects follow the paradigm of *riscavare lo scavato* that gained currency in Italian archaeology in the later 20th century and again depend on the synthesis of textual with archeological evidence—the texts here being 19th century and notably Richardson's own work on the domestic architecture of the city and its pictorial and other adornments.

### **Not the Minucia Frumentaria? A Long-Standing Topographical Puzzle** *M.T. Boatwright*, Duke University

In his entry on the Porticus Minucia Frumentaria in *A New Topographical Dictionary of Ancient Rome*, Richardson suggests its identification with a large, now undetectable, building at the southwestern end of the Via Lata. The proposal was characteristically understated and iconoclastic. The Porticus Minucia Frumentaria figures among the most disputed questions in Roman topography. The scant documentary evidence, mostly the regionary catalogues and inscriptions, places this grain-distribution facility in Regio IX. The two sites for the Porticus Minucia Frumentaria most currently accepted are the portico east of the Largo Argentina and north of the Via delle Botteghe Oscure and the monumental structure in the Via di Sta. Maria de' Calderari. The present paper does not seek to decide between these two locations in Rome's southern Campus Martius; rather it uses Richardson's suggestion to explore a little-known area of Rome and a structure now ignored by Roman topographers.

Richardson argued his case from archeological finds west of the Via Lata, from south of the Aqua Virgo to north of the modern Via di San Marco. Plate 21 in Lanciani's *FUR* depicts a series of sturdy pillars for a building that—were it to extend as far as indicated—measured 225 x 60 m. Remains, some found under Sta. Maria in Via Lata and Palazzi Doria and Bonaparte, are illustrated in Piranesi's *Campus Martius* as heavily rusticated in a Claudian archaistic style. Others are said to be in Hadrianic brickwork. The whole was identified as the Saepta Iulia until Gatti relocated that further west by relocating fragments of the Forma Urbis in 1934.

Although the remains along the Via Lata now lack identification (and are probably not the Porticus Minucia Frumentaria), they deserve reexamination. Discussion of accessibility and possible functions illuminates roads and movement through this central region of Rome as well as the area's monumentality or quotidian nature. It contributes to the controversy over the nearby Temple of Trajan. The paper thus furthers Richardson's real objective of invigorating Roman topography.

### The Gemma Augustea: Not Made for Rome

Nancy T. de Grummond, Florida State University

The fact that the Gemma Augustea depicts the joint cult of Augustus and Roma, and that Augustus is shown with divine attributes, strongly suggests that the gem was not made for Rome, where Augustus did not wish to be seen as a god; he would, however, allow his worship in the provinces, in connection with the cult of Roma. In fact, the earliest known record of the Gemma Augustea places it in Toulouse and thus in the area of the ancient province of Gaul. This paper argues that the Gemma Augustea was made as a dedication for the Altar of Augustus and Roma at Lyon (ancient Lugdunum, not far from ancient Tolosa), dedicated by Augustus' stepson Drusus the Elder in 10 B.C.E.

The top register depicts a man in a toga descending from a two-horse chariot driven by Victoria; he is universally agreed by scholars to be Tiberius. Nearby stands a youthful male in military uniform, along with a single horse, who has been identified as Gaius, Germanicus, and Drusus the Elder. Arguments are made in support of this last identification, in connection with the hypothesis that the gem was first presented at the time of the dedication of the great altar to Augustus and Roma, sometimes known as the Altar of the Three Gauls, and located at Condate, the point of confluence of the rivers Rhone and Saône. The goddess wearing a crown of walls and bestowing an oak wreath on Augustus may accordingly be identified as a personification of Lugdunum, and the marine (or rather fluvial) deity next to her may be a personification of Condate.

The lower register depicts deities of Gaul, Diana, and Mercury, assisting Roman soldiers to control barbarian captives and to raise a military trophy. The two youths who erect the trophy may allude to Tiberius and Drusus, who, after numerous conquests, erected the Trophy of the Alps, beginning in 15 B.C.E. Numerous other details of the iconography may be explained in terms of the Lugdunum hypothesis, and arguments may be cited to show that the date proposed for the Gemma, ca. 10 B.C.E., links it stylistically with the Ara Pacis Augustae, under construction in Rome at the same date.

### Some Roman Architectural Influences at Pompeii

John J. Dobbins, University of Virgina

Richardson's "Concordia and Concordia Augusta: Rome and Pompeii" (PP 33 [1978] 260–272) demonstrated the fruitfulness of exploring the influence of Rome on Pompeian architecture and patronage. The present paper starts with the Augustan-period Eumachia Building and underscores that Eumachia's euergatism was expressed in specifically Roman terms. Eumachia emulated Livia's dedication of the Porticus Liviae in architectural form (a similarly designed porticus), dedication (to Concordia), and political aspiration (both included their sons). Eumachia's patronage proclaimed that she was to Pompeii as Livia was to Rome. Two benefactions of Marcus Holconius Rufus (theater and sanctuary), the forum arches flanking the Temple of Jupiter, and the Imperial Cult Bulding (also known as the Sanctuary of the Public Lares) occupy the rest of the paper.

Marcus Holconius Rufus was to Pompeii as Augustus was to Rome. Inscriptions document that Marcus was one of the two most prominent Pompeians during the Augustan period. He transformed the Hellenistic theater into a Roman one that evoked the Theater of Marcellus in Rome on the model of Augustus. As duumvir for the third time, Marcus was possibly the main patron in the transformation of the Sanctuary of Apollo that alluded to Augustus and the Temple of Apollo Palatinus.

Two arches flanked the front corners of the Temple of Jupiter on the forum at Pompeii, creating a scenographic affect that emphasized the northern end of the forum. The arch at the southwest corner of the temple still stands; that at its southeast corner was removed in antiquity. The precise date for the arches is unknown, but it is clear that they were installed after the construction of the temple. What was the inspiration for the affect mentioned above? I suggest that the inspiration was the similar arrangement of temple and arches in the Forum Iulium in Rome.

The imperial cult building on the east side of the Pompeian forum is Pompeii's most important building from the point of view of Roman architectural history and the history of architecture in general. Constructed after the earthquake of 62 C.E., the building stands chronologically between the octagon suite of the Domus Aurea and the Flavian and Hadrianic developments in Rome (Domitian's Aula Regia and Hadrian's Pantheon). As such, it plays an important role in the Roman architectural revolution. But apart from current work by the Pompeii Forum Project, the building is never considered outside the context of Pompeii. This precocious building, which anticipates design elements of the Pantheon, is here placed in its Roman context.

### The Problem of Pedum

Harry B. Evans, Fordham University

Despite Pedum's importance in the Latin wars of early Roman history, its site has yet to be fixed. The most recent discussions of the problem reach no conclusion, and the Barrington Atlas indicates ancient Pedum between Palestrina and Tivoli, in an area somewhat north of Gallicano and Zagarolo with a question mark. Although our evidence does not permit any definite location, the problem why

this site is still a mystery is worth examination; sometimes the history of a problem is more interesting than its solution.

The earliest Italian chorographers, Biondo Flavio and Leandro Alberti, made no mention of Pedum; Philip Clüver appears to have been the first to treat its location, arguing for its placement in Praenestine territory near Gallicano. The polymath Athanasius Kircher, who published an ambitious study of Latium 50 years later, took issue with Clüver. Kircher claimed to have made a first-hand investigation of the area and produced a topographical map showing Pedum on the Via Praenestina, but much closer to Rome, at a site now recognized as that of ancient Gabii. In a critique written a year later, Raffaello Fabretti observed that Kircher had misread the ancient sources and was wrong to correct Clüver on Pedum. But Fabretti added nothing new to a solution of the problem.

Next in this discussion was the Dutch scholar Jacob Gronovius, who proposed an emendation of Livy's famous account of Hannibal's march on Rome (Livy 26.9.11–12) by substituting Pedum for the word "Algidus" in the manuscript tradition. This emendation resulted in a nasty response from Fabretti in his study of Rome's aqueducts, highlighted with a gratuitously coarse pun on the name Pedum and the Latin verb *oppedere* (to fart). Fabretti's attack prompted Gronovius to publish an equally fierce rejoinder, answered in turn by Fabretti in a long and spirited rebuttal. But this protracted scholarly dispute, although lively reading, did nothing to advance an understanding of where Pedum itself was.

The problem could well have been solved in the 17th century when the physical evidence on the ground was clearer. But topographers at that time, although they knew their ancient sources, appear to have been more interested in squabbling than actually exploring; as a result, no one today knows the location of Pedum. By the time Nibby, Tomassetti, and Ashby treated the location in later centuries, the evidence was inconclusive, and the site remains uncertain.

## A New Feature of "Rome Reborn": The Statue Group illustrated on the Trajanic Anaglyphs

Bernard D. Frischer, University of Virginia

This paper reports on a recent project to use digital technology to reconstruct the statue group in the Roman Forum illustrated on the so-called Trajanic Anaglyphs (also known as the Plutei di Traiano). The resulting digital model, showing Marsyas, a fig tree, and an olive tree, has been added to the "Rome Reborn" 3D digital model showing Rome in the year 320 C.E.

The two anaglyphs were found in 1872 during the demolition of a medieval tower undertaken during Pietro Rosa's excavations in the Roman Forum. The anaglyphs are of great interest to topographers of the Roman Forum because their backgrounds give us a precious panoramic view of the Forum during the reign of Trajan. In late antiquity, the reliefs were erected on two travertine plinths aligned to the Augustan Rostra and placed at the approximate mid-point of an axis running from the end of the Argiletum in the Roman Forum and the base of the so-called Column of Phocas. The original context of the reliefs is not known. As Verduchi noted, speculation about their provenance is fruitless "owing to the complete absence of objective evidence." Today the reliefs are to be found inside

the Curia Julia, where they were moved to protect them from weathering. This paper discusses the issues involved in reconstructing the statue groups on the basis of iconographical evidence and using archaeological evidence to situate the group in the plaza of the Roman Forum near the Tribunal Praetoris and the anaglyphs themselves. It will illustrates the principal methodologies and technologies typically used by the "Rome Reborn" project, which Richardson was among the first to support when it was launched in the mid 1990s.

### The House of Sallust, 1970–1971, 2005–2011: Excavations and Some Surprising Results

Anne Laidlaw, Johns Hopkins University

Almost every course on Roman architecture deals with the atrium house, and many use the House of Sallust as the standard example: fauces flanked by shops along the front, an atrium and impluvium in the center, bedrooms and alae on the sides, and a tablinum and oeci in back. However, aside from explaining the final plan as a remodeled inn and speculations that certain features belong with the original house or were later additions, no serious study of the entire house has been made since Mazois' famous publication in 1824; the demolition bomb that destroyed much of the southeast corner in World War II simply compounded the difficulties in making one.

In 1969, I began studying the house to answer a question about the First Style decoration of the atrium. This became a nightmare the following year, when a construction company acting for the Superintendency rebuilt and reroofed the main block, in the process compromising much of the remaining ancient fabric. Thus, the House of Sallust today is a mixture of ancient and modern remodelings and, like much else in the town, is again falling apart.

In 2005, serious excavation again became possible in collaboration with the University of Perugia's project to analyze several houses in Region Six. Linked into their project, Marco Salvatore Stella and I have resurrected the study of the House of Sallust, and through further soundings made between 2005 and 2010, are now finishing a monograph on the entire house.

Questions we address include: What are the date and plan of the original house? Is there evidence for earlier occupation on the lot? Do the impluvium and/or back portico belong with the first building phase? How did the water system function, both before and after the right-side garden was remodeled into a private apartment? What is the explanation of the odd extension in the regular plan of Cubiculum 16 next to the buttress in the large triclinium to its south? When did the shops flanking the fauces and the oeci next to the tablinum get remodeled? And, from an intensive examination of the published records (Fiorelli's *Pompeianarum Antiquitatum Historia* [1860–1864] and the diaries of the La Vega brothers edited by Pagano in 1997), what can we learn about the course of the original excavations of the house in 1780 and from 1805–1809 in the midst of the Napoleonic Wars?

## **Lawrence Richardson, Jr. and the Painters of the Pompeian Fourth Style** *Eleanor W. Leach, Indiana University*

Richardson's two books on Pompeian figurative panel paintings frame his more conspicuous studies on Pompeian architecture and Roman topography. In the 1955 Casa dei Dioscuri and its Painters, he broached the matter of artistic anonymity through adoption of the Morelli method of identifying the productions of individual painters that Beazley had earlier used for the systematizing of Greek painted pottery. Attributions are based on a close study of characteristically idiosyncratic rendering of small details, often in the anatomy of the subjects. Taking the Casa dei Dioscuri as his anchor point because of the abundance of paintings by visibly different hands, he identified seven painters whose work he then traced throughout the known repertoire from Pompeii and Herculaneum. But this project he considered only a beginning, and his continued attention to building a catalogue of attributions finally resulted in the 1999 publication of A Catalog of Identifiable Figure Painters of Ancient Pompeii, Herculaneum, and Stabiae. In company with Third Style attributions, this more comprehensive study expanded the repertoires of some Fourth Style painters while adding new ones, even dividing the productions of one prolific painter into early, middle, and late phases. In reaching beyond the original limit of the Dioscuri, it has included smaller houses along with grander ones, and minor as well as major artists.

With these inclusions, Richardson also enlarges upon some of the questions adumbrated in the earlier work: primarily the relationship between the circulation of painters and the economics of the painting industry but also the rationale determining the collocation of pictures in a single room and the way that representations of a popular subject might be varied to contribute to the harmony of an ensemble.

The substance of this paper appropriates some of Richardson's attributions to pursue a few of the questions he raises concerning patronage and locations. First, I look at the totality of decorations within two houses in which he has designated the presence of both major and minor Fourth Style painters (the House of Marcus Lucretius and one other); second, I track some identifiable circuits that involve works in the private and public sphere. I want to consider how the coherence of decorative ensembles contributes to a visible status hierarchy within the dynamics of Pompeian domestic spaces and how the employment of certain identifiable artistic personalities in both private and public commissions might cast light upon patronage and the audiences toward which their works were aimed.

### The Nymphaeum in the Praedia Iuliae Felicis in Pompeii

Christopher Parslow, Wesleyan University

In his book *Pompeii: An Architectural History*, Richardson surveyed the principal features of the nymphaeum in the Praedia Iuliae Felicis in Pompeii and emphasized its aquatic aspects, likening the space to an ornamental fountain. But the nymphaeum was more than that: it was the centerpiece of the architecture, art, technology, and social life in the Praedia. Its barrel-vaulted ceiling was adorned to simulate a grotto. Encircling the walls below was a blue frieze depicting pygmies

among the flora and fauna of the Nile Delta. Niches in the walls held sculptures evocative of the exotic setting. Water rippled down a water-stair fountain to fill a shallow pool framed by a masonry triclinium from which guests, cooled and soothed by the play of water, looked out onto the elegant central garden. Past studies of the nymphaeum have focused on specific aspects. Rakob analyzed its architecture in his famous study from 1964, noting parallels with the hydraulic features of the Domus Aurea in Rome, while Whitehouse identified some of the paintings from its Nilotic frieze in 1977 and linked them to the fashion for Egyptianizing motifs and landscape painting. This paper synthesizes the findings of a new archaeological survey with the results of archival research into the history of the excavations and in the museum storerooms to offer a reconstruction of the nymphaeum's architecture, artistic program, and hydraulics, and assesses its role in the daily life of the Praedia.

### SESSION 1G Recent Fieldwork in Aegean Prehistory

CHAIR: L. Vance Watrous, University at Buffalo

### Gournia Excavations: 2010-2011 Field Seasons

L. Vance Watrous, University at Buffalo

The Gournia excavations were carried out under the aegis of the American School of Classical Studies at Athens with the support of the KD' Ephoreia of Classical and Prehistoric Antiquities.

The primary aim of the project was to uncover as much as possible of the Protopalatial (2000–1800 B.C.E.) and Prepalatial (3000–2000 B.C.E.) settlement. Our aim follows from (1) the fact that Harriet Boyd only dug and published a major portion of the Neopalatial (1800–1490 B.C.E.) town, and (2) our interest in the formative period of the settlement (i.e., the question of how and why Gournia became a palatial center for a polity in the Mirabello region of East Crete). We also tried to answer certain unsolved problems about the town's development (i.e. the construction date of the palace, its Mycenaean successor [House He], and the street of the town system).

This paper presents our findings on these subjects. Excavation focused on the north edge of the town where the Protopalatial town was not built over in later periods. We have found parts of three Protopalatial houses and all three produced evidence of pottery production. The industrial character of the town so evident in LM I seems to have been already begun in the Protopalatial period. Excavation demonstrated that the palace was built in MM IIIA, not in LM I as Boyd believed, and that the main street system was laid down in the Neopalatial period, probably MM III. An earlier (Protopalatial period) street has also been uncovered. We have exposed parts of two architectural structures, one quite large, on the hilltop directly under the palace. It seems that the town was destroyed in MM IIB and completely reorganized in MM IIIA.

Inside Room 13 of the palace, we uncovered a large ritual deposit spanning the MM IIIA–LM IB period next to the standing stone baetyl. In its final period the cult produced conical cups filled with Theran pumice, ash, and animal bones. We found evidence that Gournia was occupied in the Final Neolithic period, not EM II as has been believed, and that we can for the first time estimate the size of the EM II settlement.

### New Light on the Late Minoan IB City of Gournia

D. Matthew Buell, University at Buffalo

The principal goal of the Gournia Excavation Project is to develop an understanding of the city's urban development through time. To this end, several trenches were opened in the northern most section of the settlement, an area which has seen little in the way of previous investigation, beginning in the summer of 2010. Here, a substantial part of a large, well-constructed building using Cyclopean architecture and with two distinct building phases, both of which belong to the latter part of the Late Minoan IB period, was revealed. Analysis of this building's material remains suggests that it served a specialized function, one perhaps devoted to the production and storage of food products, especially wine and/or olive oil, for the purposes of exchange. This point is furthered by the fact that this building is positioned on one of the main approaches to the city from the coast, and it overlooks the harbor. Interestingly, the connection between building size, elaborate architectural features, and industrial focus, albeit usually metal and stone vase-working, is witnessed at other buildings within the city of Gournia belonging to this period (e.g., Ab, Ah, De, Ea, and Ec).

Ultimately, while it may be true that some buildings, especially those on the eastern side of the settlement at Gournia (e.g., Ca, Cb, Ce, Cf, and Ci) were abandoned at the end of the Late Minoan IA period, the program of renewed excavation at the site suggests that other areas of the settlement saw extensive rebuilding, remodeling, and entirely new construction. As such, the situation is more complex than previously thought, and it seems to be that the settlement expanded, especially into areas that had not been previously occupied. As such, we argue that our building fits into a more general Late Minoan IB pattern witnessed in other parts of East Crete, including Mochlos and Pseira. This is a period that sees, we believe, renewed urban development, particularly in an expansion and refocusing of the limits of the town, along with the construction, rebuilding (or re-establishment) of several well-constructed buildings, perhaps belonging to local elites and associated with specific industries including metal working, stone-vase construction, and wine and/or olive oil production.

## AROURA 2011: Methods, Results, and Prospects of Geophysical and Surface Survey around the Mycenaean Fortress of Glas, Viotia, Greece

Michael F. Lane, University of Maryland, Baltimore County, Vassilis Aravantinos, Ninth Ephorate of Prehistoric and Classical Antiquities, T.J. Horsely, University of Michigan, A.E. Cuneo, Boston University, and W.S. Bittner, University of Maryland, Baltimore County

Archaeological Reconnaissance of Unexplored Remains of Agriculture (AROU-RA) continued in 2011 with an expanded methodology resulting in significant new finds. Further extensive magnetometry, soil profiling, and field walking were undertaken, while stratified soil cores taken in 2010 were subjected to flotation for the recovery of organic and inorganic materials. Radiocarbon analysis has also provided precise dates of certain features detected in 2010. Geophysical survey concentrated on clarifying the nature and extent of the regular network of anomalies near Glas' polder dike, which has been identified tentatively with a system of irrigation canals or built field partitions, and on the connection of larger "bounding" features with approaches to Glas' main gates. Soil profiling was done to ground-truth magnetometric data and to provide evidence of the polder's geomorphic history, particularly its reflooding around the end of the Bronze Age. Surface collection aimed to explore the connection between the fortress and evidence of Late Helladic habitation in peripheral areas. All together, the evidence produced by AROURA indicates that the provisionally identified field systems are related functionally and chronologically to Glas and the larger Mycenaean drainage mechanisms of the polder. Therefore, the continuing work of AROURA promises important insights into the practice and sustainability of palace-administered extensive agriculture in the Late Helladic III period in mainland Greece.

## Rediscovering Gla: The 2010 Geophysical and Mapping Survey of the Mycenaean Citadel

Antonia Stamos, INSTAP Study Center, Christofilis Maggidis, Dickinson College, and Edward Blinkhorn, University of York

A systematic mapping and geophysical survey of the Mycenaean citadel of Gla was initiated in 2010 under the auspices of the Athens Archaeological Society and the general direction of Maggidis; the project is funded by Dickinson College, with technical support from INSTAP. The citadel was built atop an island-like bedrock outcropping rising 20–40 m above the plain and encompasses an area of about 20 ha. A massive fortification wall follows the contours of the bedrock outcrop for almost 3 km and features four gates, one of which is a double gate. Within the fortification walls, the interior is divided into three adjacent and intercommunicating enclosures: an administrative and residential complex to the north, the so-called agora to the south, and a northeastern enclosure adjacent to the administrative/residential complex with no visible ruins. A fourth enclosure to the east is isolated from the remaining fortified area and accessible only from the southeast gate. The survey addresses several issues with the size, layout, and use of the citadel of Gla, namely that less than one-third of the total area inside the fortification walls appeared to have been occupied by various buildings and structures. Extensive

mapping of all visible surface features, including the fortification walls and gates, was conducted along with a remote-sensing investigation using a Geoscan FM256 Fluxgate Gradiometer in selected areas of the citadel. As a result, a radically new image of the internal organization of the structures within the Cyclopean walls has emerged, questioning the role Gla may have played as a regional storage center and an administrative seat and residence for two local rulers.

### Eastern Boeotia Archaeological Project: Excavations at Ancient Eleon

Bryan E. Burns, Wellesley College, Brendan Burke, University of Victoria, Susan Lupack, University College London, Vassilis Aravantinos, Ninth Ephorate of Prehistoric and Classical Antiquities, and Ioannis Fappas, Ninth Ephorate of Prehistoric and Classical Antiquities

The Eastern Boeotia Archaeological Project began a new phase of work this year with the first excavations of the settlement long identified as ancient Eleon. Results of a limited season of excavation in June 2011 confirm Mycenaean Eleon's function as a secondary center during the Palatial period and also as a center of vibrant activity throughout the Late Bronze Age.

The new campaign continues a synergasia of the Canadian Institute in Greece and the Ninth Ephorate of Prehistoric and Classical Antiquities, a collaboration first established through a surface survey of the plain east of Thebes (2007–2009). Eleon, which occupies the center of the plain, is clearly distinguished by its architectural remains of historical periods: a massive, curved polygonal wall of the Classical period that runs for nearly 80 m and the lower courses of a medieval tower that likely functioned within a network of similar structures across central Greece. Our analysis of systematically collected surface material, however, indicates a strong prehistoric occupation, with the quantity of Mycenaean ceramics greater than those of all later periods combined.

Geophysical survey conducted in 2009 clearly documented significant architectural remains below the current surface, with a depth of deposit of more than 2 m. It remained unclear, however, how settlement phases might coordinate with the multiple periods represented by surface remains. The goals for the 2011 excavations were thus to assess the extent to which structures and deposits remained intact and to determine whether a sequence of chronological phases lay undisturbed by modern activities.

A program of trial excavations revealed an intriguing sample of significant Bronze Age remains well preserved in the site's eastern zone. We opened three trenches measuring 5 x 5 m that produced substantial material dating from the LH I through LH IIIC periods. The discovery of well-preserved stone architecture and activity phases datable to the LH IIIB period accord well with the listing of Eleon (e-re-o-ni) on the Linear B tablet Ft 140 among a list of Boeotian sites that were part of Thebes' regional economic network. The greatest amount of material recovered thus far, however, dates to the LH IIIC period. Finds include figurines, animal bones, metal artifacts, and a broad range of diagnostic ceramics (deep bowls representing several phases; pithoi and jugs similar to those from Lefkandi; and kalathoi and kraters with figural decoration). Small soundings also uncovered architectural remains and ceramic deposits that may date to the Early Mycenaean period.

## Beyond the Walls of Agamemnon: Systematic Excavation of the Lower Town at Mycenae 2009–2010

Heidi Dierckx, Elmira College, and Christofilis Maggidis, Dickinson College

Excavation of the lower town at Mycenae continued in 2009-2010 under the auspices of the Athens Archaeological Society, the direction of Spyros Iakovidis and Christofilis Maggidis and with the financial support of Dickinson College and INSTAP. The excavation focused on the south sector, where systematic geophysical prospection detected several complexes, structures, roads, and an outer fortification wall with two gates. Two long, solid walls were uncovered running roughly north-south, both surviving to the height of 2 m. Wall A is Late Mycenaean, as indicated by its construction technique and foundation depth (built upon river deposits and massive boulders) and further documented by diagnostic sherds retrieved from its joints and foundations. Although its original function is still debated, the wall was later covered by thick slope deposits and was reused as foundation for a group of Geometric/Archaic houses/workshops to the east. The other wall (Wall B) encloses a wide area, forms indentations and recesses, is associated with a high concentration of arrowheads and sling stones, and was possibly connected with the enigmatic apsidal structure to the northeast (bastion?). This wall may have originally functioned as a fortification enclosure and preserves two main successive phases, a Mycenaean and an Early Iron Age phase, that clearly predates the large Middle Geometric II grave (ca. 800 B.C.E.) abutting the wall at its surviving top courses. Evidence also indicates the presence of both Geometric and Archaic structures, hereto little attested at Mycenae. The issue of occupation or abandonment of Mycenae after the LH IIIC needs to be revisited.

### Survey and Visualization of Mycenaean Buildings at Kalamianos

*Philip Sapirstein*, University of Pennsylvania Museum of Archaeology and Anthropology

Between 2006 and 2011, the Saronic Harbors Archaeological Research Project (SHARP) has surveyed the coastal and interior area around the modern fishing village of Korphos, Greece once a major Early and Late Helladic center of activity. One project focus has been the documentation and analysis of the recently identified Mycenaean harbor settlement at Kalamianos, a walled site with the substantial polygonal stone foundations of more than 40 buildings, indicated by ceramics to have been occupied primarily during LH IIIB. Although excavations are planned, the project to date has been a survey, relying on the copious surface remains that in many areas have not been significantly affected by later occupation. Exploiting an array of techniques for the intensive survey, mapping, description, photography, and illustration of these visible remains, we are able to restore the plans, access routes, construction phases, and design of several major complexes at Kalamianos.

Directing architectural illustration since 2009, my own work at the site has coordinated several approaches to documentation, including total station and GPS survey, stone-by-stone field drawing, aerial photography, topographic analysis, and recently 3D scans with a powerful midrange scanner (in collaboration with the Center for Advanced Spatial Technologies at the University of Arkansas). I present the novel form of hybrid digital documentation developed for SHARP, combining these various sources graphically to produce interpretive visualizations and reconstructions of the best-preserved buildings at Kalamianos. Our use of these different approaches also permits the comparison of the coverage, accuracy, and cost of each method of documentation, helpful for determining which methods are most suited for future archaeological fieldwork. I discuss the preliminary interpretations enabled by this new visual analysis of the architecture, including its ability to restore the elevations of the buildings, their design and construction process, and its remarkable consistency across the settlement as a whole.

### The Damnoni Excavation: Mesolithic Remains from Southwest Crete

Thomas F. Strasser, Providence College, Eleni Panagopoulou, Ephoreia of Palaeoanthropology and Speleology of Southern Greece, Panagiotis Karkanas, Ephoreia of Palaeoanthropology and Speleology of Southern Greece, Epaminondas Kapranos, 25th Ephoreia of Classical and Prehistoric Archaeology of West Crete, Gilbert Marshall, Ephoreia of Palaeoanthropology and Speleology of Southern Greece, Chad DiGregorio, Boston University, Miriam G. Clinton, University of Pennsylvania, Graham George, Independent Scholar, and Rebecca Mersereau, Kennesaw State University

In 2008, the Plakias Mesolithic Survey found several surface scatters along the south coast of Crete in the Rethymnon Nomos, that were defined as Mesolithic based on tool morphology. One of these sites, near the village of Damnoni, was chosen for excavation because of its soil preservation. The excavation in 2011 found clearly stratified layers containing Mesolithic artifacts made of local quartz and chert. The excavation at Damnoni has produced the first stratified Mesolithic remains on Crete and the earliest in situ cultural deposit on the island.

The site is on the south-facing slope of the Kakomouri headland, below a small cave and near freshwater streams. A series of 1 m² test trenches were excavated to understand the stratigraphy, and they revealed three strata. The first consists of brown topsoil with a mixture of Mesolithic and later artifacts. This was underlain by an orange Aeolian deposit that contains most of the Mesolithic artifacts. The third stratum is a deep red paleosol; the upper level contained Mesolithic tools and probably formed the living surface, but somewhat deeper it immediately became sterile of cultural remains. Once the stratigraphy was understood, a checkerboard of 1 m² trenches was excavated to learn the extent of the site. Finally, trenches were connected to have two cross-sections based on cardinal points. Though the eastern and southern edges of the site were found, the Mesolithic lens thickens and continues to the west and north, suggesting the potential for further excavation.

The chipped stone artifacts were predominantly made of local milky quartz. Initial analysis has pointed to the predominance of bipolar hammer-and-anvil working of raw materials. This produces a range of irregular flake spalls that are then shaped through nibbling retouch. Although the use of this technique has been noted at other Mesolithic sites in Greece, its predominance at Damnoni is significant and is probably related to the almost exclusive use of quartz as raw material.

### **SESSION 1H: Workshop**

## Cultural Heritage Preservation in a Dangerous World: Humanitarian Crises and Revolutions

Sponsored by the Cultural Heritage by AIA-Military Panel (CHAMP)

MODERATOR: Laura A. Childs, Cultural Heritage by AIA-Military Panel, and Laurie W. Rush, CRM Program, Fort Drum, New York

### **Workshop Overview Statement**

Cultural Heritage by AIA-Military Panel (CHAMP) members will participate in discussions on various aspects of cultural heritage preservation during humanitarian crises, political revolutions, and other disasters where military personnel may be involved. Group findings at the end of the workshop will be incorporated into an action plan for reference by military and academic organizations. The education group will consider education materials and courses for military personnel. The contingency plan group will develop contingency plans to have ready to implement whenever a crisis occurs. The cultural heritage information group will describe the type and availability of cultural heritage information required by military and academia to help identify cultural property. The international military panel will discuss how other militaries interface with the U.S. military to support such crises. Policy and doctrine group will determine how to input cultural heritage preservation in appropriate doctrine and policy documents. Another possible discussion will center around helping local peoples to protect their own culture during these difficult times.

#### GROUP DISCUSSIONS:

**Education:** Discuss types of education (professional military education, university programs, etc.), material, methods, and training aids that are available or in development for both military and academia.

**Contingency Plans:** Develop contingency plans for immediate implementation whenever crises occur.

**Cultural Heritage Information:** Development and availability of cultural heritage information such as GIS maps, site descriptions, and cultural property covered by 1954 Hague Conventions (e.g., museums, libraries, archives, religious sites, etc.) for military personnel to access easily.

**International Military Cultural Heritage Working Group:** (ImCurWG) integration with and support to CHAMP/CHCAG: Understand how ImCurWG can work with CHAMP to provide support in crises.

**Policy and Doctrine Development:** Develop and insert cultural issues into doctrinal, training and other efforts at the Department of Defense, interagency, and other organizational levels.

**Original Research:** Original research topics and ongoing projects in the areas of cultural heritage preservation and military operations.

PANELISTS: Lisa Kahn, University of Maryland University College, Capt Ben Roberts, U.S. Army National Guard, Corine Wegener, Wegener, Cori U.S. Committee of the Blue Shield, Col Joris Kila, The Netherlands Minestry of Defense, Michael Welch, Independent Scholar, and Philip Stinson, University of Kansas

## SESSION 11: Workshop Presenting the Past in the 21st Century

*Sponsored by the Museums and Exhibitions Committee* 

MODERATOR: Kenneth Lapatin, The J. Paul Getty Museum

### **Workshop Overview Statement**

This workshop is the first in a series of meetings intended to reinvigorate the spirit of collaboration between curators of university collections and public art museum and archaeologists. For many people, the most meaningful encounters with the art and artifacts of ancient civilizations take place in museum galleries. As numerous recent exhibitions have demonstrated, antiquity attracts enormous public interest, but it also challenges curators to make complex histories accessible to diverse audiences and to address visitors' changing expectations and values. Museums have pursued numerous innovative strategies for presenting ancient art and archaeological fieldwork to the general public, students of all ages, and specialists. How can archaeology and ancient art be displayed most effectively to visitors both inside and outside museum walls? What approaches have been adopted to create a more holistic engagement with objects and the many facets of cultural, historical, material, and scientific information they embody? In what ways can museums promote versatile research by providing electronic "deep access" to collection records, provenance history, and the archives of early archaeological excavations that were conducted under their auspices? Questions concerning open access to collection information, transparency, and multiple narratives about archaeological heritage are of growing concern to the Internet generation.

Eight speakers share their experiences of exhibiting the past through permanent collections and temporary exhibitions and discuss approaches to installation, virtual and interactive exhibitions, and online databases of collections.

PANELISTS: Michael Bennett, Cleveland Museum of Art, Susanne Ebbinghaus, Harvard Art Museums, Jennifer Chi, Institute for the Study of the Ancient World, New York University, David Saunders, The J. Paul Getty Museum, Lynn Makowsky, University of Pennsylvania Museum of Archaeology and Anthropology, and Ann Blair Brownlee, University of Pennsylvania Museum of Archaeology and Anthropology

### SESSION 2A Roman Sculpture

CHAIR: Aileen Ajootian, University of Mississippi

### **Polyphemus and Galateia at Ancient Corinth**

Aileen Ajootian, University of Mississippi

More than 100 years of excavation at ancient Corinth have produced many sculptural types rare in Roman Achaia. A fragmentary, under-life-sized marble group depicting a nude man and woman in a passionate embrace adds to the assemblage of unusual Roman mythological sculpture at Corinth. It was found in a deep fill (ca. early fourth century C.E.) of marble fragments from a massive destruction of several monuments southwest of the Propylaia at Corinth. Both figures are broken away below the waist; the added heads are missing, but it is possible to reconstruct their poses. The man is considerably larger than the woman. Probably seated, he pulls her across his chest, supporting her with his right arm. With his now missing left arm close to his side, he probably held her thigh. Her back to the viewer, she grasps her companion around his neck with her right hand. Her flowing hair spreads out behind her. Erotic Roman symplegmata in marble often involve satyrs and maenads or hermaphrodites, but Campanian First Style wall paintings provide the key to understanding this group. Several moments in the story of Polyphemus and Galateia appeared in fresco, including their lovemaking. The most well known of these painted scenes, from the Casa della Caccia Antiqua at Pompeii shows Polyphemus seated, holding Galateia across his body, with her back to the viewer. This work illuminates the fragmentary sculpture at Corinth, a rare glimpse in marble of the same episode.

The Polyphemus and Galateia statue group is not the only allusion to Homeric storytelling at Corinth. An under-life-size male marble figure (ca. mid second century C.E.), found in Byzantine levels over the South Stoa, wearing chitoniskos and long mantle has been identified as an image of Odysseus in mid-stride, his characteristic pose when offering a cup of wine to Polyphemus or absconding with Diomedes and the Palladion. At the Peirene spring on the east side of the excavated site, there may have been a bronze Skylla fountain in the Antonine period. In Roman wall painting, there are just four surviving scenes of Polyphemus and Galateia making love. One Roman marble relief at Turin depicts the two in a similar erotic encounter. Thus, the Roman sculpture group at Corinth represents a very unusual depiction of the Polyphemus and Galateia story.

### An African in Luxembourg: New Discoveries at Roman Altrier

Sinclair Bell, Northern Illinois University, and Franziska Doevener, Musée National d'Histoire et d'Art Service Archéologique, Luxembourg

Recent excavations conducted at Altrier, Luxembourg, under the direction of the Musée National d'Histoire et d'Art Service Archéologique, Luxembourg, have brought to light significant new information about the remains of a Roman vicus there. Notable among the small finds recovered during these campaigns is a bronze statuette of a boy with "African" features, who is dressed in the costume of a charioteer. While bronze statuettes of charioteers are known from across the empire, this is the first documented example from this region and the only known depiction of an African charioteer in Roman art.

This paper discusses the wider archaeological context of the find, including the possible significance of its recovery within the vicinity of two ritual enclosures, both of which appear associated with mother deities. The paper also considers the significance of the statuette's iconography within Roman art through comparison with other circus scenes, child depictions, and ethnic portraits. Finally, this paper offers a reconstruction of the object's original setting. The Altrier statuette is thus shown to offer new evidence for the wide diffusion of interest in the circus games and the creative forms of visual expression that they inspired across the empire.

### The Arcus Novus and the Meaning of its Spolia

Elisha Dumser, Ursuline College

The Arcus Novus was an honorary arch erected by Diocletian and Maximian in Rome, where it spanned the Via Lata, the main road north from the city. The arch commemorated the *decennalia* (10-year regnal anniversary) of the two emperors in 293 C.E. and the formation of the first tetrarchy that same year. Its design incorporated reused materials, including several sculpted reliefs of Claudian date.

In Laubscher's widely accepted interpretation, the spoliated reliefs allude to Claudius' 43 C.E. conquest of Britain to anticipate Diocletian as the restitutor Britanniae (restorer of the province of Britain), for Britain had slipped from Roman control in 286 C.E. Analysis of the historical circumstances in the years surrounding the arch's construction argues otherwise: the usurped territory in Gaul and Britain proved difficult and costly for the tetrarchs to recover, and it was 10 years before Britain was reconquered in 296 C.E. Any allusion to Britain in 293 C.E. would only underscore the fragility of tetrarchal power at the edges of the empire. Rather than cultivating allusions to Claudius on the Arcus Novus, such associations would have been actively avoided, lest the arch become a negative critique of the tetrarchy's ineptitude in the northern provinces. Thus, the reused reliefs were chosen not for their original context but because their subjects—such as four parallel scenes of an emperor leading a State sacrifice—illustrated the pietas and concordia of the new tetrarchal regime. Further, the potential negative consequences of an open reference to Claudius in 293 C.E. suggests that the reliefs' Claudian origins and style would have been unrecognizable to most viewers.

This new understanding of the Arcus Novus and its sculpture proves instructive about spolia usage in the late third century. It establishes that not every public monument constructed with reused materials intended to create a layered ideological message, and that Roman viewers were not always expected to discern the origins of spoliated components. It represents one model of spolia usage in which the subject of reused sculpture takes precedence over its origins, and the level of stylistic connoisseurship in third-century Rome is fairly limited.

### New "Used" Monuments: Evaluating Statuary of the Fourth Century

Julia Lenaghan, University of Oxford

The Last Statues of Antiquity is a project based in Oxford that aims to collect all the epigraphic, textual, and sculpted evidence pertaining to honorific statuary between ca. 280 and 600 C.E. The compilation of this material is to provide a basis for the study of numerous historic, social, and economic trends of the period.

This paper addresses a specific subset: non-imperial statuary of the fourth century. This body of material has traditionally presented chronological difficulties and has been mainly organized around two fixed points, the clean-shaven fashion choice of Constantine and the combed-forward hairstyles of the members of court depicted on the obelisk of Theodosius. Rather than use these monuments as points of departure, I offer a new set of fixed monuments from which we might better draw conclusions and inferences about the century and the men who ran it.

My fixed points are seven externally dated statue monuments that honor private individuals. These are complete monuments to men who can be dated by their professional careers or other biographical information. They cover a chronological time span that runs from 303 to 380 C.E. and a geographic expanse that ranges from Africa to Asia Minor. Although the majority of these monuments have long been known to scholars, they have never been discussed for what they are, a coherent group that illustrates the main trends of fourth-century honorific statuary. They exemplify the type of honorand, the setting for monuments, and the reuse of extant material. This re-use, making something old new again, is one of the most recognizable features of Late Antique statuary, and yet, at the same time constitutes a formidable obstacle for modern scholars trying to identify and reconstruct the visual landscapes of the fourth century. These dated monuments provide valuable lessons in what to expect, what was socially desirable, and what was aesthetically acceptable, and, in so doing, also demonstrate the limitations of traditional stylistic dating.

### SESSION 2B Greek Arts

CHAIR: Tom Carpenter, Ohio University

### Sailing the Symposium: Mosaics in the Andron at Eretria

Hallie Franks, New York University

Much scholarly attention has been paid to the imagery on sympotic vases, which famously treats symposiasts to tricks of the eye, humorous puns, and metaphorical allusions. In this paper, I consider the potential of mosaic decoration in the andron to actively participate—in a way similar to vase painting—in the sympotic context. I use as a case study the mosaic from Room 9 of the House of the Mosaics at Eretria, dating to the early fourth century B.C.E.

Located at the intersection of two major roadways, Eretria's luxurious House of the Mosaics boasts two andrones, one (Room 7) distinguished by its size, and

the other (Room 9) by its mosaic decoration, which covers the floors of both the andron proper and a small anteroom (Room 8). The mosaics of Room 9 include a Nereid riding a hippocamp, located just inside the doorway, and, in the room's central mosaic, alternating scenes of Arimaspians battling griffins and lions attacking horses.

The iconography of the Eretria mosaic calls to mind the peirata, the distant edges of the inhabited world where the griffins and Arimaspians live and vicious lions roam. I argue that this imagery of earth's outer limits, combined with the circular motion of sympotic conversation and of the wine around the perimeter of the room, sets the stage for the identification of the symposium as a journey at sea, a metaphor well attested in vase painting and literary sources. Specifically, it presents the symposiasts as sailors upon the Ocean that encircles the perimeter of the earth. This imagined scenario reverses the normal Greek world view: from this perspective, the inhabited world is seen from the outside in, so that the usually mysterious peirata are the most visible. In this way, the imagery of the andron, which encourages the figuring of the symposium as a distant ocean journey, contributes to the removal of the symposium experience from the quotidian and offers a counterpart for the metaphorical intellectual journey that is the event's ideal result.

### Adonis at Vergina: The Frescoes of Tomb I Reconsidered

Tiziana D'Angelo, Harvard University

The fourth-century B.C.E. Macedonian tomb known as Tomb I, or Tomb of Persephone, was unearthed in 1977 at Vergina. Its north and east walls were decorated with painted scenes that featured the myth of the abduction of Persephone. However, more than 30 years after its discovery, the interpretation of the scene that decorates the south wall continues to represent a major obstacle to the understanding and reconstruction of the decorative program of the tomb.

In this paper, I reconsider the iconographies of the three figures depicted on the south wall, traditionally recognized as the Three Fates, and I argue that they could be more convincingly identified as Aphrodite, Adonis, and Persephone. This recognition eliminates perceived iconographic inconsistencies of attributes, dresses, and postures, and leads to a reading of the scene as one depicting the myth of Adonis' death. This hypothesis is supported by compelling iconographic evidence from the paintings themselves and is strengthened by comparisons with several other representations of the myth of Adonis in Classical, Hellenistic, and Roman times. The interpretation proposed for this scene also has crucial implications for the reconstruction of the overall decorative program of the tomb. I accept the argument that the assemblage of wall paintings in the tomb belongs to the same mythological and religious cycle referring to the Underworld. However, I argue that the myths of the abduction of Persephone and the death of Adonis appear on the tomb walls to construct a multilayer message, in which the themes of premature death and of maternal and conjugal love are indissolubly intertwined within the eternal cycle of death-life-rebirth.

## Defining the Pan-Athenians: The Ionic Alphabet and Panathenaic Prize Amphoras ca. 440–400 B.C.E.

Ann E. Patnaude, The University of Chicago

This paper focuses on the use of the Ionic alphabet in so-called athla, or prize inscriptions, on Panathenaic amphoras, ca. 440–400 B.C.E. Specifically, it is about a change in a highly repetitive series that represents one of the most significant Attic religious and civic institutions.

An athlon inscription, TON ATHENETHEN ATHLON, is the defining feature of the prizes at Athens and marks an amphora as such. Since their inception, Panathenaic prize amphoras exhibit few innovations overall, and the majority occur in the fourth century B.C.E. Around 440 B.C.E., however, certain athla inscriptions appear in Ionic. Given the extreme conservatism in Panathenaic amphoras, any alteration in the appearance of the vessel would be significant. The fact that the prize inscription occurs in Ionic ca. 440 B.C.E. is dramatic and noteworthy. It is the single most important modification in the decoration of Panathenaic amphoras from ca. 530 B.C.E. until the addition of archon inscriptions ca. 375/4 B.C.E.

Why would the Attic state employ a non-Attic alphabet to declare that a prize is from the games at Athens? And why is there this shift in lettering at this particular time? I argue that the emergence of Ionic script on these amphoras suggests a change in the way the Athenians defined who encompassed the Panathenians. The Panathenial, literally the "all-Athenians," included Athens and her Ionian allies from 440–400 B.C.E. This variation in script seems to be the result of several events related to Athenian hegemony over its allies, including an increase in Ionian participation in the Panatheniac festival in the 440s B.C.E. At stake are the strategies that the Attic state employs to define itself as both empire and democracy in the last four decades of the fifth century B.C.E.

### The Amherst Amphoriskos: The Rediscovery of an Ancient Greek Decorated Silver Vessel

Pamela J. Russell, Mead Art Museum, Amherst College

The author had the good fortune to locate a silver amphoriskos with chased depictions of Nereids astride sea creatures in the storerooms of the Mead Art Museum at Amherst College in the summer of 2010. Long neglected, the elegant vessel is an important addition to the corpus of Greek luxury objects and highlights connections between the Aegean and peripheral regions in the Late Classical period. The small perfume bottle (11.6 cm ht.) entered the Mead's collection in 1958 as a gift from New York philanthropist Susan Bliss. Described in museum records by the Mead's first director, Charles Morgan, as a fourth-century-B.C.E. amphoriskos with a scene of Thetis and the arms of Achilles, the vessel was never published or put on display. The Mead is now planning a special installation and symposium to focus attention on this significant object.

Among the small number of surviving silver vessels with figural decoration, of which most are phialai or drinking cups, this is the only amphoriskos known to the author. In generally good condition, with one small area of loss on the shoulder and a somewhat darkened surface, the vessel has a raised palmette-and-tendril

pattern on its shoulder and rays at the base. The figural zone bears on one side a Nereid holding a Corinthian helmet while riding a hippocamp; on the other, a second Nereid, astride a dolphin, holds a sword in a scabbard and two long spears.

A preliminary technical examination revealed that the vessel was fabricated from at least seven parts: rim, upper neck, lower neck with upper body, lower body, two handles, and ring base. A certain roughness in execution, as evidenced by the uneven hammered surface and visible solder, contrasts with the sophistication of the figural decoration, which extends over the horizontal join of the two main body sections. Stylistic analysis suggests that the vessel may be somewhat earlier in date than Morgan suggested, perhaps late fifth century B.C.E., and is related to provincial works from Thrace, as well as Greek colonies in Italy and on the Black Sea. The cult of Achilles was popular along the north coast of the Black Sea, and several Greek gold and silver items with scenes of arms-bearing Nereids were found in tombs of this region. The Amherst amphoriskos would not be out of place among these objects.

## Tracking an Archaic Greek Warrior in the Near East: A Corinthian Helmet from Haifa Bay, Israel

John R. Hale, University of Louisville, and Jacob Sharvit, Israel Antiquities Authority

In 2007, a bronze helmet of Corinthian type was recovered from Haifa Bay, Israel, during commercial dredging operations. Found so close to an ancient Near Eastern port, the helmet raises important questions about the activities of Greeks in the Levant during the Archaic period.

Following conservation with the Israel Antiquities Authority, the helmet was put on display at the National Maritime Museum in Haifa. Shaped from a sheet of bronze less than 2 mm thick with a riveted nose guard 11 mm thick, it originally glittered with a covering of gold leaf, now somewhat corroded. Two snakes curl above the eye holes, each flanking a palmette or peacock's tail on the forehead. A lion with its forefoot raised up adorns each cheek piece. The designs were applied with chasing hammer and punches. The gilding and figural ornaments make this one of the most ornate pieces of early Greek armor discovered.

Haifa Bay provides the only natural harbor on the coast of Israel, well shielded from the prevailing southwest and westerly winds by the headland of Mount Carmel. Here, near the estuary of the Kishon River stood a small city (modern Tell Abu Hawam [ancient name uncertain]) with strata ranging from the Bronze Age to Hellenistic times. Although ancient shipwrecks have been reported in the area, the helmet appears to be an isolated artifact that fell from a ship a short distance from shore.

A similar helmet was found in the 1950s on a shipwreck near the Italian island of Giglio. Though the Giglio helmet sports wild boars instead of lions, the two helmets are nonetheless near twins, possibly products of the same Greek workshop. The Giglio helmet has been dated to ca. 600 B.C.E. based on the types of pottery found on the shipwreck, and the Haifa Bay helmet should also date to the late seventh or early sixth century B.C.E. Both were surely the possessions of elite warriors or commanders, operating beyond the limits of Greek colonization.

From 609–595 B.C.E., Israel was the scene of several major military campaigns. The Haifa Bay helmet may have belonged to one of the Ionian Greek mercenaries who visited this coast in 609 in a trireme fleet built by the Egyptian pharaoh Necho. However the helmet was lost, its owner's misfortune ensured the survival of a masterpiece of archaic Greek art.

# SESSION 2C: Colloquium Cyprus Capta: New Approaches to the Archaeology of Empire in Hellenistic and Roman Cyprus

ORGANIZERS: Paul Keen, The University of Chicago, and Jody Michael Gordon, University of Cincinnati

### **Colloquium Overview Statement**

Karageorghis and Maier (Paphos: History and Archaeology [Nicosia 1984] 226) wrote that, "the rule of the Ptolemies" followed by "Roman domination, marked the beginning of a new era" in Cypriot civilization. This statement recognized the historical and cultural coherence of this "new era" during which Cyprus' kingdoms were abolished and the island was politically transformed from a quasiautonomous region into a unified imperial possession. While the study of earlier periods has been the hallmark of archaeological investigations on the island, over the last 30 years archaeological research on Ptolemaic and Roman Cyprus as a unique, yet interrelated, historical period has increased exponentially. Moreover, novel theoretical approaches drawing on postcolonial theory and comparative empire studies have been applied to a range of Cypriot archaeological materials. These approaches have revealed innovative insights into how Cypriots actively negotiated new identities as power relations changed following imperial incorporation. A new image of Ptolemaic and Roman Cyprus is emerging that transcends previous interpretations based on foreign "domination" and reshapes our understanding of imperial power and local identities in the eastern Mediterranean.

This colloquium's purpose is to engage with a wider audience about new perspectives on the archaeology of Ptolemaic and Roman Cyprus by bringing together scholars from Cyprus and North America involved in research on a variety of archaeological materials. Cyprus has often been overlooked by scholars on the basis of it being too small or too much of a cultural backwater to provide insights into wider imperial trends. Nevertheless, recent research has shown that Cyprus' well-published archaeological corpus and evidence for cultural negotiation under imperial rule makes it an ideal locus for studies relevant to a wide range of scholars.

The first two papers discuss how imperial and local power was negotiated during Ptolemaic times. One investigates Ptolemaic epigraphy to trace the kingdom's impact on the Cypriot epigraphic habit. The other examines stone sculpture from Cypriot sanctuaries and reconstructs the "sacred landscapes of power" created between the city-kingdom and Ptolemaic eras. The following two papers focus on how Cypriot identities were negotiated through Roman material culture. One explores the new imperial identities expressed through coinage. The other analyzes

the influence of the bath, a key public building central to Roman ethos, on local architecture and worldviews. Following these papers, a discussant established in Cypriot archaeology considers the significance of these new approaches to Hellenistic and Roman archaeology in Cyprus.

DISCUSSANT: Derek Counts, University of Wisconsin, Milwaukee

## The Ptolemies and the Development of the Epigraphic Habit in Hellenistic Cyprus *Paul Keen*, The University of Chicago

The epigraphic habit in Hellenistic Cyprus is characterized by two trends. First, inscriptions in fourth-century Cyprus consist of inscriptions in Greek in both the Greek alphabet and the Cypriot syllabic script, Phoenician and so-called Eteo-Cypriot. Following the destruction of the Cypriot kingdoms in 310 B.C.E., however, public inscriptions are known only in the Greek alphabet. While the continuity of the syllabic script until at least 200 B.C.E. is known from the Kafizin graffiti, there have been no public inscriptions found to date employing this local script. Second, the Hellenistic epigraphic habit is often characterized by the tendencies of the cities of western Asia Minor and the Aegean who inscribed public documents as statements of putative political autonomy. By contrast, the new epigraphic habit in Cyprus has been described by Roesch ("Les Lagides à Salamine," in *Salamine de Chypre* [Paris 1980] 250) as an "épigraphie honorifique" consisting overwhelmingly of inscriptions and statue bases in honor of the ruling Ptolemies and their agents.

Despite the change in script, the formation of the new epigraphic habit is best understood in terms of adaptation and interaction. Inscriptions in Cyprus are inherently public statements of a given political and economic élite. Both the "épigraphie honorifique" and the use of the Greek script in Cypriot Hellenistic inscriptions are best seen as the product of the interactions between the Cypriot cities and Ptolemaic agents. Moreover, the continuity of autocratic rule between the city-kings and the Ptolemaic strategos implies a certain degree of continuity in the methodology of elite representation through text. By using the Greek script and honoring the Ptolemaic strategoi and the Ptolemaic kings, the Cypriot elite incorporated themselves into a specifically Ptolemaic-Cypriot representational environment created by the mutually dependent relationship of local elites and imperial agents.

This paper explores the ways in which power relations and issues of cultural and group identity interacted to create an epigraphic habit in Ptolemaic Cyprus. In order to construct a model of the effects of the Ptolemaic imperial presence on local epigraphic practices, the paper focuses first on the evidence of inscribed decrees, statue bases, and funerary monuments. Similar monuments from Ptolemaic territories in Lycia and Phoenicia are then examined as comparative models to argue that, while local elites were subordinated to the epigraphic habit of the Ptolemaic empire, this subordination was highly subject to localized factors and patterns of interaction with Ptolemaic imperial agents.

## Negotiating Local and Imperial Identities: The Evidence from Cypriot Sacred Landscapes and Their Associated Sculptures

Giorgos Papantoniou, Trinity College, University of Dublin

This contribution primarily aims to raise several important issues concerning changes in the use and perception of Cypriot sacred landscapes that were originally constructed in the era of many Cypriot basileis (kings) (i.e., the Cypro-Archaic and Cypro-Classical periods) but then continued to function in the new unified political environment under the control of the Ptolemaic strategos (general) (i.e., the Hellenistic period). This paper also aims to integrate the evolution of Cypriot sacred landscapes with sculpture, particularly the so-called Cypriot-Hellenistic portraits.

The paper argues that a discontinuity in cult activity from basileis to strategos is not groundless, and that it should be connected firstly with the political actions of the former and secondly with the consequent Hellenistic social developments and memory patterns. A process of ancient official neglect of the extra-urban sacred space during the Hellenistic period signaled a fundamental transformation in the sociopolitical perception of the lands. The annexation and provincialization of Cyprus, with consequent developments within Cypriot society, were accompanied by changes in memorial patterns, with less focus on regional or local structures, and more intense emphasis on stressing an imperial ideology, which created a more unified sacred space.

The dedication of portraitlike limestone images may be seen in relation to the transition from multiple political identities to a unified political identity and toward a more unified religious system. Looking at material culture as active in this transitional process, the meaning of Cypriot portraitlike sculpture seems to be deeply rooted in a religious and ritual context and not simply in the artistic process. As memory and power relationships from basileis to strategos were changing, extra-urban sanctuaries were losing significance. Political, social and religious group identities, elite and non-elites, as well as religious modes had already been seriously transformed and altered by the Roman period, and these phenomena appear to be reflected by the dedication of portraitlike images.

## **Pecunia Veneris: Negotiating Local Identity Through the Coins of Roman Cyprus** *Jody Michael Gordon*, University of Cincinnati

The iconography and legends employed on Roman provincial coins were one of the primary modes of expressing local cultural identities through material culture. These coins were produced with Rome's consent, and so their imagery often conveyed an ideology that symbolically stressed the power, legitimacy, and stability of Roman rule. At first it may seem that the messages conveyed through such coins merely betray a dualist tension between local and imperial agency. In recent years, however, numismatic research drawing on postcolonial theory and comparative studies of Roman identity has provided new perspectives on the local and imperial interactions expressed through coins. It now seems that Roman imperial culture was far more flexible than previously assumed and could incorporate the congruent interests of elites both at the center and on the periphery. Moreover,

the messages expressed through coins were not always discordant but could be actively negotiated between groups and understood in various ways. Analyses of the multivocal messages conveyed through the Roman provincial coinage have arguably provided some of the best insights into how local elites negotiated new identities following imperial incorporation.

This paper's purpose is to present a case study of the iconography and legends of the coinage of Roman Cyprus in order to examine how coins reflect the negotiation of new cultural identities between Cypriot elites and Rome. Cyprus' Roman coinage is ideal for such an investigation, as it was issued for more than 200 years under intermittent Roman and local authority and thus betrays both Cypriot and Roman numismatic choices. Furthermore, because the first thorough study of this corpus was only recently published (D. Parks, *The Coinage of Roman Cyprus* [Nicosia 2004]), the coins of Roman Cyprus have been largely neglected in studies of how Roman provincial identities were negotiated.

This paper shows how Cypriots distinguished themselves vis-à-vis Rome and, conversely, how Romans identified with Cyprus by presenting a diachronic survey of the iconographic and epigraphic choices expressed through the coinage and how these decisions changed. I specifically examine the modes by which local deities (e.g., the Paphian Aphrodite) and emperors were represented, and how issuing authorities were epigraphically described. Overall, the paper illustrates that new cultural identities were mediated through the Roman Cypriot coinage and demonstrates how an understudied numismatic corpus can provide a unique regional insight into how Roman provincial identities were constructed.

## Baths, Bathing, and Cultural Interaction in Hellenistic and Roman Cyprus *Skevi Christodoulou*, University of Cyprus

Little is known about the operation of baths and local concepts of bathing in Hellenistic and Roman Cyprus. This is because Cypriot baths have never been studied in detail, and most have only been mentioned in preliminary archaeological reports. Some baths are published only summarily, while others remain unpublished. Nevertheless, archaeological excavations in Cyprus have so far uncovered a total of 18 bath buildings, both public and private. Two of these date to the Hellenistic period, 14 to the Roman, and two to the Late Roman or Early Byzantine periods. Interpreting these bath complexes is critical to our understanding of how imperial and Cypriot elites interacted and how the Cypriot cities culturally developed after the fall of the city kingdoms. This paper seeks to fill this crucial gap in our knowledge of the archaeology of Cyprus by providing an unprecedented investigation of what baths and bathing culture can tell us about local and imperial interactions in Hellenistic and, particularly, Roman times.

Baths are usually dated on the basis of diagnostic archaeological finds such as ceramics and inscriptions. Unfortunately, these artifacts provide only limited chronological information, and so it is also critical to study the baths' building materials and architecture to associate them with wider Mediterranean cultural trends. This paper contributes to our understanding of baths in Hellenistic and Roman Cyprus through an analysis of their architecture, masonry type, and heating techniques based on archaeological material from excavations, reports, and in situ

observations. In so doing, I provide a pioneering overview of the surviving bath buildings in Cyprus and present their basic characteristics, architectural and technical elements, heating and water distribution, and drainage systems. Ultimately, this analysis situates Cypriot baths within the wider context of bathing culture in the eastern Mediterranean and shows that bath operations and local concepts of bathing were strongly linked with what was happening in other regions of the Hellenistic and Roman world.

### SESSION 2D Prehistoric Messenia

CHAIR: *Joanne M.A. Murphy*, The University of North Carolina at Greensboro

## A Bull Among the China? A Fragmentary Wheel-Made Figure from the Palace of Nestor

Emily Catherine Egan, University of Cincinnati

The paucity of ceramic figurines from Blegen's excavations at the Palace of Nestor is remarkable, as is the apparent absence of large wheel-made figures of the type well known from the wider Mycenaean world. Recent reexamination of the finds from the Pylos megaron, however, has yielded two fragments that form the rump of a large wheelmade bovid. The discovery of this fragmentary figure, the first of its kind known from Pylos, and in fact the whole of Messenia, prompts discussion about its date and place of production. More importantly, its unusual findspot in the core of a Mycenaean palace raises questions about the function of this figure at Pylos compared with similar examples found in different contexts at other Mycenaean sites.

This paper addresses each of these issues, considering the object itself, its context, and evidence from textual sources, and concludes that the bovid functioned as cult equipment for rituals performed by the wanax at the Pylian palace prior to its destruction.

## Repeat, Repeat? Rituals in the Tombs around the Mycenaean Palace at Pylos, Greece

Joanne M.A. Murphy, The University of North Carolina at Greensboro

In the past 20 years, the dead have figured prominently in archaeological reconstructions of past societies. Powerful socioeconomic roles that members of the society used to change social statuses and thus recreate social hierarchies and identities have been ascribed to the rituals around tombs for funerals and post-funeral activities. I contribute to the debate on the roles of the dead and funerary rituals with a detailed examination of the evidence for ritual in three tholos tombs, seven chamber tombs, and one cist grave excavated around the Greek Bronze Age site of the Palace of Nestor in southwestern Greece. I discuss the nature of the ritu-

als in the tombs and in their immediate vicinity, the types of objects used in them, their scale, and diachronic changes in the rituals.

I examine the evidence for repeated mortuary-related action or rituals by mapping the artifacts found in the chambers, the entrances, and the area immediately around the exteriors of the tombs. I subsequently divide the pottery into broad groups by possible function and map the densities and chronological differences in the distributions.

Several observations are derived from these data: first, ceramics and non-ceramics were deposited in all the tombs; the ceramics were predominantly connected to and used in rituals in the tombs, while the non-ceramics, mainly jewelry and weapons, were deposited as a display of wealth; second, the ritual in the early period took place inside the tomb, with drinking as a central component; third, the pottery in the tombs was similar to that found in domestic assemblages and therefore was not uniquely mortuary; and fourth, the activities performed at the tombs became more important in these funerary and post-funerary activities as the earlier focus on a display of wealth was de-emphasized. Finally, the socioeconomic significance becomes apparent by relating the shifts in the mortuary sphere to the economic changes at the palace; a chronological correlation between the decrease in wealth in the tombs and the expansion of the palace suggests that the tombs declined in social importance, and that the sociopolitical strategies formerly conducted in the mortuary arena shifted to the palace where there was a growing emphasis on the production and consumption of elite goods.

### **Heirlooms and Social Power at Mycenaean Kakovatos**

Robert Schon, University of Arizona

In this paper, I present new evidence for the use of the past as a tool for social power in Mycenaean Greece. Archaeologists have long established that palatial elites employed the older monuments of Grave Circle A at Mycenae and the tholos tombs of Messenia to advertise their ancestry and legitimize their authority. However, people in the Bronze Age used other strategies besides monumentality to forge competitively advantageous connections with the past. Antique personal adornments, especially heirlooms, played significant roles in the creation of an individual's prestige. Such objects promote heritage (esp. when linked to known personae) and could be displayed in a range of public contexts, including feasts and burials. One exceptionally robust and overlooked example is Tholos A at Kakovatos, which contained some glass and amber pieces that were already at least a few decades old when deposited. This tomb was in use during the LH IIA period, yet contains exotic objects that find their closest parallels to deposits at Pylos and Mycenae that are a generation or more earlier. I argue that the appearance of such items at Kakovatos demonstrates that the deceased, an elite at the margins of the bigger centers, had adopted a specific strategy of emulation of the rulers at those older and grander sites as a means of legitimizing both local authority and extraregional status.

## Out of Sight But Not Out of Mind: Post-Destruction Activity at the Palace of Nestor at Pylos and The Making of a Forgotten Landmark

Shannon LaFayette, Xavier University

In the past two decades, scholars have presented evidence for an Iron Age reoccupation of the Palace of Nestor hilltop and argued that fire damage was localized and the building's collapse was slow. I have previously demonstrated that parts of the palace's second floor remained standing for some time following the final destructive fire. Thereafter, the palace was accessible for looting and small-scale domestic reuse in the Iron Age.

In this paper, I synthesize the post-destruction history of the Palace of Nestor, including the results of my complete reassessment of the site's stratigraphy. I conclude that the regional history and topography of Messenia were significant factors in differentiating post-destruction Pylos from contemporary Mycenaean palace sites, in particular the absence of a historical cult.

Despite site reuse, no cult sanctuary was founded at the Palace of Nestor, which became a lost and forgotten landmark. No archaeological evidence has been found to support the suggestion that a historical cult was founded over the remains of the Palace of Nestor, making it unique among the Mycenaean palaces. The oral tradition of wise King Nestor's "echoing colonnade" and "lofty house" was fixed (*Hom.* 3.445, 449), but the location of the site was lost. Contextualizing the Palace of Nestor in the history of Messenia reveals why no cult site was founded. The location of the landmark was forgotten during the years of enslavement by Sparta, but its legacy was preserved in the region's collective memory.

### SESSION 2E Greek and Etruscan Religious Contexts

CHAIR: Susan Langdon, University of Missouri

### The Cult Vases of the Sanctuary of Demeter and Kore in Eleusis

Christina Mitsopoulou, University of Thessaly

During the Classical period, a specific vase shape was developed for the sanctuary of Demeter and Kore at Eleusis, destined for ritual and cultic use. It has been identified with the *kernos* or the *plemochoe* of ancient texts, the latter being most broadly accepted today. It served as a processional vase, presumably for the transportation and consumption of the ritual beverage *kykeon* during the Eleusinian Mysteries. A recent publication (*Kernos* 23 [2010] 145–178) argues that the vase can now be affirmed to have also served during the closing rite of the Mysteries, the homonymous *plemochoai*. During that rite, two such vases were inclined toward the east and west, and a liquid was spilled to the soil. The words *pleme* (flood) and *choe* (pouring) might well explain this act of symbolic irrigation of the seeds, which just before had been ritually sown by Triptolemos, under the instructions of Demeter.

Such vases appear mostly in clay, but there are also some in bronze, gilded clay, and marble. Most have been found in the sanctuary of Eleusis, close to the Telesterion; in the Athenian Agora, close to the Eleusinion and in other deposits; in the Kerameikos, close to the Sacred Road; and in other places throughout Attica. Outside Attica, they remain a rarity (Kythnos, Cyclades, and Alexandria, Egypt). These cases are now being further investigated in a project on plemochoai of the diaspora.

The shape appears in numerous typological variations, which has led to varied interpretations of destination and use. I explain them rather as differences of date (fifth century B.C.E. to the Hellenistic period). The vase has rarely been depicted in art (vase painting and metallurgy) and never before the 370s. Toward the third quarter of the fourth century, it becomes a symbol of the Mysteries and begins to be systematically depicted on coinage of the Athenian state, on festival emissions for the Eleusinian sanctuary. This decision seems to coincide in date with a reform and drastic simplification of the real vase shape.

The most important group of finds in this rare category, unearthed during the excavations of the Archaeological Society of Athens in the Eleusinian sanctuary from the early 1880s to the late 1930s, is now being investigated for final publication. As this is the richest and best-preserved bulk of available examples, new observations concerning typological development, chronology, fabrics, decoration, and general interpretation are here proposed.

### Miniature Votives from the Etruscan Sanctuary at Cetamura del Chianti

Laurel Taylor, The University of North Carolina at Asheville

In "Hoards, Votives, Offerings: The Archaeology of the Dedicated Object," Osborne (WorldArch 36 [2004] 1–10) claims that, "[o]bjects given to supernatural powers have been remarkably neglected by archaeologists." While this may exaggerate the current state of research, it is not hyperbole to claim that miniature objects given to supernatural powers have been understudied. Though the dedication of miniature objects was widespread in the ancient Mediterranean, studies of miniature votives—when they exist—have tended to focus on typology rather than on context and assemblage, an approach that can obscure variation and meaning in miniature artifact assemblages as well as the connection between object, ritual behavior, and site.

In recent years, the site of Cetamura del Chianti, located ca. 35 km northeast of Siena, has yielded abundant evidence of miniature votive objects in and around a structure now identified as a Late Etruscan sanctuary. Under the direction of Nancy de Grummond, the sanctuary has been recognized as one closely intertwined with the production of artisans working in a contiguous artisans' quarter, many of whom were the likely dedicants of these votive objects. The votives, some of which miniaturize crafts produced at the site, present a unique opportunity to understand the varied impulses behind miniaturization. The evidence from Cetamura suggests that, although the miniature votive assemblage may be modest in material, it is nonetheless diverse, ranging from the functional to the symbolic.

This paper considers the distribution and variable meaning of these miniature types within ritual contexts at the site as well as the overall miniature assemblage vis-à-vis the sanctuary and the artisans' quarters.

## Animals in Ruins: Faunal Analysis at the Etruscan Sanctuary of Poggio Colla Angela C. Trentacoste, University of Sheffield

The animal remains recovered from the Etruscan site of Poggio Colla (Vicchio di Mugello) offer a new and interesting perspective on the use of animals in this rural sanctuary. Set at the edge of northern Etruria, Poggio Colla occupies a liminal position close to trade routes that link with the Adriatic coast and Po River plain. Excavation of the site's acropolis by the Mugello Valley Archaeological Project (Southern Methodist University, Franklin and Marshall College, and the University of Pennsylvania Museum of Archaeology and Anthropology) has illuminated evidence of habitation from the seventh to second centuries B.C.E., multiple architectural phases, and a unique range of votive contexts. Zooarchaeological analysis of the excavated faunal material, presented in this paper, links Poggio Colla to broader patterns in Etruscan animal use and presents new hypotheses on the meaning and role of animals in Etruscan ritual activity.

Overall, analysis of the animal remains recovered from Poggio Colla presents trends comparable to those of other Etruscan sanctuaries and settlements. Domestic cattle, sheep/goat, and pig dominate the Poggio Colla assemblage, although the remains of wild species and dog are also present. Between the Archaic and Hellenistic periods the relative importance of pig increases significantly as it becomes the predominant species on site. However, the role and significance of animal remains associated with the site's votive deposits are more difficult to interpret. In particular, the placement and character of the bones in some ritual contexts suggests a degree of curation in the assembly of these features.

The limited recovery and documentation of faunal material from other Etruscan sanctuaries precludes high-resolution analogies, but acts of selective deposition in cult and funerary settings occur throughout Italy. Within this context of Etruscan cultic/ritual activity, such attention to and organization of animal remains provokes consideration of the choices governing sacrificial animal selection, the postmortem significance of animal bodies, and the disposal of both quotidian and sacrificial debris.

# Cybele, Guardian of the Archive: Assimilation and Integration of a Foreign Deity in the Administrative Landscape of the Classical and Hellenistic City

Gaelle Coqueugniot, University College London

This paper looks at the place of Cybele, the Mother of Gods, in the public landscape of the Greek city. A goddess originating from Anatolia, initially associated with foreign magical rituals, Cybele was progressively integrated into the official pantheon, and she even came to play a major role in the administration of many Greek cities, including classical and Hellenistic Athens. The Athenian Metroon, in the southwest corner of the agora, and its role as the main public archive of the Athenian council, has been widely discussed and sometimes considered as a peculiarity of this city. Several inscriptions and archaeological discoveries suggest, however, similar use of other shrines of Cybele in the Hellenistic sites of Delos, Kolophon, and Vergina as repositories of public documents.

Additionally, a fourth-century B.C.E. Athenian law on silver coinage mentions that counterfeit coins were dedicated to the Mother of Gods and were deposited with the boule, maybe in the nearby Metroon. Recent finds in the agora of Pella also associate the production of coins, the drawing and keeping of official documents, and a terracotta figurine of the goddess.

All this points toward the acknowledgment of Cybele as chief protector of the city's laws and economy. How did the oriental Cybele come to occupy such a prominent place in the administration of several Greek cities? Was the role of the Athenian Metroon and its close connection to the nearby council house at the foundation of this goddess' role as a protector of public writings and money? Or did this status derive from another source, such as Cybele's inherent qualities or her association to local civic deities?

### SESSION 2F Roman Britain

CHAIR: Lynne C. Lancaster, Ohio University

## Using Geoarchaeology to Unlock the Landscape of Iron Age and Romano-British South Yorkshire

Samantha Stein, University of Sheffield

The lack of surviving material culture and datable finds from the Iron Age/Romano-British (600 B.C.E.–400 C.E.) ditches and trackways that dominate the landscape of the Magnesian Limestone ridge in South Yorkshire and the northeast Midlands of England should not deter archaeological investigation; rather, they should inspire it. The Brodsworth Archaeology Project has sought to understand the South Yorkshire landscape through excavation and survey since 2001, through the excavation of ditched trackways, field systems, and enclosures. In 2010, excavation of one enclosure with associated double-ditched trackways at Bilham (Doncaster, South Yorkshire) inspired a geoarchaeological investigation of one of the few available resources: the sediments within the ditches.

Using micromorphology and a full sedimentological analysis, including granulometry and laser particle size analysis of the fine fraction, magnetic susceptibility, calcimetry, and organic content, a reconstruction of the periods of infilling and post-depositional processes was produced. Through these analyses, it was determined that, while the ditches lining the trackway were likely constructed at the same time as they are both of similar depth and incline, they fell out of use at different times, and were infilled using different mechanisms as well as different mineral materials. This suggests that, while the enclosure and surrounding landscape was in use, the trackway was continuously changing and shifting in relation to those more permanent structures. The presence of Late Iron Age buri-

als within the trackway further submits that later societies, even into the Early Romano-British period changed the use of these ditches from means of movement into physical boundaries across the landscape.

The sediment analysis on the materials filling the enclosure ditch terminal also illustrates a multiphase settlement pattern. Markings within the bedrock suggest that the ditch was continuously recut and kept at one level for a long period of time. Infilling with natural materials and large boulders infer a brief period of neglect and intentional infilling; however a later reshaping of the terminal ditch, followed by slow accumulation of organic-rich silty deposits, indicate a later intensive occupation phase.

Through thorough geoarchaeological analyses, a site-specific history at Bilham has emerged. At a site where material culture cannot reveal the daily activities of the Iron Age and Romano-British population, the sediments occupying monumental features have demonstrated the changing responses to the arrangement of landscape features.

### **Diverse Communities in Early Roman London**

Lacey M. Wallace, University of Cambridge

Roman London was divided topographically into three areas by the Walbrook Stream and the River Thames, and many scholars have theorized that from the earliest period these streams could have caused social divisions within the town. These theories, however, were largely unsubstantiated because of a lack of synthesis of the rich and varied excavated data.

In my doctoral research, I demonstrated that the preponderance of evidence from more than 100 excavated sites clearly shows three socially and physically distinct areas during the first decade of occupation. In this paper, I draw together the key points of analysis and interpretation of contextual artifact assemblages, features, buildings, and settlement layout to address specific questions and themes regarding these separate communities. These include the factors that bound and separated the different communities, the ways that these groups negotiated their relationships to the urban center and local power structure, and how they interacted and contributed to the growth of the town and affected change. In addressing these topics, this paper provides an insight into urbanism in the western provinces that encourages reappraisal of previous methods and theoretical paradigms to explain urban development in the early Roman empire.

## A Very Different Burial: Examining the Fragmented Skeletons of Late Roman London

Belinda Crerar, University of Cambridge

Southwark, central-southern London, has undergone extensive archaeological investigation over the past decade, revealing evidence of a "ritual landscape" south of the River Thames, near the major Roman settlement at Londinium. Significant discoveries include three extramural cemeteries containing almost 300 inhumation burials and two areas of apparent religious use.

These five sites showcase evidence that dramatically alters our understanding of religious and mortuary practice around this expansive and cosmopolitan town. This takes the form of multiple collections of disarticulated and semi-articulated human bone. When such material is discovered, it is typically dismissed as the pragmatic redeposition of disturbed inhumations. I propose that closer examination can ascertain patterns in the location and composition of these deposits that point toward symbolic action. Most abundant inclusions are human skulls, pelvises, and long bones carefully arranged in pits, ditches, and the backfill of graves, sometimes associated with animal remains that may be similarly disarticulated.

The shift from cremation to inhumation around the third century C.E. and the subsequent burgeoning of large cemeteries throughout Roman Britain has attracted inordinate attention from academics seeking to understand provincial societies and Late Roman religious frictions. These well-ordered cemeteries are used to argue for a homogenizing of mortuary practice at this time, and explanations revolve around a new Christian concern for the integrity of the body while awaiting corporeal resurrection. However, the disproportionate attention paid to inhumation cemeteries is limiting our appreciation of mortuary complexities, regional variety, and pre-Roman cultural memory within the province. I argue that the new evidence from London reveals the existence of less archaeologically visible mortuary practices involving excarnation, exhumation, and the fragmentation of corpses. This challenges theories on the uniformity of Late Roman funerary practice and religious ideologies during the Late Roman period, leading us toward a more complex appreciation of attitudes toward death and the dead.

## An Innovative Group of Bath Builders in Roman Britain and the Invention of Hollow Voussoir Vaulting

Lynne C. Lancaster, Ohio University

In this paper, I discuss the evidence for the presence, near Chichester in southern Britain (Sussex), of an innovative group of builders who invented the hollow terracotta voussoir for heated vaults in bath buildings during the last quarter of the first century C.E. The technique of using hollow voussoir vaulting went on to become very common in Roman Britain (almost 100 sites), but it was rarely used elsewhere (only one site). The earliest examples, dubbed Westhampnett voussoirs, display a set of characteristics that allow them to be distinguished from later examples. They have a distinctive semicircular vent cutout on the sides, and they typically bear relief patterns created with a roller die, a device likely adopted from its earlier use to key daub in walls for plastering. The voussoirs also occur in conjunction with a unique type of double-flue box-tile bearing the same group of roller stamps, and the two elements were part of a unified heating system. Both are more robustly built than later examples, and the wall box-tiles appear to have been intended to play a structural role in supporting the vault (unlike the more typical tegulae mammatae and tubuli, which were merely applied to the walls and played no structural role). The defined set of roller stamps and the unique clay fabric used allow the two elements to be assign to a particular group of builders, who initially specialized in small private villa baths, such as the earliest baths at Fishbourne Palace (as opposed to public or military ones). In spite of the invention of the voussoirs for an archetypal Roman structure, the bath building, and the tiles themselves display Gallic influences in the relief patterns and graffiti. Hence, the Westhampnett voussoir represents a mix of cultural influences that manifested themselves within the indigenous private sphere and that resulted in a highly innovative bath building system unique to Roman Britain.

# SESSION 2G: Colloquium Comparative Urbanism in the Ancient Mediterranean World

ORGANIZERS: Jeffrey A. Becker, The University of North Carolina at Chapel Hill, and Jamie Sewell, Humboldt University

### **Colloquium Overview Statement**

The study of urbanism in the ancient Mediterranean Basin is experiencing something of its own revolution today, both in methodology and in disciplinary approach. Recent scholarship has stressed the importance of survey and landscape archaeology, as well as regional and microregional approaches. These changes have affected the degree to which scholars consider the Mediterranean as a region wherein parallel events took place rather than in terms of artificially circumscribed cultural spheres.

This session explores comparative urbanism in the ancient Mediterranean world by examining trends and developments in the archaeology of several key time periods and culture groups. The discipline finds itself in need of fundamental reassessments not only of the evidence for urbanism in the ancient world but also of the theoretical underpinnings of discussions of said urbanism. For instance, how should "urban" be defined in the archaic Greek world? To what degree did the Punic culture plan cities and towns? How monolithic are Roman urban models and how are these models transmitted and transformed? The result of so many open questions is that the themes scholars concern themselves with vary widely depending on local and temporal circumstances. By bringing together scholars focused on diverse geographical areas, cultural spheres, and time periods, it should be possible to find areas of commonality (e.g., the crucial economic and administrative relationships between urban centers and their territories) and interconnectivity (e.g., the dissemination of orthogonality in town planning). The presentation of diverse perspectives on Mediterranean urbanism should strengthen cultural, regional, and temporal contextualization through the highlighting of specificities.

In this colloquium, Emberling focuses on Mesopotamian cities from the late third millennium B.C.E. to the destruction of Nineveh, considering all the while the factors that allowed for the increasing intensification of urbanization. Sewell reflects on the recent light shed on Phoenicio-Punic urbanism by comparing it with Greek and Roman conventions. Melisch probes the attractiveness of the polis model during the Hellenistic period through the example of the well-preserved town plan of Palairos. Mogetta considers the evidence for formative urbanism at sites such as Argos and Eretria and considers possible comparisons with the

dispersed pattern of occupation attested on the plateaus of early Etruscan cities. Becker considers the relationship between the archaic cities of Italy and those of the early and middle Republican periods, examining whether the "Roman city" is necessarily a product of the Archaic period.

DISCUSSANT: Nicola Terrenato, University of Michigan

### Cities in Empire: Assyrian Cities in their Mesopotamian Context

Geoff Emberling, Kelsey Museum of Archaeology, University of Michigan

Mesopotamia is often characterized as an urban civilization whose cities were walled, built around large palaces and temples (particularly ziggurats), and divided into quarters by roads or canals. Ancient perspectives, from Gilgamesh to Herodotus, describe the massive centrality of cities on the Mesopotamian Plain, and more recent scholarship has surveyed landscapes, excavated portions of cities, and deciphered the organization of urban economies and social structures. But this essentially static and typological perspective on Mesopotamian cities, however carefully researched, does not capture the continuing processes of urbanization. People were continually drawn to cities by a variety of means, and this continuing process generated increasingly efficient and specialized economies, technological innovations, a greater scope for the exercise of political authority, and increasing social division.

In this paper, I discuss the ways in which cities were built and expanded in northern Mesopotamia (ancient Assyria) from the appearance of the city of Assur as an independent city-state after 2000 B.C.E. through the development of a territorial state in the Middle Assyrian period, the expansionist empire in the Neo-Assyrian period, and the final destruction of the Assyrian capital city at Nineveh in 612 B.C.E. Among the topics considered are the construction of new capital cities, the intensification of irrigation systems that allowed Assyrian cities to grow beyond their natural environmental limits, and the development of new urban military institutions. In particular, the construction of the new city at Dur-Sharrukin (modern Khorsabad) under Sargon II (r. 721-705 B.C.E.), extremely well documented in royal inscriptions and ancient letters, illustrates the extent to which imperial cities were dependent on an entire empire rather than just their immediate hinterland. The extensive irrigation networks built by Sennacherib allowed the expansion of Nineveh to some 750 ha in size (and, like other Assyrian imperial capitals, inhabited in large part by deported populations). And it is argued that the continuing growth and intensification of urbanism within the empire allowed the development of increasingly large standing armies, along with entire urban sectors to store equipment and allow for annual campaign preparations.

## **Urban Villages: Comparing Iron Age Settlement Structure in Greece and Italy** *Marcello Mogetta*, University of Michigan

Can the comparatively rich set of excavation data from the early levels of the largest cities of mainland Greece provide a model to interpret the surface evidence available for the Early Iron Age nucleated settlements of Etruria and Latium? And

can the macro-scale approach commonly adopted to study the pattern of occupation of Etruscan and Latin sites in this period be used to reconstruct the internal organization of Greek settlements?

Starting from the ninth century B.C.E., both regions witnessed the development of unusually large sites composed of apparently sparse and unplanned clusters of villages. In Veii, as in Argos (just to name two type-sites), dozens of discrete habitation clusters gather on wide yet well-defended geographic units, positioning themselves within sight of one another. In the case of the Etruscan cities, regional surveys show that this phenomenon is paralleled by the contextual and simultaneous abandonment of hundreds of hilltop hamlets and villages that dotted the landscape in the previous periods. In spite of the coordination and planning that this settlement reconfiguration must have to some degree involved, the spatial distribution of separate compounds on the plateaus of the later Etruscan cities suggests that these groups did not merge completely into a unified community but, instead, tried to maintain their own cultural identity. In terms of spatial logic, a similar picture can be reconstructed for the beginning of the urbanization process in mainland Greece. A closer look at the infrasite pattern of occupation of some of the main urban centers of Early Iron Age Greece (e.g., Corinth, Argos, and Eretria) shows that these, too, were initially composed of individual districts, or "urban villages," whose identity was clearly marked by a distinctive sanctuary and necropolis. This generalized trend clashes against the common opinion that early Greek cities originated from the progressive and concentric growth of a core of "germ cells," resulting in a rigidly bounded settlement characterized by a uniform and continuous fabric. On the broader theoretical level, this evidence supports the view that the formation of early cities does not necessarily require an increased level of sociopolitical complexity and hierarchy, following recent calls to move the debate on the origin of Greek and Roman urbanism beyond issues of political centralization.

### Phoenicio-Punic Urbanism from a Graeco-Roman Perspective

Jamie Sewell, Humboldt University

With the first volumes dedicated to Phoenicio-Punic urbanism only published within the last four years, the subject is truly in its infancy. Attempts to establish qualities specific to Phoenicio-Punic urban settlements should thus be undertaken with caution, especially considering their dispersed distribution around the Mediterranean. The populations of towns in differing regions were subject to local cultural influences, and individual developmental trajectories are evident. Despite this, because of the sheer number being investigated, one may identify some characteristics that many settlements had in common: the choice of site (close to the coast) and the limits of settlement growth (often small). Extra-urban necropoleis were the norm, and certain building techniques were preferred. They were generally fortified, but there is little sign of formal planning until the Hellenistic period. Yet what do we mean by a planned settlement? Scholarship traditionally views the strict orthogonality of Greek and Roman foundations as the yardstick for town planning during this period. The Greeks and Phoenicians were both founding

settlements around the Mediterranean during the same periods, and this paper explores the interconnectivity in their respective concepts of urbanism.

Yet the differences stand out. Proportionately many fewer Phoenicio-Punic towns seem to have possessed a regular plan that had been imposed by a central authority at the moment of foundation. This is partly expressed by the lack of strict rectilinearity in many cases, but also by an absence of major functional subdivisions in the urban space (Kerkouane, Mozia, Selinus, Monte Sirai). Subdividing urban space according to function at the moment of foundation was a defining element of Graeco-Roman town planning. In the Phoenicio-Punic setting, one often finds a seemingly unstructured network of small open areas and minor sanctuaries among the houses themselves. Although some construction projects in Phoenicio-Punic settlements were unquestionably public in character, such as town walls, an inscription from pre-Roman Carthage indicates that urban infrastructure projects could be initiated in a manner entirely unfamiliar to scholars of Greek and Roman urbanism. Instead of representatives of a central authority or a wealthy patron being responsible, a consortium of businessmen initiated and financed the construction of a new road. Seemingly, private enterprise was a force for physical development in Phoenicio-Punic towns, implying that the unordered layout of streets might have been a result of sporadic growth over time, driven by private initiatives.

## Palairos: the Strengthening of the Polis Model in West-Central Greece During the Fourth and Third Centuries B.C.E.

Claudia M. Melisch, Humboldt University of Berlin

The superbly preserved ruins of the ancient polis of Palairos lie in west-central Greece, on the sparsely populated Plaghia peninsula in the modern district of Aetolia-Acarnania. Epigraphic evidence recovered from the ruins above the lake of Myrtuntion (modern Lake Voulkaria) confirmed their identity as ancient Palairos. Since the late 18th century, Palairos has only been sporadically visited and occasionally described by scholars; this is still true today.

First mentioned in a fragment of the dramatist Epicharmos from the first half of the fifth century B.C.E., the development of Palairos received a fundamental boost later that century as a consequence of conflict between Athens and Corinth. Thucydides (2.30.1) reports for the year 431 B.C.E. that Palairos absorbed the territory of its neighbor, the polisma Sollion, conferred by the Athenians to ensure continuing support by Palairos. The only textual sources that refer to Palairos during the fourth century B.C.E. and the Hellenistic period are inscriptions. According to Strabo (10.2.2), the polis became dependent on Nikopolis in the late first century B.C.E. This infers that its population was resettled in the nearby Augustan foundation, sharing the fate of other poleis in the region that also suffered forced abandonment.

From 2000 to 2008, topographical and pick-up surveys were carried out within its city walls as part of a larger multidisciplinary project investigating the Plaghia peninsula undertaken by the German Archaeological Institute and the Greek Ephoria. Because so many wall foundations and street courses are visible on the surface, it was possible to create a comprehensive and detailed town plan. Dat-

ing evidence was available through the material recovered in the pick-up survey. Palairos grew over time. The original core of the settlement received a large extension during the Hellenistic period that came to be encased within a new set of fortifications, including one of the oldest, extant true-arched gates known from the ancient Greek world. The planned and regularized extension of the town attests to its success during this period. But to be able to contextualize this urban revitalization, one needs to look at the broader picture.

This paper compares the urbanization of Palairos with that of other poleis in Acarnarnia, Epirus, and Aetolia to demonstrate the degree to which urban expansion and renewal were features of western and northwestern Greece during the Hellenistic period.

### Storied Pasts? Archaic and Republican Urbanism Compared

Jeffrey A. Becker, The University of North Carolina at Chapel Hill

The storied past of the city of Rome (and of Roman cities) appealed to late Republican intellectuals and writers, as it helped foster a feeling of confidence in Rome's rightful claims to authority on the basis of a long and glorious tradition. In spite of their confident musings on city foundation (and re-foundation), it can prove difficult to relate the traditions of early Italian urbanism with those from the time of the Late Republic. To that end, this paper addresses the changing nature of central Italian urbanism by comparing examples across the chronological benchmark of the late archaic period.

The first wave of primary urbanism that redefined the settled landscape of peninsular Italy was chiefly a phenomenon of the eighth and seventh centuries B.C.E., yet its influence proved to be long lasting. In the Orientalizing and Archaic periods, central Italy witnessed the growth of powerful cities with substantial territories, with many demonstrating a propensity for elite display by means of monumental architectural forms in the public and private spheres. The "archaic city" redefined Italian settlements in many ways, and yet a key question that remains to be explored is to what extent urban forms (and phenomena) of the later first millennium B.C.E. may be linked to the formative events of the Archaic period. Yet the enigma of the archaic city feeds into the still problematic Republican city.

This paper engages these questions with a comparative framework in mind. Drawing upon a discrete but demonstrative set of examples, the discussion centers on several set points of comparison and addresses issues both conceptual and concrete. Of manifest necessity is an appraisal of civic architecture in both cases and an examination of the link between civic institutions and architectural forms. For example, the Vigna Parrocchiale site at Caere offers an interesting case for archaic public assembly that finds comparison with Roman assemblies of the Republican period. Also of interest is a consideration of spatial issues related to the position of urban sanctuaries vis-à-vis central spaces and assemblies. In both periods, it is possible to examine the prerogatives of elites with respect to architectural patronage within the urban sphere. All in all, an assessment of the degree to which the better understood Roman city of the Late Republic is indebted to its archaic and early to middle Republican forerunners yields important insights into the very nature of Roman urbanism.

### SESSION 2H: Workshop Reyard Iconography: Materials Metho

## Beyond Iconography: Materials, Methods, and Meaning in Ancient Painting Studies

MODERATOR: Sarah Lepinski, J. Paul Getty Research Institute, and Susanna McFadden, Fordham University

#### **Workshop Overview Statement**

The field of ancient painting studies has expanded exponentially in the last decades, with the recovery of new paintings, reassessment of long-standing collections, and scientific analyses on painting materials. This work, while broad, remains remarkably imbalanced, both chronologically and geographically, as well as in terms of methodologies and analyses.

This situation results from the largely fragmentary nature of most ancient mural painting and from the issues surrounding the excavation and conservation of paintings. The remarkably well-preserved Late Republican and Early Imperial paintings in the towns and villas in the Bay of Naples and other discrete bodies of paintings, such as those from Bronze Age Santorini, and Iron Age Italy and Asia Minor as well as from Hellenistic Macedonia, Egypt, and Delos, understandably dominate current scholarship.

In many respects, however, work on these bodies of paintings remains distinct. The results of the study of one group do not necessarily inform another, making it difficult to address questions regarding broader social and historical trends. Moreover, the integration of visual, technical, and material analyses with studies of architectural spaces is frequently not fully realized.

This workshop session brings together specialists working on diverse aspects of ancient painting studies, including material analysis, the study of technical characteristics, and the investigation of literary and archaeological evidence pertaining to painting practices in the ancient Mediterranean world. With short presentations and question periods, the session considers the fundamentals of painting studies, that is the materials and methods employed in the execution of paintings on walls, marble stelae, and mosaic floors, and how understanding these facets advances interpretations of the paintings and their representations. The presentations highlight both regional and temporal distinctions in painting practices, as well as enduring traditions throughout the Mediterranean.

It is our hope that the session fosters lively discussion among scholars in the field of painting studies and related disciplines and serves as a springboard for future communication and collaboration.

PANELISTS: *Ioanna Kakoulli*, University of California, Los Angeles, *Mark Abbe*, University of Georgia, *Stephanie Pearson*, University of California, Berkeley, *Regina Gee*, Montana State University, *Lea Cline*, Yale University Art Gallery, *Ruth Beeston*, Davidson College, *Katharine Raff*, The Art Institute of Chicago, *John R. Clarke*, The University of Texas at Austin, and *Stella G. Miller-Collett*, Bryn Mawr College

## SESSION 21: Workshop Site Preservation: The Future of Saving the Past

Sponsored by the Site Preservation Committee

MODERATOR: *Paul Rissman*, Archaeological Institute of America and *Thomas Roby*, Getty Conservation Institute

#### **Workshop Overview Statement**

This workshop, sponsored by the Archaeological Institute of America's (AIA) Site Preservation Committee, examines and evaluates the holistic approach to site preservation promoted by the AIA's Site Preservation Program and exemplified in the efforts of its various grant and award recipients. The AIA-sponsored projects are centered on the idea that outreach, education, and community development procure greater long-term protection for sites in a manner that cannot be achieved solely through conservation efforts.

The workshop is divided into two parts. In the first part, representatives from each AIA-sponsored project present a summary of their efforts and lead a discussion that evaluates the efficacy of these innovative approaches to site preservation. In the second part, participants, including the representatives from each AIA project, will participate in a forum that analyzes the previously presented approaches with the ultimate goal of creating a working document that both defines and presents a methodology for using this holistic approach at archaeological sites around the world.

We believe that the workshop will serve as an impetus for the growth of new ideas and collaborations and will spread best practices and ideas to the larger archaeological community. Topics addressed in the workshop include preservation through public outreach and community involvement, economic sustainability and opportunity, and the use of innovative technology and techniques.

PANELISTS: Heather McKillop, Louisiana State University, Dougald O'Reilly, Heritage Watch, D. Clark Wernecke, The Gault School of Archaeological Research, Yuval Gadot, Hebrew Union College, Taufik Dea'dle, Karev Initiatives in Education, Edward Luby, San Francisco State University, Isaya Onjala, National Museums of Kenya, Paul Christians, Open Hand Studios, Bert de Vries, Calvin College, Giorgio Buccellati, University of California, Los Angeles, Jo Anne Van Tilburg, Jo Anne Van Tilburg, Cotsen Institute of Archaeology, and Dominique Rissolo, San Diego State University

### SESSION 2J Poster Session

#### A New Typology of Spearheads for Iron Age South Italy

Yvonne L. Inall, University of Sydney

I present a new typology for Iron Age spearheads from pre-Roman south Italy, drawn from the functional characteristics of the weapons. This new typology facilitates the synthetic study of ancient weapons and cultural contacts, changes in form and distribution, and changes in fighting style.

The typology is a morphological taxonomy, drawing on material from a range of pre-Roman south Italian sites in Daunia (Lavello, Canosa, Ordona, Ascoli Satriano, Arpi, and Minervino Murge), Basilicata (Incoronata, Oppido Lucano, Serra di Vaglio, Ruvo del Monte, Satrianum, and Chiaromonte), and southern Campania (Pontecagnano, Sala Consilina, Oliveto Citra, Cairano, and Paestum). It is the product of a M. Phil. thesis accepted by the University of Sydney. It facilitates analysis of cultural contacts between indigenous southern Italic groups and immigrating groups of Villanovan and Greek origin. Analysis reveals the variety of spear forms in use and tracks changes over time. These changes expose cultural transformations and alterations in fighting styles.

#### What is in a Name? The Case of Zaraka in Arcadia

Robert J. Stark, McMaster University

The understanding and proper documentation of geographic name changes is an important part of examining the archaeological past, yet in the absence of original written and contextual evidence, such a task becomes highly difficult. Through the use of later text accounts and inference from linguistic analogs, it is possible to reconstruct the potential origins of otherwise undocumented toponyms. Such research can provide significant historical insight and cultural data, allowing for a better understanding of often poorly documented and tumultuous eras of history.

The site of Zaraka, close to ancient Stymphalos, provides an interesting example. Stymphalos, in Arcadia, has a well-documented history throughout classical antiquity. Yet following the ultimate demise of this site, little is known of the Valley of Stymphalos until the revival of recorded occupation with the building of a Cistercian monastery in the 13th century C.E. It is at this time that the name Zaraka (alt. Saracaz, Saracez, Sarakez, Zaraca, Zaracca) is first identified with the monastery and possibly the valley in general, suggesting a name transition in the interim between the Classical/Late Roman era of occupation of the valley and the later 13th-century C.E. Cistercian period of occupation. The name of Zaraka continues to provide significant etymological difficulty in terms of origin, as there are no written accounts regarding its adoption, despite the relatively late era of transition. There is also no contextual evidence or logical Greek term that can be inferred for this site-name change, suggesting a non-Greek origin.

Research was undertaken to address three potential origins of the name of Zaraka through an investigation of linguistic associations with Slavic terms, association with the Saracens, and association with Persian origins. The research presented reconstructs three potentially viable scenarios that may have resulted in the adoption of the name Zaraka for this monastic site. At this time, no definitive answer can be provided. It is intended that, through a delineation of these three possible associations, a more fruitful discourse can be derived, with the intention of providing a basis for further investigation and understanding of this important region in terms of this truly cryptic historic name change.

### Julia Domna: Forensic Hairdressing

Janet Stephens, AIA Member at Large

Scholars note that the coin portraits of Empress Julia Domna (r. 193–217 C.E.) can be divided into two distinct hairstyle types, each with two variants, for a total of four discernable hairstyles in 24 years. Because of the extreme volume of hair and the variety of styles depicted on her coin and stone portraits, many conclude that all Domna's hairstyles must have been fictive (i.e., created with wigs) and not arranged using her own natural hair.

In my article "Ancient Roman Hairdressing: On (Hair)pins and Needles" (*JRA* 21 [2008]), I demonstrate how Domna's "serpentine bun" (ca. 211) could be arranged using natural hair instead of a wig. In this poster, I argue that all Domna's hairstyles were arranged with her natural hair, and that a rare hair growth disorder, distal-type, female-pattern androgenetic alopecia (FP-AGA), may have been a determining factor in the development of these styles.

Using Ghedini's chronology, I compare hairstyles depicted on four coins. I illustrate how gradually abbreviating hair-growth cycles (the chief symptom of distaltype FP-AGA) could cause the visible "wasting away" of Domna's bun from one portrait type to the next. I present four coifed manikin heads (each recreating one coin example), as well as video demonstrating recreation methodology and hair-arrangement technique.

### Learning from Their Mistakes: Try-Pieces, Wasters, and Other Evidence for Ceramic Production from the Potters' Quarter at Corinth

Bice Peruzzi, University of Cincinnati, and Amanda S. Reiterman, University of Pennsylvania

Material from the Potters' Quarter at Corinth offers a hitherto untapped resource to aid in modeling the initial (manufacturing) phase of the pottery life cycle in archaic Greece. Drawing upon the paradigm outlined by Peña for Roman pottery (Roman Pottery in the Archaeological Record [New York 2007]), this poster presents preliminary findings from our ongoing project of examining and documenting the Potters' Quarter's try-pieces, ceramic wasters, misfires, and other vestiges of the production process, which have yet to be considered as a complete corpus. Some were published in Stillwell and Benson's (Corinth 15) volume of 1986, while

numerous specimens have remained unstudied in the Corinth storerooms since the time of their excavation in the 1930s.

These imperfect or unfinished ceramics from the potters' dumps provide snapshots of transitory stages in the chain of production, capturing information about middle Corinthian ceramic methods and technology, which is generally not preserved on the finished pots. Such insights include the order of painting a vessel's sides, the types of pots stacked together in a kiln, and the moments when failures occurred most often. In addition, several unusual examples of repair and reuse offer rare glimpses into the decisions made in response to mishaps. These instances of adjustments executed mid-process reveal that experimentation was a regular part of the workshops' procedures. They serve as reminders that, although Corinthian orientalizing pottery was distributed throughout the Mediterranean in large quantities, it was, in fact, the product of an imperfect science.

Breaking down the manufacturing phase of the pottery life cycle into its constituent parts allows us to recognize the creative solutions developed by potters and painters at each step as they confronted the vicissitudes of their craft and conditions. These challenges had the potential to become the wellsprings of innovation.

#### The Gabii Project: The 2011 Season

Rachel S. Opitz, The Gabii Project, Anna Gallone, The Gabii Project, Marcello Mogetta, University of Michigan, and Nicola Terrenato, University of Michigan

In the summer of 2011, the Gabii Project conducted its third season of excavation in the city of Gabii. More than 60 students, mostly from North American institutions, participated in the exploration of more than 1 ha (2.4 acres) in the center of the ancient city of Gabii, 12 miles east of Rome. The 2011 season provided several insights into different periods of the city's life. More Early Imperial tombs were excavated, including two on which large quantities of lead were lavished. They delineate a phase when the city had noticeably contracted, and the burials were placed well inside the original wall circuit.

Our knowledge of the much larger mid-Republican city has also considerably improved. Two habitation units have now been fully exposed. They date to the late third/early second century B.C.E. and are built in massive drystone walls, with stone-paved wellheads and plastered floors characterized by distinctive moldings. The larger of the two, which shows a clear atrium-tablinum complex, provides important evidence for the formation process of this house type in central Italy. Tantalizingly, the houses have earlier phases that will be excavated in 2012 and could further illustrate their development.

In another area, remains of an occupation sequence covering the seventh and the sixth centuries B.C.E. have been explored. They seem to belong to a smaller domestic unit that was resurfaced many times. Crucially, it is not aligned with the overall city grid, further confirming a date in the Early Republican period for the complete reorganization of the urban fabric. The placement of at least three large shaft tombs with niches all around the house, not long after its abandonment, represents another remarkable feature. This is in violation of the predominant custom in central Italy at this time but finds comparanda in other similar tombs excavated elsewhere within the city of Gabii.

The excavation is expanding to another adjacent block where a similar sequence seems to be emerging, again with a massive mid-Republican phase. Thanks to a generous National Endowment for the Humantities grant, the Gabii Project will continue at least through the summer of 2014, pursuing the investigation of an urban site that is making a significant contribution to the study of the origins and development of Roman urbanism and architecture in the first millennium B.C.E.

### Chryssi Island: Archaeological Exploration of a Marginal Landscape in Southeast Crete, Greece

Konstantinos Chalikias, Ruprecht-Karls University of Heidelberg

Despite evidence for a rich cultural landscape along the south part of the Ierapetra Isthmus, Crete, until recently, the region has not been the focus of systematic archaeological research. Several archaeological projects along the north part of the Ierapetra Isthmus have provided significant evidence for the settlement history of the Mirabello area, leaving the south part of the Isthmus unexplored.

Chryssi Island, located only seven nautical miles south of Ierapetra, therefore provides a unique opportunity for the exploration of an undisturbed landscape and the way in which it was transformed and exploited during the antiquity. Recent excavations by the 24th Ephoreia on Chryssi Island have increased our knowledge about the settlement history of the Ierapetra area through the centuries. Several sites there date from the Early Bronze Age to the Venetian period and reflect the diachronic changes and processes in settlement patterns that occurred along the south part of the Ierapetra Isthmus. The occupation on Chryssi demonstrates the particular importance of this small island community during Neopalatial, Helenistic, and Roman times and suggests the existence of a thriving and complex network of settlements on the opposite coast of Crete, some of which have not yet been discovered.

Chryssi presents an ideal case study for the settlement history of islets off the coast of Crete and furthers our understanding in the field of island archaeology. Islands like Pseira, Gavdos, and Kouphonisi have been inhabited since the Neolithic period but their communities were largely dependent on the nearby settlements of mainland Crete. The archaeological investigation on Chryssi Island improves our understanding of the "colonization" of these marginal landscapes, the insular character of their communities, and their ties with the nearby coastal towns.

#### Map of Asia Minor Around 100 C.E.

Richard Talbert, The University of North Carolina at Chapel Hill, and Jeffrey A. Becker, The University of North Carolina at Chapel Hill

The Ancient World Mapping Center at The University of North Carolina at Chapel Hill (hereafter AWMC), presents for inspection and comment a large draft map of Asia Minor. Despite the recent improvement of map resources for the study of classical antiquity, it remains a challenge for scholars who study extensive regions to gain a cartographic conspectus of them at a serviceable scale, because of the sheer extent of the landmass. Asia Minor is a prime example. Even in the *Bar*-

rington Atlas of the Greek and Roman World (Princeton 2000), where each double-spread map extends to 62 cm wide, it is split among eight maps at 1:500,000 and three at 1:1,000,000. The coverage provided by the *Tabula Imperii Byzantini* (to date, six sheets at 1:800,000) is far from complete. Calder and Bean did successfully achieve a rudimentary single-sheet overview (A Classical Map of Asia Minor [London 1957]), but at 1:2,500,000.

Digital technology and the expertise developed at AWMC now permit an attempt at 1:750,000, with publication envisaged in both print and electronic formats. This more meaningful scale corresponds to the coverage of Greece and Italy in AWMC's series, Wall Maps for the Ancient World (2011). Its seven maps were designed, however, to meet the needs of newcomers to antiquity in the classroom. AWMC's Asia Minor, by contrast, expects a more mature engagement and purposely confines its focus to a single time period, ca. 100 C.E., when the region was stable in the aftermath of Flavian administrative reorganization. The map shows (so far as possible) physical landscape at that date; elevation, distinguished by eight tints, is calculated from Environmental Systems Research Institute data. The map's naming of both landscape and cultural features matches the *Barrington* Atlas: coordinates are derived from Pleiades project data wherever available. All settlements marked in the Barrington Atlas' three larger (of five) lettering sizes are included, together with a selection of further sites determined with expert help; experts also contribute recommendations for marking new discoveries (including road courses).

In addition to the appraisal of detail which it invites, the poster session is an ideal opportunity for AWMC to gain reactions to the projection used, to the extent of the map's coverage, and the practical option of delivering the 2 m wide print version in two segments (west, east) that overlap. Observers' reactions gain added importance in the light of AWMC's intention to attempt further maps of other regions following the same model.

# **Symbols of Fertility and Abundance in the Royal Cemetery at Ur, Iraq** *Naomi F. Miller*, University of Pennsylvania Museum of Archaeology and Anthropology

Fertility and abundance are important themes in word and image in ancient Mesopotamia. A hymn to Inana (c.4.07.a) praises the goddess: "You are she who creates apples in their clusters (?).... You are she who creates the date spadices in their beauty." Plant imagery in the jewelry found in Puabi's tomb shows clusters of apples and the flowering male and fruiting female branches (i.e., spadices) of the date palm. Until now, however, the twisted wire pendants in the same group of objects remained mysterious. This poster illustrates how they may be related to the flocks of Dumuzi and the shepherd (and Inana's consort). It also reconsiders the willow and poplar leaves of Puabi's headdress in light of Tengberg, Potts, and Francfort's proposal that the broad leaf represents the Indus Valley sissoo.

### An Integrated Approach to Identifying Byzantine Defensive Systems in North Central Anatolia

Angelina D. Phebus, The University of North Carolina at Chapel Hill, J.M.L. Newhard, College of Charleston, J. Haldon, Princeton University, H. Elton, Trent University, and N. Levine, College of Charleston

When considering Byzantine defensive systems of the sixth through 13th centuries, textual sources suggest a complex and integrated system of installations, ranging from large-scale castra to smaller, more ephemeral outpost locales. While larger installations have been identified in Turkey, Syria, and elsewhere, traces of small Late Roman/Byzantine defensive elements can be difficult to identify, even via intensive survey, owing to their scanty surface remains. Using refined survey methods developed by the Avkat Archaeological Project, in combination with Byzantine texts and analysis in GIS, a series of defensive structures were positively identified in the area around ancient Euchaita (modern Beyözü) in central Turkey.

The authors present a method by which smaller outposts were identified in the landscape. Hilltop promontories with dense scatters of pottery and roof tiles were discovered on the landscape through intensive survey. These promontories were noted to have a wide field of view. Deductive modeling within GIS, incorporating geographical location and viewshed analysis, was employed to determine whether the designation of these features as watchtowers was appropriate. The interpretation of these features as outposts is thus supported by the descriptions of defensive structures given in Byzantine military treatises, archaeological evidence, and GIS analysis and modeling. Furthermore, the process used to determine the likely functionality of these features provides a means for developing interpretative frameworks for other elements in the ancient landscape.

#### **XRF Analysis of Metal Composition of Etruscan Bronze Mirrors**

Robert H. Tykot, University of South Florida, Nancy T. de Grummond, Florida State University, and Shirley J. Schwarz, University of Evansville

Etruscan mirrors are well known for their highly polished obverse surface and engraved mythological scenes on the opposite side. Dating from ca. 540 B.C.E. to the second century B.C.E., more than 3,000 have been reported with many now located in museums outside Italy. As part of the Corpus of Etruscan Mirrors (Corpus Speculorum Etruscorum) Project, and under the guidance of the Istituto degli Studi Etruschi ed Italici in Florence, multiple catalogues are being produced for all known Etruscan mirrors in public and private collections. As part of the eastern United States project, elemental analysis of 27 mirrors was conducted to determine the composition of their lost-wax cast copper-based alloys, whether particular formulas or recipes were used, and what the effects were of polishing the mirror side. For mirrors that have no find context, or come from collections without secure provenance, unusual compositions could be indicative of forgeries or historic repairs.

A portable X-ray fluorescence spectrometer was used to analyze Etruscan mirrors in the collections of the Smithsonian Institution, the Baltimore Museum of Art, the Walters Art Museum, the Johns Hopkins Archaeological Museum, and the

Tampa Museum of Art. Multiple spot analyses were conducted on each mirror to investigate surface heterogeneity and potential compositional differences between the medallion section of the mirror and the tang handle. The results revealed that two mirrors had a significant amount of zinc, which was not known to have been used during the Etruscan period, while many included a few percent of lead and/or arsenic. The tin content varied significantly, from 3 to 30%, in part due to the range of time periods represented in this study, with high tin bronzes and their clearer reflections widely used beginning in the fourth century B.C.E. There were also major differences between mirror and handle due to intentionally separate castings or repairs.

The overall variability supports the hypothesis that Etruscan mirrors were not mass produced by large-scale commercial centers but by smaller local workshops for an aristocratic elite. Despite mirrors being produced for wealthy clients, the highly skilled craftsmen also likely practiced recycling of a variety of metal objects.

#### Distribution of Pressurized Water in the Countryside around Rome

Eeva-Maria Viitanen, University of Helsinki

Roman cities were equipped with aqueducts and sophisticated systems for distribution of water; pressurized water was available in some form for most citizens. Aqueducts were usually not built for fulfilling the requirements of rural areas, but they could be, and were, quite commonly tapped for use on farms and villas. However, little is known of how common this kind of water distribution was and how pressurized water was used in the countryside.

Lead pipes are one of the most important finds concerning piped water. They were also often stamped with the names of owners of water rights and the makers of the pipes, which adds an interesting social dimension to the study of lead pipes. Hundreds of lead pipes have been found in the countryside around Rome, but little is known of how they were used in water distribution and other functions.

This paper analyzes evidence on lead pipes, water supply, and distribution in some 275 locations outside the Aurelian walls. Lead pipes are most commonly found at villas and farms near the public aqueducts of Rome, but they were also used in connection with local and private distribution systems. Stamps on the pipes suggest that most owners of water rights were of senatorial rank. Their estates were located in the popular resort towns near Rome and usually also near the public aqueducts. In private rural contexts, piped water was used in the same way as to the urban dwellings: it was conducted to the atria, nymphaea, and, most commonly, to baths. However, not all lead pipes transported water, as they were also used in connection with installations related to production, for example fish tanks and wine presses. Piped water was intended mostly for recreational purposes, not as general household water. It was an urban convenience that could also be transferred to the countryside.

### **An Ethnoarchaeological Perspective on Aegean Bronze Age Trade and Contacts** *Elizabeth A. Fisher*, Randolph-Macon College

The identification of exotic animals and materials used or depicted in various ways in the Bronze Age Aegean has led to speculation about the meaning of the materials and representations. One aspect of the interpretation of these precious objects and detailed frescoes has been overlooked: there may have been a single source for all of them. The "blue" monkeys of Minoan and Theran frescoes have been identified as Vervet monkeys. The antelope from House Beta at Akrotiri are most likely Grants gazelles. Both of these species are endemic to East Africa. Virtually all of the precious and exotic materials that were imported to the Aegean area for elite exchange or manufacture of privileged objects are found in the same region, an area identified as the legendary Land of Punt.

Ethnoarchaeological research in the Wejjerat and Tigray regions of modern Ethiopia reveals some intriguing links to details in the frescoes of Crete and Thera, and presents new information about sacred and secular practices that are compellingly evocative of images and objects found at Akrotiri and other Aegean sites.

The poster presents evidence for an extensive Aegean Bronze Age trade network, reaching far into sub-Saharan Africa, and suggests that Aegean traders were well acquainted with the Land of Punt long before Hatsheptsut's famously documented expedition.

### What Has Beauty to do with Death? Blurred Boundaries in Depictions of Vanth and Lasa in Etruscan Funerary Art

Allison J. Weir, University of St. Andrews

Two of the most commonly depicted winged female figures in Etruscan funerary art are Vanth and Lasa, both of whom are plural deities that are sometimes shown nude. These two deities, however, stand in sharp contrast to each other: Vanth is a psychopomp associated with the realm of the dead, whereas Lasa is an attendant of Turan, the goddess of love, and has a primary role in assisting with the adornment of women. Given their substantial differences, therefore, one would assume that there would be few similarities in how the demon Vanth and the nymph-like deity Lasa are depicted in Etruscan funerary art. However, this is not always the case. A closer analysis of the depictions of both Lasa and Vanth reveals that there are in fact several examples in which the boundaries in the ways in which Lasa and Vanth are depicted are blurred.

In this poster, I focus on those examples that do not appear to conform to the iconographical norm. First, there is a bronze mirror of unknown provenance (ca. 400–350) that shows a Lasa not only in the dress commonly seen worn by Vanth but also in a role that is connected to that of Vanth's role as a psychopomp, namely that of fate. Second, there is a series of painted pots from near Orvieto that depict Vanth in the dress, or lack thereof, and pose that is typical of a Lasa (ca. 300). These are only two examples of many. Finally, even the earliest inscription referring to Vanth is, most peculiarly, on an aryballos (seventh century). One would more naturally expect a perfume bottle to be associated with the adornment of women, and therefore more in the realm of Lasa than of a chthonic demon. Interestingly, the

inscription itself specifically mentions beauty. This description begs the question: what has beauty to do with death?

In this poster, I present a detailed analysis of the iconographic depictions of Vanth and Lasa in the exceptional examples outlined above that show either figure as more like the other. My aim in doing so is to explore the question of why the appearances and items associated with these two most distinct and opposite of deities should, in some exceptional cases, appear to be interchangeable. I argue that these images indicate that both deities are much more complex than is commonly seen.

### Roman Funerary Reliefs and North African Identity: A Contextual and Comparative Investigation of Tripolitanian Iconography

Julia S. Nikolaus, University of Leicester

In Tripolitania, Roman-period cemeteries are rich in mausolea decorated with funerary reliefs and statues that depict ritual, religious, and symbolic scenes, as well as representations of daily life. However, research on these reliefs has been predominantly conducted on scenes correlating with Roman or Punic artistic norms, with the focus being on individual sites or monuments. As a result, many aspects that influence or determine the choice of relief depictions on funerary monuments have received very limited attention, despite their potential to elucidate much about localized North African traditions, religion, and rituals.

The argument is presented through a case study comparing the images of the funerary reliefs on the temple-type mausolea of the desert town of Ghadames and of the architecturally similar tombs at Ghirza (800 km to the east). Ghirza's mausolea were decorated with so-called Roman style funerary reliefs. However, Mattingly (Imperialism, Power and Identity.Experiencing the Roman Empire [Oxford 2011]) notes that their style, art, and symbolism are localized and do not conform to Roman imperial art of the capital of the empire; instead, they show scenes of daily life, ceremony, and religion. The representations in the reliefs of Ghadames are different to those found at Ghirza, such as through the rendering and the choice of scenes depicted. Such scenes show their own traditions, symbolisms, and dress in a very unique way, which are probably influenced by the prime location of Ghadames as a nodal point in the network of trans-Saharan trade.

The reliefs of the two different locations are critically examined and compared by exploring new ways of interpretation; this is principally accomplished by investigating the iconography of the funerary reliefs and their reflection of local identities and/or ethnicity, rather than simply being a by-product of "Romanization" and "Imperialism." Furthermore, I investigate the extent to which we can speak of adoption, resistance, or continuation of local traditions within these depictions. My research demonstrates that, although the funerary reliefs are susceptible to multiple readings, the different use of images was not accidental but a conscious selection depending on local power relations, religion, trade connections, and traditions.

### Reaping What You Sow: Archaeology and Ethnography in the Study of Ancient Agriculture in Greece and Cyprus

P. Nick Kardulias, College of Wooster

The vast majority of the world's people depend on agriculture for their daily sustenance. Yet farming is only about 10,000 years old, while humans have been on earth for about four million years. Archaeologists and anthropologists concentrate considerable research on the reasons for the transition from hunting and gathering to farming. Scholars have been able to determine when the change occurred, suggested why it took place, and have also considered the long-term repercussions of this event; once people adopted an agricultural or pastoral way of life, there was no turning back. The shift affected not only the means by which humans acquire food but also the kinship systems by which they determine who is related to whom, the economic structure with the introduction of new technologies and specialized occupations, the political systems by which people organize themselves into communities, and many other aspects of culture.

This poster provides an overview of how scholars study ancient agriculture, with a focus on archaeological and ethnoarchaeological research. The work involves the analysis of excavated material from Greece and Cyprus, with a focus on the various implements farmers have used. Some of the tools and methods of food production have changed little over several thousand years, so a second phase of the research entailed interviews with present farmers in the regions and the examination of tools that only recently went out of use. Finally, in order to better understand how farmers worked in the past, the study involved some experimentation in an effort to reconstruct these ancient practices.

The central perspective that weaves all this research together emphasizes the strategic planning in which all farmers, past and present, must engage. In so doing, I challenge the notion of "traditional" farmers as inflexible and wedded to outdated practices and tools. Instead, it becomes clear that agriculture requires a fine balance between conservative and innovative approaches to the essential task of providing the daily bread.

#### The Lapidary Lathe in the Bronze Age: An Experimental Study

Angela M. Hussein, Independent Scholar

After 2000 B.C.E., there was a marked rise in the use of semiprecious hard stones to manufacture seals in both the Near East and Crete. This increase was due primarily to two factors. Firstly, the extensive trade networks that functioned during the Bronze Age made emery, an extremely hard abrasive, more widely available, thus facilitating the carving of hard stones. Secondly, the invention of the lapidary lathe, or horizontal engraving spindle, a bow-propelled fixed drill, increased the rotation speed of the drills and cutting wheels used to engrave gems. Scientific studies have been conducted to examine the markings left by different materials and drill shapes on existing seals to prove or disprove the adoption of certain technologies at different times. However, there has yet been no experimental study undertaken to recreate the bow-powered lapidary lathe and to collect data on how it functioned with copper bits and emery abrasive.

For my study, I recreate a lapidary lathe based on ancient evidence and modern studies of ancient hard stone seals. I report on the results of experiments with the bow-turning system and the copper bits and cutting wheels on various semi-precious gems. Experimental problem solving is the very method employed by ancient innovators to evolve technology. By means of firsthand trial and error, we can hope to understand and recreate ancient technology in all its complexity.

#### **Typologies of the Caryatid Coiffures**

Katherine A. Schwab, Fairfield University

An analysis of the hairstyles adorning the caryatids of the Erechtheion reveals specific types of braids and complex designs unique to these sculptures. Relying on archival photographs, models, and a professional hairstylist, the six hairstyles were replicated and filmed with both still photography and video in 2009. Subsequent analysis exposes an impoverishment of scholarly typologies sufficient for a rigorous analysis of ancient classical coiffure. New nomenclature must take into account the science of hair and how the varying texture of waves and curls in the caryatids' hair reflects real human hair.

The caryatid hairstyles rely on two types of braids. The first is the standard three-strand English style braid, which is used around the head above the ears, the top of the head, and preserved at the forehead hairline on the caryatid known as Kore C. The second braid is called the fishtail, or herringbone, braid, made from two large sections, and it is used exclusively for the hair at the back of the head where the growth is thickest. Among Archaic sculptures, both the Berlin Kore from Keratea and the discus-thrower stele in Athens wear an early version of the fishtail braid. By the Early Classical period, the bronze god from Cape Artemision wears two long braids alternating between the English style and the fishtail wrapped around his head.

The caryatids' side hair behind the ear is organized into three long corkscrew curls pulled forward onto the shoulder, with the exception of Kore E, who has two long locks. Corkscrew curls can form on their own or can be formed by wrapping the hair around a finger or slender stick. As the most elaborate of long curls, the corkscrew type was the most difficult to carve and the most labor intensive. Earlier examples of this hair treatment are rare. One example is the Archaic kore number 682 from the Acropolis, whose face is richly framed by four locks on each side. Most Archaic korai wear side locks of hair best described as crimped hair, which is either faceted (the simplest) or curvilinear.

As richly adorned maidens, the caryatids wear distinctive hairstyles that contribute to their overall presentation associated with the prestige of leading a religious procession. Analysis of these and other archaic and classical coiffures expands the nomenclature of visual representations and allows a more accurate description of their styles.

#### **Conservation of the Hadrianic Baths at Aphrodisias**

Kent Severson, New York University, and Trevor Proudfoot, New York University

First excavated in 1904 and subsequently explored in the 1960s and 1970s, the Hadrianic Bath at Aphrodisias was left largely unprotected in recent decades. Extensive marble flooring, shattered by the collapse of the building, is threatened by explosive plant growth and unrestricted foot traffic. Broken revetments, hypocausts, and in-wall heating systems are likewise threatened. The monumental limestone arches are unstable in places, and *petit appareil* walls are crumbling.

A program of clearing and plant growth suppression in 2008 allowed for general assessment and project planning. Work began in 2009, with stabilization of the pool and surrounding floors in the peristyle court at the northeast corner of the complex and continued in 2010 with stabilization of the walls and floor of the adjacent hall. The 2011 program focused on the marble floor, pool, and revetments in the adjacent frigidarium and the stabilization of the first row of limestone arches to the south.

The current conservation program of the Hadrianic Bath draws on the experience and technologies developed in the more than 15 years of site-stabilization work at Aphrodisias. As with earlier projects (in the Bishop's Palace, the Temple of Aphrodite, the Bouleterion, and the Atrium House), the project is unfolding in conjunction with a new historical study of the bath and ongoing archaeological exploration and documentation. The conservation team consists of conservators, architects, and engineers, together with a cadre of experienced local workmen, using methods that rely on extensive use of traditional lime mortars. Interventions using stainless steel reinforcements and concrete inserts are limited to structural deficiencies where they are absolutely necessary. With minimal intervention as a guiding principle, the project seeks to preserve the monument as it came down to us from antiquity while making it accessible to the public and easy to maintain.

### Analysis of the Population of Akhmim, Egypt (800–200 B.C.E.) Using Advanced Imaging and 3D Modeling Technologies

Robert D. Hoppa, University of Manitoba, Jonathan P. Elias, Akhmim Mummy Studies Consortium, and Carter Lupton, Milwaukee Public Museum

The city of Akhmim/Panopolis (290 miles south of Cairo) is one of the great communities of the ancient world and although largely unexcavated, presents many opportunities for testing modern methods of archaeological modeling and reconstruction. Early excavations at the cemeteries of Akhmim (mid 1880s) were hastily done and poorly recorded, but they brought forth hundreds of mummies, coffins, and other items of Akhmimic material culture. The original work, while contextually destructive, had the effect of dispersing members of this important ancient population around the world. Akhmim's mummies are generally well preserved and genealogically traceable. Therefore, they provide valuable cultural data that enhance our understanding of Egyptian society during the first millennium B.C.E.

The embalmed population is being systematically studied in several modalities based on the acquisition of digitized image information from CT scans from 2003

to 2011. Scan data analyzed by the Akhmim Mummy Studies Consortium have contributed greatly to our understanding of funerary preparation protocols as they evolved within this community during the later phases of pharaonic history. The mummies represent a regional population as it developed from ca. 800 B.C.E. through Kushite times (700–664 B.C.E.), the Saite Renaissance (664–525 B.C.E.), the murky phase of Persian domination to the early/mid Ptolemaic period (305–200 B.C.E.). Morphometric study of the osteological evidence from the CT data is ongoing.

Collaborative study of a data set that now includes 17 Akhmimic individuals is beginning to distinguish ethnic diversity within the population. Description of its general patterning and its variation through time is now becoming possible. Advanced imaging and 3D printing technology have been used to create models of Akhmimic skulls and to develop facial reconstructions in an ongoing effort to explore ethnicity and biological variation among the peoples of ancient Akhmim.

### Recognition of "Girls" in Fifth Century B.C.E. Athens: The Evidence from Painted Pottery

Georgina Muskett, University of Liverpool

The definition of "girl" as a female who is not yet an adult woman should be straightforward, but how is a girl distinguished from an adult woman on Athenian painted pottery of the fifth century B.C.E.?

The absence of the veil worn by females at the onset of puberty, as noted in the fifth-century B.C.E. written record, is widely accepted as a straightforward way of identifying a girl. However, the veil is rarely depicted in ancient art.

The dilemma becomes apparent when researchers attempt to provide definitive descriptions of the iconography of Greek painted pottery, whether for a catalogue or searchable database. Should any depiction of a small figure presented as female be automatically classified as a girl or are there other ways in which the modern viewer can securely identify a female who has not yet achieved the status of a woman? For example, can iconographic features such as hairstyle give information about age in the same way that young people can be identified in Aegean Bronze Age art by means of a partly shaven scalp? Alternatively, is the context of the representation (i.e., the setting in which females are depicted, the occasion shown, their companions, etc.) the crucial factor?

This dilemma is addressed by considering the depictions of females described in publications as girls that appear on fifth-century B.C.E. Greek painted pottery, particularly Attic white-ground lekythoi. The poster includes examples of the presenter's own experience as a museum curator and university researcher, with particular reference to white-ground lekythoi in the collection of National Museums Liverpool, some of which have not been published.

#### On a Thessalian Rock-Cut Pattern

Robert S. Wagman, University of Florida, and Andrew G. Nichols, University of Florida

In the years 1979–1980, German archaeologist I. Blum identified on a low hill east of Eretria a small, extramural shrine of a stoa and a temple ("Die Stadt Eretria in Thessalien," in *Topographie antique et géographie historique en pays grec. Monographie du CRA* 7 [Paris 1992]). Scattered over the sides of the hill were also some large fragments of limestone exhibiting a very distinctive type of rock-cutting: a domelike, hemispherical projection carved individually or in sets on the upper face of the stones. Blum convincingly argued for the sacred nature of these sculptures but was unable to offer any parallels for them. It is the object of this presentation to rectify this statement, showing that the Eretria carvings are not an isolated occurrence but a recurring feature of rupestrian sanctuaries in the region.

Rock-cuttings similar to those described by Blum appear in three different locations at the west and east end of Pharsalus. "Breast-shaped projections" hewn singly or in multiples in the local limestone are reported by Arvanitopoulos on the hill of Agia Paraskevi, near the temple of Zeus Thaulios, and in the old Varoussi neighborhood, near the shrine or chapel of Asclepius (i.e., in contexts more or less identical to Eretria—rocky hilltop sites crowned by shrines). Regrettably, the evidence from these areas is no longer available, as both Agia Paraskevi and Varoussi have long been covered by modern structures, but a hitherto unexplored site on the eastern outskirts of town, locally known as Ta Koulourakia Tes Panagias, or "Biscuits of the Virgin," still preserves several examples of the carving, including a nine-piece set cut into an altar or offering table that appears to be responsible for the place's imaginative name. In this presentation, we offer an overview of this rock-cut shrine and it carvings, discussing the analogies with the Eretrian investigated by Blum. We also discuss a possible interpretation of the toponym in relation to the ancient offertory cakes, in particular, the knobbed variety attested as monomphala or polyomphala popana, which exhibit a decorative pattern suggestively similar to that of our stones.

#### Pottery from Building Kappa at Mycenae: 2002–2005

Sarah E. Peterson, Temple University, Katie Lantzas, Independent Scholar, and Christofilis Maggidis, Dickinson College

From 2002–2008, excavation took place in an area of the citadel of Mycenae now known as Building Kappa. This structure, which probably functioned as an extension of the storerooms of Megaron M, was constructed after LH IIIA2 and was destroyed at the end of LH IIIB2.

Through the display of detailed photographs and drawings of the pottery, as well as plans and sections from Building Kappa, this poster presents a preliminary examination of studied pottery from the 2002–2005 excavations. The excavated area of Building Kappa contained several different levels: These include stratum 4/6, a deposit associated with the structure that shows it went out of use in the LH IIIB period; level 3, a deposit consisting of baulks left unexcavated by early expeditions in the 1890s, which consists of an LH IIIC level from habitation near this

area after the building went out of use; deposit  $2\beta$ , a modern backfill containing both Bronze Age and Hellenistic pottery that was spread across the site in modern times; and layers 6, 7, and 8, which comprised the destruction level, clay floor, and fill beneath the floor of the aforementioned Late Mycenaean building.

Resulting from a formal detailed analysis of a portion of the recovered ceramic assemblage, this research corrects several errors recorded in notebooks at the time of excavation before the pottery was washed and studied, and it clarifies the stratigraphy of the area of Building Kappa, allowing preliminary observations about the nature of the occupation at this location. The importance of this study is that it allows preliminary observations about the nature of occupation at this location and indicates the need for a more detailed examination of the remainder of the unstudied ceramic assemblage.

### Signatures in Ceramics: Identifying Prehistoric Interaction Through Ceramics on the Great Hungarian Plain

Danielle Riebe, University of Illinois at Chicago

Interaction directly influences social change, yet this agent is often overlooked in favor of understanding the independent progress of culturally defined groups of people. To contextualize social developments occurring within a single culture, one must look at the existing interactions between cultures.

On the Great Hungarian Plain, research has focused on describing the discrete evolution of the Tisza and the Herpály, marginalizing the role that regional interaction played in defining preceived social differences. However, through the identification of specific regional chemical signatures, ceramic analysis will establish the basis for future investigations on prehistoric interregional interactions on the Great Hungarian Plain.

The purpose of this project is twofold: to assess the comparability of the results obtained from two different elemental measuring devices and to identify if site-specific chemical signatures are present on a regional scale on the Great Hungarian Plain. Previously, TOF-LA-ICP-MS (Time-of-Flight Laser Ablation Inductively Coupled Plasma Mass Spectrometry) equipment at California State University, Long Beach, was used to ascertain the chemical composition of ceramic material from six Early Copper Age sites from the Körös region on the plain. Minimal variability in the clays was discernable, with the exception of one site located on the Maros River, which differs from the other five sites located on the Tisza River. To determine if the use of different methods produce equivalent results, a portion of the original samples were retested with the LA-ICP-MS (Laser Ablation Inductively Coupled Plasma Mass Spectrometry) equipment at The Field Museum in Chicago.

Since previous conclusions suggest that differing waterways increase the likelihood for chemical variation in clays, the scope of the project was expanded geographically to encompass a larger area, with a third river included in the analysis. Clay and ceramic materials from this larger region will add to the preexisting database to allow for the preliminary understanding of the clay composition in areas peripheral to the Körös region. Should chemical variation in differing clays be present, then initial characterization of interaction between various prehistoric groups, including the Tisza and the Herpály, along these rivers can be undertaken.

### Innovation or Desperation: An In-Depth Analysis of the Apodyterium Mosaic at Poggio del Molino, Populonia, Italy

Jennifer Altman-Lupu, Archeodig Project

The Villa at Poggio del Molino (in Populonia, Italy) is home to a number of mosaic floors, many of which remain quite well preserved. Several of the mosaics were discovered by the University of Florence in the 1980s, including the nationally famous one depicting the head of Medusa. These mosaics are believed to have been constructed during the second half of the second century C.E., when the villa seems to have undergone major renovations.

During the 2011 season of excavation, the Archeodig Project, supported by Past in Progress and Earthwatch Institute, uncovered two more mosaic floors, one of which is particularly unusual and interesting. The poster looks at that mosaic in the context of the site itself and in the context of other mosaics from that period and region. It includes a geological analysis of the stones, an art historical analysis of the design, and an archaeological analysis of the significance of the floor and its historical context.

This mosaic lies in a room believed be an apodyterium (a changing room for a bath complex). The interpretation of the function of the room is supported by the presence of two doorways, one leading to a sudatio (steam room), the other to a mosaic-floored tepidarium. Although partially destroyed, the mosaic in the apodyterium depicts a continuous crisscross design featuring small red rosettes. While all the mosaic floors in the villa depict unique and original designs, the apodyterium's floor contains an additional peculiar element. Many of the stones used to construct the floor are typically shaped and of traditional materials (e.g., local marble), but the mosaic also incorporates pieces of small river rocks, which are common to the area. The use of such stones is extremely unconventional for mosaics in this area or from this period. This begs the questions: Were the creators innovators, using local materials to create an abstract flower design? Or were they perhaps unable to find or afford the type of stone they needed? While we may perhaps never know the answer to the questions, the mosaic provides a number of clues about the history of the villa itself.

### Data Compilation and Visualization for the DEPAS of Mycenae Lower Town Excavation

Ryan Shears, Mississippi State University, and Christofilis Maggidis, Dickinson College

The Dickinson Excavation Project and Survey of Mycenae's Lower Town (DE-PAS MYCLT) has just completed its 10th year of research. Over those 10 years, an immense amount of spatial data has been accumulated, primarily remote sensing data, architectural plans, and artifact locations. After managing and organizing these data for storage and retrieval, their compilation and presentation offers additional challenges. The data hold much information useful to the researchers studying various artifact types, architecture, stratigraphy, environment, and site layout. Thus, it is necessary to process these data to make them immediately accessible

and comprehensible to researchers. Thematic maps can facilitate the research and understanding of the important spatial elements of the data.

Thematic maps, maps featuring one or more kinds of data and their distribution across space, are essential to understanding spatial relationships. They present distances and distributions directly, rather than in words or tables. Thus, they are the ideal solution for showing spatial archaeological data. However, their creation is not a straightforward procedure. Technological concerns aside, there are many questions of how to map the data in the manner most useful to other researchers. Which combinations of data are relevant to be shown together? Is it possible to effectively show the distributions of artifacts that do not have locations recorded beyond their context? During excavation, contexts were recorded with a theodolite in varying degrees of detail. What is a meaningful way to display information about these contexts together, neither creating false impressions about minimally recorded contexts nor having to discard information that is disproportionately dense?

We present a cohesive map-viewing system, created in ArcGIS, aimed at resolving issues like these for MYCLT. A series of "map layers," analogous to transparencies, are compiled into an interactive computerized system to be stored on a server and used by excavation staff. The layers can be viewed individually or overlain in any combination desired. Particular emphasis in this presentation is given to the display of contexts. Techniques are described in which the contexts' shapes can be used to abstractly show the distribution of artifacts for which individual locations were not recorded. These include cartographic techniques like hashing and shading, as well as random representative point generation. Through a unique combination of such techniques, a solution is presented that enables researchers of the DEPAS MYCLT to view any spatial data they need for their research.

### The Spaces in Between: Roads, Gardens, and Gods in Petra's Northeastern Wadis *Michelle L. Berenfeld*, Pitzer College, and *Felipe A. Rojas*, Brown University

Although the role of long-range traffic and trade in Petra has been an object of academic interest since the 19th century, short-range connections between the city and its hinterlands have been understudied. Yet it is precisely these connections that allowed food and water to reach a large population; they were an essential part of urban life in a harsh desert environment.

While substantial work over recent decades has clarified issues of water management in and around the city, and new research is shedding light on agricultural and religious activity in Petra's hinterlands, there has been little attempt to study short-range traffic in and through the city. Pressing questions remain unanswered: How did the caravan trade really interact with urban life at Petra? How was the city's peculiar topography traversed by humans and animals? How did goods move through Petra, as well as between the city and its hinterlands?

Our investigations of Petra's northeastern wadis (part of the Brown University Petra Archaeological Project) suggest that these natural corridors served as dynamic, multipurpose spaces that were an integral part of the urban experience. As has been widely discussed, topography made the city defensible, but it also made movement in and out of Petra very difficult. The wadis were used for both com-

munication and protection, but they were not merely unaltered thoroughfares, and they did not act simply as natural barriers. Rather, the importance of these liminal spaces lay in their versatility, which is attested by extensive interventions there. The wadis provided the most direct access to agricultural lands, as well as to rural sanctuaries and long-range trade routes. They also served as natural defenses—they were so narrow and steep that intruders would be exposed to attack from above. Moreover, the wadis served as an intermediate agricultural territory between the urban core and large-scale farming areas to the north. They were intensively cultivated: water and soil were collected by means of elaborate systems that supported sometimes surprisingly small plots of land. They were also part of the sacred landscape of Petra, as is attested by numerous baetyls, many of them connected with water sources. In addition to providing new evidence about the routes that connected Petra to its hinterlands and about the infrastructure that served the city, our investigation of the evidence for the use and occupation of these wadis sheds light on a vital but thus far unexplored aspect of Petra's urban landscape.

### Pits and Scratches: An Examination of Dental Microwear of Two Bronze Age Sites in East Lokris, Greece

J. Rocco de Gregory, Mississippi State University, and Nicholas P. Herrmann, Mississippi State University

The assessment of dietary indicators is a key component of a thorough bioarchaeological analysis. Dental microwear has been studied for the last 40 years to investigate diet in humans and primates. This study uses dental microwear texture analysis as well as traditional methods to examine the dental microwear signature of skeletal collections from two sites, Mitrou and Tragana Agia Triada, located in East Lokris, Greece.

Mitrou, located in the Bay of Atalanti, has recently been the focus of archaeological excavations. The second site, Agia Triada, was excavated in the 1990s and consists of nine Late Helladic chamber tombs located 3 km from Mitrou. The burials recovered from these two sites are demographically diverse, representing both sexes and various age groups. The combined skeletal collections offer a unique opportunity to examine the diet of Bronze and Iron Age populations from central Greece.

The two samples complement each other temporally, with the Agia Triada tombs representing Late Helladic periods and the burials at Mitrou representing Middle to early Late Helladic and Protogeometric period burials. This research represents an expansion of preliminary studies conducted by the authors examining geographic and temporal variation in dental microwear during the Bronze to Iron Age transition.

#### Iron Age Material at Poggio Civitate: Evidence and Argument

Andrea Rodriguez, The University of Chicago, Ann Glennie, Florida State University, and Anthony Tuck, University of Massachusetts, Amherst

The Etruscan site of Poggio Civitate is located 26 km south of Siena, Italy. Although Poggio Civitate is most well known for the monumental buildings constructed during the Orientalizing and Archaic periods, habitation of the hill most likely began some centuries earlier. During the Late Iron Age, a material culture known as the Villanovans occupied Etruria. They are defined by their particular burial style, thatch-roofed huts, use of stone tools such as chert, and the newly acquired technology of iron smelting. This culture is usually dated from ca. 1000–750 B.C.E., when the transition to the Orientalizing period began.

Because of the topography of Poggio Civitate and the inevitable erosion of the surface, Iron Age evidence onsite is extremely fugitive. However, the Orientalizing-period workshop on the Piano del Tesoro, preserved beneath its floor, stratigraphically secure, Iron Age material. These artifacts include the mainstays of Etruscan archaeology: weaving implements such as spindle whorls and rocchetti. Also found was coarse impasto pottery with a noticeably uneven surface caused by the coiling required of handmade pottery; the potter's wheel was still centuries from invention.

Two other areas of the site, those known as Civitate A and Civitate C, have yielded material that can be stylistically labeled Iron Age, if not confidently dated as such from stratigraphic placement. Stone tools, chert flaked into blades, were also still in the Iron Age technological repertoire and is often found in the matrix of Civitate A.

The evidence from Poggio Civitate suggests that three distinct phases of occupation existed on the hill: Iron Age (possibly Villanovan), Orientalizing, and Archaic. The material remains also imply a continuity not only of occupation but also of a particular indigenous population and their discrete material culture.

#### **Horae** in Roman Funerary Inscriptions

Simeon D. Ehrlich, The University of Western Ontario

The epigraphic practice of rendering ages at death in terms of years, months, days, and hours was widespread during the Roman Imperial period, yet in most epigraphic manuals, these inscriptions receive a cursory mention at best and are often ignored altogether. This poster takes a closer look at this practice by considering the patterns of such inscriptions and the social information that is conveyed within them. I contend that this practice was a recognized means of commemorating the deceased, that communicated not only quantitative demographic data but also qualitative social information, such as wealth, education, or even affection. Yet such precise information extended beyond just the age of the deceased; precisely calculated durations of marriage and military service also feature, as do precise times of birth, death, and burial. Furthermore, the formulaic language of funerary prose led to the creation of certain standardized phrasing regarding hours of death.

By tracing the geographical and temporal distribution of these approximately 1,000 inscriptions, it is possible to see the way in which a cultural phenomenon spread across the borders of provinces and was accepted by different communities, especially those of Italy and the North African provinces. Additionally, this practice transcends social boundaries, as shown by its adoption among slaves and freedmen, equestrians and soldiers, and Christians and pagans. The practice of recording hours and finer units of time on tombstones begs questions of how the Romans measured these, how accurate their instruments were, and to what extent they would have been aware of such units on a daily basis. This poster explores this practice by way of visual representations of the distribution of these inscriptions throughout the empire, with specific attention given to patterns of dates, times, ages, and other demographic markers.

#### Student Potters in Middle Bronze Age Cyprus

Laura Gagne, University of Toronto

During the Middle Bronze Age on Cyprus, pottery production in general appears to have been mainly a household craft. White Painted Ware, a specialized category of ceramics, had a much more restricted distribution than the more common monochrome wares. It was likely manufactured by small groups of potters working in villages that specialized in painted pottery. The potters responsible for producing these vessels began to make pottery at an early age. Evidence for child learners can be seen on vessels whose shapes and/or decoration betrays a lack of fine motor control.

Although there is a wide range of decorative motifs and syntaxes, certain production centers preferred different motifs and combinations of motifs. By comparing the motifs applied to those vessels usually considered to be "sloppy" with neater and more symmetrical decoration on other vessels, it is possible in some cases to determine the model used by the student painter. There are also vessels that bear well-proportioned motifs neatly arranged on one part, while the motifs of another part of the same vessel are not as well formed. These may represent teaching pieces, on which the more accomplished painter has applied a model for the less accomplished painter to copy. In some cases, the vessel itself is well formed, but the painting appears to have been hastily executed. In the past, these vessels have been overlooked, partly because all pottery production in the Middle Bronze Age was thought to have been carried out in the home along with other household tasks. Painted pottery, however, is uncommon and appears to have been in the hands of specialists.

This poster considers how potters and painters learned their craft in the Middle Bronze Age by looking at those vessels where it is clear that multiple hands were involved in production, as well as the vessels where it is evident that the manufacture of the pot was carried out by someone with greater motor control than the person who was responsible for the decoration. Finally, an entire class of White Painted Ware, namely Coarse Linear Style is considered. It is argued that it represents the work of learners imitating the more precise Cross-Line Style of the same production center.

#### **Teaching Archaeological Conservation in Iraq**

Jessica S. Johnson, University of Delaware

The Iraqi Institute for the Conservation of Antiquities and Heritage (IICAH) was initiated in 2008 as part of a U.S. Embassy, Baghdad, two-year Targeted Development Program grant. Throughout 2009 and 2010, working with the State Board of Antiquities and Heritage (SBAH) and the Kurdish Regional Government (KRG) two programs, conservation and historic preservation, were developed and taught, and a state-of-the-art facility was renovated in central Erbil. In January 2011, the SBAH and KRG took over the IICAH, and it is now managed by an Iraqi board of directors.

IICAH's conservation program continued in 2011, with funding through the U.S. Embassy, Baghdad. The program is managed through the University of Delaware, in partnership with the Walters Art Gallery, Winterthur Museums and Gardens, and the University of Arizona. The conservation program was expanded into a two-tier program: Introductory and Advanced level. Students are professionals currently working in heritage preservation from all over Iraq.

The goal of the program is to develop Iraqi professionals who are conversant and capable in current standards of international heritage preservation. Courses take place over six months and are led by internationally recognized faculty to provide students with current concepts and methodologies in conservation, critical thinking and creative problem-solving skills, and an international professional network.

Archaeological conservation is central to the education. Students are taught technical skills in lifting fragile artifacts, stabilizing and restoring artifacts, and low-tech materials identification skills, as well as methods for long-term safe storage of these materials. Students are also taught to think about conservation as part of archaeology, a way to contribute through a deeper understanding of materials, and collaboration with others working to understand Iraq's important past.

English language instruction is an important part of the education. It empowers Iraq's cultural heritage personnel to participate in international professional activities and provides another bridge between Arabic- and Kurdish-speaking cultural heritage professionals.

At the end of each section of the course, students return to their institutions to carry out an on-site practicum. These activities, at cultural heritage institutions throughout Iraq, help ensure students use their new skills to enhance Iraqi collections and sites.

An advisory board of American and Iraqi heritage preservation professionals has been founded to advise the board of directors and help ensure sustainability of the IICAH. Plans to continue and expand the training in historic preservation, museum studies, and archaeology are under development.

### SESSION 3A Minoan Studies

CHAIR: Eleni Hatzaki, University of Cincinnati

### A New Method of Defining Private Structures in Minoan Neopalatial Architecture Through Access and Circulation Pattern Analysis

Miriam G. Clinton, University of Pennsylvania

The importance of domestic space in archaeological study can scarcely be emphasized enough, but in Minoan archaeology, the very concept of the house has been a particularly elusive one. Perhaps because of the relatively poor preservation of many houses, vernacular architecture, while generally published within site reports and monographs, has until recently received little synthetic attention. Now that archaeologists have begun focusing on Minoan domestic architecture, the flaws in our understanding of the functions of ancient structures have been exposed. Simply put, Minoan archaeologists cannot yet agree on the precise definition of a Minoan house, still less on how to identify residential architecture consistently in the field. Some examples are clear-cut and universally agreed to be residences, but many, such as the so-called villas, fall into gray areas, in which scholars cannot agree about their functions.

This paper offers a new methodology for differentiating between public and private buildings in the Neopalatial period to distinguish the elusive class of Minoan houses. It presents a typology of access and circulation patterns as a means of assessing relative privacy. The management of access and circulation by means of fixed architectural features forms the basis for the typology, which identifies five possible types of circulation patterns, from most to least likely: room-to-room, cellular, locus of circulation, corridor, and exterior. The paper applies the typology to selected examples from the corpus of Minoan houses, including structures from Nirou Chani, Mochlos, Kommos, and Pseira.

Based on the typology, the paper addresses the relative privacy of each type of circulation pattern on two different levels: that of the inhabitants in relation to other inhabitants and that of inhabitants in relation to visitors. The typology of circulation patterns clarifies these differences and allows buildings as a whole to be categorized as private, semipublic, or public. Unlike Gamma Analysis or other architectural methods of understanding or quantitatively measuring privacy, this paper's approach does not divorce the measurement of access and circulation from the plans themselves. It offers a methodology that is easy to apply in the field to guide further research and allow finer analysis of the functions of buildings.

### Urban Transformations: The Little Palace North Project and the Cityscapes of Late Bronze Age Knossos

Eleni Hatzaki, University of Cincinnati

This paper presents the results of the Little Palace North Project, a two-season excavation (2001–2002) aimed to provide a diachronic picture of urban activities in the core elite sector of urban Late Bronze Age Knossos.

The emerging picture from combining new and old excavation data suggests that the urban landscape of Knossos underwent various drastic changes in the Neopalatial, Final Palatial, and Postpalatial periods. This analysis, therefore, challenges Sir Arthur Evans' vision of an unaltered urban layout for Late Bronze Age Knossos (regularly used as a pan-Cretan model) and prompts the reexamination of urban development in other Cretan settlements with long and complex occupation sequences.

#### Motherhood in Minoan Iconography

Annette T. Teffeteller, Concordia University

Minoan iconography presents women in public—perhaps exclusively religious—contexts. This emphasis on public roles to the exclusion of the domestic has led to the claim tout court that we are faced with "complete iconographic silence on anthropomorphic motherhood in Minoan Crete" (B.A. Olsen, WorldArch 29 [1998] 380-92). It is certainly true that we do not have representations of motherand-child groups in Minoan art. Minoan iconography, however, does incorporate representation of motherhood en passant. The open-front bodice of the elite palace dress worn by women in Minoan art effectively announces a woman's status vis-à-vis motherhood. Within the graphic convention in the miniature frescoes of routinely indicating the exposed breasts by a simple dot representing the nipple, the ptotic breasts carefully delineated in the Grandstand fresco at Knossos indicate not age per se but rather multiple pregnancies and prolonged breastfeeding (the widely-cited study by Rinker et al. (Aesthetic Surgery Journal 28 [2008] 534–37), emphasizing the role of pregnancy and discounting breastfeeding in the development of ptosis, does not consider the effects of breastfeeding beyond an average of nine months; in modern societies, age is also a contributing factor but would have been of minimal impact in Bronze Age Crete, even in the Middle Minoan period). This explicit representation of ptotic breasts attests to the fact that elite women breastfed their children, that no stigma was attached either to the practice or to its physical effects, that the open bodice was worn by women in various states of pre- and post-pregnancy and lactation (as perhaps indicated in other visual representations as well), and that (at least in the LM IA period) Minoan women taking part in public (perhaps religious) occasions included matrons. Younger has said of the lack of erotic art among the Minoans of the Neopalatial period that their art was a "formal construction, and it was not its purpose to give us viewers glimpses of overt Minoan sexuality, but rather covert reflections of it" (ArchNews 23 [1998–2000] 6). Similarly, the formality of Neopalatial art eschews depictions of private domestic scenes, but it gives us an unmistakable depiction of the physical manifestation of motherhood.

### Exotica at Knossos: A Reconsideration of the Faience Snake Goddess and Her Votary

Emily Miller Bonney, California State University, Fullerton

This paper argues that the two reconstituted faience figurines from the temple repositories at Knossos, restored by Sir Arthur Evans as the Snake Goddess and her Votary, were not manufactured for a preexisting, indigenous palatial cult of the Snake Goddess. Rather, they are exotic amalgams strongly influenced by Syrian imagery of the later Middle Bronze Age and deliberately introduced at Knossos as part of the consolidation of power at the palace in MM III. Deconstructing the figurines by eliminating Evans' additions leaves a head (that of the so-called Snake Goddess), two torsos, and the remnants of the Votary's flounced skirt. While their tight bodices are unquestionably within the Cretan tradition, their gestures, coiffures, and the Votary's checked flounces do not have close parallels in the Cretan artistic tradition. Moreover, there are no Cretan iconographic sources for the images of the women participating in the cult of the Snake Goddess, whether as goddesses or as priestesses and wearing or brandishing snakes in this fashion. Created as part of a suite of faience luxury objects to express the power of those who ordered their production, the figurines display oriental traits. The artisan(s) who crafted them employed motifs from the Syrian artistic tradition, apparently drawing on the representations of the goddess opening her skirt and the renderings of Syrian goddesses with cylindrical crowns, straight hair, and robes with thick edges, all motifs current in the Late Middle Bronze Age in the Levant. The elites who ordered the production of the figurines did so within the context of their consolidation of power with the construction of the MM III palace at Knossos. At a time of heightened interaction with the Late Middle Bronze Age monarchies of the Levant, the elites at Knossos emulated Syrian iconography as an assertion of their access to exotic knowledge and control of trade. When the MM III palace was destroyed, the figurines, irreparably damaged, were deposited in the temple repositories, and their iconography was buried with them. The total absence of snake-wielding women in subsequent Neopalatial art underscores how alien in form and content they were to the Cretan tradition.

## SESSION 3B Sicily

CHAIR: Claire Lyons, The J. Paul Getty Museum

### A Measured Harvest: Grain, Tithes, and Territories in Hellenistic and Roman Sicily D. Alex Walthall, Princeton University

During the reign of the Syracusan monarch Hieron II (269–215 B.C.E.), Sicily's famed agricultural resources were, for the first time, comprehensively mobilized through a sophisticated administrative system designed to collect an annual graintithe from city-states within his kingdom. Hieron II's administrative system was so effective in harnessing the productivity of the island that the Romans—eager to

feed their growing urban and soldier populations—retained the annual grain tithe and applied it to the whole of the island, thereby transforming the first of their provinces into the grain basket of a burgeoning empire.

Scholars have long recognized the economic and political importance of Sicily's agricultural resources for the kingdom of Hieron II and the Roman Empire. Yet the traditional narrative of agricultural administration in Hellenistic and Roman Sicily overlooks a substantial body of archaeological material. My paper recasts this narrative in terms of standardized grain measures, monumental granaries, and patterns in rural land use—material evidence of agricultural administration emerging from excavations and intensive landscape survey on the island.

I argue that the appearance of terracotta grain measures of standardized form and volume at cities such as Akrai, Kamarina, and Morgantina during the third century B.C.E. should be considered evidence for the consolidation of territories in southeastern Sicily under Hieron II's royal taxation administration. Furthermore, I propose that the distribution of these standardized measures—and particularly those with stamps of official endorsement—may be used to determine the geographic extent of Hieron's authority. These findings are considered in light of archaeological evidence collected during excavations and intensive field surveys conducted in the territories of Morgantina and Akrai, to address whether agricultural taxation lead to demonstratable change in land use and settlement.

Finally, I present the results of the 2011 season at Morgantina which focused on two monumental granaries located in the city's agora. In light of the archaeological materials recovered from these excavations, I propose a revised chronology for the construction of the so-called West Granary, and, in so doing, reevaluate the building's role in the assessment and collection of an agricultural tithe during the Hellenistic and Roman Republican periods.

### The North Baths at Morgantina and the Architecture of Greek Baths

Sandra K. Lucore, Independent Scholar

In 2011, the American excavations at Morgantina completed the excavation of the North Baths, with the author as director of the project and the one responsible for the final publication of the building's findings. This paper focuses on the outstanding architectural remains of the building that provide striking examples of innovations in design, construction, and technology.

The North Baths are dated to the middle of the third century B.C.E., perhaps as early as the second quarter. They are the best preserved of the important group of similar Sicilian baths, and they provide clear evidence that Greek baths of the Hellenistic period, in Sicily in particular, led the way in architectural design to create new kinds of spaces to accommodate new forms of public leisure, developments that prefigure Roman baths and constitute a prominent source of influence on their early appearance.

In the third century B.C.E., bathing customs expanded from the simple utilitarian practices known from the fifth century B.C.E. onward. This expansion is reflected in the eleven or more rooms of the North Baths, which include, in addition to the service areas, waiting/changing rooms and spaces for relaxation or other services provided in bathing establishments, as well as the traditional form

of individual hip-bathtub bathing. Most notable, however, is the unprecedented inclusion of communal luxury bathing in a hot-water immersion pool. A new form of heating was invented for the Sicilian baths that represents a major development away from the common use of simple portable braziers. A large furnace now provided increased amounts of hot water for bathing, as well as heat for the surrounding rooms, while the immersion pool was provided with its own hypocaust and probably a testudo, a device otherwise known only in Roman contexts. The hallmark feature of the North Baths, however, is the presence of a dome and two barrel vaults that covered the three main rooms of the complex, among the earliest surviving evidence of above-ground vaulting, whose appearance very possibly owes something to the work and activities of Archimedes. All of the public spaces of the North Baths were carefully decorated.

The North Baths represent a significant allocation of resources by the king or other elites for the common good. They reflect the general trend in cities of the Hellenistic period toward embellishment and luxury, and in the larger picture, they make a significant contribution to the history of ancient architecture.

### It's All Relative: Measuring Economic Investment and Growth in Archaic-Classical Sicily

Lela Urquhart, Georgia State University, and Emily Modrall, University of Pennsylvania

How can an economic perspective inform questions of state formation in the context of ancient Sicily? Most studies have approached this issue using models of cultural interaction between "colonial" and "indigenous" populations. While revealing, their insight into the harder economic and political realities of state development in the Archaic and Classical periods has been rather limited.

In this paper, we propose that a promising avenue for research is the study of long-term economic growth using a comparative and quantitative study of economic investment across settlements of various sizes and ethnopolitical compositions. Focusing on the central-western part of the island, we ask two questions. What were the major outlets for economic investment for Sicilian communities? Can measures of economic investment be used to better understand interstate relations?

In this paper, we consider the opportunities for economic investment available to Greek, Phoenician, and indigenous communities. Material indicators of economic investment that can be measured both across sites and over an extended time frame are somewhat few. But monumental architecture exists to some degree at most Sicilian sites, regardless of their cultural or ethnic background; it can also be measured by estimating costs of material, labor, and transport. As such, it is an effective indicator of intentional expenditure.

In July 2011, we conducted a two-week fieldwork campaign focused on measuring and restudying the architectural forms, building materials, and quarry sources of a collection of indigenous settlements in the hinterlands of Gela, Agrigento, and Selinus. Combining this new data with earlier research, we make the point that, despite certain distinctive sociocultural traditions among the different ethnic groups in Sicily, by ca. 575 B.C.E., nearly every site in our study area began

to invest to some degree in monumental architecture. We argue that the significance of each settlement's economic investment must be measured quantitatively and understood relativistically. To do this, we estimate both absolute and relative investment costs, taking into account settlement size, estimated population, and proximity to materials that could be quarried. We conclude that while cultural and/or ethnic traditions may have contributed to how much communities chose to invest in monumental architecture, certain settlements ignored those traditions and devoted massive resources, both in relative and absolute terms, to the construction of public monuments. These conclusions highlight the symbolic and practical functions of monumentality and offer a new perspective on understanding the growth and interstate relations of Sicilian settlements.

### **Archaeobotanical Evidence of Funerary Dining in Ancient Sicily**

Jennifer Ramsay, The College at Brockport, State University of New York

I present an analysis of archaeobotanical remains recovered during the 2009 and 2010 excavation seasons of Kauakana, Sicily, after Wilson (AJA 115 [2011] 263–302) discovered a tomb and excavations began in 2008. The tomb contained the remains of two individuals and is dated to the sixth to early seventh century C.E., based on ceramic and coin evidence. The tomb was found within a domestic structure, and evidence for funerary banqueting is indicated by the presence of hearths, a bench, an offering table and associated material culture items, such as amphoras, cooking pots, and tableware excavated from within the tomb area. As a result, the site is considered unique in Sicily with respect to Christian funerary dinning. Evidence for what was consumed during funerary dining is rare in the archaeological record, so the soil samples taken during excavation were processed in the field by water flotation to recover any botanical remains of ritual feasting. Analysis of the charred remains recovered from hearth contexts indicated the presence of a variety foodstuffs, such as wheat, barley, millet, peas, lentils, fruits, and nuts. These finds provide intriguing evidence of materials consumed during ritual feasting during the Late Byzantine period on Sicily. This study, in association with the analysis of archaeozoological remains of chicken, pig, and sheep/goat, expands our knowledge of funerary dining and contributes to a broader understanding of local diet and ritual in the ancient world.

#### Hellenistic Diplomacy in Western Sicily: Third-Century Entella

Randall Souza, University of California, Berkeley

In the course of the First Punic War, the city of Entella in western Sicily was destroyed and its population dispersed, most likely at the hands of the Romans. The Entellinoi were eventually able to return home, however, and when they did, they passed a series of decrees honoring the cities and individuals that had aided them in their diaspora and resettlement. These decrees were inscribed in bronze on the Entella tablets, which were excavated clandestinely and sold on the antiquities market and which have now been published together by Ampolo and Parra (*Da un'antica citta di Sicilia* [Pisa 2001]). This dossier of seven decrees, unique both

in Sicily for its documentation of diplomatic activity and in the Mediterranean for its documentation of a city's response to trauma, illuminates an otherwise poorly understood period of western Sicilian history.

The first decree to be passed honors four cities and six individuals, capturing relations between Entella and its neighbors at a much finer resolution than had been possible from the archaeological and ceramic evidence alone. Each of the cities and individuals lent or gave grain for Entella's resettlement; cities received *eunoia, isopoliteia, proedria,* and an invitation to Entella's games, and individuals were made *proxenoi*. A1 is particularly remarkable in Hellenistic Sicily for these grants and for its formulas, linguistic features, accounting of grain, and preservation of local names.

This paper characterizes the dynamic relationship between Entella and its nearest benefactors through an analysis of this decree's diplomatic language and the contributions of grain. I first present the evidence for the cities honored (Petra, Makella, Kyttatara, and Schera) and a brief onomastic survey of the individuals. I then demonstrate, drawing at times on the other decrees, how Entella participated in a diplomatic discourse that left it well supplied with friends among the Greek poleis of Sicily, even as the Romans were establishing their provincial administration on the island. I suggest that the assistance in grain not only had economic significance for the resettlement as food for immediate consumption and seed for restarting agricultural production but also played an important role in this diplomatic discourse. I stress that the decree both documents and constitutes Entella's connection to its benefactors, and I conclude that this prescriptive power, which ensured continued interaction between the populations involved, is crucial for understanding the foreign policy of a city that was nearly annihilated.

## SESSION 3C Architecture and Topography of Rome

CHAIR: Ellen Perry, College of the Holy Cross

### Finding the Fornix Calpurnius: Reinterpreting the Topography of the Republican Capitoline

Anne Hrychuk Kontokosta, Pratt Institute

According to the fifth-century author Orosius, a member of the gens Calpurnia erected a fornix (a republican freestanding arch) on the Capitoline Hill sometime before the death of Ti. Gracchus in 133 B.C.E. Orosius uses this monument—known as the Fornix Calpurnius—as a topographical marker noting that Gracchus fled down a flight of stairs toward the fornix before being beaten to death by an angry mob (Oros. *Adv pag.* 5.9.2). Other ancient authors record similar details of the last hours of Gracchus, adding that he had been attending the tribunate assembly in the Temple of Jupiter Optimus Maximus, that the senate was gathered nearby in the Temple of Fides, and that Gracchus ran through "the gateway beside the statues of kings" before being killed with a club (App. *B Civ.* 1.15–16; Plut. *Vit. Ti. Gracch.* 19.9; *Retorica ad Herennium* 4.55.68; Val. *Max.* 3.2.17; Val. *Patr.* 2.3).

Despite the interesting details provided by the literary sources, the uncertain nature of the ancient topography of the Capitoline Hill has hindered a determination of the position of the Fornix Calpurnius. Among various hypotheses proposed by Roman topographers, the most influential debate has centered on whether the fornix is depicted in fragment 31a-c of the Forma Urbis Romae, and whether the monument can subsequently be positioned over a staircase on the west side of the Capitoline overlooking the Area Sacra di San Omobono or on the north side of the Capitoline and in association with the Porta Pandana. However, this paper demonstrates that, on close examination, neither of these solutions is satisfactory. Based on a critical reevaluation all of the literary, topographical, and archaeological evidence, it repositions this important fornix on the slope of the Capitoline Hill overlooking the Forum Romanum.

Instead of the various members of the gens Calpurnia previously championed as patrons of the Fornix Calpurnius, this paper argues that C. Calpurnius Piso constructed the fornix after his triumph over the Celtiberians and Lusitanians in 184 B.C.E. In this context, the social and political implications of the construction and location of the fornix are considered in relation to an earlier fornix—that of P. Cornelius Scipio Africanus—erected on the Capitoline in 190 B.C.E. Finally, the Fornix Calpurnius is situated within the intense spirit of competition that prevailed among generals who had successfully campaigned in the western provinces during and immediately following the Second Punic War (218–201 B.C.E.).

### Building Temple B: A Case Study from Largo Argentina for Technological Innovation in Roman Republican Architecture

Seth Bernard, University of Pennsylvania

This case study helps to address broader questions about the development of Roman Republican building technology. How did builders acquire and apply knowledge without written theory? What were the implications of this process for our concepts of standardization and specialization at this time? I begin with fieldwork documenting the building process of Temple B at Largo Argentina. The paper next moves to a contextualization of this evidence from a survey of related architectural fragments around Rome. A fascinating phenomenon emerges: the builders' approach appears both convergent with and divergent from their contemporary technological knowledge base. From here, I consider how Roman builders solved technological problems during this period and how this can further our understanding of the Republican building industry.

There has been no study of Temple B for 30 years, but the identification of the structure as Catulus' Temple of Fortuna Huiusce Diei (vowed 101 B.C.E.) remains secure. After reviewing the architecture, I focus on the travertine column capitals. The carving technique, as well as the two-piece construction manner, was traditional for Corinthian capitals of this date. This build technique would also indicate an awareness of the upper capacity of available lifting machinery. However, a series of previously unremarked upon cuttings found on the blocks relate to a novel form of lifting technology. These consist of an identical pattern of matching holes and indentations on all surviving fragments. Position and appearance argue that they derive from the original phase. The builders ignored more typical techniques

(the lewis, ferrei forfices) in favor of an innovative though unparalleled solution. Interestingly, we know the architect behind this structure from epigraphy (L. Cornelius). However, Temple B's buildtechnique diverges with methods found in his other projects. Architectural fragments from the period instead show a variety of lifting methods. If a general awareness of the capacity of machinery existed, the application of that machinery can be seen to have varied from site to site.

This combinatory approach found at Temple B, both traditional and highly innovative, reflects the sort of oral transmission of information that typified the Roman building industry of the Republican period. This view finds confirmation in Vitruvius. Some scholars have seen at this time the beginning of work force specialization in the Roman building industry, especially with the advent of concrete. This study, however, suggests a more complex and less determinist progression of Roman building technologies in the Republic, formed by a more site-specific and ad hoc approach.

#### The Theater of Pompey in Rome: The Excavation Season of 2011

James E. Packer, Northwestern University

In 2009, our excavations in the Theater of Pompey in Rome continued with a new trench on the west side of the southeast court in Palazzo Pio, the medieval/modern structure built into the remains of Pompey's ancient theater. By the end of the season, our trench had reached a 13th-century stratum of white marble chips, 3.30 m below the pavement of the modern court.

At this level, we began our current excavation in July of 2011. About a meter below the marble stratum (16.49 masl), we found several large-scale, finely finished white marble blocks. Underneath lay a broken concrete vault that covered two collapsed wall segments, one on top of the other. Reused roof tiles faced the later, upper section; reticulate, the earlier, lower one. A high-quality, unpainted white plaster mixed with finely ground white marble dust decorated the previously exposed surfaces of both sections. Into the concrete of these late first-century B.C.E. walls, the ancient workmen had thrown late second- or early first-century B.C.E. terracotta remains of a small temple: parts of a column shaft, a painted acroterion, a statue, and the remnant of a fine frieze from the entablature (?).

These terracotta elements attest earlier, previously unknown construction on the site of the theater. The character and position of the theater's concrete and marble remains suggest that its destruction began in the Early Middle Ages. After repairs under King Theodoric (d. 526 C.E.), the building, although abandoned, must still have been in relatively good condition. As our marble blocks show, however, the neighbors had begun to erect temporary structures on the seats and had chipped away at the seat blocks. At that point, a serious earthquake—probably the one dated in the *Liber Pontificalis* to August 618 C.E.—shook the site. Parts of the cavea collapsed. The seats (the big marble blocks mentioned above) crashed down through the underlying structures, knocking a supporting vault and the attached wall into a room below and damaging the room's *opus spicatum* floor. The elevation of that floor (13.73 masl, nearly 7 m below the modern court) suggests that, since, as our earlier work has shown, the pavements of the ground-floor rooms lie at a depth of 11.95 masl, our recent excavation has presently reached the pavement of a floor just above those chambers.

### The Stagnum Augusti: A Unique Roman Naval Victory Monument

Kristian Lorenzo, University of Wisconsin, Madison

The stagnum Augusti was a gigantic basin with seating, its own almost exclusive aqueduct, and an island. It was one of Rome's most impressive waterworks, a grand reshaping of the Transtiberim's landscape and a new form of naval victory monument unparalled in size and scale. Augustus constructed this stagnum in 2 B.C.E. to stage the performance of an inaugural naval battle, or naumachia, of great importance. "Athenians" and "Persians" once again fought the Battle of Salamis. Such a reenactment can be seen as a retrospective allusion to the Battle of Actium in terms of the civilized West's victory over the barbaric East. Previous studies of the stagnum have considered its water-control system, shape, exact location in the Transtiberim, and various ideological factors of its naumachiae but not the commemorative aspects of the stagnum itself. In this paper, I argue that the stagnum Augusti was built to commemorate the naval victory at Actium.

Ancient testimony makes clear the dual nature of the stagnum's inaugural naumachia. Augustus' choice to reenact Actium as Salamis made this naumachia a part of his classicizing program. Furthermore, the interpretation of the stagnum as a naval victory monument accords well with Rome's tradition of naval victors and their commemorative monuments. By 2 B.C.E., 18 naval victory monuments dotted Rome's landscape. Monuments such as the Temple of Juturna (ca. 242 B.C.E., victory over Carthage) and the columna rostrata Octaviani (ca. 36 B.C.E., victory over Sextus Pompeius) made memorials set up by or for naval victors an integral component of urban life. Augustus' stagnum was a veritable sea in the city, specifically designed so that fleets of warships could perform a symbolic reenactment of a historically pivotal battle, thereby showcasing itself as the most naval of all naval victory monuments.

My discussion of the stagnum Augusti—public venue for lavish spectacles, naval victory monument, and, later, nemus Caesarum commemorating Gaius and Lucius Caesar—highlights the tendency for certain Augustan monuments to have multiple meanings. The Temple of Divus Iulius exhibited this same tendency when warship rams captured at Actium were attached to its facade. In my discussion of the stagnum, I bring to the forefront broader issues of what defines a victory monument and the different meanings that these memorials can have.

### Monuments and Morality: The Forum Transitorium and Domitian's Urban Program in the Subura

Margaret M. Andrews, University of Pennsylvania

I present a reinterpretation of the urban and ideological context of Domitian's Forum Transitorium in Rome through an examination of its extant sculpture, topographical situation, and relevant literary sources. Building from a previous argument by D'Ambra that the extant frieze depicts moralizing exempla of feminine virtue (*Private Lives, Imperial Virtues: The Frieze of the Forum Transitorium* [Princeton 1993]), I argue that this message, embodied by the entire complex, was addressed most directly to the occupants of the lower Subura and Argiletum just east of the structure. Domitian's revival of the Augustan *leges Iuliae* and his emphasis on ma-

tronly duty, *pietas*, and *pudicitia* would have resonated most with this area, described by contemporaries as a valley plagued by prostitution and deviance—the very behaviors targeted by Domitian's reforms.

Domitian enacted his policies most visibly through the construction of the forum itself, which dramatically changed the nature of the urban center. Archaeological evidence shows that for its construction Domitian razed the district of the Argiletum, displacing a large number of occupants and businesses. Once built, its large walls and a sinuous, bottlenecked corridor in the east prevented mass entrance from the Subura. Domitian's forum completed the process of removing the crowds from the center, which the earlier fora had accomplished in part.

As D'Ambra convincingly demonstrates, the depiction of Minerva's punishment of Arachne flanked by personifications of *pudicitia* and *pietas* in the forum's easternmost bay conveyed Domitian's moralizing ideology and characterized the forum. I propose, however, that beyond emphasizing Domitian's reforms abstractly, the reliefs played directly against the licentiousness of the Subura immediately nearby. The social plight of the area would have been acute to visitors entering the forum from the east; the reliefs created the sharp contrast between the two spaces and cast Domitian's social policies as all the more imperative. Indeed, the effect of the reliefs depended on the proximity and nature of the Subura as a compelling foil to the forum's message of matronly rectitude.

More broadly, Domitian's complex paralleled Maecenas' earlier intervention against similar problems at the other end of the Subura, near the Porta Esquilina. It also connected ideologically with the site of the annual *matronalia*—the republican Temple of Juno Lucina rising over the Subura from the Cispian slopes. In attempting to instill morality in the lower Subura, Domitian continued a longstanding tradition of emphasizing female virtue across the valley as a whole.

#### New Discoveries at the Remotest Sources of the Agua Traiana

Rabun Taylor, The University of Texas at Austin, Katherine Rinne, University of Virginia, Edward O'Neill, Independent Scholar, and Michael O'Neill, Independent Scholar

In 2011, following on the discovery of two monumentalized spring sources of the Aqua Traiana around the western and northern rim of the crater of Lake Bracciano, our team focused on remains of particularly remote parts of its conduit. Archival documents indicate that the 17th-century Acqua Paola reused many parts of the ancient Roman aqueduct but they do not specify locations. We verified that this was true in two distant sectors of the Acqua Paola, both of which are now dry and unknown to scholarship. We examined a short section of conduit at Pisciarelli, site of the southernmost sources of the Acqua Paola. It clearly appropriated the channel and a service shaft of its Roman predecessor, which still preserves well-built tracts of *opus testaceum* brickwork and *opus signinum*. At this site, we documented an unusual usage of *opus signinum*: its application to the exterior facing of the channel's base. At a section of the duct aboveground in Manziana, near the monumental source discovered in 2009, we observed another unusual technique: a half-round, rather than the usual quarter-round, molding at the upper edge of the *opus signinum* application on the interior walls of the conduit. This implies that

the vaulting was laid afterward; by covering and clamping the outer part of the molding, it helped to anchor the entire vertical layer of *opus signinum* in place.

At another remote site to the north, and further up the rim of the crater, we found a collapsed bridge of the Aqua Traiana directly downstream from its abandoned 17th-century replacement. One large chunk of the bridge has fallen on its side, directly into the creekbed, exposing its *opus signinum* floor. Part of the bridge's arch hovers precariously from one bank, and an abutment is still in place on the other side. The Roman bridge crossed the stream at an oblique angle, whereas the Acqua Paola bridge follows roughly a right angle. We were able to investigate a sector of the conduit's interior downstream from the bridge. Consistently, the Roman aqueduct's channel and *opus signinum* lining were preserved as much as possible, but the repairs and vaulting are of the early modern period.

These discoveries vindicate the hypothesis that the source network of the Aqua Traiana equaled that of the Acqua Paola in breadth and scope by exploiting virtually every available spring in the watershed of Lake Bracciano.

### **SESSION 3D: Colloquium**

### Pomerance Award Session: D.P.S. Peacock's Model for the Organization of Roman Pottery Production: Impact and Responses over Three Decades

ORGANIZERS: *J. Theodore Peña*, University of California, Berkeley, and *Roberta Tomber*, British Museum

#### **Colloquium Overview Statement**

It is now 30 years since the publication of D.P.S. (David) Peacock's *Pottery in the Roman World: An Ethnoarchaeological Approach* (London 1982). In this book, Peacock combined ethnographic and archaeological evidence to articulate a generalizing model for the organization of pottery production in the Roman world. This model posited the existence of seven more or less distinct modes of production (household production, household industry, individual workshops, nucleated workshops, the manufactory, estate production, military/official production), considering the social, economic, and technological contexts within which these operated and specifying their material correlates. The model had an immediate and long-lasting impact both on Roman pottery studies and on the study of craft production in the Roman world more generally, and has also been adopted and adapted by archaeologists interested in the organization of craft production in complex societies in many different areas of the world.

This colloquium brings together specialists in the archaeology of pottery/craft production with a view to taking stock of the impact of and responses to Peacock's model and to consider how it continues to influence research being carried out today. It is divided into two sections, each comprising three papers. The first, consists of presentations by scholars who are specialists in the archaeology of pottery/craft production in culture areas other than the Roman world. These speakers—one specializing in the prehistoric Aegean, one in the historical periods of ancient Greece, and one in pre-Columbian South America—each provide a gen-

eral overview of recent research into the organization of pottery/craft production in their area, considering how this has been influenced by Peacock's model. The second section consists of presentations by scholars who are Roman pottery specialists. These presentations consist of specific case studies that illustrate the ways in which current research on the organization of pottery production in the Roman world and areas with which it enjoyed trade relations draw on and address concepts embodied in Peacock's model. These presentations include a broad, diachronic analysis of the development of tableware and cookware production in the eastern Mediterranean during the Hellenistic and Roman periods, an evaluation of the circumstances that underlay the emergence of the Italian Sigillata industry at Arretium in the later first century B.C.E., and a study of household pottery production in northwest India during the Indo-Roman trade period.

DISCUSSANT: David P.S. Peacock, University of Southampton

### Peacock's Production Modes: The View from Aegean Prehistory

Carl Knappett, University of Toronto

In the early 1980s, the study of Aegean Bronze Age pottery underwent a paradigm shift. Where before only art historical and typological approaches existed, a focus on the dynamics of ancient pottery production began to emerge. This new perspective, which viewed production as a socioeconomic activity, drew on ethnographic analogy as a source of ideas, and embraced scientific analysis of both fine and coarse wares as an integral methodology, was an outgrowth of processual archaeology. Peacock's role in promulgating this perspective was absolutely critical because he very clearly articulated these connections for a "Classical" audience wed to art historical and typological approaches. However, within this audience, one section—the Aegean prehistorians—was particularly receptive to an "ethnographic" approach, with the work of Colin Renfrew in the 1970s, and John Cherry, Paul Halstead, and Todd Whitelaw in the 1980s having paved the way. Thus, for pottery studies in the Aegean Bronze Age, Peacock served as an important interlocutor between, on one hand, the ethnoarchaeological work of Hélène Balfet and Sander van der Leeuw, working within a French chaîne opératoire approach, and on the other hand, the grounded study of ancient classical and Mediterranean pottery. Peacock's attention to ceramic fabrics through petrographic analysis and his systematic connection of technological choices with modes of production were twin poles that grounded the striking growth of ceramic analysis in Aegean prehistory, driven by the likes of Richard Jones, Ian Whitbread, and Peter Day. In this paper, then, I assess the importance of these connections to Aegean Bronze Age pottery studies and consider the enduring contribution of Peacock's work, even as new approaches emerge and grow from this important base.

#### Peacock's Production Modes: The View from Ancient Greece

Eleni Hasaki, University of Arizona

Peacock's seminal contribution on the modes of pottery and tile works specialization appeared in 1982 (*Pottery in the Roman World: An Ethnoarchaeological Approach* [London]), the same year in which a cluster of important studies focusing on craft specialization were also published. Peacock's organizational model focused on Roman pottery production, but soon its applicability cut across technological, geographical, and chronological boundaries. A parallel development of studies on the *chaîne opératoire* of technical processes reinforced a holistic approach on the archaeological study of craft technologies in ancient and preindustrial societies. Peacock's second major contribution is the formal adoption of ethnoarchaeology to the study the Mediterranean world. The word has a low occurrence rate in the text, yet in retrospect, it signalled the intensification of ethnoarchaeological studies in later decades among Mediterranean archaeologists.

For Greece in particular, in the decades following the book's publication, excavations, surveys, and archaeological sciences regularly included in their agendas the recognition, study, and analysis of production loci. Large infrastructure projects, as well as intensive residential construction in cities, presented the archaeologists with a more diversified archaeological record, rather than with the previous selective process of excavating sanctuaries, palaces, and tombs.

In this paper, I present a synthesis on the archaeological and ethnoarchaeologicalwork conducted in the last three decades relating to craft production establishments, especially pottery workshops and tile works from the Dark Ages to the Hellenistic times in Greece. The study of technical equipment, the inferred productivity rate for ancient Greek potters, and a close reading of the spatial organization of workshop space is discussed in the light of Peacock's modes of production. For workshop space in particular, archaeological and ethnoarchaeological data suggest that there is a positive and consistent relationship between the intensity of craft production and various spatial or scalar variables: the extent of the workshop, the size of its equipment (namely kilns), the size of its workforce, the space (or the lack thereof) allotted to long-term storage, and ultimately the size of the available means of land or sea transportation. If one of these variables changes, all others tend to adjust accordingly. Furthermore, a firm understanding of the spatial limitations of a workshop permits a more accurate estimation of the size of workforce that could operate in such spaces.

### D.P.S. Peacock and the Organization of Craft Production: The View from the Americas

Cathy L. Costin, California State University, Northridge

From the perspective of the Americas, the contributions of Peacock to the study of craft production—pottery specifically but all media more generally—fall into three areas. First is his ethnoarchaeological approach. Second is his general model for the organization of (Roman) craft production. Third is his enumeration of the material correlates of specific types of organization he identifies.

Ethnoarchaeology has been a particular useful tool in the study of craft production in the Americas, perhaps even more so than in Europe, because of the persistence of traditional, non-industrial technologies. Although quite authoritative, Peacock's model of the organization of pottery production in the Roman world has had less direct influence, in large measure because few pre-Columbian societies had the degree of sociopolitical complexity and economic complexity as Rome, and therefore only a few of his organizational types have parallels in the New World. Despite this lack of direct transferability, his general model had a strong influence on some New World scholars of craft production, who in turn were very influential on studies of craft production in the Americas. Finally, as with his organizational model, Peacock's exposition on the evidence for the organization of production influenced the study of craft production in the Americas indirectly. With his careful attention to the material correlates of production types, he influenced how many early studies of craft production in the Americas approached the study of the organization of production generally and thereby indirectly affected generations of scholars working on craft production in North and South America.

All in all, Peacock's overall approach to the study of craft production has been quite impactful in the Americas, although the specifics of his model have been less so, largely because of the differences in the cultural contexts of the two regions.

### Fine Wares and Cooking Pots: Scales of Distribution and "Modes of Production" in the Roman East

Kathleen Warner Slane, University of Missouri

The Classical and Hellenistic model of pottery production (workshops localized in urban centers by independent potters with growing regional markets) was modified around the middle of the second century B.C.E. with the development of Eastern Sigillata A. Tableware manufacture became concentrated in huge manufactories centered on Arezzo, North Africa, and the Pergamon region. In every part of the Mediterranean except southern Greece (including Athens), local production of tableware ceased by the Claudian period. From the second century B.C.E., cooking pots also began to be widely dispersed (e.g., corrugated cooking ware, Late Roman micaceous Aegean ware), and during the empire, production was on a regional rather than a local scale (e.g., the whole of the Galilee shared single production sites as did the northeast Peloponnese). Whether there was still local production and local consumption of cooking pots is unknown. Two of the largest tableware manufactories in the Mediterranean were in the hinterlands of Antioch and Pergamon, and two of the three main cooking pot exporters were probably at coastal sites in the Bay of Edremit. I have argued previously that the change in tableware production owes at least as much to technological improvements as to industrial organization along the lines laid out by Peacock; it seems clear that potters specialized in particular production techniques or types of clay and, therefore, in particular classes of ceramics.

I also examine the assumption that imported ceramic and glass vessels are expensive goods, since importation implies added value by the cost of shipping. The lack of viability of local tableware production in the eastern Mediterranean suggests otherwise. Furthermore, the invention of glass blowing ca. 25 B.C.E. led to

the proliferation of cheaper glass tablewares, and mold production of tablewares was soon drastically reduced in scale. Data from Corinth show that glass drinking cups replaced ceramic ones soon after glass blowing was invented (although glass platters do not seem to replace ceramic plates) and that imports limited the local production of tablewares. Importing cooking pots did not destroy the regionally based cooking pot production, however, the amount of imports reached roughly 30% in the second and the fifth centuries C.E. A preliminary survey of eastern Mediterranean sites suggests both patterns are universal. Since we are dealing with materials used by almost everyone, an obvious conclusion is that the imports must have been cheaper than the local products.

### The Organization of Pottery Production in Roman Italy: Raw Materials and the Emergence of the Italian Sigillata Industry at Arretium

J. Theodore Peña, University of California, Berkeley

The publication of Peacock's model positing distinct modes of pottery production in the Roman world inspired a burst of research into the organization of pottery production in Roman Italy. Perhaps no aspect of this topic has drawn more attention and bred more contentious debate than the question of the organization of the production of Italian Sigillata and, in particular, the organization of the Italian Sigillata "industry" at Arezzo (Roman Arretium) and the set of circumstances that led to its emergence during the period ca. 50–25 B.C.E.

This paper argues that access to a uniquely advantageous set of raw materials played a determining role in the development of the Arretine Italian Sigillata industry. A program of compositional research (petrographic and neutron activation analysis) carried out by the presenter involving the characterization of specimens of Black Gloss Ware and Italian Sigillata from Cetamura demonstrates that the producers of Italian Sigillata and, before them, the producers of Black Gloss Ware at Arretium used clay obtained from a formation of lacustrine clay that outcrops over a small area to the west of Arezzo. In contrast with the marine clay employed by Black Gloss Ware producers elsewhere in the region, this unusually fine-textured clay could be used for the manufacture of gloss-slipped tableware as it came out of the ground, that is, without recourse to the labor-intensive operation of levigation. The clay formation in question is overlain by a bed of peat, the only substantial deposit of this material known in peninsular Italy. In northern Europe, where peat is abundant, it has been regularly employed in pre-modern and modern times as fuel for the firing of pottery. Given that the extraction of the lacustrine clay used by Arretine potters required digging through this bed of peat, it seems likely that they took advantage of the situation and employed this material as fuel, probably at substantially lower costs than those associated with the use of other kinds of fuel. Although the inland location of Arretium placed it at a disadvantage for the distribution of any craft goods manufactured there, the joint availability of clay requiring no levigation and low-cost fuel allowed Arretine producers to manufacture high-quality tablewares at exceptionally low cost, creating the conditions for the emergence there of the Italian Sigillata industry once the development of market demand and transport infrastructure reached certain levels ca. 50 B.C.E.

### Household Production and the Long-Distance Trade of Ceramics: A Case Study from the Indian Ocean

Roberta Tomber, British Museum

Two seminal publications from the 1980s drew attention to the long-distance trade in handmade ceramics, primarily cooking wares, throughout the Roman Mediterranean. These publications are Peacock's *Pottery in the Roman World: An Ethnoarchaeological Approach* (London 1982) and the British excavations at Carthage (M.G. Fulford and D.P.S. Peacock, *Excavations at Carthage: The British Mission Vol.* 1, pt. 2. *The Avenue du President Habib Bourguiba, Salammbo. The Pottery and Other Ceramic Objects from the Site* [Oxford 1984]). Together they demonstrate that handmade wares produced on a small scale in the home as a part-time activity nevertheless were consistently integrated into trade networks. Their success in this sphere has often been attributed to their outstanding functional properties resulting from their clay composition.

Peacock's Pottery in the Roman World relied extensively on the use of ethnographic parallels in establishing his model. It is therefore unsurprising that the model can be applied to cultures well beyond the Roman world. This paper focuses on a case study of handmade pottery produced in northwest India (primarily the modern state of Gujarat) during the Early Historic period (ca. 300 B.C.E.–300 C.E.). It was widely exported in small numbers along the Indo-Romana trade networks, as far west as the Egyptian Red Sea trading ports of Berenike and Myos Hormos. Comprising a restricted range of handmade vessel types for cooking from ricetempered clay with excellent thermal shock properties, the ware has much in common with its Mediterranean counterparts. Here, too, one can suggest that these wares were made seasonally on a small scale in the home. At present, their distribution is limited to ports and does not penetrate beyond these sites, a distribution that suggests the vessels were items used primarily by sailors. It would, therefore, seem that the same production model can be applied to these diverse geographical areas but that an understanding of their distribution must be more context driven. It may be instructive to review the distribution of Mediterranean wares to determine whether a similar interpretation may be applied in part to their distribution, or if it should be attributed to more economically driven models.

### **SESSION 3E: Colloquium**

## Sailing Away from Byzantium: People, Goods, and Ideas at the Edges of Empire

Sponsored by the Medieval and Post-Medieval Archaeology in Greece and the Eastern Europe/Eurasia Interest Groups

ORGANIZERS: *Adam Rabinowitz*, The University of Texas at Austin, and *Michelle Hobart*, The Cooper Union

#### **Colloquium Overview Statement**

The last decade has seen an explosion of interest in the Late Antique world and in Byzantine archaeology. Spectacular discoveries like the Harbor of Theodosius in Istanbul and long-term, well-documented excavations at Anatolian sites like Amorium, Sardis, and Sagalassos have provided extensive information about urban life, maritime trade, and material culture in the heartland of the Eastern Empire during the Early Byzantine period. At the same time, excavators have begun to pay close attention to Byzantine layers at classical Greek sites like Corinth and Athens. The core of the Byzantine state in the Aegean and Anatolia is thus coming into better archaeological focus. Despite the attention of historians to the farranging Justinianic reconquista of the sixth century C.E., archaeologists have been slow to develop a picture of patterns of connectivity at the far corners of the Early Byzantine world. Objects found at the ends of the empire are frequently discussed in terms of their local context and the relationships they show with the Byzantine center, but there has been much less analysis of similarities and differences in the movement of goods and people in different peripheral areas. This reflects both the traditional impression of a breakdown of communication between parts of the former Roman empire in late antiquity and the national and linguistic boundaries in modern scholarship.

This panel brings together scholars working on the movement of people, goods, and ideas in various parts of the Byzantine periphery, primarily in the Early Byzantine period. These scholars, whose areas of interest stretch from the northern Black Sea to western Sicily, discuss patterns in the movement of portable, durable objects like ceramics, glass, and coins, both in their own regional contexts and in comparison with other peripheries. They examine the seaborne flow of ideas and influences that accompanied these objects, reconstruct the routes of the ships that bore them, and investigate their effects on the lives of distant subjects of the Byzantine empire. Through a discussion of connectivity in diverse peripheral zones, the panelists reexamine the role of the Byzantine center in the movement of people and things across the Late Antique and Early Byzantine world.

DISCUSSANT: Andrew Poulter, University of Nottingham

#### Savior Saints on the Seas of Early Byzantium

Amelia R. Brown, University of Queensland

This paper considers the literary and archaeological evidence for savior saints on the ships and along the coasts of the Early Byzantine empire. Seafaring saints were adopted and carried abroad to fulfill specific social roles by all those who traveled and sought a safe reception and return: merchants, soldiers, high officials, sailors, fishermen, and itinerant holy men. Despite intensive study of the iconography and hagiography of Byzantine saints, the actual means by which their images and exploits spread from the eastern Mediterranean across the empire remain poorly understood. Though it is clear that transmission happened primarily by sea between, for example, Alexandria, Constantinople, and Rome, the specific agents of that transmission are often mysterious. Certain saints became very widely observed throughout the empire, however, while others retained only local importance. I suggest that the saints credited with salvation at sea would be among the first candidates for widespread carriage and adoption abroad, at the edges of the Byzantine empire. Thus archaeological and literary evidence for St. Nicholas as a savior of seafarers spreads from southern Anatolia to Constantinople first and then to the corners of the Byzantine world: Alexandria, Rome, and southern Russia. The rapid translation of iconographic types, texts, and then the actual relics of St. Nicholas between east and west, and north and south suggests unexpected levels of communication and trade across the Mediterranean continuing even into the seventh, eighth and ninth centuries. The cult of St. Nicholas thus has unexpected importance for interpreting Byzantine relations between Constantinople and its far periphery in Early Byzantium, the Byzantine Dark Age, and beyond.

#### Trade Links of Chersonesos in the Early Byzantine Period

Larissa Golofast, Institute of Archaeology of the Russian Academy of Sciences, Moscow

Long-term systematic excavations at the site of Chersonesos in Crimea have produced numerous Early Byzantine deposits ranging in date from the fifth to seventh centuries C.E.. They are rarely primary deposits found in situ; instead, most were redeposited twice or even three times. Yet by the date of the final deposition of material in them, they can be subdivided into four chronological groups: fifth century, second/third quarters of the sixth century, late sixth–early seventh century, and second half of the seventh century. These assemblages reflect the trade links of Chersonesos in the Early Byzantine period and allows us to reconstruct diachronic changes in those links.

The majority of the fifth-century ceramic deposits are composed of two extensive groups. One includes ceramics believed to be Pontic (e.g. Synopian amphoras of Opaiţ E-1 type, Colchian amphoras, Pontic Red Slip Ware). The other includes ceramics from the Mediterranean (e.g., Late Roman Amphora 1, Gaza, and bag-shaped Syro-Palestinian amphoras, as well as amphoras considered to have been produced in the region of Sardis). North African imports are represented by isolated fragments of red slip ware and amphoras. In the sixth and early seventh centuries, Chersonesos began to be more oriented to the Mediterranean; the pro-

portion of pottery from different centers of Asia Minor and the Mediterranean islands increases markedly, though the percentage of Pontic amphoras also remains rather high. The products of North African provenance are represented almost exclusively by rare specimens of red slip ware.

The composition of deposits sealed within the second half of the seventh century is similar to that of the sixth to early seventh centuries, and includes Late Roman Amphora 1 and 2, Cretan amphoras, and Phocaean red slip pottery. It is difficult to say, however, when imports from western Asia Minor ceased. The large quantity of Phocaean tableware in the deposits of the second half of the seventh century seems to confirm the conclusion proposed by J.-P. Sodini and E. Villeneuve that the manufacture and exportation of this pottery group had come to an end ca. 600.

The material in these deposits thus demonstrates that throughout the entire Early Byzantine period, Byzantine Chersonesos maintained trade links with both Pontic and Mediterranean centers, although the volume of trade with these centers changed over the course of time. While the links between Chersonesos and its Pontic partners were surely direct, Mediterranean and Syrian-Palestinian products are most likely to have been imported via Constantinople.

### The Late Roman and Early Byzantine Adriatic: Seaborne Trade and Island Archaeology

*Ivancica Schrunk*, University of St. Thomas, and *Vlasta Begovic*, Institute for Archaeology, Zagreb

The relative importance of the Adriatic region within the Roman empire increased in late antiquity. The tetrarchic foundation of new administrative capitals intensified maritime traffic in the Adriatic Sea, the safest arterial route interconnecting the divided empire. The empire-wide militarization and the system of annona significantly shaped patterns of connectivity in a still integrated Mediterranean from the fourth to mid fifth centuries. The uniform ceramic assemblages show domination of North African tableware, cookware, amphoras, and lamps. North African grain, wine, and olive oil supplied civilian and military markets; household merchandise came with those shipments. Steady trade with the eastern Mediterranean, perhaps of more civilian nature, is attested by importation of Phocaean Red Slip Ware from the late fourth century on (as early as the imports into Athens and Thessaloniki), which follows the pattern of the Eastern Sigillata and Aegean kitchenware and lamps in the preceding centuries. The eastern imports dominated the exchange through the Early Byzantine period, between the sixth and ninth century. Byzantine amphoras, coins, and belt buckles do not only indicate relations between the Byzantine center and its strategic points in the west but also call for discussion on identities of their consumers. In the last 10 years, studies and publications on the evidence from shipwrecks have greatly advanced our knowledge of maritime routes and trade in the Adriatic. Still, on the consumer end of the evidence, only the coastal urban centers, such as Salona and Diocletian's palace at Split, have been extensively published.

The study of island societies in the context of maritime culture and patterns of connectivity is at its beginning in the Croatian Adriatic region. The evidence of shipwrecks has shown that maritime traffic went primarily along the eastern Adri-

atic, taking advantage of the channels between the islands and of their safe ports and food and water supplies along the way. The trans-Adriatic sailing between the western and eastern coasts has also used the so-called island bridge. Our focus has been on two small islands—one in the northern Adriatic (Veli Brijun), and one in the central Adriatic (Sv. Klement)—that became linked to wider networks of commercial exchange on account of their agricultural economies, marine, and mineral resources, and safe anchorage. The islands' landscapes and seascapes and the nature of settlements were dynamic and responded to changing historical scenarios. Ceramic and architectural evidence attest to especially high level of connectivity in the Early Byzantine period.

### Sicily, Byzantium, and the Distances Between: The Experience of Exploitation on the Edge of Empire

Emerson Avery, University of Pennsylvania

The Justinianic reconquest of Sicily in 535 C.E. marked the beginning of the island's history as a Byzantine province, and if the legal sources are to be believed, the end of its history of domination by the elite of the western Roman empire. Justinian's Novel 75 provided for recourse, in extremis, to the authority of the *quaestor sacri palatii*, based in Constantinople. In so doing, it envisioned the beginning of a direct relationship between the Byzantine center and what was, for centuries, one of its most distant western possessions. Notwithstanding such rhetoric, archaeological research has increasingly shown that Sicily's "eastward drift" was neither so complete nor geographically so uniform, as once was supposed.

Rather, there is evidence for a sort of Sicilian bipolarity, whereby the east of the island—which hosted Byzantine civil and military authorities at Catania and Syracuse, respectively—witnessed a greater influx of Byzantine products than the west. These sorts of regional differences in experience provide a context for my continuing dissertation research, conducted under the auspices of the Marsala Hinterland Survey and here presented for the first time. I seek to characterize the effect of policies formulated at the imperial center on local patterns of settlement and circulation, especially among the agriculturalists, tenant farmers, merchants, and taxmen effected by the Byzantine interest in exploiting western Sicily's natural wealth. Using ceramics recovered by the survey and GIS Software, I trace the development of Marsala's rural hinterland between the sixth and seventh centuries C.E.—a period during which ceramic evidence is plentiful and political change dramatic—to explain the apparent continuity of aspects of the area's Roman imperial habitat and to consider the degree to which such conservatism is reflective of real continuity in the Sicilian experience of Roman, and later Byzantine, imperial power.

## SESSION 3F: Colloquium Silent Participants: Terracottas as Ritual Objects

Sponsored by the Coroplastic Studies Interest Group

ORGANIZERS: Caitlín E. Barrett, Cornell University, Theodora Kopestonsky, University of Tennessee, Knoxville, and Clarissa Blume, University of Göttingen

#### **Colloquium Overview Statement**

Since its antiquarian origins in the 19th century, the study of Mediterrranean terracotta figurines has undergone a dramatic transformation. Building on the foundation laid by a 2009 AIA panel addressing current trends in coroplastic studies, this session focuses on one specific issue within the field: the interpretation of terracotta figurines from ritual contexts. We intend this colloquium to be the second in a series of AIA sessions on coroplastic studies.

The study of figurines not merely as objets d'art but as artifacts within specific archaeological contexts can reveal a great deal of information about the lives, practices, and beliefs of the people who made and used these objects. Terracotta figurines appear in a broad range of archaeological contexts in the ancient Mediterranean, and context is thus crucial to their interpretation. A single iconographic type can frequently appear and signify different meanings within a wide variety of settings. In some cases, those settings suggest a ritual function for these artifacts. In sanctuaries, graves, and domestic shrines, terracotta figurines may play the role of votive offering, stand in for a worshipper, or even embody the divine. Their appearance in both sanctuary and domestic contexts facilitates an exploration of the relationships between household and temple cult. Furthermore, as small, relatively cheap objects made of inexpensive materials, terracottas open a valuable window into popular cult and the religious practices of nonelites as well as elites.

Accordingly, this colloquium session investigates the range of ritual contexts within which terracotta figurines can appear within the Mediterranean world and beyond and the ways those contexts shape our interpretation of the figurines. In a discussion of figurines from one multipurpose site where activities may have included craft production as well as cultic performance, paper 1 investigates the criteria that allow us to describe a site as "ritual." Subsequent papers offer interpretations and discussions of figurines from a variety of religiously-charged contexts, including sanctuaries (papers 3, 4), domestic cult settings (paper 2), and burials (paper 5). The panel takes a geographically and temporally broad perspective, addressing figurines from Bronze Age to Byzantine sites in Greece, Italy, Thrace, and the Levant. Employing a range of academic and interdisciplinary approaches, the papers in this session shed light not only on the ritual uses of terracotta figurines but also on, more broadly, the relationship between "popular" and "official" cult in the ancient Mediterranean.

DISCUSSANT: Jaimee Uhlenbrock, State University of New York, New Paltz

### Defining a Cultic Context at Mastos in the Berbati Valley Through the Setup of Mycenaean Figurines

Ann-Louise Schallin, Swedish Institute at Athens

The figurines discussed in this paper derive from excavations in the so-called Potter's Workshop at Mastos in the Berbati Valley. The excavations took place in the 1930s and 1950s and were executed by A.W. Persson and Å. Åkerström. A Late Helladic structure was revealed, including a kiln and numerous misfired pottery sherds. The main bulk of the Late Helladic material from the site belongs to the LH IIIA2/B1 phase. The kiln, however, seems to have gone out of use in the LH IIIA1 phase. It is therefore not altogether self-evident that the structure's main function in LH IIIA2/B1 was a pottery workshop. There are also some indications of ritual activities at the site, and these have been discussed by Åkerström and later myself. In the workshop area not only pottery sherds were found in abundance but also Mycenaean figurines of various types. Here, the setup of figurines is presented and taken as a means to investigate the possible cultic nature that dominated or existed side by side with pottery production at the site.

### From Passive Objects and Discard Patterns to Enacted Rituals? Contextualizing Mycenaean Terracotta Figurines: A "Practice" Approach

Melissa Vetters, University of Leicester

Mycenaean terracotta figurines of various types are common finds in Late Helladic III settlement strata on the Greek mainland, but they are especially ubiquitous in the Argolid. In select case studies, variations in types and changes over time are traced in diverse contexts of use and discard, focusing on the Late Palatial (LH IIIB) and the Post Palatial (LH IIIC) period. The analyzed find assemblages derive from the Mycenaean citadel and lower town of Tiryns. Tiryns' long-term settlement history allows for a detailed contextual analysis of domestic practices involving figurines. First, the stylistic and typological range of contemporary figurine assemblages is assessed at various points in time and in different architectural settings. By triangulating evidence from stratigraphy, find preservation, and overall composition of figurine assemblages, idiosyncratic motifs or shifts in types can be traced. Second, different stages in the life-cycle of figurines are extrapolated from well-stratified contexts. This forms the basis for a contextual analysis of figurines and associated finds to highlight specific settings where figurines were once employed. Special attention is given to hearths and entrances, since these locales are supposedly focal points of domestic rituals. Due to their size, figurines are easily handled and could have constituted personalized objects. Therefore, this paper explores whether instances of habitual or discursive use of figurines are indeed discernible. Ultimately, the contextual study aims at reconstructing ritual practices via a *chaîne opératoire* approach to the staging and performance of rituals.

### "Coming-Out" Performances and Rituals in the Athenaion at Francavilla Marittima, Southern Italy

Elizabeth Weistra, Groningen Institute of Archaeology

The sanctuary of Athena at Francavilla Marittima has yielded an interesting body of terracottas from the eighth to the early fourth centuries B.C.E. that mirror the contemporary fusion of local traditions with influences from abroad. Bordering the plain of ancient Sybaris in southern Italy, Francavilla Marittima was an indigenous site that blossomed in the period of the Greek colonization of the region, with temples for the goddess on the hilltop, houses and huts on the terraces, and a necropolis at the foot of the hill. Together with other evidence from the excavations, the terracottas attest to the veneration of a goddess with a multifaceted identity that clearly evolved over time. A strong element in the figurines and *pinakes* concerns the performances and rituals involved in the transition of adolescents into adulthood.

This paper briefly explores the identity of the goddess, while focusing on the specific forms of the ceremonies and rites de passage that took place in her sanctuary. Among these were weaving activities and the dedication of cloth by prenuptial girls, processions to the acropolis, and singing and dancing in which youths took part, both boys and girls, in the context of courtship and marriage. An iconographical analysis of these "coming-out" rituals shows them to reflect the image of the Divine Couple, inspired by Levantine contacts from the Early Iron Ages, yet also how this image was adapted over time to meet local needs.

#### Terracotta Figurines from the Thracian Sanctuary of Tatul

Zdravko Dimitrov, Bulgarian Academy of Sciences, National Archaeological Institute and Museum

In the course of the past couple of years, the archaeological site near the village of Tatul, Momchilgrad, has become one of the most exciting spots in the Rhodope Mountains as well as throughout Bulgaria. The archaeological team (N. Ovcharov, Z. Dimitrov, and D. Kodzhamanova) has revealed that it is a multilayered site comprising five different epochs: a ritual structure from the Copper Age (Eneolithic period), a Thracian sanctuary from the Late Bronze and Early Iron Ages (16th–ninth centuries B.C.E.), an emblematic heroon complex from the Hellenistic and Early Roman periods (late fourth century B.C.E.–C.E. first century), a Late Roman and Early Byzantine residence (probably a section of a villa) dating from the third–sixth century, and a medieval fortress (10th–12th centuries).

At the beginning of the Ptolemaic period (early third century B.C.E.), a heroon was established in Tatul, following the Greek prototype. It contains all the elements known from the heroons in the Greek world: Golbasi-Trysa, Lymira, and Belevi. The heroon consists of a cult building, a symbolic grave complex, a blocked cult space (temenos) encircled by a stone wall (peribolos), staircases, rock altars, and niches cut into the rock. A small complex of terracotta figurines dating from the Early Hellenistic period appears to be the most remarkable among all the cult artifacts coming from the excavations.

These figurines are the subject of this paper. The Hellenistic cultural layers produced two terracottas with outstanding representations: one decorated with ivy leaves, the other a serpent's head. Still another four fragments of terracottas come from the cult building. Two of them contain fruits of pomegranate and its bifurcations; the other two are anthropomorphic.

The advent of cult objects peculiar to the Greek world in the Thracian milieu is the main focus of the paper. The figurines appear to be direct evidence of the broad diffusion of the Hellenic culture, especially in the early stages of Hellenism the Ptolemaic period. The terracottas here presented testify to the local practices of the Thracians, incorporated into a new model of cult object, imported into the closest neighboring regions to the Aegean world. The complex of terracotta figurines is very rich in data, as it comprises anthropomorphic as well as zoomorphic and floral motifs.

### Two Woman-and-Child Figurines from Byzantine Tombs at Beth Shean

Stephanie Hagan, University of Pennsylvania

This paper investigates two terracotta figurines from Byzantine-period burials at Beth Shean (Scythopolis) in Israel. One depicts a seated woman with a boy at her breast; the other is of a woman carrying a child on her shoulder.

The figure of a seated nursing mother recalls the iconography of the goddess Isis or the Virgin Mary nursing her divine son. This shared lactans imagery, however, does not offer an entirely satisfactory parallel, as the Isis cult is not strongly attested at Beth Shean, and the figurines do not have attributes that identify them with either Isis or Mary. Dionysos, however, boasted a strong cult following in the city because of his role as its mythic founder. The figurines may depict his nursemaid Nysa, whom he buried there. Imagery recalling Dionysos and his nymph nurse would be well suited to a funerary context; because of the god's miraculous rebirth from the thigh of Zeus, his cult adherents hoped that they, too, would escape death and be born anew.

The figurine of a woman carrying a child suggests the desire for safe passage on the perilous trip to a hoped-for paradise. The burial context provides additional evidence in the form of accompanying grave goods. Amuletic devices such as bells corroborate the idea that the journey to the afterlife was a dangerous one that required proper preparation.

While these terracottas could be simply read as fertility figurines, they reveal richer meanings when considered as equipment for the afterlife and interpreted in relationship to local cult.

### **SESSION 3G: Colloquium**

### Placing Jordan in the Mediterranean: A DAI and AIA Collaboration

Sponsored by the Near Eastern Archaeology Interest Group

ORGANIZERS: Susan E. Alcock, Brown University, and Ortwin Dally, Deutsches Archäologisches Institut

#### **Colloquium Overview Statement**

This colloquium brings three leading German scholars, currently carrying out innovative research in the Hashemite Kingdom of Jordan, into conversation with six members of the Archaeological Institute of America who work primarily in various parts of the Mediterranean Basin. Our goal is to entangle ongoing investigations in Jordan with parallel, or contradictory, trends observed in the Mediterranean, breaking down frequent and unhelpful distinctions between archaeological research conducted in the Levant/Near East and work in the Mediterranean world.

A paper on rural life in northwest Jordan in Roman and Byzantine times, with an emphasis on regional development and evolving ceramic chronologies, is—for example—followed by two Mediterranean-based commentaries, one from the perspective of a survey archaeologist, the other by an expert in Roman and Late Roman ceramics. A second paper on the development, change, and decline of urban space, focusing on the Hellenistic to Byzantine phases at the major site of Gadara (modern Umm Qais), is paired and compared with observations on long-term urban change at Carthage and Pompeii. And recent work on the hitherto little-understood royal residences at Nabataean Petra is placed side by side with two studies of Hellenistic and Roman luxury architecture and artifacts, notably in the Italian peninsula.

All participants in this colloquium believe that this kind of direct interaction, aided by the interventions of two final discussants (one from the Deutsches Archäologisches Institut, one from the AIA) not to mention the audience at large, will do much to connect scholars in the DAI and the AIA. It will also act to foster a more overarching, inclusive view of major archaeological concerns, and possible collaborations, in the circum-Mediterranean world.

DISCUSSANTS: Susan E. Alcock, Brown University, Sebastian Heath, New York University, Steven Ellis, University of Cincinnati, Naomi J. Norman, University of Georgia, Bettina Bergmann, Mount Holyoke College, Kenneth Lapatin, The J. Paul Getty Museum, Ortwin Dally, Deutsches Archäologisches Institut, and C. Brian Rose, University of Pennsylvania

#### Rural Life in Northwest Jordan During the Roman and Byzantine Period

Dieter Vieweger, German Protestant Institute Jerusalem, Amman, and Jutta Häser, German Protestant Institute Jerusalem, Amman

The relation of city and hinterland is an often neglected question in the study of classical periods. The Gadara Region Project, directed by Dieter Vieweger, was initiated in 2001 by the Biblical Archaeological Institute, Wuppertal, to investigate the history of the area around Gadara before, during, and after the existence of this classical Decapolis city in northern Jordan. The Wadi al-'Arab, situated southwest of Gadara, was chosen for more intensive studies, and its main archaeological features visited. After detailed surveys and geophysical investigations, Tall Zira'a was selected as the most promising site in this region for intensive exploration. Excavations started in 2003, and since 2004, the Gadara Region Project has been a joint venture of the Biblical Archaeological Institute, Wuppertal, and the German Protestant Institute of Archaeology.

The excavations on Tall Zira'a brought to light a stratigraphic sequence extending from the Early Bronze Age to the Ottoman period. Three areas have been opened to date in this rural village, in each of which the Roman-Byzantine architecture is very different. In Area I, at the northwestern edge of the tall, large houses with a pathway between them were discovered running along the outer edge of the hill. In Area II, a stratigraphic sequence of 10 levels, ranging from the Umayyad to the Early Roman period, was found, revealing different house types and a complete change in the layout of buildings in the Byzantine period. The houses of the Roman period are small and built with clumsy walls and pisé floors, while during the Byzantine period, the direction of the buildings altered, and large houses with courtyards were constructed. In Area III, a building with a large courtyard complete with a mosaic floor and a huge cistern—probably an atrium—and with attached rooms was excavated. This complex was intensively reused in the following centuries, until the Mamluk period.

The dense stratigraphic sequence at Tall Zira'a forms the basis for several studies regarding pottery and glass vessels, allowing a more refined overview of typological developments in the region. It can also be used to provide additional information about interactions between the Decapolis cities and their rural surroundings. This paper explores the story of the expansion and decline of Gadara relative to the much longer lasting history of this important rural village, 4.5 km south of the city.

### Development, Change, and Decline of Urban Spaces: Hellenistic to Byzantine Gadara, Jordan

Claudia Bührig, Deutsches Archäologisches Institut

The ancient city of Gadara is located in the northwest of the Hashemite Kingdom of Jordan, on the border with Syria and Israel. The fortified Hellenistic settlement of Gadara was built in the early second century B.C.E. by the Seleucids. The city's core is situated on the highest point of a hill, at the edge of the fertile high plateau of Ard al-Ala, which is delimited by the Jordan Valley in the west, the Wadi al-'Arab in the south, and the Yarmuk Valley to the north.

In comparison to the spatially delimited settlement on the hill, the easily accessible main transit route, running from east to west, is one of the most striking elements of the urban design. From the Early Imperial period onward, this eastwest axis constituted the backbone of urban development at Gadara. Continuous research over about the past four decades in Gadara (present-day Umm Qais) has

revealed the continuous structural metamorphosis of a Hellenistic hilltop settlement to a Roman and Byzantine urban structure.

One key focus of this paper is the analysis of the development, change, and decline of the city and its urban spaces during the Hellenistic to Byzantine periods. This especially requires consideration of the emergence and development of premodern cities, which in turn depends on a variety of factors, such as topography, economic conditions, and the availability of various local materials. Interpreting and investigating urban space involves an exploration of the complex composition of a city in all of its historical facets, functional interactions, and determinative circumstances.

The so-called theatre temple area marks the most prominent position on Gadara's urban backbone (east–west axis). Here, it is possible to observe the development, change, and decline of one particular urban space in greater detail. Focusing on this area, the significance and interaction of natural environmental and social determinants in the urban development of Gadara can be closely observed, as can the multiple adaptations and uses of the urban space thus created.

#### Newly Discovered Nabataean Royal Residences at Petra

Stephan G. Schmid, Humboldt University of Berlin, Piotr A. Bienkowski, University of Manchester, Zbigniew T. Fiema, University of Helsinki, and Bernhard Kolb, University of Basel

According to passages in ancient textual sources, the Nabataean kings had *basileia* (royal quarters) in the city of Petra. From the written sources, however, no further precision can be obtained, and questions arise, both about whether these indications can actually be trusted and what exactly these royal quarters looked like.

Recent fieldwork at Petra has pointed out two distinctive topographical locations as the most probable candidates for royal residences. The first one is situated on top of Umm al-Biyara, the most prominent elevation in the area. It turns out that, during the first century B.C./C.E., the Nabataeans had constructed spectacular buildings on that spot, with views overlooking the entire area.

While this complex can be considered a royal residence because of its luxurious construction, the strategic importance of its setting, and its resemblance to the palaces of Herod the Great at Masada, it is hardly to be identified with the main palace of the Nabataean kings, since that should be expected to be located within the city of Petra proper. A fresh look at the topography of the city center of Petra has now pointed out another site where all the prerequisites for such a royal structure are fulfilled.

Besides proposing the identification of these two Nabataean royal residences at Petra, this paper intends to place these structures within a supra-regional context of luxury architecture during the later Hellenistic and Early Roman Imperial periods.

### **SESSION 3H: Workshop**

## Discussions and Strategies Regarding Applying for Grants, Fellowships, and Post-Docs

Sponsored by the Student Affairs Interest Group and the Committee for Archaeology in Higher Education

MODERATOR: Andrea F. Gatzke, The Pennsylvania State University

### **Workshop Overview Statement**

Scholars are constantly urged to apply for funding for research, excavations, writing, publishing, and educational programming. At the same time, funding through fellowships and grants has become increasingly competitive in recent years as the economy has forced universities and non-profit organizations to be tighter with their budgets and decrease their funding programs. The task can be a daunting one, with requirements varying widely between organizations, and unsuccessful applications often lead to frustration for reviewers and applicants alike. Yet rarely do applicants—student or professional—receive feedback from the fellowship-granting institution as to how they could improve their dossier for the future.

This workshop aims to illuminate this process for graduate students and junior scholars to improve their chances of putting together a successful application. The workshop provides a variety of perspectives, featuring panelists who are versed in various parts of the process. They include several scholars who have served on fellowship committees of prestigious organizations, well positioned to give advice on how to structure a proposal, put together a budget, and sell your project to both specialists and nonspecialists. The workshop also includes scholars who have extensive experience applying for and receiving funding for their projects; they give advice on topics such as searching for appropriate grants and fellowships and drafting effective proposals.

Our panelists span the various fields of classical studies, including philology, history, archaeology, and art history to make this workshop useful to a broad audience. Through this discussion, attendees will be able to better understand various approaches and methods to compiling a competitive and, ultimately, successful fellowship or grant dossier.

PANELISTS: Sheila Dillon, Duke University, Kathleen Lynch, University of Cincinnati, Richard Thomas, Harvard University, Sandra Scham, Catholic University, and Zoe Stamatopoulou, The Pennsylvania State University

# SESSION 31: Workshop The Protection of Cultural Heritage in War-zones and the Role of the Media

MODERATOR: Friedrich T. Schipper, University of Vienna

#### **Workshop Overview Statement**

Media coverage of armed conflict and its devastative effects on cultural heritage influences public opinion and political leadership and, therefore, ultimately, the course of events. In the context of the new conflicts, the embed of civil specialists with all kinds of expertise has become a frequent phenomenon. The embedding of journalists is one of the most significant trends. These journalists might be strongly influenced by the military because they share a common daily life with the soldiers in the field as well as a fellowship based on shared experiences and threats. Further, embedded journalists often sign contracts with the military that limit what they are allowed to report. Together, they create the news that is broadcasted directly from the conflict zones or even battlefields in a dialectic process that is disorganized, unbalanced, and not adequately reflective. Nevertheless, the closeness to the events is granting the journalists and their news heightened authenticity. Furthermore, Internet coverage of armed conflict is vast and reaches millions of users in almost real time. This information flow is uncontrollable and is created by a diverse community of many agents; some lack any expertise in journalism or conflict or cultural heritage studies and are in part driven by pure political agenda. Questions revolve around these issues and demand serious attention in a constructive, systematic manner. What does all this mean for cultural heritage protection in the event of armed conflict? What does it mean for the interaction of journalists and archaeologists or cultural heritage experts? How can embedded and nonembedded journalists interact when dealing with issues of cultural heritage protection? How can scientific communities and mass media interact? What is the role of the military press? How can scientific and media communities work toward a mode of cooperation based on a solid basis of understanding and ethics, with each facing the responsibility of their own profession to society? The workshop is intended to investigate these questions by bringing together experts from archaeology and cultural heritage, as well as from the media, NGOs, and the military who would not normally meet at conferences. In the first part, invited participants deliver short statements and presentations on the questions and issues mentioned above. In the second part, these questions and issues are discussed comprehensively.

PANELISTS: Elisabeth Snodgrass, National Geographic, Steven Lee Myers, The New York Times, Cori Wegener, U.S. Committee of the Blue Shield, and Laurie W. Rush, CRM Program, Fort Drum, New York

# SESSION 4A: Colloquium The Economic Role of Greek Fineware Pottery in the Ancient Mediterranean Sixth–Fourth Centuries B.C.E.

ORGANIZERS: *Ulrike Krotscheck*, The Evergreen State College, and *Catherine L. Cooper*, University of Cambridge

#### **Colloquium Overview Statement**

It has long been recognized not only that Greek pottery was traded itself, but also that it could indicate the movement of other goods no longer archaeologically visible. Fine ware pottery is a particularly interesting case. Although the fabric is not intrinsically valuable, the careful production implies that it was valued by consumers, and the pots, independent of their contents, were actively traded. In the 1990s studies created a broad-brush picture of economic exchange in the archaic and classical Greek world, based on the findspots of vase shapes and vessels by individual painters or potters. Yet it is only recently that scholars have begun to use larger assemblages of imported pottery from specific contexts to create a more nuanced picture of the economic and social implications of archaic and classical distribution networks around the Mediterranean.

This colloquium furthers the debate by showcasing recent work from international scholars, both new and well established. Our panelists discuss how Greek fine ware pottery was received, used, and understood by different consumers between the sixth and fourth centuries B.C.E. The colloquium format allows us to present a wide range of data and a variety of different perspectives. The arrangement of the papers highlights these contrasting and complementary perspectives.

The session begins with a 10-minute introduction to current work in the field. The first paper, "Between Kerameikoi, Sanctuaries, and Cemeteries: Archaic Greek Fine Wares and the Economies of Crafts," discusses how early workshop and distribution networks functioned. The next two papers consider distribution patterns of archaic and classical Greek pottery in mainland Greece ("The Diffusion of Attic Red-figured Pottery in Greece") and the eastern Mediterranean ("The Economic Role of Greek Fine Ware Pottery in the Exchange Between the Aegean, Cyprus, and the Levant"). The following two papers explore the sociocultural implications of Greek imports. "Identifying Consumers: Attic Black Gloss Pottery in the Mediterranean Economy" discusses the significance of Attic black-gloss pottery to its consumers at Morgantina, while "Consumption and Taste: Integrating Economic Concepts with Social Values" studies Late Classical Greek imports at sites around the Rhone, Thrace, and the Black Sea. The final two papers, "Prestigious Gift or Trade Agreement? The Attic Volute Krater in Non-Greek Contexts During the Archaic Period" and "Bronze Vases, The Adriatic Grain Trade, and The Birth of the Apulian Volute Krater" consider how a particular vase shape was received by, and influenced, its non-Greek consumers in different periods. In conclusion, our discussant summarizes the contribution made to the debate on economic connections, trade mechanisms, and constructions of selective economies in the ancient Mediterranean.

DISCUSSANT: Robin Osborne, University of Cambridge

### Between Kerameikoi, Sanctuaries, and Cemeteries: Archaic Greek Fine Wares and the Economies of Crafts

Vladimir Stissi, University of Amsterdam

Greek fine ware pottery is an archaeologically almost unique kind of material. It was produced in vast quantities, probably in every town of the Greek world, and was also widely distributed—locally, regionally, and over longer distances; we have direct archaeological evidence for its production and transport, images of its use, and even documentation of its selling. It can be dated and classified very precisely, so that single sherds can offer detailed information on production, distribution, and use, sometimes within assemblages of tens of thousands of items. There is hardly anything we know so well with such wide and dense coverage.

As I have shown during the last decade in my thesis and some articles offering specific contextual case studies, taken together, this wealth of data indicates that the chain of events from producer to consumer was dynamic, and must have involved close interaction between the people involved on a very large scale. Consumption patterns show close similarities among sites throughout the Mediterranean, without being identical, and they develop quickly and along similar lines, but not exactly synchronous, over the same large area. Mirroring this, production centers, though often appearing as stable *kerameikoi*, in fact grew and contracted and changed their output. All this does not seem to fit the traditional image of the ancient economy as being slow on all levels, locally oriented and hardly geared for large scale distribution; the limited means of transport and communication available must have made a dynamic economy of crafts difficult.

Yet, in my view, it worked. In my paper, I want to give some hypotheses showing how this dynamic crafts network might have worked, starting from archaeological evidence of ceramic production on one hand, and some very accurately published finds assemblages (cemeteries and sanctuaries) on the other, and focusing on the sixth century B.C.E. This may help our understanding of pottery as a craft product and also the role of crafts and craft products in the economy generally.

#### The Diffusion of Attic Red-Figured Pottery in Greece

Dimitris Paleothodoros, University of Thessaly

Since the pioneer study of Richter on the distribution of Attic red-figured vases in 1905, fine pottery has been regarded as a key commodity for assessing the nature and the extent of overseas trade in the Archaic and Classical periods. A great number of studies dealing with distribution, shipping, value and consumption of Attic pottery abroad have been produced recently. It might seem a paradox, however, that the least studied area of diffusion of Attic pottery has been mainland and insular Greece. My study aims at bridging this gap in documentation by presenting concrete evidence for the distribution of Attic pottery in mainland Greece. I examine the economic, cultural, and political factors that play a role in the presence or the absence of Attic pottery in a given area. My main concern is to explore whether the Athenian political domination of a large part of Greece contributed in any archaeologically traceable way to the commercial success of Attic late black-figure and red-figure pottery in the Greek markets.

### Identifying Consumers: Attic Black-Gloss Pottery in the Mediterranean Economy *Justin St. P. Walsh*, Chapman University

Recent research on the Attic black-gloss pottery found at the archaic and classical settlements of Morgantina has revealed intriguing patterns. These patterns are the result of the acceptance of some types and the rejection of others or, to put it another way, of a striking expression of consumer preference visible in the archaeological record. Consumers have long been left out of studies of the ancient economy because of the difficulty of finding evidence for their behavior relative to the manufacturer or the merchant middleman. Careful recording and analysis of the Morgantina material, however, has finally made it possible to complete the sequence of behavior that comprised the ancient economy, from production to transport to sale to use, and even, to discard (what Gourhan first labeled the *chaîne opératoire*).

Perhaps more importantly, this new evidence for preference also allows for exploration of the reasons behind the acceptance and rejection of particular goods. Some modern sociological work on shopping can be applied to the ancient marketplace as well, illuminating the connections between the purchase of an object and the messages that a buyer/user wants to send to others about membership in various societal groups or associations with particular values. This paper describes how study of economic patterns of consumption found at Morgantina and elsewhere in the western Mediterranean can show how ancient consumers made choices, and, in turn, how these choices can be reflective of local identity construction.

### **Consumption and Taste: Integrating Economic Concepts with Social Values** *Zosia H. Archibald*, University of Liverpool

The kinds of diachronic and regional patterns discernible from current research projects on Mediterranean ceramics under the Roman empire that can be analyzed from an economic perspective have not yet been achieved for the first millennium B.C.E. A wide range of data is nevertheless available from locations in many different parts of the Mediterranean area that can be considered in economic as well as cultural terms. Furthermore, the use of different fabrics within the same locality provides a basis for identifying patterns of consumption and demand. Imported fine wares can thus be observed within a dynamic context of changing responses to tastes and types of cuisine as well as sources of procurement for cooking, storage, and tablewares. Changing local consumption patterns provide one of the most coherent ways of making economic sense of ceramic assemblages.

This paper looks at comparative consumption fashions in the Rhone Valley, central Thrace (Pistiros) and selected sites on the Black Sea coast between 450 and 300 B.C.E. to model how these patterns can be interpreted in terms of relationships between producers and consumers, the frequency of shipments, and the economic value that these relationships may represent.

### Prestigious Gift or Trade Agreement? The Attic Volute-Krater in Non-Greek Contexts During the Archaic Period

Athena Tsingarida, Free University of Brussels

Although kraters are widely acknowledged to be prestigious goods, referring to the consumption of wine and to the aristocratic practice of the symposium, little literature has been so far devoted to the study and understanding of distribution patterns of the shape in clay.

This paper focuses on one type of Attic krater: the volute krater. It lays special emphasis on the black-bodied variety with a figured-decorated zone on the neck, dated to the second and third quarter of the sixth century B.C.E. Monumental in size and influenced by its more prestigious metal counterpart for the display of its decoration, the black-bodied krater was found in Greek and non-Greek contexts and offers a good case study to trace economic connections and mechanisms of trade in the Archaic period.

As far as we know, the main distribution areas of the shape are concentrated in the Greek necropoleis of South Italy and Sicily, while there is a thin scattering in the area ranging from the Heuneburg, located north of the Alps, to Bologna in Etruria Padana. In an important article ("On the material in its Northern setting" in W. Kimmig, ed., Importe und Mediterrane Einflusse auf der Heuneburg [Mainz 2000]), Shefton already raised the question about the reasons of the shape's presence in such marginal places as the Heuneburg. In this paper, I complete the distribution pattern published by Hitzl in 1982 and compare it with that developed after the Persian Wars when the volute krater is produced in red-figure with the decoration covering a greater expanse of the body. As far as we know, new markets occur at that time, since the shape is now known in the Adriatic coast, in the area of Picenium and Etruria Padana. The vase certainly does not bear the same meaning in a chieftain society—such as that of the Celtic hills north of the Alps or the inland sites of Picenum—as it does in an Etruscan grave that is part of an aristocratic urban society where the symposium played a central role and where there are clear and continuous cultural ties with the Greek world.

Therefore I shall continue Shefton's discussion about the function of volute kraters within economic transactions between Greeks and non-Greeks. Are they prestigious gifts diplomatic presents to aristocrats or chieftains? Are they signs of close ties with distinctive Greek culture practices? Or must they be seen, in certain cases, as tokens of agreements about a variety of trade exchanges and connections?

### Bronze Vases, the Adriatic Grain Trade, and the Birth of the Apulian Volute Krater *Jed M. Thorn*, Franklin and Marshall College

Volute kraters mimicking Athenian bronze kraters became emblematic of Apulian red-figure production during the fourth century B.C.E. However, while the sources of metallic inspiration for the ceramic kraters have recently been investigated, the archaeological distribution of the bronze vases and their red-figure imitations has received less attention.

This paper uses distribution data to shed light on the relationship between the Apulian red-figure volute krater and the trade in metallic vases along the Adri-

atic grain route. While Early Apulian red-figure production has been attributed to Taras on the Ionian Gulf coast, the evolution of the Apulian volute krater betrays closer ties to the Adriatic coast. For example, volute kraters produced by the first generations of Apulian workshops are only known to have been found at Italic sites near the Adriatic coast. Many of these Early Apulian kraters mimic a bronze krater classified as "A-type" by Barr-Sharrar, with their potters including elaborate openwork handles and swan protomes on the vases' shoulders. Additionally, the inclusion of imitation-bronze reeding on red-figure volute kraters was rare, but such vases have only been found at Ruvo di Puglia and Spina during the initial decades of Apulian production.

I conclude by suggesting that the role of bronze kraters in the Adriatic grain trade sparked the evolution of a distinctly Apulian funerary vase of the fourth century B.C.E. This reconstruction illustrates the important role of ceramics as "downmarket" elements in broader commercial exchanges, as well as their capacity to impact the material cultures of local participants.

### SESSION 4B Recent Work in the Near East

CHAIR: To be announced

#### History in a Cookpot: New Approaches to the Local Ceramics of Tell Atchana/ Alalakh

Mara T. Horowitz, Alalakh Excavations

The Middle/Late Bronze Age site of Tell Atchana, ancient Alalakh, in the Amuq Valley of southern Turkey has always been important to the study of the ancient Near East because of its pivotal location and long history of extensive excavation that has revealed textual materials of great value. Major questions, ranging from the chronological to the socioeconomic and cultural, have, however, remained unanswered due to the lack of a systematic study of Atchana's local pottery, which is notable for its overall continuity throughout the second millenium B.C.E., despite the textually attested cultural diversity of Amorites, Hurrians, Hittites, and many others in the area.

This paper presents results from a four-year intensive study of the local pottery of Tell Atchana from the period ca.1700–1100 B.C.E. The study includes material from more than 130 sealed deposits excavated from 2006–2010 (directed by K.A. Yener under the auspices of Koç University, Mustafa Kemal University, and the Ministry of Culture and Tourism, Turkey) and makes use of a new typology. The results of the study clearly show that within the tradition of continuity are several significant shifts in material culture in the 600-year span under consideration; shifts that may relate to a range of factors, including local demographics, foreign imperial management and local responses, and, perhaps, changing environment.

The study reveals a shift in cookware and dining habits that clearly define the beginning of local LB I. While the new assemblage is strongly rooted in local ceramic production traditions, the influence of new foreign contacts with the Hittites

and Mitanni can be seen in the appearance of large wheelmade plates for dining, while an apparently Amuq-specific innovation—the shell-tempered cookpot—rapidly displaces the traditional calcite-tempered equivalent. The plate and the shellware cookpot come to dominate local assemblages, beginning in the palace and spreading to other parts of the city, and continue through two subsequent shifts: the LB IIa, when increasing Hittite influence can be seen; and the earliest Iron Age when the appearance of Mycenaean IIIc–Early/Middle 1 and handmade burnished wares along with local material, indicate a complex interaction between locals and newcomers. The study is currently in the final phases of data analysis and will proceed to publication with emphasis on the topic of interrelationships between socioeconomic, cultural, and political identities and allegiences during the dynamic Late Bronze period, with comment on the relationship to preceding and succeeding phases.

#### Composite Figurines in the Iron Age Levant: A Comparative Approach

Michael Press, University of Arkansas, and Erin Darby, University of Tennessee

This paper serves as a preliminary report for a new comparative research project focusing on composite figurines, an Iron Age Levantine coroplastic type. These anthropomorphic figurines (e.g., the Judean pillar figurines and Phoenician bellshaped figurines), with handmade or wheelmade bodies and molded heads, are a major component of coroplastic assemblages throughout much of the Levant and Cyprus in the eighth to sixth centuries B.C.E. Although the figurines have received significant attention from scholars for decades, previous studies are limited in their effectiveness by a series of methodological problems. Such studies have been authored by individuals focusing on a single regional corpus and have thus ignored the broader Levantine context. On the rare occasions when comparative analysis has been attempted, scholars have highlighted broad similarities rather than the particularities of archaeological context and stylistic variation. Moreover, previous work has explored individual iconographic elements, such as hand position, that may be associated with a wide range of figurine types and technological styles, to the exclusion of other aspects, such as production technique. Although this type of inquiry may help explain the genealogy of individual iconographic tropes, it does little to explore how and why these elements were reincorporated in Iron Age composite figurines.

In contrast, the present project depends upon the combined effort of specialists in different corpora and focuses on the regional variations within a single technological style. The current paper briefly summarizes past studies and their methodological presuppositions. It then outlines a preferable comparative methodology for interregional figurine research. Finally, the paper applies this methodology to the composite figurines of the Iron Age Levant, focusing on assemblages from Judah and Philistia (in modern-day Israel), the regional specialties of the authors. In the process, the paper investigates basic issues, such as the date that these figurines arose in Judah and Philistia (and other parts of the Levant), the possible influences that might have generated this new technological style, and the cultural implications of its local adaptation in various regions of the southern Levant and beyond.

#### Fragile Frontiers: Glass Vessels from the Late Roman Fort at Yotvata

Carolyn Swan, Brown University

What can glass artifacts tell us about life on the eastern military frontier during the Late Roman empire? Glass is an often overlooked or underappreciated category of material because of its relative infrequency at the majority of sites in comparison to its ceramic counterpart. However, the mere presence of such a fragile and traditionally luxurious commodity at a remote military outpost suggests that we should perhaps take a closer look at this material and reconsider social and economic life on the frontier.

This paper presents the glass assemblage that was excavated from the Roman fort at Yotvata, Israel, between 2003–2007 and under the direction of J. Magness and G. Davies. Located at an important oasis and road junction some 40 km north of Eilat/Aqaba, the fort was established in the mid-fourth century and was abandoned by the fifth century C.E. The forms, colors, and decoration of the glass vessels are first discussed and compared to glass finds from other Late Roman-Early Byzantine fortified sites in the Near East, including Mezad Tamar, el-Lejjun, 'En Boqeq, and Upper Zohar; these observations are then contextualized by considering glass production and consumption trends during the Late Roman period in other parts of the empire.

The presence of glassware at a remote eastern Roman fort raises several important points: (1) glass consumption was not limited to civilian populations in domestic environments; (2) glass at this point in time was not the luxurious commodity it was in the first century; by now it was so pervasive that it was accessible even to common soldiers stationed far from urban centers; and (3) glass as both a material and an object may have become more central to certain aspects of Roman culture or patterns of social behavior.

### Metal Objects from Cape Gelidonya: A Case Study for Integrated Theoretical Perspectives

Colleen Kron, University of Pennsylvania

Shipwreck archaeology has been instrumental in the construction of narratives for cross-cultural trade and exchange in the Late Bronze Age Aegean, particularly when integrated into larger theoretical frameworks for understanding Archaic state interaction, such as World Systems Theory. As the first Aegean wreck to be systematically excavated, the Late Bronze Age shipwreck from Cape Gelidonya has played an important role in such studies. Problematically, ambiguous details about the Gelidonya ship, such as its point of departure, itinerary, and the identity of its crew, make it difficult to use the Gelidonya material to provide details for the large scale interactions suggested by the application of World Systems Theory to the Late Bronze Age Aegean context.

This paper combines the fine-grain approach of object biography with the broad-brush theoretical framework of World Systems Theory, and applies both to the interpretation of the metal artifacts from the Cape Gelidonya shipwreck. When considered at the finer resolution of object biography, the metal objects from Gelidonya provide evidence of the multiple component phases in the Late Bronze

Age metals trade, including production, exchange, use, and reuse. When then considered in the broader framework of World Systems Theory, the biographies of individual objects can provide details about the role which the Gelidonya objects played in the trans-Aegean metals trade. The combination of the vantage points of these two theoretical frameworks demonstrates that the evidence from the Gelidonya shipwreck can be used to "bridge the theoretical gap" between large-scale theories of interaction at the level of the Archaic state and the physical material objects used as evidence.

### Local and Imperial Dynamics in a Residential Neighborhood at Assyrian Sam'al (Zincirli Höyük, Turkey)

Virginia R. Herrmann, The University of Chicago

The expansion of the Neo-Assyrian empire throughout much of the Near East in the ninth to seventh centuries B.C.E. is often seen as a major historical turning point that transformed the political, economic, and social landscapes of this region in indelible ways. This paper presents an analysis of the extent of this transformation and its sources, both imperial and local, in a residential neighborhood at Zincirli Höyük, Turkey, the Iron Age city of Sam'al. Recent excavations under the auspices of the Neubauer Expedition to Zincirli of The University of Chicago's Oriental Institute have exposed a complex of domestic and cultic buildings that were occupied and renovated several times from the mid eighth century B.C.E., when Sam'al was still ruled by a local dynasty under Assyrian influence, until the end of the Assyrian provincial period, in the late seventh century. Changes and continuities in the architectural organization and artifact assemblages of the successive rebuildings of this neighborhood reveal some shifts in the access of local residents to goods and resources, the emphasis of their productive and subsistence activities, and their social makeup over the transition from local to Assyrian provincial rule, despite a high degree of overall continuity. Consideration of the archaeological data in the context of the extant historical record of this region suggests that the overall local continuity reflects an Assyrian policy of limited intervention in the social and economic life of this city, while the changes that are evident can be attributed to a complex interaction of imperial policies, the conditions and opportunities created by unified rule, regional geopolitical events, and the pursuit of local political, economic, and social agendas against this background. These results run against the grain of widely held expectations for social and economic restructuring and/or decline in the territories annexed by the Assyrian empire. Further, the multicausal interpretation enforced by the local perspective of this study may come closer to approximating the myriad interactions of social actors with one another and their environment that ultimately form societal-scale entities such as empires and may thus avoid some of the reductionist and determinist pitfalls of a more synoptic, comprehensive perspective on the Neo-Assyrian empire.

#### **Identity and Ritual: Masked Performances in Cyprus**

Erin W. Averett, Creighton University

The striking evidence for masking rituals on the island of Cyprus has long interested scholars of the eastern Mediterranean. Past studies have focused on the stylistic pedigree of these masks, linking Cypriot masks to Levantine and Aegean examples. Analysis of the archaeological context, however, reveals that, despite stylistic affinities with external masks, Cyprus was home to a unique masking tradition.

This study reinterprets evidence for masking rituals in the Late Cypriote III through Cypro-Archaic periods, ca. 1200–500 B.C.E., focusing on the archaeological context, iconography, and local patterns of use. An analysis of worked bucrania, terracotta masks, protomes, and terracotta and limestone depictions of masked figures that span the Late Bronze through Iron Ages provides evidence for extensive, island-wide masking customs involving three distinct mask types: anthropomorphic, zoomorphic, and grotesque.

Cypriot-masking rituals can be linked to a male deity (or deities) at sites across the island, both inland and coastal, urban and rural. The scholarly concentration on spectacular finds from Kition and Enkomi and affinities with foreign masks have obscured local masking practices which are not restricted to political centers. Moreover, Cypriot masks are strongly linked to funerary rituals through their inclusion in tombs. The distribution and variety of Cypriot masks reveal that they likely had multiple functions. Ethnographic studies have shown that masks can be used for numerous rituals that require identity alteration, including but not limited to fertility/renewal rituals, initiation and other rites of passage, rituals related to secret societies, and rites related to death, the underworld, and ancestors. Interpretations of ancient masks often simplify the anthropological evidence, overlooking the multivalent and dynamic power of masking performances. In Cyprus, masks are associated with wider expressions of the complex relationship between humankind, the natural environment, and the divine realm. These interactions are expressed through hybrid figures, displaying aspects of all three realms: human, animal, divine. Depictions of hybrid figures as well as masked dramas blurred the lines between worlds and facilitated communication between mortals and divine.

# SESSION 4C: Colloquium Roman Dacia and Moesia: Developments in Archaeology and Heritage Preservation in Romania

ORGANIZER: Robert Wanner, EAC/Archaeology

#### **Colloquium Overview Statement**

The Roman provinces of Dacia and Moesia, occupying a large part of the modern country of Romania, inhabit a peculiar niche in the archaeology of the Roman empire. Dacia was a relatively late acquisition (C.E. 106) that was subsequently abandoned before the social processes that took place in other provinces took root, and as such, presents an important case study in the processes of Roman provin-

cialization. Moesia, however, had a much longer life as a Roman province. Trading settlements along the Black Sea coast had long been used by Greeks, and, unlike Dacia, Roman towns persisted into the Middle Ages. Written sources are of little help in understanding both provinces, and information has come primarily from archaeology.

Research on these provinces within Romania has expanded rapidly since the early 1990s. Although a growing number of articles are published in English and German, most are available in journals with limited circulation outside Romania; monographs in western European languages are few and far between. Therefore, first and foremost, this session communicates the important research that is going on within Romania to a North American audience. Presenters have been invited who research a variety of relevant archaeological themes (coinage, urbanization, frontiers) and who work at different scales (sites, provinces, landscapes).

Another goal of this session is to emphasize the complexities of cultural heritage management in Romania. The challenges of balancing the expansion of modern industry and development with archaeological research have been seen most recently in the controversy surrounding the gold-rich mountains of Rosia Montana, where industrial mining and neglect currently threaten a Roman mining land-scape. All of the presenters have been asked to consider the implications of their research in this context, with an aim toward stimulating debate about the role of Roman archaeology in heritage management in Romania, a domain with limited resources. This session demonstrates the potential of technology, international collaboration, and other activities to develop a stronger policy of heritage preservation in Romania.

DISCUSSANT: Ioana Oltean, University of Exeter

### The War Goes On: Cultural Heritage and the Roman Army in Romania Dan Weiss, University of Virginia

By the conclusion of the Dacian Wars in C.E. 106, Trajan had executed an effective pincer movement that annihilated the higher echelons of Dacian society in the Transylvanian Plain. The demise of the aristocracy left the remaining Dacians militarily impotent and without their customary theocratic leadership. The effect was so great that it led Eutropius to remark that the Dacian population was completely exhausted, forcing Trajan to repopulate the new province with settlers from the entire world. Although Eutropius' assessment exaggerates the severity of the conquest, the impact the Romans had on the cultural geography was profound and enduring. Even after the Roman withdrawal in 271, we find, after a short

former Dacian ones.

Centuries later, despite invasions and occupations by Goths, Huns, Turks, Magyars, Russians, and Germans, it is the polarity between the Dacians and the Romans that holds center stage in terms of national identity and cultural heritage. During the Cold War, the debate on national identity largely remained behind the Iron Curtain. However, the present holds new opportunities for researchers

interval, a continuation of the Roman-built network rather than the reversion to

from the West, and the struggle between the Dacians and Romans has taken on a larger role in terms of international cultural heritage. As the issue opens itself up to new insight and interpretation, it also opens itself up to new debates. After barely shaking off the dust from a largely unsettled Communist era discourse on national identity, the Dacians and Romans run the risk of falling into cultural heritage biases that are either Romano-centric or swing the pendulum overzealously in the other direction. In addition to bias, studies in Roman Dacia are threatened by misinformation and unavailable information; the former perpetuated largely by the digital age and the latter by the limited circulation of printed scholarship on the subject.

This paper briefly summarizes the pertinent issues in Roman/Barbarian relationships in general and how they affect, and are affected by, national identity and cultural heritage. Then by focusing on the archaeology, topography, and scholarship of northwestern Roman Dacia, I identify more specific progressions, limitations, and pitfalls to analyzing interaction between the Romans and the Barbarians. Finally, I offer some proposals and solutions for the future of studies in this area that aim not only to balance biases but also to make the information clear, correct, and available to an international community of scholars.

# **Ulpia Traiana Sarmizegetusa and Teutoburg Forest: Coins and Historical Events** *Cristian Găzdac,* Institute of Archaeology and Art History at the Romanian Academy

The Battle of Teutoburg Forest is well known among ancient historians for its military aspects and also for the way that the battlefield was identified: the retrieval of artifacts and the recording of their find spots and contexts. Can this methodology help to decode other historical events unknown to the ancient literary sources?

Colonia Ulpia Traiana Sarmizegetusa (modern Sarmizegetusa, Romania), one of the most important urban centers of Roman Dacia, is considered to have been established on a virgin site, with no previous traces of habitation. The excavations in the Forum Coloniae in the 1990s revealed interesting aspects of the first phase of human presence at Ulpia Traiana Sarmizegetusa. According to scholars, the stone forum was preceded by another Roman edifice built in wood. The vertical stratigraphy of the site indicates the following events: To build the stone forum, the wooden edifice was demolished; the whole area was leveled above the demolished layer, conventionally noted as "no. 13"; a thick layer of burnt soil rich in Roman military material and coins was deposited, conventionally noted as "no. 9." If we agree with this hypothesis, when could these events have happened? To answer this question, we investigated the coins found in the demolished layer number 13 and in the military layer number 9. This numismatic evidence can offer some clues about what happened at Ulpia Traiana Sarmizegetusa at the beginning of the second century C.E., on the establishment of the new Roman province of Dacia.

### The Discovery of the Daco-Getic Landscape: Benefits and Challenges

Ioana Oltean, University of Exeter

Until just over a decade ago, the territory once occupied by the Dacian and the Getae tribes (now in modern Romania) was known to international academic research largely via historical accounts and a few iconic sites. Far from providing a representative sample of the extent and complexity of human activity over the Late Prehistoric period and after the Roman conquest of Moesia and Dacia, these nevertheless provided sufficient clues to suggest the considerable importance Dacia once had in this region and its potential to contribute significantly to scholarly investigations into the nature and effects of Roman colonization and imperialism in the ancient world. The introduction of aerial archaeological research in Romania since 1998 by the author, in collaboration with W.S. Hanson (University of Glasgow), subsidized mostly by the British Academy, allowed for the first time the recovery of considerable archaeological information from larger landscapes across Romania and analysis of far more complex spatial and social processes than ever before, with immediate effect on the participation of Dacia in current academic discussions on the Roman empire. This paper provides an overview of the current state of aerial archaeological landscape research in various areas of the Daco-Getae territory and discusses the challenges this dramatic quantitative and qualitative increase in archaeological information raise for Romanian cultural heritage management authorities.

#### Searching for the Eastern Border of Roman Dacia

Szilamér Pánczél, Mures County Museum, Târgu Mures

Despite the fact that the archaeological investigations on the eastern *limes* of Roman Dacia began in the 18th century, it is very difficult to understand how this complex defensive structure functioned in this part of the province because of the gaps in the research.

In 2008, a new archaeological research project began as a collaboration between specialists from the Romanian museums of Târgu Mureş, Odorheiu Secuiesc, Cristuru Secuiesc, and, since 2010, Miercurea Ciuc and Sfântu Gheorghe, as well as from the Aerial Archaeological Archive of Pécs, Hungary. The aim of the Limes Dacicus Orientalis project is to study the more than 150 km long sector of the eastern *limes*, with all the components of the defensive system: the forts, fortlets, settlements, watchtowers, defensive ditches, and the *limes* road from the Mureş River to the Breţcu Pass.

This paper summarizes the state of research until 2008 and the results of the geophysical, aerial archaeological, topographical, and field survey undertaken over the course of the project.

#### How Public was Private Worshipping? The Evidence of Dacia

Constanze Höpken, University of Cologne, and Manuel Fiedler, University of Cologne

In Roman religion, there was a very broad spectrum of ritual practices. Religious activities in public places and temples had a visible, representative function. But in general, religion had a very strong private character as well, as many religious activities took place within the domestic space.

In the province of Dacia (modern Romania), there is much evidence for these two faces of Roman religion. The province provides a good base for the study of religion because during the initial Trajanic phase of the province, people from the entire world (*ex toto orbe romano*) came to Dacia, bringing their own deities and religious ideas with them. The character of Roman religion in Dacia does not appear to have been influenced by any native traditions. In recent decades, many public sanctuaries and temples from the second and third centuries C.E. were excavated in Romania. However, very few domestic buildings have been excavated, and thus we have much less knowledge about the private face of religious activities within the household.

This paper presents new evidence from the small sanctuary site located in the area sacra of the Roman town of Ulpia Traiana Sarmizegetusa. Several features interpreted as ritual deposits were excavated around a small cult building—one of several identified in the area sacra—that was dedicated to the little-known deities Domnus and Domna. The spatial distribution, content, and pattern of these ritual deposits helps us to understand the points of intersection and departure between the public and the private aspects of religious activities.

### Porolissum: Urban Transformations in the Forum During the Roman and Immediate Post-Roman Phases (C.E. 106–375)

Eric De Sena, John Cabot University

Located in modern-day Salaj county, Romania, the military base of Porolissum was established in C.E. 106 by the Roman emperor Trajan to control the main passageway through the Meses Mountains into the province of Dacia. After a few decades, Porolissum evolved into an important commercial center that facilitated trade between the Romans and the peoples of Barbaricum. It was granted municipium status under Septimius Severus. The site of the town forum was located in 1996 through a program of magnetometry and became the focus of an American-Romanian excavation eight years later. This forum is only the second one, after Ulpia Traian Sarmizegetusa, to be investigated in former Dacia, and as such, presents an important opportunity to understand the process of urbanization in this shortlived Roman province. The first phase of the Porolissum Forum Project took place between 2006 and 2010, during which time the forum courtyard, the colonnade, the tabernae, a bath complex, and a building that is interpreted as the basilica were investigated. A basic chronology of urban transformation has been determined based on the study of pottery and coins from certain features. The project has also generated intriguing evidence for the post-Roman fate of this town. This paper presents the preliminary results of the five-year project.

## SESSION 4D Contacts and Exchange in the Eastern Mediterranean

CHAIR: Robert H. Tykot, University of South Florida

#### **Greek Underwater Surveys and Amphora DNA Evidence of Ancient Trade**

Brendan Foley, Woods Hole Oceanographic Institution

Woods Hole Oceanographic Institution is partnered with the Hellenic Ministry of Culture to perform maritime archaeological research in Greek waters. Since 2001, the team has pioneered the use of Autonomous Underwater Vehicles (AUV) for rapid, broad-area underwater archaeological survey and site-specific investigations. Beyond these field projects, the team has also developed a laboratory method for extracting trace DNA of the original contents of now-empty amphoras recovered from shipwrecks. Recent projects include the 2010 AUV survey in the northern Sporades Islands and, in 2011, the first systematic underwater archaeological survey conducted along the northern coast of Crete, centered near the Bronze Age capital, Knossos. In this presentation, I announce the DNA findings of trade goods carried in amphoras and present the results from the 2010 and 2011 underwater surveys.

#### Minoan-Egyptian Relations Revisited: The Warrior's Tale

Tristan Carter, McMaster University

In keeping with eastern Mediterranean traditions, the chipped stone assemblages of Bronze Age Crete are dominated by fine-blade products with few modified tool types. One of the few exceptions are trapezes and lunates, relatively rare implements that are usually interpreted as small projectiles. With these arrowheads recurrently found in Pre- and Protopalatial burials, including Lasithi Cave ossuaries, central Cretan house tombs, and the Mesara tholoi, it suggests that status was conferred upon those who wielded them.

Given that Crete has the only Aegean Neolithic culture lacking projectile technology, it is posited that this weapon type was introduced from overseas in EM I. This paper argues for an Egyptian origin, with such arrow types well attested in fourth and third millennium B.C.E. contexts, including numerous examples from the Predynastic cemetery at Abydos, where associated representations of bowmen indicate that the use of these weapons in hunting and warfare was strongly associated with specific forms of male status.

In this presentation, I document the techno-typological specifics of this weapon in Crete, the raw materials employed (Aegean and Anatolian obsidian, nonlocal cherts), its chronological range (Pre- to Neopalatial), regional and contextual associations (central/eastern Crete, funerary and domestic), and other related data (bow iconography). The adoption of the bow and transverse arrow is then interpreted in the broader consideration of ideational and material flow between Egypt and Crete in the Prepalatial period, viewed as one of many foreign practices appropriated by Cretan elites as new modes of creating and performing social distinction.

### "Šrdn of the Sea": A Reassessment of the Sherden and Their Role in Egyptian Society

Jeff Emanuel, Harvard University

The association of the Sherden with their fellow "Sea Peoples," the more well-known and better-attested Philistines, has led to several assumptions about this group, its members' origin, and their role in the events that marked the end of the Late Bronze Age and the transition to the Iron Age. Despite a broad temporal presence in ancient Near Eastern records, there exists limited information about who these Sherden were and where they came from, the circumstances of their entry into the Egyptian and Ugaritic records in which they appear, and where they eventually settled. Further, addressing these questions in traditional fashion relies on the assumption that they were a homogeneous ethnic group with a single shared culture, point of origin, and geographic destination.

This study separates the Sherden from the Aegean migration and greater "Sea Peoples" phenomenon of the Late Bronze–Early Iron Age transition in an effort to challenge long-held assumptions about their initial encounter with Ramesses II in the early years of his rule, their role in the famous land battle and naumachia of Ramesses III's eighth year, their participation in the migrations that marked the end of the Late Bronze Age, and their status as foreigners to the Levant whose main function was to serve as mercenary soldiers and pirates. Through a close reading of the extant material and literary evidence from the Amarna and Ramesside periods in Egypt, and with support from relevant Ugaritic texts, the role of the Sherden within broader Near Eastern society in general, and Ramesside Egypt in particular, is shown to be very different from that of the more famous Philistines: one of initial, small-scale intrusion of heterogeneous warriors who originated elsewhere within the eastern Mediterranean world, followed by relative geographic stability over multigenerational periods that was marked by rapid and enduring acculturation and assimilation into Egyptian society.

### The Good, the Bad, the Keftiu: The Concept of the "Good" Foreigner in New Kingdom Egypt

Beth Ann Judas, University of Pennsylvania

The presence of the Keftiu, or Bronze Age Aegeans, is represented in the Egyptian archaeological record in many ways: ceramics, Egyptian texts, statuettes, and paintings. The Late Bronze Age Aegean ceramic and the New Kingdom pictorial depictions, however, are the most numerous and the most discussed by scholars as evidence of relations between Egypt and the Bronze Age Aegean. Representations of the Keftiu include the artistic renderings in the Theban tombs of the Nobles and the Aegeanizing frescoes from Tell el Dab'a, both of which date to the early to mid 18th Dynasty.

The New Kingdom Theban tombs of the Nobles are an important aspect of the search for the relationship between the Aegean and Egypt. They depict a diplomatic relationship between Egypt and the Aegean at the beginning of the Egyptian empire, as well as a relationship that resulted in imported Aegean goods. This larger debate generally concerns the identification of the Keftiu figures in the so-

called tribute scenes, and if the individuals come from Crete, mainland Greece, or even Cyprus (S. Wachsmann, *Aegeans in Theban Tombs* [Leuven 1987]; J. Strange, *Caphtor/Keftiu: A New Investigation* [Leiden 1980]). In reality, the scenes of the foreigners are only one aspect of the visual demonstration of the tomb owners' high statuses and ranks within the royal court, as well as Egypt's worldview.

There has been little investigation of the correlations between the Keftiu depictions in the tombs and the deeper possible meanings behind the depictions of the Aegeans in the larger Egyptian cultural milieu. The discussions of the representations of the Keftiu, in essence, have been divorced from their larger cultural Egyptian context and discussed almost as free-standing movable objects; they have also not been discussed in terms of the larger concept of "being a foreigner" in Egypt. Instead, they are often set against the Aegean cultural setting in the search for their identity. The representations of the Keftiu have not been discussed in conjunction with their primary cultural setting (i.e., New Kingdom Egypt, the owners of the tombs, and their meaning) beyond a statement of a simple documentation of the presence of the Keftiu and their Keftian culture as determined by Egyptian tomb painters. This paper explores the concept of "being foreign and other," or the "good vs. bad foreigner" in the Egyptian concept of the world, and where the Keftiu fit into the Egyptian universe.

### Objects and Agents: Transnational Interaction Between Cretans and Phoenicians in the Early Iron Age

Catherine Pratt, University of California, Los Angeles

The nature of Phoenician presence on Crete during the Early Iron Age has been a subject of controversy for some time, with a variety of interpretations of the material evidence. A reevaluation of this evidence indicates a more nuanced picture of cultural interactions on the island.

In this paper, I introduce the concept of "minor transnationalism," currently used in discussions of modern cultural interactions, and demonstrate its application to ancient cultural contact through the careful examination of Phoenician material on Crete. It is necessary, moreover, to understand Phoenician-Cretan interaction within a wider Mediterranean setting. A comparison between Phoenician presence and its characteristics in the western and eastern Mediterranean present some interesting and insightful differences that shape our notions of the mechanisms for cultural interaction. Rather than treating the Phoenicians as a unified, cooperative group, they should be identified as culturally and economically distinct city-states. These city-states leave their own unique marks on cultural interactions, including those seen on Crete. By applying the model of minor transnationalism to approach the complex relationship between Phoenicians and Cretans during the Early Iron Age, we can come to a better understanding of the situation on Crete and its broader implications for Phoenician presence in the Aegean.

### The Serraglio, Eleona, and Langada Archaeological Project: Report on the 2011 Study Season

Salvatore Vitale, University of Calabria

The Serraglio, Eleona, and Langada Archaeological Project (SELAP) is a research undertaking under the auspices of the Italian School of Archaeology at Athens. Its goal is to achieve a thorough reassessment of Bronze Age Kos through a re-examination of the rich array of finds recovered during Luigi Morricone's excavations on the island.

The 2011 season was focused on three main points: (a) the analysis of the materials from the EB II cemetery of the Asklupis, (b) the macroscopic study of ancient ceramic fabrics and manufacturing techniques, and (c) the study of Minoanization and Mycenaeanization of Kos.

The examination of the finds from the Asklupis has provided us with new information on a relatively poorly known phase, enriching our knowledge on the chronology, ceramic typology, and burial practices of the period. The analysis of the evidence has confirmed that, during the EBA, Kos belonged to the southwestern Anatolian cultural interface.

Different patterns seem to characterize the processes of Minoanization and Mycenaeanization of Kos and their interaction with previous Anatolianizing local traditions. Minoanization was typified by a stronger degree of hybridization and ideological exchange, but its impact was limited mostly to pottery productions. By contrast, the penetration of Mycenaean cultural traits was much more pervasive and also included the spread of typical architectural features, rituals, burial practices, and religious beliefs.

### Reinterpreting the Aegean and Aegean-Like Pottery in the Amuq Valley (Turkey): From Late Bronze Age Object to Early Iron Age Symbol

Johannes Verstraete, University of Cincinnati

The collapse of Bronze Age civilizations in the eastern Mediterranean at the end of the second millennium B.C.E. and the emergence of territorial states in the ensuing Iron Age have been the focus of intense archaeological scrutiny in recent years. While it has become increasingly evident that there was some contact—evidenced by pottery with strong Aegean associations—between the Aegean and the eastern Mediterranean during the Early Iron Age, the type and the frequency of these interactions are not quite clear and are under debate. Scholars are inclined to explain the occurrence of Aegean-like ceramics as proof of the arrival of Greek settlers or as evidence of an invasion of the Sea Peoples. This assumes a direct correlation between archaeological evidence and ethnic identity, an assumption that may be questioned on both general and archaeological grounds.

The archaeological survey in the Amuq Valley (Turkey) conducted by the Oriental Institute between 1995 and 1998, new excavations at Alalakh and Ta'yinat, and the analysis of the unpublished Aegean and Aegean-like pottery from the excavations at Çatal Höyük and Judaidah offer an opportunity to readdress these issues. On the basis of the archaeological record of the Amuq Plain during the Early Iron Age, I argue that the material culture of the Amuq at this time reflects a mixture

of Luwian, Near Eastern, and Aegean elements, and I investigate whether this evidence can be interpreted as representative of a subelite identity that emerged in the Amuq, rather than as a sign of an influx of Aegean settlers or products.

#### Al Mina and East-West Relations: The View from Tell Tayinat

James F. Osborne, State University of New York, Buffalo

The site of Al Mina has attracted considerable interest and debate since it was excavated by Sir Leonard Woolley in the 1930s. Located at the mouth of the Orontes River in the northeast corner of the Mediterranean, the early levels of Al Mina have long played a prominent role in discussions of the cultural and economic relations between the Aegean and the ancient Near East during the ninth and eighth centuries B.C.E. This paper contributes to the debate by evaluating material, ceramic and historical evidence in particular, from the large inland site of Tell Tayinat. Tayinat was the city of Kunulua, a regional capital to which Al Mina was the likely port via the Orontes. Tayinat has been known to have a large amount of Greek pottery since it was excavated by The University of Chicago in the 1930s. This material, however, has remained unpublished.

In this paper, I present the imported Aegean pottery at Tell Tayinat, consisting primarily, but not exclusively, of the pendent semicircle skyphos. This information is then examined in light of the other archaeological remains of Tell Tayinat, including results from the renewed excavations of the University of Toronto as well as historical records from that site and the broader ancient Near East. With this cumulative data, I assess the role that Tayinat played in facilitating connections between the Aegean and the Near East and what this role suggests about the nature of Al Mina.

# SESSION 4E: Colloquium Staging Death: Funerary Performance, Architecture, and Landscape in the Aegean

ORGANIZER: Anastasia Dakouri-Hild, University of Virginia

#### **Colloquium Overview Statement**

The performance of funerary rituals reinforces a sense of community, being a means to revive social memory and legitimize links with an ancestral past. Such rituals tend to be highly formalized and performed in specific contexts, times and places that set them apart from everyday life. They require a "stage" (e.g., the cemetery and the site of a grave), a performer (e.g., a priest or priestess), and an audience (e.g., the attending members of a funeral). Funerary performance is highly communicative, a form of enacted symbolic language articulated through material culture. The study of performance casts light on how social relations and mortuary beliefs were conceived and communicated within a society on the occasion of a particular event.

In the Aegean, the concept of funerary performance has been explored primarily through the study of cultic implements and artifacts used in ceremonial processions; libations; feasting; the treatment, adornment, and purification of bodies, offerings to the deceased, etc. This colloquium is meant to further explore the performative aspects of mortuary space, landscape and architecture in the Bronze Age Aegean. The approach is both theoretical—discussing key concepts in performance, memory, and landscape theory—and anchored on field data. There is a combined analytical and synthetic focus, and the overall approach is comparative. We include case studies representing two different regions of the Aegean with rich funerary traditions, mainland Greece and Crete, in an effort to detect broader patterns as well as regional nuances in mortuary behaviors.

The contributions highlight the semiotics of landscape, choice of burial areas, cemetery arrangement, interrelationship of mortuary and residential space, relationship of cemeteries or particular graves with prominent natural (hills, rivers) or other features (e.g., roads); the monumentality of tombs as a factor contributing to their theatricality; the architectural design and "domesticity" of chamber tombs (doors, thresholds, benches, platforms, wall paintings); the arrangement and usage of associated structures and features, both interior and exterior; and iconographical aspects of funerary architecture and landscape.

DISCUSSANTS: *Emily Miller Bonney*, California State University, Fullerton, and *Rodney D. Fitzsimons*, Trent University

#### The Changing Faces of Death in Early Mycenaean Greece

Nikolas Papadimitriou, Museum of Cycladic Art

The transition from the Middle to the Late Bronze Age in mainland Greece saw a major change in funerary customs; poor inhumations in small individual pit and cist graves gave way to ostentatious burials in elaborate tholos and chamber tombs. The social correlates of this transformation have been extensively studied: ostentation and architectural elaboration are widely thought to reflect increasing social complexity and competitions among early elite groups. By contrast, little attention has been paid to the ritual dynamics of the change and to the symbolic connotations of the standard dromos-stomion-chamber arrangement of Mycenaean tombs.

This paper lays special emphasis on the dromos element and traces the evolution of a permanent system of access from the earlier appearance of lateral entrances in late MH tumuli until the standardization of dromoi at the end of LH IIA. I suggest that the observed changes reflect increasing emphasis on collective identities and a quest for more exclusive areas of representation. I interpret the dromos as a major focus of ritual performance, where ideas about the transition from the world of the living to the realm of ancestors were efficiently integrated with statements about the solidarity of the group and the transmission of social roles and property rights.

### **Mycenaean Mortuary Practices in Ancient Nemea**

Mary K. Dabney, Bryn Mawr College, Eva Pappi, Fourth Ephorate of Prehistoric and Classical Antiquities, Panayiotis Karkanas, Ephoreia of Palaeoanthropology and Speleology of Southern Greece, Angus Smith, Brock University, Sevi Triantaphyllou, Aristotle University of Thessaloniki, and James C. Wright, Bryn Mawr College

The complex and varied history of burial and post-burial activities in the Mycenaean chamber tomb cemetery at Ayia Sotira and the chamber tomb at Barnavos in the Nemea Valley is explored. The history of tomb openings and closings is reconstructed in part though the use of soil micromorphology to identify floors and surfaces in the chambers and dromoi. In some tombs, these episodes are also identified in construction phases in the stomion blocking walls. Through detailed analysis of the stratigraphy, the use for burial of seemingly empty pits and side chambers in the tomb chambers and dromoi are integrated into the overall history of tomb use. Finally, the location of the tombs relative to the nearby excavated settlement at Tsoungiza and the surrounding land use and transportation routes as reconstructed on the basis of the Nemea Valley Archaeological Project Survey is addressed.

#### The Politics of Death at Mitrou, East Lokris

Aleydis Van de Moortel, University of Tennessee, Knoxville

Our 2004–2008 excavation and surface survey produced an unusually rich Prepalatial data set including settlement and mortuary remains. Preliminary studies indicate that a ruling elite manifested itself from LH I onward through the creation of a landscape of power. In the settlement, two elite complexes were constructed, and long paved orthogonal roads were laid out, arguably intended to monumentalize performances of some sort. The manipulation of the mortuary realm played a major role in the visualization of elite power. In LH I, two elite tombs were created in prominent locations and linked to a major road, ostensibly to enhance the performance value of elite mortuary rituals. One of these was built chamber Tomb 73, uniquely set inside elite Complex D. At the same time, the long-standing practice of burying the dead among settlement buildings was abandoned, and possibly a permanent cemetery was established to enhance a sense of community and create a larger mortuary landscape as backdrop for the elite tombs. After the LH IIIA2 Early destruction of Building D, elite burials ceased in Tomb 73, but evidence from the road and dromos points to public rituals continuing into the LH IIIC phase, reflecting a persisting link with the Prepalatial elite.

### The Prepalatial Cemetery of Petras, Siteia, Eastern Crete: A Diachronic Monument of Social Coherence

Metaxia Tsipopoulou, National Archive of Monuments, Hellenic Ministry of Culture and Tourism

Petras, the only palatial site in eastern Crete in the Protopalatial period, was occupied from the Final Neolithic until LM IIIC. Since 2004, the unplundered Prepalatial cemetery of house tombs (to date five) with sophisticated plans has been excavated, as has a rock shelter with secondary burials (EM I–MM IA). In the rock shelter, two Neopalatial ceremonial vases were found. The paper examines the topographical relationship of the areas of the living to those of the dead, diachronically; and the evidence for the use of the cemetery as a symbol of social coherence during its primary use and many centuries later.

House Tomb 2, at the south limit of the cemetery, the last to be constructed, in MM IB, contained primary and secondary burials, including several in clay containers. It is significant for an understanding of the social evolution in the critical transitional period from the Prepalatial to the Protopalatial, as suggested by the complex architecture and the important movable finds (pottery, gold bands, unique seals, palaeoanthropological material). There was also architectural evidence for organized rituals in honor of the dead. House Tomb 1, also large, but different from House Tomb 2 in plan, dating (its main phase being EM III/MM IA), and the movable finds, was the second to be excavated. Of particular importance for the continuity of use of the space as a hallmark for the social coherence of the Petras community are three large LM IIIC megaroid buildings, accompanied by a peribolos and a platform and built partially on top of House Tomb 1. They were probably connected to special ritual activities in honor of the dead ancestors, showing continuity at Petras for two millennia.

## Room with a View: Landscapes of Memory in the Mavro Spilio Necropolis at Knossos

Lucia Alberti, Institute for Studies on Aegean and Near Eastern Civilizations, National Research Council, Italy

The Knossos Valley is a particularly effective area in which to explore the relationship between a city of the quick and one of the dead, since it is narrow enough to intensify links between life and death and wide enough to keep the two states apart.

The necropolis of Mavro Spilio lies on the eastern slope of Profitis Ilias, in view of the palace; it was continuously used for about 500 years, from MM IIB to early LM IIIC. The cemetery's positioning on its slope during the Neopalatial and Final Palatial periods is particularly interesting. Here, as with other cemeteries in the vally, deliberate changes in both tomb architecture and burial customs can be associated with differing uses of space and landscape. The existence of a spring in a cave, the tombs ready visibility from afar, and the wide view from the cemetery are noteworthy. Thus, the "visual" choices made in siting such localities can be explored, as can the movements of participants at a funeral in the mid second millennium B.C.E.

## Funerary-Architectural Events and Theatricality in the LM II-IIIA Sanctuary-Tomb and Royal Tomb at Knossos

Maria Chountasi, Aristotle University of Thessaloniki, Greece

This paper attempts a hermeneutics of Knossian funerary architecture, looking at ritual-architectural events that bring out the architectural potential for persuasion and/or extemporization and focusing, in particular, on the Sanctuary-Tomb and the Royal Tomb at LM II–IIIA Knossos. Specifically, I examine the inclusive or exclusive character of the performances held in the specific buildings, the types of movements and choreographic options that might have taken place there, and the potential emic effects of these funerary-memorial performances on viewers. It is shown that theatrical-type performances in the funerary contexts referred to above are actually human practices creating a peculiar sense of temporality and a-temporality; they emphasize architectural monumentality as a feature that transcends death and extends to eternity; at the same time, they can be events of specific apprehensions fully situated in specific cultural contexts and human memories. From this perspective, funerary architectural monumentality is created by specific human performances, and, at the same time continuously stimulates them.

### Minoan Death in Context: The Spatial Dimension of Cemeteries in Bronze Age Crete

Sylviane Déderix, Catholic University of Louvain, Belgium

The location of cemeteries is not a chance outcome. It is the result of funerary choices dictated by the social, political, cultural, and ideological characteristics of human groups. Studying the spatial distribution of burial sites has thus the potential to provide some insights into the mortuary behaviors of ancient societies. Accordingly, this paper aims towards a better understanding of the place allocated to the dead within the wider landscape of Bronze Age Crete. GIS-based thematic maps and spatial analyses (e.g., clustering, viewshed, site catchment, least-cost path, a.o.) are helpful in reconstructing the territorial and visual relations between the tombs, the rest of the archaeological remains and the natural environment. In the context of Minoan Crete, where the funerary data are plentiful but badly preserved and thus hard to interpret, such issues are especially important since they can shed light on the place, as well as on the roles and functions the deceased were assigned within the living community.

### SESSION 4F Pre-Roman Italy

CHAIR: Greg Warden, Southern Methodist University

### Protourbanism in Italy: The Conundrum of the First Pre-Cities

Clive Vella, Brown University

Urbanism studies in Italian archaeology are well established and yet have been largely restricted to classical archaeology. Indeed, the present embodiment of urbanism studies tends to diminish and perhaps even marginalize prehistoric studies in favor of the "first cities." Somewhat favoring the establishment of historic peoples over prehistoric groups, this bias has created a conundrum for prehistorians and protohistorians who appear unable to underline the importance of Italic earliest forms of incipient urbanism. Urbanism studies have tended to ignore the crucial fact that the first cities were preceded by a long tumultuous series of continuity and discontinuity during which Late Bronze Age (LBA) and Early Iron Age (EIA) Central Mediterranean communities created numerous forms of incipient proto-urbanism that varies in its successful employment and maintenance across time.

Therefore, this paper attempts to outline the emergence of Italian protourbanism from the point of view of rising political centrality, which during the LBA-EIA transition was also being exhibited in the form and organization of prehistoric settlements. Just as important is that, unlike other parts of Mediterranean Basin, the Italian LBA-EIA transition into protourbanism appears to be a native reaction to a forming political complexity that was irregularly employed in the Italian region and was exhibited through morphological change of settlements. Furthermore, this paper also highlights that without complex political hierarchy, writing, and craftsmen there can be such a thing as incipient protourbanism. Ultimately, a major part of this paper outlines the necessity for better frameworks to improve the archaeological comprehension of early forms of incipient urbanism. After all, we cannot simply define the prehistoric situation as "not quite urban" but rather improve our capacity to gauge the formation of hierarchy and social conduct as exhibited through settlements.

## **Reviewing a Decade of Archaeological Investigation of Timpone Della Motta** *Søren Handberg*, Aarhus University, and *Jan K. Jacobsen*, Ny Carlsberg Glyptotek

This paper presents a decade of archaeological investigation of the Greek indigenous sanctuary site at Francavilla Marittima in Calabria, Italy, conducted by the Groningen Institute of Archaeology. The last decade's intensive excavations conducted on the hill of Timpone della Motta at Francavilla Marittima have revealed important new archaeological evidence concerned with the early Greek presence in the Sibaritide both before and after the foundation of the Greek *apoikia* of Sybaris.

An indigenous Early Iron Age presence is attested by monumental timber buildings with religious connotations on the uppermost plateau of the hill. Indigenous habitation at the site is also confirmed by huts and burials in the nearby Macchiabate necropolis. By the seventh century B.C.E., an extensive sanctuary, which housed at least three temples, was situated on the uppermost plateau. At this time, the temenos area appears to have been enlarged by a terrace wall. A temenos wall was probably already erected in seventh century B.C.E., and the area was considerably enlarged and surrounded by a monumental wall in the sixth century B.C.E. At the spot of the largest Temple V, four successive construction phases spanning the period from the late ninth to the sixth century B.C.E. have been reconstructed.

In addition, a Greek presence with an associated pottery workshop at the foot of the hill dating to the eighth century B.C.E. has recently been identified. The pottery workshop produced wheel-turned pottery in a distinctive Euboean style, which by the end of the eighth century B.C.E., included vessels in the style of the Cesnola Painter. Further evidence suggests a contemporary production of indigenous handmade matt-painted pottery that included vessels with unique representations of mythical scenes.

The archaeological site of Timpone della Motta presents an exceptional situation with contemporary religious, domestic, and mortuary evidence that overlaps with the foundation of the Greek *apoikia*. The wealth of material, mostly pottery but also bronze objects and other small finds, allow for a detailed examination of the cultural transformation of the site and the reception of Greek material culture from before the time of the foundation of the Greek *apokia*. Especially remarkable is the evidence for Greek and indigenous Oinotrian cohabitation at the site and joint participation in religious activities in the sanctuary.

## Controlling the Chora II: Geoarchaeological Investigations at Monte Palazzi (Grotteria, Calabria) in 2010

Paolo Visonà, University of Kentucky

In the sixth century B.C.E., the cities of Rhegion, Locri Epizephyrii, and Caulonia built small coastal and mountain forts to guard the frontiers of their chorai against rival Greek states. Strategically located near potential invasion routes, these phrouria served as observation posts and control points and have comparable features. The northernmost of half a dozen of Greek archaic forts identified in the toe of Italy thus far, about 15 km inland from the Ionian coast, Monte Palazzi began to be explored in 2005. The University of Kentucky's final season of fieldwork included both excavation and remote sensing. Excavation was aimed at assessing the structural characteristics of the southeastern perimeter wall (already uncovered in 2008) and the depth of the archaeological deposit. A geophysical survey of the mountain top—involving the use of a fluxgate magnetic gradiometer and electrical resistivity—was also conducted to determine the overall size of the complex and to identify the remains of interior structures; 2.5 m in width, the rampart was constructed with blocks of local granite and garnet chlorite schist from a nearby outcrop; its upper courses were made of mudbrick. Fragments of Ionic B2 cups from the lowest soil layers confirm a Late Archaic date for the arrival of the Greeks at Monte Palazzi. Finds of stone slingshots, bronze arrowheads, and iron

javelin points also corroborate the military importance of the site. The fort had an irregular plan, with a central courtyard and a main entrance on the southern side, and enclosed an area of 1,300 m². Other nonceramic finds include two bronze coins of Dionysius I of Syracuse, a Locrian bronze issue, and several micaschist utensils whose function is uncertain. This evidence, in addition to the preponderance of Locrian transport amphoras in the ceramic record, supports assigning the fort to Locri Epizephyrii. However, some of the fine ware from the 2010 excavations could have come from Hipponion, Locri's main subcolony on the Tyrrhenian coast of Italy, suggesting that this outpost was a node for intercoastal communication as well as territorial defense. A garrison on Monte Palazzi would have guarded both the frontier with Caulonia and an overland route to Hipponion, which continues to be used today. The site was abandoned or destroyed by the mid third century B.C.E., possibly after the Brettians conquered these two cities.

## Building a Regional System: Settlement Continuity and Agricultural Connection in Southern Italy

Darian M. Totten, Roanoke College

Scholars of the Roman economy often focus their studies on two spatial scales: the empire as a whole or the single site or local landscape. This focus has made it difficult to explore economic connections between rural sites, either by lacking detail of contextualized interactions or by isolating places from wider contexts. However, taking a "mid-scale" spatial approach to the evidence can demonstrate how local places formed a regional economic system.

In this paper, I present the synthesized results of a study of field survey and excavation data from rural contexts in southern Italy from the first-sixth centuries C.E. Through a detailed mapping of site data and comparison between local landscapes, I delineate a distinct region in the interior of southern Italy, stretching from the Molise to northern Puglia and into Basilicata, based on similar settlement patterns over time. Within this region, villas emerged at the same chronological moment, in the first century C.E., gradually replacing farms. There was also a significant degree of spatial continuity through time in these landscapes, with 65% to 80% of sites displaying continual occupation from the first-sixth centuries C.E. In addition to long-term occupation, excavated sites have also offered evidence of consistent production strategies over time. This continuity is indicative of a similar economic response within the region, characterized by long-term stability. Emphasizing the role that internal economic connections played in fostering this stability, I advance the hypothesis that the intraregional trade in pork and olive oil was an important factor contributing to the formation of this region. The mountainous areas of Basilicata and Molise could not grow olives because of their terrain and climate but lack evidence for imported Mediterranean oil. However, these mountain sites engaged heavily in pork production. The lowland landscapes to their east instead display considerable evidence of olive oil production, in an area ill-adapted to pig foraging. A reciprocal trade in pork and olive oil would have afforded these two areas a stable regional market for their respective goods and supported continued production and investment in rural sites. So while scholars often posit that trends in the wider Mediterranean trading economy determined

the economic circumstances of rural places, this south Italian regional system demonstrates the importance of exploring "mid-scale" connections to understand the economic history of rural contexts. It also shows that regional connections were a fundamental part of building the wider Roman economic system.

## Production, Animal Husbandry, and Distribution: Some Preliminary Thoughts on Economy at Poggio Civitate (Murlo)

Joseph R. Vansuch IV, Florida State University

Recent research on the faunal remains at the seventh and sixth century B.C.E. Etruscan site of Poggio Civitate has shed considerable light on methods of animal husbandry and the local economy of the site in both the Orientalizing and Archaic phases of its habitation. Faunal analysis of the Orientalizing deposits reveals a high concentration of pig bones, which suggests that the inhabitants practiced pannage in the local woods and thus more intensively used non-arable land. Evidence of production from the Orientalizing Complex Building 2/Workshop in the form of loom weights, spindle whorls, and carved bone also confirms an intensive manipulation of animal resources. Zooarchaeological remains and other animalrelated artifacts suggest that the inhabitants of Poggio Civitate employed an intensive system of husbandry on a scale normally beyond the means of commoners, but a corresponding lack of evidence for large-scale long-distance trade precludes the possibility that they practiced specialized pastoralism; what then emerges is a local aristocratic economy where the elites of Poggio Civitate commanded considerable animal resources and used byproducts of those resources for luxury production and to enhance their social, political, and religious status among local nonelites through the distribution of meat in sacrifice and banquets. Seen in this light, the animal resources at Poggio Civitate assume an important geopolitical role in the locality of the site which sheds additional light on the architectural form of the Archaic building. Due to evolving methods of collection during excavation, relatively few faunal remains were kept for analysis from Archaic contexts, but an increased attention to the protection and housing of flocks can be inferred from the form of the courtyard building and its two towers, which suggests that animals continued to play an important role in its sixth-century phase of occupation.

## Defining a Sanctuary in Northern Etruria: New Evidence from Poggio Colla (Vicchio di Mugello)

Ann Steiner, Franklin and Marshall College, Gretchen E. Meyers, Franklin and Marshall College, Michael L. Thomas, The University of Texas at Austin, and P. Gregory Warden, Southern Methodist University

Since 1995, the Mugello Valley Archaeological Project (MVAP) has conducted excavations at Poggio Colla, an Etruscan site located 35 km northeast of Florence. The research design of the project, sponsored by Southern Methodist University, Franklin and Marshall College, and the University of Pennsylvania Museum, is interdisciplinary. Stratigraphic excavation, scientific analysis, land survey, and geophysical prospection form the basis of an interdisciplinary regional landscape

analysis of Poggio Colla and the surrounding area. The project is nearing the end of its planned 20 years of excavation and survey. This paper covers the past five years of excavation and is focused on the arx. Excavations have uncovered at least one monumental structure, preserving evidence of multiple construction phases and substantial evidence for votive deposits and the ritual that accompanied them in every phase of the site's history. This paper also presents new evidence of monumental architecture, including column bases, more of a substantial stone altar, evidence for storage of grain in the final phase of the site's history, and new ritual deposits. A collaborative project with the Open University, United Kingdom, has brought to light early remains on the northwest slope, including an Orientalizing quarry and fire pits. Recent research projects include a major study of the bucchero, the deposit of victoriati uncovered in 2001, faunal remains, and evidence for textile production. Material from the site has appeared in a permanent installation in a regional museum in Dicomano and a temporary exhibition at the Meadows Museum in Dallas. A coring survey in 2007 revealed a general picture of the area around the arx. Plans for publication of the adjacent site at the Podere Funghi, excavated by MVAP from 1998 to 2005 and extensively surveyed through a project sponsored by the Keck Consortium, are well along. Publications including a study of the roof tiles and a preliminary standardization study of the local ceramic production have appeared, but destruction of the site by the landowner in 2009 has impeded completion of the final publication.

The site continues to produce evidence for understanding a north Etruscan sanctuary and settlement most of Etruscan history (seventh–second centuries B.C.E.).

## Archaeological Research in Ancient Satricum: New Discoveries, New Interpretations

Marijke Gnade, University of Amsterdam

In the summer of 2011, the University of Amsterdam continued its excavations in the lower settlement area of ancient Satricum, subject of systematical archaeological research since 2004. Notwithstanding the intensive agricultural activities carried out in the 1970s, the area, also known as Poggio dei Cavallari, revealed many remains of the Archaic settlement. Apart from a monumental road tract leading to the main sanctuary of Mater Matuta, the foundations of several adjacent buildings were identified. As such, the discoveries are an important complement to our knowledge of the urban organization and layout of the Archaic town, which until the discoveries in Poggio dei Cavallari, was restricted to the architectural remains on the acropolis of Satricum.

Moreover, various remains of the post-Archaic periods have been uncovered, offering complementary evidence of later occupation of the settlement so far lacking on the acropolis. They are related to restoration activities of the Archaic structures, the following abandonment of them, and the subsequent installation of a necropolis on top of the former habitation remains.

A small burial ground of ca. 50 inhumation graves was discovered during the last years of research. The burials, which date to the late fifth and fourth centuries B.C.E., contain unexpectedly rich funerary outfits consisting of personal ornaments and all kinds of pottery, indigenous Italic as well as imports from other

Mediterranean regions. The burial ground can be attributed to the same cultural background as two other burial grounds discovered in Satricum in the 1980s and attributed to the Volscian occupants of the Latin town, but they appear to be richer in outfit and of a later date, both aspects that are of consequence regarding earlier interpretations of the later history of the settlement.

### SESSION 4G Epigraphy

CHAIR: Garrett Fagan, The Pennsylvania State University

### Fishing with Fire: Comparative and Epigraphic Evidence

Ephraim Lytle, University of Toronto

In most accounts of fishing in the ancient Mediterranean and Pontic regions, little attention is given to methods employed at night in conjunction with fire, the light from which could be used to attract and concentrate schools of seasonally abundant species like sardine and mackerel. Recent discussions focusing on the potential productivity of ancient fisheries either ignore such methods altogether or suggest they will have been of little significance. In fact, there exists an abundance of ancient literary and early modern comparative evidence suggesting that under the right ecological conditions, fishing with fire would have been both widely practiced and economically important. This paper brings that evidence to bear on a few overlooked Greek inscriptions that can be interpreted as attesting fishing with fire. These are a little-studied Late Hellenistic dedication from Cyzicus on the Sea of Marmara (*IMT Kyz Kapu Dağ* 1539) and a dossier preserved in two copies at Roman Histria on the Black Sea (*I.Histria* 67, 68).

The dedication from Cyzicus is usually interpreted as attesting a tax-farming company, but the inscription includes a number of enigmatic terms that suggest this company comprised a fishing operation whose owners had leased the rights to a coastal location suitable for a large-scale, seine net deployed in conjunction with small boats equipped with fire baskets. The success of such operations hinged primarily on the skill of the individuals charged with finding schools of mackerel or sardine, sometimes as distant as 2 to 3 km from shore, and using firelight to lead the schools back to within the compass of the seine. In the dedication from Cyzicus, these individuals are termed, descriptively, *epagogoi*.

Such fisheries consumed considerable quantities of fuel, and travelers to the region, beginning already in the 16th century, attest a specialized trade in the resinous pinewood used in such operations. The dossier inscribed at Histria probably attests a similar use of forest resources in antiquity. It preserves letters from various Roman officials confirming the rights of the Histrians to conduct their salt-fish industry without paying duties to *publicani* at the southernmost mouth of the Danube. Much of the detail remains poorly understood, but it is clear that one of the privileges enjoyed by the Histrians involved carrying out torchwood from a managed pine forest within the delta without paying customs duties to tax officials at the mouth.

### **Epigraphic Evidence of the Integration of Larinum into the Roman State**

Elizabeth C. Robinson, The University of North Carolina at Chapel Hill

This paper forms part of a larger, more comprehensive study that combines epigraphic material with archaeological studies of settlement patterns and major monuments, to understand in greater detail the factors at work at the site of Larinum (Molise, Italy) during its integration into the Roman state. In this paper, I deal with a corpus of 204 inscriptions from Larinum and the surrounding territory that date from the first century B.C.E. onward, with a particular focus on the early period. The paper analyzes these inscriptions to clarify Larinum's relationship with Rome in this period through a study of local prosopography, tracing the principal families and their political and social links at the local and regional levels.

Larinum's rich epigraphic record has been cataloged previously, but it has not received an in-depth analysis. Similar studies of local epigraphy, particularly in central and northern Italy, have yielded important information about the survival of local families into the Roman period, as well as the names of key political players during the time of transition. By studying monument types and styles, epigraphic habits, and commissioners' names, a more complex picture of the processes of continuity and change emerges. For example, about one-eighth of the inscriptions in my sample provide examples of intermarriage and social networks between Larinum and neighboring communities at the time of the town's adoption into the Roman state and also in later periods. Furthermore, the epigraphic record's relative scarcity of Roman names may reflect the preservation of local power networks after Roman conquest. Powerful local families, such as the Vibii, who are named in inscriptions from Larinum and who were also active in Roman politics, maintained and reinforced their status throughout the transitional period. The inscriptions from Larinum also intersect nicely with the historical record, particularly with Cicero's Pro Cluentio. Family names that are mentioned in the oration, such as Cluentius, Vibius, and Papius, appear in the inscriptions, and an epigraph dedicated to Sulla and dating to his dictatorship further corroborates elements of Cicero's speech.

While studies of the formation of the Roman state sometimes deal with cities as political abstractions, a study of local prosopography provides information about individual political activity. Focusing on the agents involved in the processes can shed light on the ways in which the inhabitants of Larinum maintained and restructured local power networks and social relationships, vis-à-vis each other and Rome, during this important transitional period.

#### The Name of Horace's First Mistress

John D. Morgan, University of Delaware

In two of his *Epistles* (1.7, 1.14) and two of his *Odes* (4.1, 4.13), which were written ca. 20–15 B.C.E., Horace (65–8 B.C.E.) mentioned his much earlier love affair with a mistress whose name is transmitted in various forms by the medieval manuscripts of his poems: Cinara, Cinyra, Cynara, Cynira, etc. Although there have been some doubters, the manner of Horace's repeated references to his love for this girl has induced most scholars to believe that she was a real woman, not

a fictitious construct by the poet. That Horace did not mention her in any of the epodes and odes he composed in the 30s and 20s B.C.E. might suggest she did not really exist, but it could instead indicate that his affair with her occurred even earlier, in the 40s B.C.E.

My searches of both Greek and Latin epigraphical databanks indicate that this girl's name was almost certainly not Cinara (artichoke), which is otherwise unattested as a personal name, but could well have been Cinyra or equivalently Cinura, which are well attested on Latin inscriptions. One of these is a grave stele found in 1975 at Montemilone, near Venusia, Horace's native city, in southern Italy, which presents the following well-preserved text: "Cinura | L. Salvi h(ic) | sita est. | Silo L. Salvi) | posuit" (Cinura, Lucius Salvius' [slave], is buried here. Silo, Lucius Salvius' [slave], placed [this stone]).

Silvestrini, who first published this inscription in *Epigrafia e Territorio* Vol. 3 (Bari 1994) stated that the type of this stele and its lettering indicate it should be dated to the end of the Republican or the beginning of the Augustan age. This dating coheres very well with the implication of Horace's statement in *Odes* 4.13.22–23 ("Cinurae breves | annos fata dederunt") that Cinura had died at a young age many years earlier. Hence, it is probable that this is the grave stele of the girl who was the mistress of Horace when he was a very young man ca. 45 B.C.E.

The Greek word *kinyra* is a transliteration of a Phoenician word that means lyre. Inscriptions provide many other examples of Latin slave names that were the names of musical instruments (e.g., Calamus, Lyra, Chelys, and Sambuca [another Greek word of Phoenician origin for a stringed instrument]). Hence, Cinura would be a very appropriate name of the earliest mistress of the young man who would become Rome's greatest lyric poet.

**The Dedication Inscription from Augustus' Victory Monument for the Actian War** *William M. Murray,* University of South Florida, and *Konstantinos L. Zachos*, Scientific Committee of Nikopolis and Institute for Epirote Studies

Within a few years following the deaths of Mark Antony and Cleopatra, Augustus (then Octavian) dedicated an impressive monument to celebrate his victory in what came to be known as the Actian War. On the site of his personal camp overlooking the Straits of Actium, he built a massive podium, which supported an elaborately decorated altar, statues, and a pi-shaped stoa. The podium's southern retaining wall, facing toward the city of Nikopolis in the plain below, greeted those who first approached the monument. Into this wall were socketed bronze warship rams cut from the prows of Antony's and Cleopatra's largest ships. Above the rams, Augustus placed a large and impressive inscription, cut into a course of large rectangular blocks in letters that were 30 cm tall.

Between 1913 and 1996, 44 fragments from the monument's inscription course have been recorded. Despite this large number of fragments, a satisfactory reconstruction has never been produced because the inscribed blocks were found over the course of many decades, because some fragments discovered between 1913 and 1927 have since disappeared, and because the text appeared to be extremely fragmentary. Recent developments now allow for a thorough reevaluation of this important inscription and make it possible to recover the original with greater

confidence. First, a series of brief reports have been published from the archives of the Greek Archaeological Service that provide new information about blocks discovered between 1913 and 1927. Second, during the course of his recent excavations (1995–2001), Konstantinos Zachos recovered seven new inscribed fragments and gathered all the surviving blocks into a single location, greatly facilitating their study. Finally, during 2009, William Murray conducted a detailed examination of each surviving block and recorded a series of 3-D laser scans that enabled an accurate analysis of the letter spacing between preserved letters.

This paper presents the preliminary results of our study of this important inscription. It proposes a revised text incorporating all 44 blocks, calculates the inscription's original length, suggests the precise location of the text on the original monument, and correlates this with known findspots of recorded blocks. In so doing, the authors hope to establish a reliable text for the assessment of Augustus' first official statement regarding the Actian War and its outcome.

#### The Traveler's Bill?

Garrett Fagan, The Pennsylvania State University

An inscription from Aesernia depicts, at the bottom of the stone, an image of two men facing each other, one of them a hooded traveler with a saddled mule at left. The text, arrayed above, reads (*CIL* 9 2689 = *ILS* 7478):

L. Calidius Eroticus | sibi et Fanniae Voluptati v(ivus) f(ecit). | copo, computemus. | habes vini (sextarium) I, pane(m) | a(ssem) I, pulmentar(ium) a(ssem) I. convenit. puell(am) | a(sses) VIII. Et hoc convenit. faenum | mulo a(sses) II. Iste mulus me ad factum | dabit.

L. Calidius Eroticus made (this) for himself and Fannia Voluptas while he was alive.

Nothing is known of the stone's original context; it is roughly datable on shaky letterform grounds to the High Imperial era. The opening line echoes the tone of an epitaph ("sibi ... vivus fecit" is a funerary formula), but the rest of the text is clearly a joke.

Perhaps this is merely the epitaph of a man with a good sense of humor. But the onomastics are suspicious: L. Calidius Eroticus means, roughly, "Lucius Hot-Stuff Lover" and Fannia Voluptas, "Fannia Delight." Neither name is well attested in Roman nomenclature. Moreover, the conversation between the taverner (*caupo*) and the traveler, both depicted in the crude relief, suggests that the entire stone once served as the sign for a named tavern ("Lucius Hot-Stuff Lover and Fannia

<sup>&</sup>quot;Innkeeper, let's settle up"

<sup>&</sup>quot;You have one sextarium of wine and bread, one as. Relish, one as."

<sup>&</sup>quot;Agreed."

<sup>&</sup>quot;The girl, eight asses."

<sup>&</sup>quot;Agreed again."

<sup>&</sup>quot;Hay for the mule, two asses."

<sup>&</sup>quot;That mule will be the ruin of me!"

Delight's") that humorously drew customers by advertising the amenities, goods, and services on offer. Comparable tavern signs are known.

There remains the issue of the funerary tone of the opening line, "[he] made this for himself and his Fannia Voluptas while he was alive." The phrase hardly refers to the tavern itself; why would a proprietor say he built a tavern "while he was alive"? A more likely explanation is found in the juxtaposition of pleasure and death in Roman thought (iconographic examples are discussed; e.g., skeletons bearing wine jugs, comparable inscriptions). The message was, "Enjoy life while you have it, as death comes soon enough," a sentiment entirely appropriate for a taverner and his customers.

### Excuse Me, Do You Know the Way to Mr. Aadiriis.v.'s House?

Tanya K. Henderson, University of Alberta

Dating from the Social War, the eituns inscriptions provide unique insight into how the Oscan citizens of Pompeii communicated navigational routes in the first century B.C.E. The function of the inscriptions, generally believed to direct the militia to specific muster points throughout the city, has been debated, and although their intent is an important component of the inscriptions, what is more revealing is how they communicated directions and the markers they use as identification, which provide an ancient ideological construct of Oscan Pompeii. Within these six inscriptions, no less than seven personal names are recorded. This provides not only a sense of the urban landscape and how it was communicated but also a sense of where specific individuals may have lived. The significance of naming the houses of specific individuals within the inscriptions further serves to limit the knowledge of where these muster points are and limit the information to an Oscan-speaking public. The information is locally specific and without knowledge of where specific individuals live it is not possible to find specific locations. By comparing how directions are given with other contemporary inscriptions and literary accounts of directions, it is possible to determine whether there is a general Mediterranean-specific language of direction or if the directions given are culturally specific. The main comparative evidence comes from Rome, but examples from the Greek world are also examined.

### The Healing Touch: Anointers and Masseurs in the Roman Empire

Sarah E. Bond, Washington and Lee University

In the Roman empire, the application of ointments and the art of massage was practiced predominantly by slaves and freedmen typically called *unctores* in the Latin West and *aliptae* in the Greek East While attention has been paid to the production and use of ancient oils, there has been little investigation into the professional typologies, associative identities, and changes in status undergone by the professionals who applied them. Although largely overlooked, the material record communicates numerous roles for these professionals. I reconcile the archaeological evidence—composed of epitaphs, papyri, graffiti, dedications, statue bases, reliefs, and mosaics—with the literary evidence (e.g., Juv. 3.76) to define clearly their

function and opportunities within Roman society. Dozens of inscriptions (e.g., *CIL* 6, 631; *IEph* 629) and papyri (e.g., SB 14.12059) attest to the associative connections and socioeconomic roles of these tradesmen. I focus on their attachment to various voluntary associations (e.g., athletic guilds) and also identify independent associations of anointers and masseurs within communities in Italy, Greece, Asia Minor, and Egypt from the first century B.C.E. to the fourth century C.E.

First, my paper investigates the extensive nomenclature for anointers and masseurs within the Roman world. Second, I examine the social status and associations of these professionals, analyzing the factors that determined their standing in Roman society. Numerous elements contributed to the perceived esteem or disrepute of these tradesmen. Religious anointers (e.g., the attendant that mimed the oiling of Jupiter's statue) enjoyed a different status from the personal slaves who oiled their masters, or even from those employed by the baths to rub down the visiting bathers. I argue that, while the purpose of the massage mattered (e.g., medicinal vs. recreational), an unnoticed component was the status of the individual being oiled. The physical contact involved in massaging and anointing was a highly personal service. Likewise, the person being massaged—a corpse, a gladiator, a senator-could imbue prestige or ignominy on the masseur. Moreover, I indicate that new diseases and shifts in medicinal trends affected anointers and masseurs. Physicians' assistants, referred to as iatraliptae, became the physicians themselves in the early empire (Plin. NH. 29.2) and treated skin outbreaks such as mentagra. I investigate the roles and identities of these overlooked professionals, and also use them as a lens with which to examine the social effect of changing medical conventions.

#### Outside the Limes: A Latin Inscription in the Caucasus

Andrew Findley, Washington University in St. Louis

Carved onto a limestone boulder a few miles west of the Azerbaijani shore of the Caspian Sea, near the modern city of Qobustan, is the easternmost known example of Latin epigraphy (AÉpigr 1951, 263). The text itself is carved into the rough surface of a large limestone boulder and reads: "IMP DOMITIANO | CAESARE • AUG | GERMANIC | L • IULIUS | MAXIMUS • | LEG XII FUL". Because the inscription refers to the Twelfth Legion Fulminata and Emperor Domitian, scholars have regarded it as confirmation of organized Roman military activity in the Caucasus region during the Flavian dynasty (C.E. 69–96). Yet no study has considered the inscription within its historical and physical contexts, and many even err on the location of the inscription. My paper offers an alternative interpretation based on the specific geographical location and immediate surroundings of the inscription.

The Qobustan inscription was carved at the nexus of major travel routes connecting the eastern borders of the Roman empire, the Caspian Sea, Persia, and the northern Caucasus region. Located near the inscription is an abundance of small natural rock formations suitable for temporary shelter. Moreover, the site abounds with prehistoric petroglyphs that demonstrate a long-term human presence in the area. A striking parallel for this situation exists on the far side of the Roman world, at Wadi Mineh, in the eastern Egyptian desert, where rock-cut Latin inscriptions are found in combination with natural rock shelters and prehistoric petroglyphs.

A documented trade corridor near Wadi Mineh suggests that the site functioned as a temporary stopping place for traders during the Early Imperial period. I argue that the Qobustan inscription, too, may have been carved by a private trader, perhaps waiting in the nearby rock shelters either for trade partners to appear or for unfavorable circumstances to pass. Because the Qobustan inscription was carved by a Roman centurion, it may be the personal epigraphic statement of one formerly based near the eastern *limes* and who ventured into unfamiliar territories to engage in private enterprise. If so, it constitutes rare evidence documenting the activities of private Roman individuals beyond the borders of the empire. It also removes one of the few indications that the first-century emperors, and in particular Domitian, aspired to military conquest in the Caucasus region, suggesting the need to reevaluate that scenario.

# SESSION 4H: Colloquium Current Research at Nemea: New Finds and New Insights

ORGANIZERS: Kim Shelton, University of California, Berkeley, and Elizabeth Langridge-Noti, DEREE, The American College of Greece

### **Colloquium Overview Statement**

This colloquium presents current archaeological work at the site of the Sanctuary of Nemean Zeus in Greece. The papers of the session span the chronological range of the site, from prehistory to the Byzantine period, showcase the work of established scholars, highlight the involvement of younger scholars and graduate students, and spotlight lesser-known materials and aspects of the site itself.

The six papers begin with a field report from the 2011 excavations at Nemea with their focus on the earlier phases of human use and manipulation of the area, investigating the transition from the Bronze Age to the Iron Age and the emergence of the ritual area. This examination of the early phases of the sanctuary continue, in the second paper, which discusses the ritual and cultural implications of the visible manipulation of landscape for the archaic heroon and its associated embankment relative to the Neolithic, Bronze Age, and Early Archaic strata that underlie them.

The approach of the third paper combines the scientific and humanistic analyses of Late Classical/Hellenistic pottery from the excavations. The identification of wares and provenances permit the author to suggest reconstructions of the components of the regional vs. international outlook of the sanctuary at the height of its built environment.

The last three papers focus on aspects of the later habitation of the site and valley. Of these, two use finds from the Nemea Valley Archaeology Project. The first transitions from the earlier to later material by addressing changing land use in the valley from the Archaic to Roman periods. Fluctuations in the intensity of land exploitation over time and the suitability of Nemea for nonsubsistence polyculture are examined using intensive pottery study and GIS. The second compares the medieval material from the survey to that of the site to create a medieval overview and reveals substantial domestic and agricultural use of the sanctuary area

and stadium in the 12th and 13th centuries C.E. that highlights changing land use and human activities within the Nemean landscape. The final paper compares the skeletal material from the Early Christian and Byzantine periods; although living conditions appear similar from one period to the other, changes in burial deposition suggest a changing composition in the population.

By emphasizing new methodologies or by focusing on lesser-known periods at, or objects from, the site, this session enriches understanding of the development the area of the Sanctuary of Nemean Zeus and its relationship to the surrounding valley.

#### Excavations at Nemea: The 2011 Season

Kim Shelton, University of California, Berkeley

This paper presents the preliminary results of the second season of renewed exploration and excavation of the Sanctuary of Zeus at Nemea and its vicinity by the University of California, Berkeley, under the auspices of The American School of Classical Studies at Athens. The focus of the new excavations is the early history and prehistory of Nemea, especially in the area of the Sanctuary of Zeus. The research goal is to investigate the process of transition in the area of the later sanctuary from border region between two emerging political powers to a ritual center that became a focus for pan-Hellenic national and ethnic identity; a change that the area exhibits as it moves from the prehistoric period into the early historical one.

Several areas of the site are investigated through excavation this season, as well as part of the Tsoungiza Hill, location of successive prehistoric habitations. Some trenches, such as those in the Hero Shrine, continue the investigation of features uncovered last season. Other areas to the southwest of the temple, in the heart of the sanctuary and east of the altar, delve deeper into the early history of the site. A few trenches also investigate the stratigraphic sequence of the sanctuary's use. Initial results both confirm and supplement information gained through the renewed excavation program and the ongoing ceramic study from past excavation. Preliminary results of the 2011 season are discussed.

### The Archaic Heroon and Nemean Landscapes

Nathan Arrington, Princeton University

The construction of the heroon at ancient Nemea was a crucial component in the development of the Archaic pan-Hellenic sanctuary. The low mound marked the alleged grave for Opheltes, in whose honor the original games were said to be held. Moreover, the heroon, together with the embankment emerging from it, extended over 100 m, and accordingly this (joint) monument required a significant amount of labor and altered the landscape of the valley.

This paper investigates how the heroon and the embankment both responded to and shaped the visible past and the natural landscape within the political and cultural contexts of the Archaic period. It analyzes the relationship of the Archaic monuments to the underlying Neolithic, Bronze Age, and Early Archaic levels, and explores the cultural and ritual significance of the wide spectrum of sediments and matrices within the monuments.

## "Local" Ceramics from the Houses at Nemea in the Late Fourth-Early Third Centuries B.C.E.: Preliminary Results

Heather Graybehl, University of Sheffield

The ongoing study of ceramics from the rebuilding period at Nemea (late fourth-early third centuries B.C.E.) aims to identify and define local and regional ceramics from the sanctuary through a program of scientific ceramic analysis. To fully understand economic activity and visitorship at the sanctuary in the Late Classical and Hellenistic periods, it is necessary to gain a greater understanding of ceramic production and provenance. The combination of typological and chronological study with petrographic and neutron activation analysis produces definitions of characteristic wares in addition to providing insight into the provenance of the ceramics. No evidence for local ceramic production at Nemea has been found to date; however, previous pottery studies indicate that the majority of pottery is local or regional in origin. The influence of Argos in the sanctuary, in addition to the roles of nearby Kleonai and Phlious, makes it likely that the ceramics from the sanctuary represent the greater economic activity and vessel production of the region, rather than a single production center. Thus, the petrographic and chemical studies endeavour to identify, define, and provenance the wares from the greater area, to understand the relationship of production and exchange in the Korinthia and Argolid during the Late Classical and Hellenistic periods.

The majority of the examined ceramics comes from several buildings found in the sanctuary and the houses. These buildings represent multiuse structures with an abundance of cooking, table, and fine wares. The array of ceramics and indications of building use provide a varied assemblage, allowing the study to center on both fine and coarsewares. Thus, the extended study of the ceramics from these domestic areas also creates a greater understanding of the functions of the buildings to help clarify the activities that took place in them.

This paper outlines this ongoing study and the preliminary results from the typological and macroscopic analysis. Additionally, the aims of the petrographic and chemical studies, to be carried out in 2012, are addressed. The study of the Hellenistic houses, combined with the program of analysis, sheds new light not only on the role of ceramic production in Nemea and the surrounding areas but also on the types of activities taking place on the site.

### Nemean Neighbors: A Survey Perspective from the Nemea Valley

Christian Cloke, University of Cinncinnati

Finds from the Nemea Valley Archaeological Project (NVAP) illustrate how and to what extent ancient inhabitants farmed and exploited this land-locked and often politically marginal landscape in the southwestern Corinthia. Analyzing and contextualizing survey finds from the Archaic to Late Roman periods, this paper examines diachronic change in the Nemea Valley, with particular attention given to agriculture and related rural activities. Although the relocation of the Nemean games in the third century B.C.E. diminished the area's sociopolitical importance, the continued prosperity of nearby Corinth and Argos, and a thriving regional trade in the Late Roman period, allowed the area to flourish, particularly through

nonsubsistence polyculture. Within the tracts walked by the survey, a predominance of small sherds likely to have been included in domestic waste used as fertilizer suggests that manuring was practiced during the Roman period. Numbers of rural sites peak in the Archaic, Classical, and Late Roman periods, with the last showing strong signs of villa-based agriculture. The functional variety of on-site ceramic assemblages is used as an indicator of activity, helping to distinguish cemeteries from rural shrines, and storage and processing sites from true farmsteads, which are less common among rural sites than many Greek surveys acknowledge. Bridging the gap between published results for the prehistoric and Byzantine periods, this study examines life in the backyard of Nemea and demonstrates continuity and even growth in agricultural exploitation during centuries when the sanctuary was inactive.

## The Sanctuary of Zeus at Nemea: The Medieval Deposits (12th–13th Centuries C.E.) *Effie Athanassopoulos*, University of Nebraska, Lincoln

This paper reports on the ongoing study of the medieval deposits from the excavations at the Sanctuary of Zeus and stadium in Nemea, as part of the research and publication program of the Nemea Center for Classical Archaeology.

The excavations have produced substantial evidence for occupation from the 12th–13th centuries C.E. Farming activities were extensive; farming plots, an irrigation ditch, agricultural implements, ceramics, and coins of this period have been found throughout the area. Two domestic structures have been also uncovered. A 13th-century house located southeast of the temple was excavated in 1976. This structure consists of two rooms, along with storage pithoi and two cisterns. A second house, located immediately west of the modern Nemea River, was excavated in 1998.

The Early Christian basilica saw considerable activity, centered on a medieval chapel built over its remains. The ruined chapel was removed by French archaeologists in 1884, when systematic investigations began in the area. Excavations in 1980 revealed that the terracotta-tile paving of the basilica was covered over by medieval layers, including graves and pits. The 1984–1986 excavations produced further evidence for activity in this area, including 25 graves along the south side of the basilica.

The stadium is another area with substantial medieval deposits. Large quantities of ceramics and coins dating to the 12th and 13th centuries were recovered during the excavations of its north end, especially in section EE 25.

The systematic study of the medieval deposits from the sanctuary and the stadium provides a better understanding of the spatial distribution of this material, including farming activities, domestic structures, ceramics, and other finds. Selected deposits of coarse and fine wares are being studied to refine the chronology of well-represented styles. The excavated medieval material is then combined with the survey evidence of the Nemea Valley Archaeological Project to reconstruct land use, settlement, and other activities in the Sanctuary of Zeus and its vicinity.

## A Bioarchaeological Approach to the Early Christian and Byzantine Burials from the Sanctuary of Nemean Zeus.

Jared S. Beatrice, Michigan State University, and Jon M. Frey, Michigan State University

Much more famous for its monuments and history dating to an earlier era, the site of Nemea also contains a wealth of information concerning the later Roman and Byzantine periods. The Nemea Valley contains two large basilicas and no less than 300 burials, which suggests a substantial post-classical occupation of the area. Yet we know relatively little about these later inhabitants.

This paper presents the preliminary results of an analysis of the human skeletal material recovered at the site during the last four decades. By combining the results of a comprehensive skeletal analysis with the spatial data from the archaeological accounts, our study sheds light on the nature of life and death at Nemea in the Early Christian and Byzantine periods. A comparison of the burials from these two eras shows that, in spite of the different periods of time, age-at-death distributions, and indicators of health problems such as anemia remained relatively constant. The prevalence rates of dental enamel developmental defects reflecting childhood stress also show small temporal differences that are consistent with similar living conditions during each period. The similarities in aspects of health between the two groups make certain differences all the more interesting. For example, while early Christian burials have been uncovered in many locations throughout the site, those of the Byzantine period tend to cluster around the collapsed remains of the basilica. In addition, the earlier period burials tend to contain a single individual while the later period graves often feature multiple interments. Most interesting, later burials contain more than twice as many males as females. These results seem to suggest that, in spite of the similar living conditions it offered, the Nemea Valley in the Byzantine period may have been home to a markedly different group of people from those in the Early Christian period.

### SESSION 41 Aphrodisias

CHAIR: Katherine Welch, Institute of Fine Arts, New York University

## **Recent Archaeological Research at Aphrodisias: 2010 and 2011 Seasons** *Esen Ogus*, Koc University

This paper presents the results of the 2010 and 2011 fieldwork at New York University's excavations at Aphrodisias. Recent archaeological research has aimed to clarify several significant questions concerning the settlement phases on the main north—south avenue of the city, architectural layout of the west portico of the north agora, and the urbanism patterns in the residential area north of the Temple of Aphrodite.

The north-south avenue of the city, first excavated in 2008, continued to be the main focus of fieldwork. The avenue is the thoroughfare connecting the monu-

mental gate of the Temple of Aphrodite to the theater. Recent excavations partially exposed the marble paving of the road and the stoa on its east and west sides. Most importantly, research has shown the multiple functions of the bordering stoas of the avenue as an urban space and various phases of their gradual settlement from the Early Imperial to the Islamic period.

Excavations in the north agora have led to an understanding of the architectural connection of the agora with the Late Antique pool complex, the tetrastyle court, that lies to the northeast of the Hadrianic Baths. The west portico of the north agora, previously assumed to have double colonnades, was understood to have a single row of columns.

Two trenches excavated in the residential field north of the Temple of Aphrodite aimed to date the grid plan in this part of the town. These trenches confirmed the earlier assumption that monumental settlement in this area did not occur before the Early Imperial period. In addition, the excavations have revealed that the north–south oriented roads had similar alignments in both trenches. Further excavation is needed, however, to understand whether the alignment of the east–west oriented roads differed and whether same grid system applied throughout the area.

In sum, recent excavations at Aphrodisias have resulted in an understanding of settlement phases on the major thoroughfare of the city, a new reconstruction of the city's plan on the west portico of the agora, and a fresh perspective of the urbanism patterns to the north of the city.

## **Set in Stone: Incised Architectural Drawings from the Civil Basilica at Aphrodisias** *Philip Stinson,* University of Kansas

Excavation of the Roman civil basilica at Aphrodisias in 2005 and 2008 revealed incised architectural drawings and measurements that contribute to our knowledge of architectural drawings and their function in classical antiquity. Found in situ on the marble floor paving near the tribunal in the south hall of the civil basilica, two carefully drafted full-scale drawings and part of a third depict building entablatures and an arch in profile and elevation. Two in situ measurement markers and a loose fragment of a third were found adjacent to the drawings. Although differing in their details, the entablatures resemble the real ones belonging to many major monuments constructed at Aphrodisias dating to the second and early third centuries C.E.; the civil basilica itself, built in the Flavian period, provides a terminus post quem for their inscribing. Lengths for the two intact measurement markers are 28 cm and 31.5 cm, or within the general range of the standard foot used at Aphrodisias. These clues and others suggest that these special inscriptions are not contemporary in date, and that they accumulated in the south hall over a period of time. Ancient drawings inscribed on stone during the Hellenistic and Roman periods are often interpreted as "blueprints" incised on available marble surfaces for reference during construction of new buildings, and this is certainly one possibility for functional interpretation. A second possibility takes into account architectural and spatial context, the setting being the south hall of the civil basilica, one of the most important and prestigious municipal public spaces at Aphrodisias. When considering context, another possibility arises. Hypothetically,

these drawings and markers could have served an official purpose of some kind, the most likely being the "setting in stone" of contractual agreements between architects and commissioners. New discoveries from Aphrodisias expand the realm of possibilities for interpreting the function of ancient architectural drawings and provide further evidence for a business purpose for the civil basilica.

### The Hadrianic Baths of Aphrodisias in Late Antiquity

Allyson E. McDavid, Institute of Fine Arts, New York University

Discovered in 1904 by Paul Gaudin, the Hadrianic Baths were later determined to be one of the largest civic monuments of Aphrodisias. Underwritten by local gentry, they were dedicated to the emperor in the early second century C.E. The 500-year lifespan of the baths, however, makes for an exciting biography of the monument beyond its initial high imperial foundation. Supported by architectural, epigraphic, and sculptural evidence of transformation, the fourth to seventh centuries illustrate a period of concerted renovation activity that enabled the Hadrianic Baths to thrive through repeated modification, after which time they and the city of Aphrodisias were abandoned.

This paper presents the results of a preliminary investigation into the Late Antique history of the Hadrianic Baths, providing evidence of phased alteration of its fabric through discrete campaigns of repair and reuse, as well as changes to its initial architectural design. Additions to larger bathing spaces of smaller, more intimate pools provoke the issue of "privatization," or creating zones of exclusivity within the public baths, while concurrent adjustment to circulation through the building indicates a changing use of space and perhaps some functional contraction. Economic questions are also raised by the scale and type of repairs made to the structure, such as the sealing off of sections of its heating and convection armature; the extensive use of brick infill to the primarily limestone ashlar and petit appareil core; and the redeployment of marble slabs from entirely different contexts, many inscribed for use in the first and second centuries, in later wall and floor revetment campaigns.

The material remains of the Hadrianic Baths attest to an enduring civic pride throughout Late Antiquity, expressed through rigorous maintenance and transformation of the complex; its later phasing may mirror the needs of a society whose attitude toward bathing also underwent nuanced change.

#### The Achilles and Penthesilea Group from the Hadrianic Baths at Aphrodisias

Maryl B. Gensheimer, Institute of Fine Arts, New York University, and Katherine Welch, Institute of Fine Arts, New York University

One of the highest-quality and most complete replicas of the virtuoso Achilles and Penthesilea statue group was excavated at Aphrodisias in the 1960s, although it was never published. Recent research has identified additional fragments belonging to the group: both Achilles' and Penthesilea's right feet; part of Penthesilea's Phrygian cap; and, notably, Penthesilea's right hand, which does not survive elsewhere but is of critical importance in reconstructing the figures'

respective poses. Study of these fragments, in combination with other full-scale replicas, today extant only in part, as well as the celebrated casts in Basel, expands and clarifies our knowledge of the iconography of this important statue group and its Hellenistic original.

The Aphrodisias replica was discovered in its Late Antique context, in which it had been set up on a reused base in the tetrastyle court of the Hadrianic Baths following some repairs to damaged areas of the sculpture. The Achilles and Penthesilea was juxtaposed with a full-scale replica of the so-called Pasquino Group and a colossal nude male torso wearing a chlamys, both also redeployed in the Late Antique period. Archaeological work reveals that all three pieces (the two groups and the colossal torso) faced east, onto the viewer arriving at the baths through their principal doorway, from the main market square of the city, the north agora. Our study elucidates the thematic intent behind this sculptural ensemble and the poignancy of the contrast between the dying Penthesilea in the Achilles and Penthesilea group and her pendant, the dead Patroklos in the Pasquino.

The unique sculptural material from Aphrodisias, together with its known find context, allows for new reconstructions of the original iconography of a major Graeco-Roman statue group and illuminates the history of the statue's repair and display context in the fifth century C.E., a time of great cultural change and conflicting political and religious agendas within the city.

## A New Depiction of the Birth and Childhood of Dionysos on a Sarcophagus from Aphrodisias

Sarah Madole, Institute of Fine Arts, New York University

The story of the birth of Dionysos is one of the most unusual narratives in Greek mythology. In fact, the deity was born twice before finally being ushered to safety in the hills of Nysa. The violent death of the pregnant Semele, one of Zeus' lovers, the birth of Dionysos from Zeus' thigh, and the transfer of the newborn to the nymphs of Nysa under the aegis of Hermes, comprise the three key components of this partly tragic, partly "supernatural" birth narrative. An unpublished sarcophagus from Aphrodisias depicts two vignettes from this cycle: the second birth of the infant and his subsequent arrival at Nysa. Juxtaposed with this mythological narrative, a pair of standing portrait figures presumably represents the patrons of the sarcophagus. The Aphrodisian monument is a new addition to the unusual corpus of birth and childhood—themed Dionysian sarcophagi, of which there are less than 10 examples preserved from the Roman period. The notable appearance of this imagery—so far unique in Asia Minor—suggests that it reflects a special commission and conveyed a particular intention of the patron(s). Based on this supposition, the potential significances of the selection of this iconography are considered. These include the consolation of the bereaved, commemoration of the deceased, regional connections with local cult, and civic benefaction.

## From Local to Imperial: Honorific Sculpture and the Construction of Imperial Power at Aphrodisias

Elizabeth A. Wueste, University of California, Berkeley

In understanding how the Romans were able to create and sustain such a farreaching and expansive empire, it is crucial to consider how imperial power was constructed within a provincial setting. This paper examines the interactions of imperial control with the local government of Aphrodisias during the Imperial and Late Antique period, as traced through its representation in honorific sculpture and epigraphy. Because of its extensive corpus of well-preserved honorific sculpture and inscriptions, in addition to its historically documented change from a civitas libera into a provincial capital, Aphrodisias is a prime location to test the aesthetic effects in sculpture of varying levels of imperial involvement with the local government. The evidence sampled includes a diachronic survey of statues and inscriptions erected to honor specific persons dating from the Republican period into the sixth century C.E. By comparing the number of statues and inscriptions from Aphrodisias in different time periods, the data show that statues wearing the civic costumes of the himation or the toga and inscriptions honoring local men for local offices are far more prevalent during the period when Aphrodisias was a civitas libera. However, after Aphrodisias became an imperial capital, honorees were far more likely to be honored for imperial offices and to wear the cuirass or the military-style chlamys cloak. Therefore, imperial and local power at Aphrodisias each had its own particular costumes that were deemed appropriate for its honorific statues: military costumes for imperial officials and civic costumes for local ones. The costumes of the statues and the accompanying epigraphy bring to light the underlying cultural conceptions of imperial control as primarily militaristic while emphasizing local dominance over civic matters. The dichotomous administration of the empire—wherein the military was overseen at an empire-wide level and centrally from Rome, while civic affairs including taxes and local government were handled at the local level—has already been studied using historical sources and administrative records. However, the same ideology can be further traced through the semantics of the visual imagery of honorific sculpture. The honorific statues at Aphrodisias reflect this cultural understanding of imperial control and military might against local governance and civic administration, and also potentially reinforced and strengthened these concepts for the viewing populace.

## An Expression of Authority: the Architecture of the Late Antique Atrium House at Aphrodisias, Caria

Ian M. Lockey, McMaster University

This paper presents key new evidence about the importance of domestic space to the political landscape of the late antique city by examining the Late Antique renovations and urban context of the Atrium House at Aphrodisias. Through the creation of a space reminiscent of large public monuments and the establishment of a close architectural link to the city's sanctuary of the imperial cult, the owner advertised his political ambition and authority to the city.

The Atrium House, initially constructed in the first century C.E., underwent large-scale renovations in the mid fourth century. The resulting townhouse covered a footprint of more than 2,000 m² and featured four courtyards, making it the largest and most architecturally complex domestic structure excavated at Aphrodisias to date. An apsidal peristyle suite created during this period, apparently unique in the ancient world in its form and decoration, became the major public focus of social activity in the Atrium House. A large apsidal wall built in place of a south portico featured the only newly carved fourth-century architectural decoration in the city, and it carried a two-storey aediculated facade that rose to a height of more than 10 m, filled with mythological and portrait sculpture, including a series of philosopher shield portraits installed in the porticos in the fifth century C.E.

Two further apsidal rooms within this suite functioned as a reception space and an audience chamber. The three additional courtyards were also richly decorated and featured a fountain monument and major sculptural display. The use of typical architectural and sculptural vocabulary of elite domestic structures on a scale more in keeping with a public monument was an important way in which the owner reaffirmed his status and competed with his peers.

Renovations to the house also encroached upon ground previously used by the Sebasteion complex, a large sanctuary dedicated to the imperial cult that at some point became a bustling market. The north building of this sanctuary was forced to taper around the apsidal peristyle, and a large monumental doorway into the Atrium House opened from this complex, underscoring the importance of this family to the Late Antique city. It is likely that the owner of the Atrium House had an important political connection to this complex, since he was able to create such a direct link between his house and the sanctuary courtyard.

My analysis of the Atrium House, therefore, offers exciting new information about the ways in which the aristocracy of the Roman world manipulated the architecture of domestic spaces to generate political authority.

#### Anastylosis of the Sebasteion at Aphrodisias, Turkey

Thomas Kaefer, Aphrodisias Excavations, and Gerhard Paul, Aphrodisias Excavations

The Sebasteion, excavated between 1979 and 1981, was a grandiose temple complex dedicated to Aphrodite and the Julio-Claudian emperors and was decorated with a lavish sculptural program. It is located on the eastern side of the main north—south street that ran past the tetrapylon to the theater. Long and narrow in plan, the complex is composed of four distinct architectural elements: a propylon at the west, and two long buildings to the north and south that frame a paved sanctuary or processional space. They complex featured marble relief panels depicting mythological scenes; members of the imperial family including Augustus, Claudius, and the youthful Nero; and personifications of conquered provinces.

Anastylosis of a portion of the south building began in 2005 and is now all but completed. Here we present this anastylosis in the context of other such anastyloses in western Turkey (Ephesus) and at Aphrodisias itself (the tetrapylon, completed in 1990). This illustrates the evolution of methods of anastylosis from the

1980s to the present. From earlier examples to the Sebasteion, one sees increasingly more refined and less intrusive methods of reconstructing ancient buildings.

In the Sebasteion anastylosis, we employ the same methods as did the ancient builders. Using at least 75% of the ancient masonry, by means of careful measuring and trials, we set the architectural blocks one atop the other, exactly where they originally stood, employing the same statics as were used in ancient times. The restoration of the original reliefs was finished in 2008 (involving removal of all modern iron clamps, applied in the 1980s). Silicon molds of several of the panels were then made, namely those comprising the decoration of the northwest corner of the south portico of the building (i.e., the part closest to the temple and whoe panels were therefore rather "charged" in their iconography.

In our anastylosis, most of the architectural members are ancient, but the copies of the reliefs now installed in the building are made from artificial stone (a mixture of white cement, marble dust, and sand), and each is custom-reinforced with stainless steel rods. This painstaking and labor-intensive work has created a new "iconic" tribute to the ancient city and has helped to understand not only the ancient construction methods but also the order in which the ancient relief panels were set up relative to one another.

### SESSION 4J: Joint AIA/APA Colloquium Creating Collective Memory in the Greek City

ORGANIZER: Julia L. Shear, American School of Classical Studies at Athens

#### **Colloquium Overview Statement**

In the late 20th century, memory turned into an obsession for contemporary society. Under this influence, remembing and forgetting also became critical issues for contemporary scholarship across a wide range of disciplines. Scholars frequently juxtaposed individual with collective or social memory, while they also stressed that remembering was fundamentally a social activity. More recently, the transition from individual remembering to the memory of the collective group has been seen as problematic, and this intersection has been described as the "central challenge for the study of memory's social dimensions" (Cubitt 2007, 133). Much existing scholarship focuses on the 19th and 20th centuries when the evidence is extensive, but the large scale of the societies under investigation and the complications of mass media-first newspapers and later radio and television-make it difficult to understand how this transition operates. In contrast, the much smaller scale of ancient Greek cities and the absence of modern mass media provide an ideal opportunity for untangling the relationships between individual and collective remembering. Scholars of ancient Greece, however, have not focused on these issues; when they have discussed memory, it has been at the level of either the individual or the collective group. This panel, in contrast, addresses just this intersection. It not only provides four case studies demonstrating the different ways that collective memory was created in ancient Greece but it also seeks to advance the discussion in memory studies broadly construed by untangling the different ways that individual remembrance becomes that of the collective.

These processes appear across a broad spectrum of city's public spheres: in monumental architecture (Paper 2), commemorative monuments (Papers 3, 4), inscriptions (Papers 3, 4), the assembly (Papers 1, 3), and ritual (paper 1). These areas are all those of the collective, of the city as a whole, but the papers demonstrate that the memories created for the group require the actions of individuals and cannot come into being without them. Papers 1 and 3 show particularly clearly how individual choice is a necessary factor in this process and how this transition from the individual to the group might take place. As publicly presented, however, the role of the individual may be largely ignored, and the remembrances may be simply presented as those of the collective (Paper 2). These studies bring out the difficulties in constructing these social memories, which may be contested or may ignore the memories of other groups, as is particularly the case with the Treasury of Athens (Paper 2). Remembering involves choice (Paper 1) and, therefore, the possibility of forgetting. Consequently, the destruction of memory is also in play as communities remember, and it is particularly visible in the transition from the individual to the group (esp. Papers 3, 4). In some cases, the forgetting may be deliberate (Papers 2, 3), but in others, it may be the consequences of simple neglect and the passage of time (Paper 4).

Together, these four papers bring out the ways in which collective memory must be continually (re)constructed and the roles of the individual and the group in these processes must repeatedly be renegotiated as participants individually and collectively remember and forget. Methodologically, they throw into question the dichotomy between individual and collective memory and show that both must work together for a community to remember. In this way, the panel makes an important contribution to the larger field of memory studies and shows how individual remembrance turns into that of the collective.

### The Epitaphios and the Construction of Athenian Collective Memory

Julia L. Shear, American School of Classical Studies at Athens

Every winter, classical Athenians gathered together to mourn the war-dead and to bury publicly any men killed in combat in the preceding campaigning season. The occasion included an oration spoken in honor of those being buried by a man chosen by the city. The preserved speeches are well known (Thuc. 2.35–46, Lys. 2, Dem. 60, Hyp. *Epit.*, cf. Pl. *Menex.*) and the scholarship has particularly focused on their roles in creating Athenian identity and promulgating the ideology of the democratic city (e.g., Loraux, Thomas, Grethlein, Todd). Their politics of remembrance, however, have been ignored. As I shall argue, these orations constructed collective memory for the Athenians. At the time of composition, the speech represented the thoughts of a single individual man, and its text was not authorized by the city before its delivery. When the orator gave his speech at the burial of the war-dead, he presented his version of the final campaign undertaken by the dead and of selected events in the city's history in a ritual setting. This context by its very nature created a single memory of the battles, and indeed the rites themselves, for the whole city.

How these processes created collective remembrance is well illustrated by our surviving speeches. In different ways, both Hypereides and Demosthenes focus

on the final campaign undertaken by the men being buried. Hypereides provides a long and detailed narrative of the events (Epit. 10-18, 23) that creates a vivid sense of the actual campaign and the hardships suffered by the Athenian forces. They endured an unusually large number of battles, extreme winter weather, and a lack of supplies. The description provides an immediacy that a simple list of victories could not. Particularly for those listeners who had not taken part in the campaign, this narrative creates especially strong memories of the events. In his speech for the dead from Chaironeia, Demosthenes also remembers the end of the deceased men's lives, but he focuses on their final thoughts: their memories of their eponymous ancestors inspired them to be valiant in the face of the enemy (Dem. 60.27-31). In one case, the orator even gives us their final words and so asks the audience the same question that he says the men asked themselves (Dem. 60.29). The effect is to provide listeners with the final thoughts and words of the dead, as if they had been present at their deaths. Both orators provide those Athenians not present with memories that they would otherwise not have of the last moments of the dead men's lives. Similar processes are also at work with the battles previously fought by the city, as Lysias' long narrative of the Battle of Salamis demonstrates (2.32–43). In this description, the perspective shifts from the ancestors to the Athenians listening to the speech and from the noncombatants watching to the Athenians fighting at sea. The effect is to put the audience in the position of the Athenians in 480 and to have them replicate some of the actions of the participants. In this way, they are present at the battle.

Through these narratives in the orations, all Athenians gain the same memories of specific events in the city's history. Thus, they become part of the city's collective remembering through their articulation in the ritual setting. Subsequently, these battles could be remembered on other occasions, such as later funeral orations (cf. Lys. 2.2–3). The orators, however, did not simply repeat all the examples used by their predecessors, and they emphasise that they must choose which examples to use (e.g., Lys. 2.2, Dem. 60.15, Hyp. *Epit.* 4). Consequently, the politics of these orations show us how individual memory intersects with and then becomes collective remembrance for the Athenians. Memorialised in this way, the memories of the war-dead would truly never grow old (cf. Lys. 2.79).

## The Athenian Victory at Marathon and the Contested Memory of War *Jessica Paga*, Princeton University

In a curious twist of memory, the Greek victory over the Persians at Marathon in 490 is better documented in the material record than the final battle of Plataia in 479. Commemorations of the earlier battle include the Old Parthenon, the painting in the Stoa Poikile, and the Ionic tropaion at the battle site itself. In this paper, I argue that the Athenian treasury at Delphi should be considered within this context of Marathon memorials, and that, together with the other monuments in Athens, the treasury worked to solidify the memory of a specifically Athenian victory over the Persians while negating the collective Greek victories at Salamis and Plataia. Previous scholarship has been concerned primarily with matters of dating and iconography rather than the treasury's role as a locus for memorialization and memory. As Michael Scott has recently shown, though, the Athenian treasury at

Delphi was situated within a distinct milieu of monuments increasingly dedicated to military victories. I argue that, within this rubric, the Athenian treasury speaks not only to a specifically Athenian victory at Marathon but also to a specifically Athenian defeat of the Persians. The treasury thus coopts individual recollection by exclusively memorializing and monumentalizing the role of the Athenians, a physical denial of allied contributions and Hellenic unity. As one of the grandest victory monuments to the Persian Wars, the honor and prestige of triumph over the barbarians seem to belong exclusively to the Athenian; their treasury was located at a visually prominent space within the sanctuary, and the dedicatory inscription boldly proclaimed their leading role in the wars.

The depiction of both Herakles and Theseus in the metopes of the treasury likewise cements the message of a specifically Athenian victory, a sentiment that was later echoed in the Marathon painting hung in the Stoa Poikile. In both instances, the appearance of Theseus, a hero exclusive to the Athenians, emphasizes the identity of the true victors, while the use of Herakles within the specific contexts of the treasury and Stoa Poikile painting solidified the Athenian's claim to the Panhellenic hero. The appearance of these two heroes on the treasury and in the Stoa is a visual reflection of Herodotos' claim that the Athenians were aided by the two gods on the battlefield at Marathon itself. Furthermore, if Peter Krentz is correct about the "Oath of Marathon," the Athenian treasury at Delphi should likewise be considered a statement of the Athenians' prowess in battle and ultimate victory, in which the majority of Hellenic visitors to the Panhellenic sanctuary did not participate and thus could not share.

All the monuments commemorating the Battle of Marathon combine in an attempt to erase or deny the individual memories of the various Greek poleis who participated in the Persian Wars and to assert a singular military victory by the newly established Athenian democracy. The collective action of the Greek states against the Persians was overshadowed by the collective action of the Athenians alone, and Marathon emerged as the only victory that mattered, the only victory that ensured Greek (that is to say, Athenian) dominance over the Medes. The multiplicity of monuments commemorating Marathon—their size, distribution, and ornamentation—overshadowed remembrances of Thermopylai, Artemision, Salamis, and Plataia. Through these monuments—and particularly the treasury at Delphi—the overall Hellenic victory over the Persians was molded into the specific Athenian victory at Marathon.

## **Commemorating Destruction and Reshaping Memory in Athenian Inscriptions** *Polly Low*, University of Manchester

Scholarship on the Athenian epigraphic habit has increasingly emphasized the role played by inscribed monuments in both reflecting and shaping the collective memory of the polis. It has been observed that, while inscribed monuments memorialize individuals, this commemoration is inextricably embedded in the commemoration of a collective action: the decision of the people. This paper argues that these acts of commemoration were less stable, and the relationship between collective and individual memory more complex, than has previously been rec-

ognized, and that this complexity becomes particularly visible when inscribed monuments are destroyed and recreated.

The paper concentrates on a small group of inscriptions—largely but not exclusively honorific decrees—that were destroyed at the end of the fifth century (in many cases as a result of the actions of the Thirty) and (re)created in the early years of the fourth. That these monuments were restored has long been recognized, and the motivation for their destruction has also been analyzed, but there has been no systematic analysis of the process by which they were recreated, its motivations or its implications.

These inscriptions adopt various approaches to advertising, or concealing, their status as restorations. In some cases, the original decree is reproduced in full, sometimes together with the later decree that authorizes its republication (e.g., IG  $2^2$  12, 32 [= IG  $1^3$  228]); in other cases, the new monument seems to have stood alone, only alluding to the existence of an earlier version (e.g., IG  $2^2$  6, 52); in other cases again, the act of reconstruction is not explicitly marked at all, but can only be inferred from the content or style of the text (e.g., IG  $2^2$  27 [= IG  $1^3$  92], 5224). This variety is itself telling; there is little obvious sign here of the degree of coordination or control that has been identified in other areas of Athenian epigraphic practice.

Two of the best-preserved inscriptions in this group are particularly revealing. In the restored honors for Heracleides of Clazomenae (IG 2<sup>2</sup> 8), the original decree of the demos is repeated in full, and the full history of the relationship between city and honorand is thus preserved. Here (as in other honorific decrees), the commemoration of the honorand's activities preserves not just the memory of Heracleides' actions but also the—equally honourable—record of the city's response to euergetism. But this model of commemoration cannot be applied to a near-contemporary inscription: in IG 2<sup>2</sup> 6 (which records the restoration of the proxenia of five Thasians), all that is explicitly commemorated is an act of destruction (the removal of the original stele by the Thirty) and an act of restoration; the focus throughout is on stelae rather than on substantive psephismata. The result is a monument that seems to commemorate not an event or a decision but another monument; it seems safe to assume that this focus is dramatically different from that of the original. This shift in focus reflects a shift in agency (above all, the increased prominence of the honorands as instigators of the creation of the monument) and in function. The past of the city, as a community, becomes far less important here than that of these five individuals, and recent events are remembered through the prism of their impact on those individuals. The paper argues, therefore, that this diversity of practice is not random but reflects different attitudes to the commemorative function of inscribed texts; this, in turn, is shaped by competing agendas and agents involved in the recreation of these monuments.

## **Forgetting the Past: Inscriptions and Social Memory in Post-Classical Athens** *Graham Oliver*, University of Liverpool

This paper explores the fragility of the commemorative act whose legacy is the epigraphic record. Certainly, it is important and right to emphasize how inscriptions can develop and project memories of individuals and the community. Epig-

raphy or inscribed monuments do and did function in this way in Athens. But this paper reminds us that not all epigraphy was memorable for all time.

Many inscribed monuments were indeed removed or adjusted as an administrative action or as an (often) violent reaction associated with a change in regime or adjusted as a memory sanction. But a great deal of epigraphical material became forgotten. In time, some inscribed monuments lost their significance; some monuments were removed and integrated/built into the archaeological context of the surrounding area, but others continued to provide a monumental and commemorative landscape for subsequent displays. It is often difficult to tell the lifestory of an inscription and thereby assess how a monument was viewed over time. Indeed, in a community like Athens, the complex archaeological history and the constant use and reuse of archaeological material over the *longue durée* act as a real barrier to our understanding of the changing spatial context in which inscriptions would have been viewed over time.

This paper focuses on a small group of reused inscriptions from Athens that were set up by the pyloroi. The monuments analyzed in this paper are palimpsest inscriptions. Five are explored: IG 2 $^2$  2295, 2304, 2305, 2308; A.E. Raubitschek, TAPA 76 (1945) 104–7 = E. Schweigert, Hesperia 8 (1939) 30–2, no. 8. Their use, and reuse, suggests that in most of these cases, the contents of the earlier inscription and the institutional relevance were no longer as significant when the stones were identified as suitable surfaces on which to record a new inscription. These inscriptions have not been considered for the light that they shed on the fragility of epigraphic memory. Indeed, the focus on the role of inscriptions and memory has usually been on the formative nature of epigraphy, either on the intentional removal or adjustment of the epigraphic landscape or on the contribution that inscribed monuments make to commemoration.

The individuals concerned by the original monuments that were thus reused and refashioned were generally forgotten. The new concerns of group memory or social memory had since changed. The new institutions whose members were commemorated on the new inscriptions take their place in the epigraphic record. The stones on which the older inscriptions had been cut were available and to hand; by the Imperial period, when these stones were reused, the original inscriptions seem to play little part in Athenian social memory. At the same time, one might argue that the very reuse of this older epigraphic and monumental material says something about the institution or group that were the pyloroi. They were responsible for the Acropolis, and, in some sense, their role overseeing this space also extends to their epigraphical control of material in it.

This later reuse of older existing inscribed material in Athens forces us to accept that at some point some memories were no longer of the same value as they were before. Some were not worth preserving or the importance of past memories was forgotten. Epigraphy was not forever. Effort is required for a society to remember individuals and groups. This paper demonstrates how some memories were simply given up and "lost" by the changing priorities over time.

# SESSION 5A Pompeii and Ostia

CHAIR: Alan Kaiser, University of Evansville

## Unpacking Construction Fill: Archaeological Formation Processes of Activity, Refuse, and Construction in an Urban Environment

W. Flint Dibble, University of Cincinnati

This paper aims to explore the range of relationships between movable finds and the seemingly associated architecturally defined spaces in which they occur. The case studies are taken from the Pompeii Archaeological Research Project: Porta Stabia (University of Cincinnati), and are focused on ceramic assemblages recovered from stratified construction fills of cooking areas. Since the archaeological formation processes of urbanized sites like Pompeii are predominantly made up of discard entrained within construction-related deposits, it is hoped that a systematic analysis of assemblages found within defined activity areas can reveal otherwise ambiguous relationships between activity, refuse, and construction patterns over time.

The assemblages from two areas with extant masonry cooking surfaces (installed in the final phase of Pompeian habitation) were compared to other excavated areas and analyzed by phase. Mann-Whitney U tests confirmed that these two areas included a statistically significant high proportion of cooking ware sherds (by both count and weight) in comparison to other excavated areas of the site. While the proportion of cooking ware sherds was naturally not as high as that of an in situ refuse pit, the elevated proportion in these two areas suggests that refuse from local cooking activity was incorporated into construction fill of an ambiguous origin. Through analyzing the spatial relationships of artifacts, as well as elucidating the formation of the archaeological record over time (via activity, refuse, and construction), this approach to the study of movable finds from architecturally defined spaces demonstrates the value of studying construction fills and their assemblages.

### Repopulating an "Abandoned" Suburb: The Case of Pompeii's Tombs

Allison Emmerson, University of Cincinnati

When August Mau published the first tract of tombs outside Pompeii's Porta Nocera, he described monuments that were broken and collapsed, with ancient refuse piled in and around them. He determined that the necropolis was badly damaged in the earthquake of C.E. 62 and abandoned afterward. As more tombs were revealed outside Pompeii's gates, the "abandoned" designation spread; in fact, at every necropolis, tombs were found collapsed, ruined, and filled with garbage. The evidence seemed clear: in the last 17 years of life at Pompeii, the city was surrounded by deserted and crumbling tombs used for little more than trash disposal.

This picture contributed to the prevailing 20th-century idea that Pompeii was in decline after C.E. 62. The theory held that what little wealth remained was de-

voted to more pragmatic measures than the maintenance of elaborate tombs. More recent scholarship on the last years of Pompeii, however, has rejected the idea of decline, demonstrating instead a city in a period of rejuvenation. How can we reconcile the thriving city with an abandoned refuse-filled burial landscape?

This paper refutes the idea that Pompeii's necropoleis were abandoned by focusing on three key reasons for the state of the tombs at their discovery. First and expectedly, much of the tombs' ruined appearance can be attributed to the events of the eruption itself, a point unrecognized by the first excavators. Secon, posteruption activity contributed: destructive human interaction with the site seems to have begun almost immediately after the eruption and has continued into the modern period. Third, and most importantly, the presence of garbage in tomb precincts need not be attributed to abandonment but to Roman attitudes toward funerary space. Tombs in active commemorative use, although considered sacred to the spirits of the dead, were also a part of the dynamic zone of the suburbium. As such, they were suitable for posting official notices, scratching graffiti, engaging in disreputable behavior, and even dumping garbage. Rather than necropoleis in neglect, Pompeii's tombs were centers of mixed activity, not least of which was continued funerary ritual up to the moment of the eruption.

### **Toward A Social Network Analysis of Pompeian Wall Painting**

David Fredrick, University of Arkansas, Keenan Cole, University of Arkansas, Jackson Cothren, University of Arkansas, Russell Deaton, University of Arkansas, Frederick Limp, University of Arkansas, and Jasmine Merced, University of Arkansas

Research into the relationship between space and decoration in Pompeii faces two key obstacles. First, the traditional room vocabulary (atrium, tablinum, oecus, etc.) is often not supported by artifact finds and does not provide a sufficiently clear spatial framework (e.g., P.M. Allison, "How Do We Identify the Use of Space in Roman Houses?," in E.M. Moorman, ed., Functional and Spatial Analysis of Ancient Wall Painting [Leiden 1993] 1–8). Second, while print resources like Pompei: pitture e mosaici (Rome 1990) and Häuser in Pompeji (Munich 1984–2004) are invaluable, what is needed is a searchable database amenable to emergent techniques in network analysis. An interdisciplinary research initiative at the University of Arkansas, the Digital Pompeii Project (DPP), is pursuing a twofold workflow that establishes a statistically derived set of room definitions and links this with a database designed to facilitate deep spatial analysis.

First, DPP extends Allison's movement toward a more precise room vocabulary (*Pompeian Households: An Analysis of the Material Culture* [Los Angeles 2004], ch. 5) with a spatial syntax analysis (SSA) of all exposed insulae in Pompeii, together with axial movement and isovist studies (e.g., M. Grahame, *Reading Space: Social Interaction and Identity in the Houses of Roman Pompeii* [Oxford 2000]; M. Anderson, "Houses, GIS and the Micro-Topology of Pompeian Domestic Space," in J. Bruhn et al., eds., *TRAC 2004: Proceedings of the 14th Annual Theoretical Roman Archaeology Conference* [Oxford 2005] 144–156). Through a scripted application in ArcGIS, house plans are compared statistically, binning together rooms that share similar size, relative asymmetry, and depth scores (with respect to the outside carrier space and internal courtyards). This will establish a set of spatial definitions based

on SSA statistics, separate (at least temporarily) from the traditional vocabulary. Second, DDP is creating a relational database based on images from *Pompei: pitture e mosaici* and *Häuser in Pompeji*. This database records the level of complexity (and therefore labor expenditure) found in a given wall, in terms of perspective elaboration and degree of ornament. Beyond more obvious features (color, style, mythological theme for central paintings), it also tracks decorative motifs found in vignettes, still lifes, and genre scenes, and their spatial location on the wall (socle, predella, middle zone, upper zone). Together, the SSA-based room definitions and the database make it possible to apply social network analysis algorithms to the spatial distribution of constituent elements in wall painting. This paper illustrates the usefulness of this approach through application to insulae 11, 15, and 16 in regio 6; results are presented through animated graphs and visualizations constructed in the game engine Unity.

## Urban Layout as an Agent of Romanization: A Comparison of Urban Space at Ostia, Pompeii, Silchester, and Empúries

Alan Kaiser, University of Evansville

Romanization, the concept that the Romans brought unity to their empire through the spread of their culture to non-Roman residents, has fallen from scholarly favor in recent years. Rather than unity, those investigating the interaction of Roman and non-Roman people within the empire have emphasized the diversity of cultures and subcultures that came to dominate the Roman world. Elements of material culture such as an artifact of Roman manufacture or a typical Roman building type that have been excavated in the provinces were once seen as indicators of Romanization. These same elements are now being reexamined as we discover that they may have been used in very different ways from identical items found closer to the heart of the empire.

In our rush to recognize overlooked diversity, however, we have downplayed one type of material culture that imposed unity: urban space. In this paper, I argue that, while Roman cities in the west are famous for their grid layouts, what really unites them and imposes a Roman worldview on the people using them is the arrangement of space within them. Through a statistical comparison of the use of space in four case-study cities from various parts of the western Roman world—Ostia, Pompeii, Silchester, and Empúries, I demonstrate the unity of the Roman urban phenomenon with regard to the positioning of buildings with specific uses. Anyone not already familiar with Roman culture would have had to learn this layout to use the goods and services available in a Roman city and could have then used this knowledge to navigate other cities within the empire. Entering a Roman city for the first time was the initiation of the Romanization process; to return only reinforced and expanded the lessons on Roman cultural ideals about the use of space.

## Stratigraphic Analysis and the Economics of Reuse at Later Ostia: Field Study of the Palazzo Imperiale, 2011

Joanne M. Spurza, Hunter College, City University of New York

After three campaigns of preliminary excavation (2008–2010) in the baths of the Palazzo Imperiale, Ostia, a study season in July 2011 focused on quantitative and qualitative analyses of excavated materials, dynamics of deposition, and circumstances of reuse. Previously, extensive excavation in Room 7 at the baths' southeast corner had revealed a substantial stratum of artificial fill put in place to raise the floor level. This fill layer comprised a dense aggregate of four major components: building materials, painted plaster, mosaic fragments, and pottery. Our aim in 2011 was to devise and apply a method of quantitative analysis to determine the relative amounts and relationships of these four main fill components.

In connection with this quantitative analysis, we undertook qualitative studies of three classes of finds from Room 7 and elsewhere in the Palazzo: (1) painted plaster fragments, (2) bricks with anepigraphic stamps, and (3) marble fragments, principally revetment, from excavation and surface survey. Our catalogue of 330 marble pieces includes identified colored marbles from across the empire—Spain, France, Italy, Greece, Turkey, and North Africa. Samples of white marble from the Palazzo were sent for minero-petrographic testing to pinpoint their quarry source; the preponderance in the Palazzo of Carystian *cipollino* and North African *greco scritto* is not unexpected for imperial baths; less easy to explain is the large size of some "scrap" marble fragments (ca. 20–25 cm in length) found in the Room 7 fill.

While this fill layer offers an unusually rich type case for developing a methodology of close observation and quantitative analysis, little is unusual about the depositional stratum itself; it likely represents standard Roman building practice. Previous generations of excavators at Ostia, and perhaps elsewhere, made scant record of such deposits. More recent investigators have begun to see in this demolition debris a potential treasure trove of clues about Roman deconstruction processes, by which floor mosaics, high-status wall ornament, the walls themselves were shattered into pieces. Then, as here, the debris was roughly reconstituted in support of a new floor and a new room function, perhaps for new occupants. No single room can provide all the answers, but a database of comparanda from other buildings and other sites may begin to shed light on the economics of Roman recycling and salvage. Romans "built for the ages," but increasing evidence shows they built for the short term too, with an eye toward eventual, even multiple, reuse of their constructional and decorative materials.

### SESSION 5B Roman Trade in the Mediterranean

CHAIR: Joe Rife, Vanderbilt University

### Modelling South Coastal Tuscany: The Roman Cabotage Port of Rusellae

Alessandro Sebastiani, University of Pennsylvania Museum of Archaeology and Anthropology, Matteo Colombini, Independent Scholar, and Elena Chirico, University of Siena

Southern Tuscany has been the focus of considerable archaeological research in the last 30 years, and intensive field projects have significantly enhanced our understanding of Early to Late Medieval settlement trends. In stark contrast to these advances, there remains a substantial lack of information on the Roman period (second century B.C.E.–sixth century C.E.) in this area due largely to the absence of sustained and significant research programs.

The discovery and excavation (in 2010 and 2011) of the Roman cabotage port of Rusellae (first century B.C.E.–sixth century C.E.), in the territory of Alberese in the modern Commune of Grosseto (Tuscany) presents us with a most welcome opportunity to investigate four points, central to our greater understanding of Roman settlement and economy:

- (1) What, in terms of landscape exploitation and settlement change, was the impact of the Roman conquest of south Etruria from the second century B.C.E.?
- (2) What kind of economic infrastructure came into being; in particular, what was the relationship between cities, the rural settlements in their territories, and the distributive systems, including cabotage ports and harbors?
- (3). How did economic patterns change after the second century C.E. economic crisis, especially in terms of local production vs. long-distance trade?
- (4) How did the economic and social system change at the fall of the Roman empire (fifth/sixth century C.E.), and what was the impact of these changes on the urban, rural, and maritime settlements?

The focus of this paper is the functioning of the "mature" Imperial Roman system and the way it adapted or restructured in the face of both the economic problems of the second century C.E. and the much more profound and all-encompassing crisis of the late fifth and early sixth centuries C.E., the moment when new economic, social, and political structures seem to have come into being.

# An Ancient Naval Battle Landscape in Sicily: New Evidence for Ram Manufacture, Hellenistic Warship Construction, and the Outcomes of Ship Combat

Jeffrey G. Royal, RPM Nautical Foundation

The Egadi Islands Survey Project has conducted seven seasons of field work off the northwest Sicilian coast, an area believed to be the site of the final battle of the First Punic War between the Romans and Carthaginians in 241 B.C.E. (the Battle of the Egadi Islands, as reported by Polybius). The project was conceived and is codirected through the cooperative efforts of the author, codirector Sebastiano Tusa, and the representative organizations: Soprintendenza Del Mare, Regione Siciliana, and RPM Nautical Foundation. Along with numerous finds and two shipwreck sites that provide evidence for maritime commerce, the discovery of five bronze rams located in this area, along with a sixth pulled from the area in the early 2000s, provide the first corroboration of an ancient naval battle site in addition to new insights into the nature of ancient warships in the central Mediterranean. During the 2010–2011 field seasons, an area was investigated where four of the rams' find sites, as well as several Montefortino-type helmets and Punic amphoras were located. It is clear from the finds in this area, as well as the location of artifacts found farther away, that fish-net dragging impacted the original deposition of artifacts from the battle and the current depositional formation. However, a more refined location for the battle is now discernible.

This paper provides an overview of the finds—along with comparative analyses with other waterline warship rams—and the connection of the finds with historical accounts. Furthermore, evidence from the corpus of rams is weighed against hypotheses for ancient warship construction and their deposition. With the number of waterline rams more than doubling in the last few years, the only direct evidence thus far available for ancient warships, it is evident that ideas of warship size and configuration must be reworked. It is also clear from the data that the potential fates of ancient warships are no longer a matter of conjecture; warships did sink.

### Sanisera (Menorca): The Life and Death of a Port City in the Roman World

Paul W. Salay, Jr., University of Southern California, Fernando Contreras, Ecomuseu Cap de Cavalleria, Cristina Bravo, Ecomuseu Cap de Cavalleria, and Tatiana Valente, Ecomuseu Cap de Cavalleria

The ancient Roman port city of Sanisera is located in the modern harbor of Sanitja, sheltered by the Cap de Cavalleria on the extreme north of the island of Menorca. Despite long being known as a location with abundant evidence of ancient occupation, the site was only sporadically excavated until recently. These excavations have revealed a site with a long and complex history, from its origins as a Roman military encampment in the final quarter of the second century B.C.E. to an urban settlement with evidence for local industry, several associated necropoleis, and at least one, possibly two, Christian basilicas discovered so far, continuing to the ultimate abandonment of the site in the seventh/eighth century C.E.

Because of its unique geography, the harbor of Sanitja is singularly well protected from the island's treacherous northern winds, conditions that would seem conducive to fostering a role in the contemporary maritime activity of the region. The ceramic evidence supports this contention, strongly suggesting that the site was an active and dynamic locus of trade. To understand more fully the role of the site within a larger economic sphere, we examined the total assemblage of transport amphoras from the various excavations, both terrestrial and subaquatic, and compiled a quantitative data set that includes several types of information, including sherd count, sherd weight, form, typology, provenance, and date range.

Using this information, we conducted a diachronic analysis of the data with an eye to establishing the temporal limits of the site's occupation, fluctuations in the levels of consumption, trade networks, and how these trade networks developed and evolved over the life of the site. In short, it was our intent to use the information available from the amphoras to reconstruct, in broad terms, the economic life of the Roman city of Sanisera from its birth to its demise.

Ultimately, we contend that the results demonstrate first, the potential of ongoing excavations at Sanisera; second, and perhaps more importantly, that the degree of broader commercial interaction was substantial even at a comparatively "marginal" site like Sanisera, suggesting, on one hand, that the Balearic Islands constituted an important and overlooked component in Mediterranean trade networks, and on the other hand, that it was possible for smaller cities outside the major urban centers of the Roman world to achieve much higher levels of economic integration than previously believed.

# New Light on Central Adriatic Amphoras: Survey and Excavation of a Concentration of Production Sites Around Potentia in Picenum (Marche, Italy) Patrick A. Monsieur, Ghent University

The knowledge of the production and typology of what now can be called central Adriatic amphoras is still underexposed. Despite different allegations of production in Apulia, in the lower Po Valley, or even on the Dalmatian shores, there can be little doubt that most, if not all, of the Adriatic Graeco-Italic and the well-known Lamboglia 2 amphoras were manufactured on the central Adriatic coast of ancient Italy (Ager Gallicus et Picenum), as were their followers, the Dressel 6A, Dressel 2-4, ante-Dressel 6B, and early Dressel 6B types. Until now, only four amphora workshops have been traced along the central Adriatic coast. But the discovery of new production sites in the Ager Potentinus confirms the origin of these amphoras.

The ancient colony of Potentia in the lower Potenza Valley was founded in 184 B.C.E. and lies near Porto Recanati, some 25 km south of Ancona. Since 2002, current research (field walking, remote sensing, archive research, material studies) by Ghent University, Belgium, in the lower Potenza Valley revealed a unique concentration of six to seven amphora workshops clustered around the ancient city. In the last four years, the archaeological fieldwork was supplemented by excavations of the extra-urban west gate zone at Potentia and an amphora workshop some 3 km to the south, at Acquabona near Potenza Picena, giving clues for the chronology and the relationship between city and countryside. The chronology of amphora production goes from soon after the foundation of the colony (site of Colle Burchio) to the Tiberian age (site of Acquabona). These amphoras, in particular, the Lamboglia 2 and Dressel 6A types, reflect an important (preindustrial) production and export of wine and olive oil, and they seem better known from consumption sites, especially the Po Valley, Histria, Noricum, Pannonia, Dalmatia, Epirus, mainland Greece, Athens, Delos, Asia Minor, and Alexandria, but also Rome and Germania. The situation of the Ager Potentinus presents possibilities for research on the typology, the chronology, and the extent of amphora production; the supposed relationship between workshop and estate; the connection with the city;

and possibly the identity of owners, as amphora epigraphy can prove. This paper focuses on the results of the survey of some production sites and the excavation of the site of Acquabona as a contribution to the date and complex morphology of central Adriatic amphoras.

#### Lepcis Magna's Maritime Villas: New Research

Katia Schörle, University of Oxford

This paper presents the preliminary results of a survey of the coastal landscape to the west of Lepcis Magna. The survey covered 27 km of coast to the west of Villa Silin, and revealed a high density of maritime residences interspersed with productive sites, showing evidence for olive and wine production in a pattern very similar to that identified by Marzano in Latium and Campania. The villas were strategically located on promontories overlooking the sea and nearby wadis (dry riverbeds) to optimize their use of natural bays and the beauty of the physical landscape. Owned by the wealthy Tripolitanian elite, they show a considerable element of emulation of the maritime villas on the coasts of Latium and Campania, areas to which the elite had prominent trading ties.

These villas, which display imported marble, monumental porticoed facades, and imported fine ware, were involved in a range of activities, whether agricultural or concerning the exploitation of marine resources. This is evidenced by wine and/or oil presses and, in one instance, a fish-salting facility. In addition, several amphora kiln sites were located in association with the villas. This has considerable implications for Tripolitania's role in pan-Mediterranean trade and its importance as a productive center, in terms of its trade with Rome, and with, surprisingly Gaul and the Sahara. This allows us to suggest and map new routes and increase our understanding of the importance, evolution, and connectivity of certain areas in the Libyan interior, as well corroborate the pattern identified on a much larger scale in the Tarhuna Plateau. A detailed study of the ceramics is currently underway investigating such questions through dating, provenancing and linking types with similar finds in other Mediterranean and African sites. Such questions are the focus of future research and are already adding substantially to the typological and petrographical information on ceramics from this area, which is currently almost nonexistent.

#### **SESSION 5C**

#### Central Greece from the Bronze Age to the Iron Age

CHAIR: Brendan Burke, University of Victoria

A Preliminary Examination of Architectural Fragments from Mitrou, Greece: The Benefits of a Contextual Analysis of Accidentally Fired Earthen Material

Kyle A. Jazwa, Florida State University

Analysis of Bronze Age and Early Iron Age architecture rarely proceeds beyond the durable stone socles of the edifices. The overwhelming mass of the superstructure—mudbrick and organic matter (timber, reeds, etc.)—is frequently excluded from analysis because of its ephemerality and difficulty of identification in situ. Although architectural fragments are often discussed in recent publications, they are seldom considered for more than their contributions toward the reconstruction of the superstructure.

This paper presents the preliminary results of my ongoing examination of Bronze Age and Early Iron Age architectural fragments from Mitrou with particular emphasis on Protogeometric Building A. After the introduction of a basic typology of the fragments from Building A, I present the results of numerous contextual analyses that have been used to aid in the interpretation of Mitrou's site history. As a result of these studies, I demonstrate that an analysis of architectural fragments must be subject to the same archaeological scrutiny as any other material. Indeed, examination of the fragments must proceed beyond basic description to elucidate the depositional forces that acted on the architecture, technological innovation, and the ancient use of locally available materials.

The results of this study are manifold and varied. For example, the accidental firing of the normally perishable architectural fragments teaches us much about the destruction of Building A. A distributional analysis of the architectural clay fragments baked in an oxidizing environment vs. those fired in an oxygen-reducing environment proves for the first time conclusively that Building A at Mitrou was destroyed by fire in its latest phase. Furthermore, a diachronic intrasite analysis of architectural fragments at Mitrou informs us about technological stasis or change through time. At Mitrou we see a consistent building tradition from the Early Helladic through Protogeometric periods, suggesting cultural continuity in terms of building practices in spite of several periods of major societal change. Finally, I present numerous enigmatic fragments from Building A that appear to be without parallel in Bronze and Early Iron Age Aegean architecture.

### Socializing Interactions in the Early Iron Age Mediterranean: Multi-Scalar Network Intensification in the Euboean Gulf and Beyond

*Alex R. Knodell*, Brown University

This paper outlines a framework for understanding social development through the analysis of diverse data sets and networks on multiple scales. The case study employed to demonstrate the utility of this framework examines the relationship of local, regional, and interregional dynamics connected to developments in the Euboean Gulf in the Late Bronze and Early Iron Ages. The broadest scale of analysis is thus the Mediterranean and the changing nature of interconnectivity between various relevant parts (the Levant, Cyprus, the Aegean, the Adriatic, and the Tyrhennian coast). This large scale is best understood through patterns of trade, population movements, and the diffusion of innovations. On the regional level, I integrate geographical analysis with data gathered from archaeological surveys and excavations to examine relationships between sites and landscapes in the Euboean Gulf. A final level of study, and the primary focus of this paper, looks at local developments on the Lelantine Plain, specifically the changing nature of relationships between and within the sites of Chalkis, Lefkandi, and Eretria; this is a storied landscape, to be sure, regardless of the validity of certain historical

conflicts. The aim, then, is to demonstrate that local, regional, and interregional developments are inextricably intertwined, and that, in the case of the Early Iron Age Euboean Gulf, they should be studied in relation to one another to explain the development of several roughly coincident social phenomena, such as the inception and development of iron technology, major shifts in trans-Mediterranean interactions (external interests moving from East to West), the adaptation of the Phoenician script into the Greek alphabet, and a reconstitution of political structures leading to the emergence of poleis. I argue that by studying patterns of network intensification and "de-intensification" on multiple scales, we can begin to understand how seemingly divergent social phenomena are related or unrelated. This paper, then, focuses primarily on local developments and shifting power centers in the Lelantine Plain during the Protogeometric and Geometric periods; it also provides a summary of what is necessarily a much larger project, outlining its methods, motivations, and preliminary results.

### Populating Theban Political Geography in the Euboean Gulf During the Late Bronze Age

Brendan Burke, University of Victoria, and Trevor Van Damme, University of Victoria

Research in Aegean prehistory has lately stressed the importance of networks and interconnectivity of heterogeneous sites within the geopolitical landscape. Of key importance in the Mycenaean age was access to ports of trade and the establishment of trade networks. Work in the Corinthia and Argolid in recent years has stressed these connections with the major center at Mycenae because of the strong evidence for foreign imports at the site and Mycenaean exports found throughout the Mediterranean, contributing factors to the site's presumed preeminence.

This paper examines Boeotian geography in the Mycenaean period, particularly in terms of connections between Thebes and the Euboean Gulf. We seek a middle ground between competing camps of scholars, some of whom suggest broad and expansive territorial control of mainland Greece centered at Thebes, while others suggest a minimized role to Theban territorial extent during the Late Bronze Age. Looking at the Linear B tablets in conjunction with archaeological data from excavated and surveyed sites in Boeotia and Euboea is the surest way to accurately assess the size and scale of Theban hegemony in the Mycenaean period. Toponyms referred to in the tablets from Thebes include *a3-ki-a2-ri-ja*, meaning "along the sea-shore," perhaps Aigaleia, a deme near Eretria; *i-si-wi-jo-i*, perhaps "sacred" Anthedon; *a-ma-ru-to* (Amarynthos), associated with the prehistoric site of Palaiochoria on the western Euboean shore; and *ka-ru-to* (Karystos) sending a pig to Thebes.

In this paper, particular attention is given to the archaeological finds from excavations at Glypha (Tseloneri/Vlycha), which the authors were able to study in 2011. This Mycenaean site is on a low-rocky hill located 2.6 km southwest of the Euripos outside Chalkis. Theochares first noted the significance of the site in 1959, but it was not excavated until 1977 by Katie Demakopoulou and then again in 1987–1978 by Efi Sapouna Sakellaraki. The objective of this paper is to contextualize the relationship of Glypha and many other second-order Mycenaean sites

within the Boeotian-Euboean network to the primary administrative center of the area, the Kadmeion at Thebes.

### Between Attica and Boeotia: Preliminary Report on the Role of Pastoralism in the Landscape History of the Skourta Plain

Amanda L. Iacobelli, Penn State University

This paper presents the results of an ongoing analysis of an intensive survey project conducted by Mark and Mary Lou Munn from 1985-1989 in the Skourta Plain, a remote upland region on the frontier of ancient Attica and Boeotia. In addition to locating the site of Panakton, the directors were able to identify a peculiar and fascinating pattern of settlement in and around the plain. After more or less continuous habitation during the later Mycenaean period and the early Protogeometric, traces of permanent human occupation in this area virtually disappear for some four centuries, bringing to mind Thucydides' claim that, after reluctantly abandoning the fort of Panakton in 421 B.C.E., the Boeotians destroyed it "under the pretext that there had once been, after a dispute over the place, ancient oaths between the Athenians and Boeotians that neither would inhabit it, but that both would graze the area in common" (Thuc. 5.42.1). Notably, this pattern is replicated in other periods of centralized political formation in Greece, namely the EH II and LH IIIA-B periods, which are either entirely unrepresented or limited to one or two settlements. While numerous Classical-period traditions bear testimony to an ongoing struggle between Athens and Boeotia for political, economic, and ideological control of this region in historical times, the prehistoric settlement evidence revealed by the survey hints at the existence of a long-lived and distinctive pattern of land use and interaction with surrounding lowlands.

The aim of this project is to reconstruct the landscape history of this region by examining the results of the survey in their larger environmental context. With the help of GIS, two larger questions are addressed: (1) How is human activity distributed across the landscape, how and why does this distribution change over time, and what inferences can we make about land use and intraregional settlement organization? (2) What factors may have influenced the exploitation, settlement, and abandonment of the Skourta Plain by outsiders and locals throughout its history? The present paper specifically addresses the role of pastoralism in the social, economic, and political history of the region. Preliminary analyses suggest that its settlement history was intimately, though not exclusively, related to its use as a pastoral resource, and that the scale of pastoral enterprises and the identity of those carrying them out varied according to historical circumstances in surrounding regions and their relative social, political, and economic structures.

#### Warriors and Bureaucrats: Becoming Mycenaean in the Province

Margaretha Kramer-Hajos, Indiana University

This paper examines the mechanisms behind the spread of Mycenaean culture into the "province" of contemporary Phthiotis in central Greece. The creation of a Mycenaean cultural identity here took place in two stages, with a first impetus

during LH I–II and a second spurt catalyzed by the palaces in LH IIIA1, when the process of Mycenaean acculturation was completed. This paper uses evidence from burial and settlement sites in Phthiotis to show that the processes by which the region assimilated the Mycenaean culture in the two periods were very different and to propose an identity for the original elites that was diametrically opposed to that of the secondary, palace-enfranchised elites who characterize the second period.

In the first period, the participation in a nascent Mycenaean culture by emerging elites in the province can be characterized by what Schon (in W.A. Parkinson and M.L. Galaty, eds., *Archaic State Interaction*, [Santa Fe 2009], 235–236) has labeled an anarchic system: elites take over elements from wide and far on their own initiative. These elites display similarities with contemporary elites from Mycenae in their emphasis on warrior implements, drinking rituals, and their tendency to collect exotic prestige goods, suggesting that they were part of a pan-European phenomenon of elite "warriors-on-the-move" as defined by Kristiansen and Larsson (in I. Galanaki et al., eds., *Between the Aegean and Baltic Seas: Prehistory Across Borders* [Liege 2007], 25–34).

In the second period, further assimilation of Mycenaean culture is driven by outer forces: the palaces, which create secondary elites consisting of functionaries of the official palatial bureaucracies who are buried with seal stones, the official tokens of their status. These new elites coexist for some time with the original elites but eventually replace them. A loss of independence of the province is also visible in the cessation of certain industrial activities at non-palatial sites.

Through the self-representation of the two groups of elites in their burials, differences and possible tensions between the early warrior elites and the palaces with their officials become visible. Although during the Palatial period, the values of the original elites become invisible, they reappear forcibly in the Postpalatial period, which bears many of the characteristics of the Early Mycenaean period in its emphasis on the warrior ethos. This suggests that the Palatial period represents a temporary anomaly in the area.

### Purpurae Florem of Mitrou: Assessing the Role of Purple Dye Manufacture in the Emergence of the Elite

Rachel Vykukal, University of Tennessee, Knoxville

Evidence suggests that purple dye was produced on the islet of Mitrou, a Bronze Age and Early Iron Age site in central Greece. The goal of this study is to determine the chronological and spatial patterning of murex shells to better understand the emergence of dye manufacture. The research hypothesis is that murex dye production was related to the rise of a visible political elite, and that the scale of production was large enough at Mitrou to have exceeded the needs of the household, thus providing a cash crop for this elite to obtain copper and tin from the eastern Mediterranean.

Multilayered statistical analyses were employed to test this two-pronged hypothesis. The first hypothesis that murex dye production was related to the rise of the elite at Mitrou was confirmed by a series of chi-squared analyses. Based on site-wide estimates of original murex population, the second hypothesis that dye

production exceeded domestic scale cannot be rejected. Since we know that the prehistoric Mycenaeans produced very ornate, multicolored, and, often, banded garments, it is possible that murex dye was produced at Mitrou to color raw wool for the production of thread, which could then be embroidered on fabric or traded as such. If it was in fact colored thread that was being produced, the site-wide estimates suggest that dye production could have exceeded domestic levels at Mitrou and that dyed thread could have been a lucrative trading commodity.

#### SESSION 5D Greek Sculpture

CHAIR: Mireille Lee, Vanderbilt University

### Athena's Olive or Persephone's Myrtle Grove?: The "Olive Tree Pediment" of the Archaic Acropolis Reconsidered

Amanda S. Reiterman, University of Pennsylvania

More than a century has passed since the poros fragments of the "Olive Tree Pediment" (570-550 B.C.E.) were discovered in the fills to the east of the Parthenon, yet controversy still surrounds their reconstruction and interpretation. Scholars, seeking visual and literary parallels for the unusual combination of elements represented (leafy vegetation, a building with Doric features, the lower leg of a large male, and standing females, one shown as a kore), have focused debate on two main reconstructions of the scene: Achilles' ambush of Troilus and a mythohistorical event or ritual involving the daughters of King Kekrops. The latter, which is based on the assumption that the tree denotes Athena's sacred olive, has gained favor in recent decades. While this proposal accounts neatly for the extant figures, it postulates the unprecedented representation of a purely local myth in Archaic monumental architecture and departs thematically from the other small poros pediments, all of which illustrate well-known chapters in the life of Herakles with numerous iconographic parallels. Meanwhile, a third possibility has gone unexplored: Herakles' encounter with the goddess Persephone during his descent to Hades to retrieve Kerberos. A survey of literary sources and sixth-century vase painting demonstrates that the portrayal of this underworld scene typically included many or all of the pediment's components. Close consideration of diverse aspects of these representations, including composition, gesture, and the rendering of details on key figures, should encourage a reevaluation of the Olive Tree Pediment, as well as other poros fragments in the Acropolis Museum storerooms, which could bring further clarity to this enigmatic sculpture, placing its imagery comfortably among that of the other small pediments. Taken together, they seem to offer a programmatic meditation on the hero's mortality.

#### The Hairstyles of the Erechtheion's Caryatids in Context

Marice Rose, Fairfield University

The six caryatids of the Erechtheion's south porch are among the most renowned classical Greek sculptures, yet one of their most remarkable features has not received the scholarly attention it deserves. Each maiden displays a different, exceptionally complicated hairstyle unparalleled elsewhere in ancient Mediterranean art. Braids encircle the tops of their heads in varying patterns, while fishtail braids extend down their backs. Three korai wear corkscrew curls in front of their shoulders, one has a braid on top of her head, and two feature twists of hair above their foreheads. Katherine Schwab's Caryatid Hairstyling Project (2009) proved that these hairstyles are not fantastical. As the sculptures themselves were afforded great time and effort in their carving, the actual hairstyles they depict also would have involved hard work using unguents, waxes, and possibly tools. My analysis uses the Caryatid Hairstyling Project as a point of departure to examine the meaning of these hairstyles within the contexts of ancient Greek public and private ritual.

Historically and worldwide, hair is a marker and maker of identity. In Greece, hair was a key component of a variety of mostly private rituals for girls and boys in which its cutting and offering served to separate its owners from childhood, as Leitao discusses in "Adolescent Hair Growing and Hair Cutting Rituals in Ancient Greece" (in C. Faraone and D. Dodd , eds., *Initiation in Ancient Greek Rituals and Narratives: New Critical Perspectives* [London, 2003] 109–129). Confirming the individual nature of these rites are the caryatids' differentiated configurations of braids, twists, and curls. The caryatids depict maidens with their hair long and in magnificent display, not yet having participated in the ceremony that will mark the end of their girlhoods and entrance into marriage.

The hair rituals' privacy and individualism are in contrast to the public religious festivals with which scholars have linked other elements of the caryatids' appearance, for example their back-pinned mantles, proffered phiales, and prominent location on the south porch. Recently, the exhibition *Worshipping Women: Ritual and Reality in Classical Athens* and Shapiro's accompanying catalogue (New York 2008) showed the key roles maidens played in multiple religious festivals on the Acropolis. The caryatids' hairstyles may be previously unrecognized reflections of the appearance of young female festival procession leaders who were chosen as paragons of Athenian beauty and morality.

#### **Slaves on Attic Tombstones**

Kelly L. Wrenhaven, Cleveland State University

For centuries, Attic tombstones have provided a fascinating source of study and comprise some of our most abundant evidence for the social history of ancient Greece; however, there has been little consideration of the frequent appearance of slaves on Attic tombstones. What do these figures reveal (and not reveal) about the relationships that could form between slave-owner and slave? What is their relationship, if any, with images of slaves found in literary and the visual arts? And why do slaves appear at all?

While these kinds of questions are intriguing, "reading" the relief imagery on tombstones often raises more questions than answers, not least the issue of how to identify and differentiate between free and slave figures. The frequent repetition of certain "themes," however, implies that the Greeks developed a sort of sepulchral language, which was intended to convey certain messages to the viewers about the status of those depicted. Since sepulchral imagery is often presumed to reproduce "standard and recognizable iconographic types," a consideration of how the figure of the slave was represented can reveal a great deal about how the Greek community viewed slaves, as well as the slave's role in Greek society (A. Kosmopoulou, "Working Women: Female Professionals on Classical Attic Gravestones" *BSA* 96 [2001] 281–319).

The first part of this paper considers the relatively rare stone memorials commemorating deceased slaves, which appear largely, if not exclusively, to be restricted to domestic slaves, and even more restrictively, to nurses (*titthai*). The second part of this paper considers the appearance of slaves on tombstones for their masters and mistresses, where they are often prominent to the extent that they sometimes even compete for space with those being commemorated.

#### Citizen Identity in Smyrnaean Grave Stelae

Athina Mitropoulos, University of Oxford

Pfuhl and Möbius published 140 grave stelae from Smyrna, which are almost uniform in style, resembling temples and large-scale *naiskoi*. The similarity in form might imply conventional social norms, funerary regulations, and workshop traditions. It might be inferred that these regulations sought to curtail former elaborate funerary monuments. But there is a lack of information about the cemetery that might substantiate this inference and contextualize these stelae. Presumably, they were erected by the middle and upper class, considering that the material, marble, was expensive. The number of contemporary grave stelae indicates a degree of wealth that the city enjoyed. This is further implied by the apparent need to regulate funerary monuments.

Studies on these stelae focused only on the reliefs and neglected the accompanying inscriptions. Scholars have overlooked the range of supplementary, separate, complementary, or seemingly contradicting information that inscriptions provide. They state that there is a difference between the messages conveyed by the funerary epigrams and by the reliefs.

This paper investigates the relationship between word and image, showing that the apparent contrast between them only exists when studied separately; together they frequently form a complementary portrayal of the deceased and their family. This paper examines four of the 140 published stelae, that date to the second century B.C. and have both inscription and image surviving in their entireties. I assess the relationship between relief and epigram and draw conclusions about the importance of reading both parts when interpreting citizen self-identity. Despite the uniformity noted in their style, the combination of text and image gives a degree of individuality to the stelae, the deceased, and often, their family

#### New Observations on the Skopadic Origin of the Dresden Maenad

Beryl Barr-Sharrar, Institute of Fine Arts, New York University

In the century since the publication by Treu of the small-scale marble statue in the Dresden Albertinum as a copy of the famous Parian marble maenad by the fourth-century B.C.E. sculptor Skopas, opposition to this identification has been based mostly on the apparent absence of the young goat vividly included in the description of the Skopas statue by Kallistratos (third–fourth centuries C.E.). Recently, adding to this frequently repeated objection, German scholars have seen a greater affinity of the Dresden statue with classicizing tendencies of the Late Hellenistic period than with the fourth century B.C.E., suggesting it is a first-century B.C.E. original adapting the motif of a Neo-Attic relief maenad with a tympanum.

After careful autopsy of the Dresden statue, the author of this paper contests both old and recently published negative arguments. With comparative visual material, the pose and style of the Dresden maenad is placed firmly in the mid fourth century B.C.E. and is associated with Skopas. New detailed photography of the marble surface, especially the left shoulder area, allows the proposal of a reconstruction with a goat supported by the maenad's missing left arm as Treu suggested but held in a very different and more dramatic way. Drawings by the author indicate how this new restoration invigorates the frequently ignored proper right side of the statue and helps justify its extraordinary torsion.

The Dresden statue originally about two-fifths life-sized, or 60–75 cm high, carved in a white, fine-grained marble that is highly translucent in the manner of Parian may copy the Skopas maenad quite accurately, conceivably even in its original size. If so, the complexity of its carving and its small size could explain the lack of Roman copies. In any case, there is no reason to exclude a fourth century B.C.E. date for the original behind the Dresden maenad.

# SESSION 5E New Digital and Visual Approaches to Archaeology

CHAIR: John Wallrodt, University of Cincinnati

### Visualizing Archaeology: Panoramic Photography and the Greek Architecture Project at Corinth

Christopher J. Stackowicz, Bethel College

I present a project I have been working on for the past four years that focuses on the utilization of new panoramic imaging technologies for creating an immersive site experience of ancient Greek Corinth. As a digital supplement to Robin Rhodes' research on the Greek architecture of ancient Corinth, I have constructed a digital application that enables the reader/viewer to virtually walk through ancient Corinth using interactive panoramas. The panoramic technology enables database technologies to not only move a viewer through the site but also to construct a visual archive of the site. Using a digital square mile of panoramic photographs,

the application creates a visually stunning overview of the site and the Corinthia. Using past publications and current research, the viewer moves from building to building and has the capability of "clicking" on salient features, architectural members, and structural features to access the corresponding data. Additional features include access to reconstructions of buildings, links to publications, and, in general, an entirely immersive experience. I further discuss the various ways in which this technology was created, organized, and implemented.

I also present the use of similar models at the Saronic Harbors Archaeological Resarch Project at Korphos and Mount Lykaion and the variety of usages of this technology, especially, as a model for e-publications. Using labor statistics and cost-efficiency models, I present how this can be done at a variety of sites with extremely low overhead and investment. Finally, I discuss how this technology can be used beyond supplemental inclusion in publications; it can also be designed for mobile device applications accessible and usable specifically on site.

#### Digital Preservation Project At Tell Timai, Egypt

Sarah Chapman, University of Arkansas, Sarah Chandlee, University of Tulsa, and Lori Lawson, American University in Cairo

In this paper, we present methods and applications to be employed for digital preservation of Tell Timai, a Graeco-Roman site found in the Egyptian Eastern Delta. This site has seen limited excavations and is being overrun by modern development more each year. In 2004, based on satellite imagery, the extent of the ancient site covered an area of approximately 0.859 km². Satellite imagery from 2009 shows a decrease by 0.1006 km² to a total area of to 0.758 km². It continues to decrease every year; there are plans to build a stadium in the northern portion of the site, and a garbage dump creeps farther onto the site in the northeast section of the tell. These figures illustrate the importance of continuing excavation and research at Tell Timai.

Our methods include the use of close-range photogrammetry for rendering 3-D site models, recording significant features as they are excavated, and using GIS to create site plans. This paper also incorporates current research by one of the coauthors on the urban development and design of the ancient city, both providing orientation for the audience and reiterating the importance of this city in history and its need for preservation. This digital preservation project will be used to create an online database of the site for current and future research (e.g., the work on the urban design of Tell Timai by one of the coauthors), assist with the physical restoration of standing architecture on-site, incorporate the most recent surface survey of the site, and eventually build an online museum of Tell Timai.

### Staveley Hall: The 3-D Digital Survey and Presentation of One of England's Lost Stately Houses

Marcus Abbott, ArcHeritage

This paper presents a case study on the integration of traditional archaeological methods with 3-D digital survey and the concluding public dissemination. The

3-D mapping and reconstruction of Staveley Hall is a cutting-edge archaeological survey and digital visualization project. The project's primary objective is to digitally capture the existing structure of the manor house and its surrounding landscape and to integrate this digital information with archaeological investigation and documentary research to produce a 3-D model of Staveley Hall as it would have appeared in 1680.

The on-site survey was conducted with a Leica C10 laser scanner and consisted of more than 50 individual scans. These independent scans were merged into one project file, creating a detailed 3-D representation of the house and the surrounding landscape. With the information from the laser scan assembled into a navigable file, we could then edit and organize the data from the scans into discrete historical phases, thus creating a 3-D dataset that shows only the features that have survived from a particular phase or period. By processing the data in this way, we were able to visually identify gaps in our knowledge about the structure of the house and, effectively, target these "data voids" with archaeological and documentary investigation.

This incomplete model of historic Staveley Hall provides us with a 3-D platform on which we can expand and experiment with our interpretation of the archaeological and historical data for the house. We were able to fill the gaps in our knowledge through documentary information and archaeological trenches that investigated missing features of the house. Much like archaeologists use geophysics to target subsurface archaeology, we used the laser scan data as a starting point to create a research and investigation strategy focused on exploring and reconstructing the appearance of the house and landscape in 1680.

While archaeology and documentary evidence will always be the driving force behind interpretation of the past, the ability to clearly visualize different interpretations and hypotheses is immensely useful for identifying gaps in our knowledge of a site, for highlighting areas of agreement or disagreement between practitioners, and for challenging our level of understanding of the details of the past. Using the survey and visualization process as an integral part of the investigation and understanding of archaeology may redefine the role of archaeological visualization from an image to accompany the text to a dynamic digital product that inspires the text.

### SESSION 5F The History of Archaeology

CHAIR: Robert Ousterhout, University of Pennsylvania

### Curious Amulets: Mesopotamian Seals Among Classical Gems in European Collections and Catalogues

Melissa Eppihimer, University of Pittsburgh

Cylinder and stamp seals were the first examples of Mesopotamian art to enter European collections in the 17th and 18th centuries. Collectors and scholars, however, identified these objects as amulets or talismans and classified them as

Etruscan, Egyptian, or Persian. While the iconography and forms of the seals were unfamiliar, the technique—intaglio carving in miniature—was not. Because of this, Mesopotamian seals were studied and published along with classical gems, a larger class of ancient intaglios. This paper details the effects of this classical context on the early reception of Mesopotamian seals. It regards the activities and ideas of the gem collectors and scholars as a "prehistory" to the more widely recognized orientalist tendencies of 19th-century scholarship on Mesopotamian seals.

Because gems were an important and popular means of accessing and learning about ancient art, the gem collections and catalogues that contained Mesopotamian seals increased awareness of the seals' existence, but this did not result in a more accurate comprehension of the objects or their images. Although a limited understanding of Mesopotamian archaeology and history is partly to blame, this paper argues that the sustained misunderstanding of the origins, iconography, and functions of Mesopotamian seals is connected to the (neo-)classical framework in which they were viewed. This framework often obscured or distorted the seals' distinctive characteristics. In early works, such as Michel Ange de la Chausse's Romanum Museum (1690), the focus on iconography brought no acknowledgment of the pyramidal form of Late Mesopotamian stamp seals. Later, in the collection of casts and impressions (dactyliotheca) produced by James Tassie in the late 18th century, cylinder seals were made to conform to the conventions of Greek and Roman gems. Tassie's impressions of a cylinder seal divided its unified rectangular scene into a series of excerpted figures; these excerpts were set into oval fields that mimicked the shape and scale of a classical gem. The application of classical standards was not only physical but also conceptual. In his catalogue of the gem collection of Baron von Stosch (1760), J. J. Winckelmann unfavorably compared the "Persian" gems to the Greek ideal. When Mesopotamian seals finally became an independent field of study in the early 19th century, the stage had been set for them to be viewed as necessary, but lesser, antecedents of the treasured classical gems.

#### **Edgar James Banks according to Ottoman Archives**

Ali Sönmez, Çanakkale Onsekizmart University, and Mehmet Fatih Yavuz, Çanakkale Onsekizmart University

The Ottoman empire spanned an area that was home to several ancient civilizations, including among others, Anatolian, Egyptian, Syrian, Greek, and Roman. Beginning in the 19th century, many European states competed among themselves to obtain antiquities from sites in the empire; some had permission to do so, while others who did not simply plundered. Toward the end of the 19th century, American antiquarians and archeologists began to dig in the Ottoman Empire.

In our paper, which is part of a larger project researching the western archaeologists and antiquarians detailed in the Ottoman archives, we focus on the activities of Edgar James Banks, an American diplomat, antiquarian, and novelist. Beginning with his appointment as American consul in Baghdad in 1898, Banks was involved in the trade in antiquities especially cuneiform tablets, getting them from locals in Mesopotamia and a dealer in Istanbul and selling them to museums, libraries, and universities in the United States. Banks also carried out excavations in

Mesopotamia. Though he wanted to excavate at Babylon or Tell Ibrahim, he failed to get a permit. He finally started excavations at Bismya, the site of ancient Adab, now in Iraq, in 1903. Banks mentions his struggles with the Ottoman authorities in his book on the Bismya excavations, published in 1912.

The official correspondences of the Ottoman authorities, however, reveal a flipside to his story. Here we discuss such issues as how Ottoman authorities perceived Banks, why they were unwilling to issue a permit to him to dig in Bismya, and how they prevented him from smuggling antiquities there.

### Rediscovering John Henry Haynes, the Father of American Archaeological Photography

Robert Ousterhout, University of Pennsylvania

The photography of John Henry Haynes (1849–1910) may be more familiar than his name. The well-known views from the excavations at Assos (1881–1883) and Nippur (1889–1900) are his, and although he received little credit for them at the time, we now see these important early excavations through his eyes. Haynes was one of the first archaeologists to use the camera systematically to document an excavation, and was one of the first photographers to be a regular part of an excavation team. Nevertheless, the majority of his work remains unpublished, and most of what has appeared in print is uncredited or attributed to others. In this paper, I reconstruct Haynes' career and assess his contribution as an archaeological photographer, based primarily on unpublished material, such as the extensive collections of his photographs and diaries at University of Pennsylvania and Harvard University, as well as correspondence in the archives of the Archaeological Institute of America (AIA) and the American Board (Istanbul).

Haynes was one of the first beneficiaries of the AIA. He was dispatched by Charles Eliot Norton at the AIA's expense to participate in the proposed mission to Crete (1881); when that failed, he joined the team at Assos. Throughout his early career, Haynes' photographic activity was supported by the AIA: in fact, the AIA owned the camera he used, subsidized his travel, and even requested certain sites be photographed for their use. Unfortunately, the AIA's photographic archive is no longer preserved.

Trained in photography by William J. Stillman following the failed mission to Crete, Haynes learned Stillman's distinctive "picturesque" aesthetic sensibility while photographing the Acropolis in Athens. Stillman had been thoroughly indoctrinated in the artistic theory of his mentor John Ruskin, and this informs his important Acropolis folio of 1870, which he attempted to recreate in 1881 while training Haynes. The principles that Stillman had directed toward a universally recognized great architectural monument, Haynes quite literally took on the road and into the trenches.

In addition to his excavation photography at Assos and Nippur, Haynes made several excursions through Anatolia, Syria, and Mesopotamia in the years 1884–1887 specifically to record archaeological sites. He was the first (or among the first) to photograph many of the inland locations (e.g., Eflatunpınar, Cappadocia, Konya, Ankara, Phrygia, Zircirli, Aslantaş, Binbirkilise, Qalat Saman, Palmyra, Dura). In addition to forming an important chapter in the history of photography,

Haynes' work provides a valuable historical record, particularly for those sites long since altered or destroyed.

### Preserving and Appropriating the Antique: Papal Controls in Renaissance Rome *Brian A. Martens*, Lincoln College, University of Oxford

In this paper, I trace the major papal directives that endeavored to regulate the preservation and export of classical statuary during the 15th and 16th centuries in Rome. I examine the following actions: (1) a bull issued by Pius II in 1462, prohibiting the destruction of marble for lime; (2) a brief issued by Sixtus IV in 1471, banning the exportation of marble without a license; (3) the appointment of Raphael by Leo X to oversee marble excavation and reuse in 1515; and (4) the establishment of the Commissario delle Antichità by Paul III in 1534. As I demonstrate, policies varied between pontificates, and popes commonly granted exceptions to their own policies in pursuance of perceived greater goods. Moreover, unlicensed excavations and exportations persisted. I conclude by briefly considering the emergence of these controls alongside increasing foreign interest in Rome's ancient inheritance.

Although these early mechanisms are often mentioned in Renaissance collection histories, their gathered significance to the history of archaeology remains remarkably unexplored. This study, therefore, fills an important gap that is of particular significance for classical archaeologists. Most notably, it further illuminates 15th- and 16th-century processes of the discovery, protection, and trade of classical antiquities in Rome. Popes attempted to dictate how antiquities were unearthed, recorded, preserved, and sold. These circumstances constitute an important aspect of site and artifact narratives and thus, in turn, of the historiography of the discipline itself. In addition, because formal controls regulating the export of ancient patrimony first emerged in Renaissance Rome, this inquiry permits classical archaeologists to contemplate the origin of modern-day institutions that now govern the excavation and trade of antiquities.

## SESSION 5G Western Provinces

CHAIR: *John R. Hale*, University of Louisville

#### A Revision of Villas and Bathing in Lusitania: New Data from the Area of Torre de Palma

Susan Fugate Brangers, Marywood University, and Maia M. Langley, National Museum of Archaeology, Portugal

The ritual of bathing and the social dynamics of bath complexes in the urban centers of Roman cities have been well documented and discussed. What is less understood is how the baths in the more rural areas of the empire served the populace, who the clientele were, and how these complexes functioned with the

social dynamics of an assumed smaller population. Rigorous surveys regarding the number of baths in the modern countries of Portugal and Spain have been conducted (V. García-Entero, Los "balnea" domésticos (ámbito rural y urbano) en la "Hipania" romana [Madrid 2005] and, Reis, Las termas y balnea romanos de Lusitania [Madrid 2004]), but there are many sites that are still unpublished. Moreover, many of these bathing complexes are attached to villa sites, and their functions are assumed to have serviced the owners or managers of these estates. Rarely have publications addressed the types of material culture found at these sites or the functions they played within the social dynamics of the villa.

In this paper, we discuss these issues by referencing one villa site, Torre de Palma, and its two separate bath complexes. Previous scholarship has focused on the Christian phase of the site with its Early Christian basilica. Discussions have included the possibility of it being a destination for pilgrimages and the second bath (also known as the West Bath) servicing the pilgrims visiting the basilica (McNabb, "The Architecture of Hospitality at Torre de Palma, Portugal," Arris 20 [2009] 4-23). Our paper addresses the history of the villa and its two bath complexes prior to the Christianization of the site. In our discussion, we ask the following questions: What do the bathing complexes tell us about the people who settled and lived here? What kind of trade or industry could support the operations of two bathing complexes? What type of role did the two separate bathing complexes play in the greater scheme of the surrounding rural Roman society? We present a new survey of villas and baths in the area and argue that in this early phase of the site the so-called West Bath functioned as a public bath servicing the surrounding community and travelers/traders, while the other (East) bath was reserved for the inhabitants of the main villa.

### Ammaia: From Geophysical Survey to an Understanding of a Roman Provincial Townscape in Lusitania.

Paul S. Johnson, University of Évora, Cristina Corsi, University of Évora, Lieven Verdonck, University of Ghent, and Frank Vermeulen, University of Ghent

This paper builds on the initial results of the work undertaken at the Roman town of Ammaia (Portalegre, Alto Alentejo, Portugal) as part of the European Union Radio-Past Project (University of Évora), which were presented at the 2011 Annual Meeting of the AIA in San Antonio. The initial results obtained through geomagnetic survey of the intramural part of Ammaia were exceptionally clear, equalling if not surpassing the detail and clarity of results from similar surveys of other, better-known sites such as Falerii Novi, Portus, and Carnuntum. In addition to the remarkably clear results from the surveys of the site, Ammaia is now one of the most extensively investigated Roman towns in Lusitania, significantly moreso than cities such as Merida, Conimbriga, Ebora (Évora), and Olisipo (Lisbon). The other great advantage of the site is that it was of no great political importance during the Roman period, though epigraphic evidence attests to the grant of municipal status in the mid–late first century C.E., and, therefore, is more closely representative of urban life for the vast majority of people in the Roman province of Lusitania during the high empire.

This paper addresses the archaeological interpretation of the survey results in detail, presenting clearly recognizable structures as case studies and discussing the process undertaken in determining an archaeological interpretation for areas within the city where the data were more problematic. Through this process, we touch on issues such as population density, water supply, the planning of the town, and the balance between public and private life for the inhabitants of Ammaia. This paper demonstrates the efficacy of a nonintrusive approach to radically enhance our understanding of this particular site and, as a result, to effectively redefine our understanding of urbanism in Roman Lusitania.

### Messages and Meanings in the First-Century Forum of Thugga in Africa Proconsularis

Allison E. Sterrett-Krause, University of Cincinnati

In this paper, I argue that none of the three first-century benefactors who donated buildings in the forum at Thugga in Africa Proconsularis set out to create a "Roman"-style forum. Instead, each pursued his own goals through his construction projects, seeking to aggrandize his personal reputation and that of his heirs, and to respond to the messages inherent in earlier donated buildings. Though the donation of each benefactor communicates an individual message, those works viewed as a whole convey a connection with Roman Carthage and with Rome itself. This message of Roman identity is, however, a by-product of the efforts of each individual benefactor.

The forum at Thugga, a small city in the hinterland of Carthage, saw intensive building activity in the early first century C.E. At least three donors constructed buildings in the space at their own expense, including two temples, monuments to the imperial cult, and arches marking the entry to the forum. Examination of both archaeological and epigraphic remains underscores the piecemeal nature of the first-century development at the forum and shows that the developing Roman identity displayed there was an unintended consequence of the benefactors' other interests. Their projects display clearly that the donors were especially concerned with promoting themselves as patrons of the city, establishing a family tradition of benefaction, and participating in the political life of Roman Carthage.

Thugga has long been cited as an example of "Romanization," in which Roman culture came gradually to replace the previous Punico-Numidian cultural practices (e.g., T.R.S. Broughton, *The Romanization of Africa Proconsularis* [Baltimore 1929]). The problems with this analytical model are well known (for a succinct summary and bibliography, see J. Crawley Quinn, "Roman Africa?" in J. Pragg and A. Merryweather, eds., *Romanization?*, Digressus Suppl. 1 [2003] 7–34). Recent scholarship has emphasized that the process of cultural change at Thugga was gradual and haphazard, occurring over several centuries, even as some Punico-Numidian cultural practices were retained (e.g., M. Khanoussi, *CRAI* 147 [2003] 131–155). This brief case study demonstrates that the adoption of Roman identity, which can be seen so clearly from a diachronic, archaeological perspective, was probably not the message that ancient inhabitants of Thugga took away from visits to their forum in the first century C.E.

### Breeding a Better Empire: Roman Impact on Livestock Breed Developments in the Ancient Mediterranean World

Michael MacKinnon, University of Winnipeg

One important aspect related to human culture is the creation and spread of new varieties, or breeds, of animals, especially domesticates. Human choice of specific physical characteristics to promote within domestic livestock, and the geographic and cultural manipulation of their breeding, results in phenotypic and genetic separation of animal varieties. Roman antiquity represents a critical period when vast numbers of such breeds developed. Available zooarchaeological metric data from Roman sites across the Mediterranean reveal size and shape changes in livestock species that generally coincide with Roman impact in various regions. Integrating this zooarchaeological evidence with descriptions of animal breeds from ancient Greek and Latin texts, as well as with depictions of animal varieties in ancient art, allows a more comprehensive picture of livestock change during Roman antiquity to emerge.

This paper links these sources to identify, in greater detail, the development, spread, trade, and manipulation of livestock breeds in the Roman Mediterranean. General "improvements" and height increases occur among cattle, sheep, and pigs, but neither equally nor simultaneously across areas of the Mediterranean. Some regions, such as Italy, see larger gains in these measures, and from earlier temporal periods, presumably a result of greater pressures to augment agricultural and economic regimes in these zones. Broader examination of the various lines of evidence, however, reveals considerable complexity, with the Romans variously manipulating different physical traits in animals, such as height, weight, stamina, strength, meat and fat content, among other characteristics and products, in their quest to breed livestock that best catered to the social and economic demands of regions of the empire. Larger pigs, for example, are bred near urban centers, such as Carthage and Rome, presumably to fulfill dietary and ritual demands in cities. Areas under more intensive agricultural exploitation, including Egypt, Sicily, and southern Italy, often register stockier, more powerful, but not necessarily taller, cattle. Roman influence in promoting bigger sheep and at a faster rate, it seems, was felt strongest in Italy and Iberia. Both areas see far more dramatic increases in these dimensions than comparable statistics for the eastern and southern areas of the empire. The integrative approach, combining three sets of data—bones, texts, and art—provides a more holistic picture of animal use and economics during antiquity by highlighting the shrewdness, efficiency, adaptability, innovation, and regionalism of the Romans in terms of animal husbandry and breeding tactics.

# SESSION 5H: Colloquium Crafts, Specialists, and Markets in Mycenaean Greece

ORGANIZERS: William A. Parkinson, Field Museum of Natural History, and Dimitri Nakassis, University of Toronto

#### **Colloquium Overview Statement**

This colloquium investigates the emergence and organization of craft specialization on the Greek mainland. One of the hallmarks of Mycenaean political and economic organization is its high degree of craft specialization. From smiths to textile workers to unguent boilers, craft specialists were critical to the operation of palatial economies. Craft specialization has also played a central role in models of Aegean state formation, such as Renfrew's *Emergence of Civilisation: Cyclades and the Aegean in the Third Millenium B.C.* (London 1972). Yet little systematic research has been dedicated to understanding the development of specialized craft activities, how these specialized craft activities were organized in different regions, and how they related to the administrative structures of the palaces in Bronze Age Greece.

The papers in this colloquium focus on the organization of craft production and the exchange of craft products in the Bronze Age Peloponnese. An introductory paper establishes the theoretical and historical framework for the session, and lays out the evidence for different kinds of craft specialization throughout the Bronze Age. The next two papers discuss craft production and the evidence for market exchange within the Mycenaean state centered on Pylos. One paper examines the palatial center; another paper, the regional town of Nichoria. The final paper examines the Argolid and discusses the variability exhibited in the organization of craft specialization within and between Mycenaean states. The discussant is an anthropological archaeologist who studies the political economies of early states and markets in Mesoamerica and China.

DISCUSSANT: Gary Feinman, Field Museum of Natural History

#### Crafts, Specialists, and Markets in Mycenaean Greece

William A. Parkinson, Field Museum of Natural History, Dimitri Nakassis, University of Toronto, and Michael L. Galaty, Millsaps College

This introductory paper investigates the emergence and organization of craft specialization on the Greek mainland. One of the hallmarks of Mycenaean political and economic organization is its high degree of craft specialization. From smiths to textile workers to unguent boilers, craft specialists were critical to the operation of palatial economies. Craft specialization has also played a central role in models of Aegean state formation, such as Colin Renfrew's *Emergence of Civilisation: Cyclades and the Aegean in the Third Millenium B.C.* (London 1972). Yet little systematic research has been dedicated to understanding the development of specialized craft activities, how these specialized craft activities were organized in different

regions, and how they related to the administrative structures of the palaces in Bronze Age Greece.

Historical models of Mycenaean political economy have emphasized its top-down organization and the redistributive role of the palaces. But the perspective that the palaces centrally controlled most aspects of their political economies has been effectively questioned, with many now stressing the extent to which the palaces relied on local systems of production and exchange. This has resulted not only in a reconsideration of the palaces as redistributive centers but also in a reworking of the role the ruling elite played within Mycenaean political systems. In other parts of the world, such as Mesoamerica, archaeological studies of craft specialization in early states have led scholars to infer the existence of regional markets much earlier than expected. This, in turn, has led to a reconsideration of the relationship between political and economic organization.

### The Palace of Nestor, Craft Production, and Mechanisms for the Transfer of Goods *Julie Hruby*, Berea College

The political economies of Mycenaean Greece have often been modeled in relatively reductive ways, described in terms of redistribution, wealth finance, or slave holding. This paper argues, by contrast, that in seeking goods and services, the Palace of Nestor at Pylos used a wide range of tactics, from active coercion (taxation, slavery, and perhaps plunder) to political pressure, and from hiring the services of craftsmen to bartering for goods and receiving gifts; these mechanisms reflect a complex, mixed economy.

Case studies of the crafts of ceramics and textile manufacture demonstrate that the product of a single craft was regularly obtained through multiple mechanisms. One potter seems to have been "hired" by the palatial elites, while the products of other potters were obtained on an ad hoc basis; some textiles were obtained from producers via taxation, others were made by slave labor, and others were likely received as gifts.

The administrators of the Palace of Nestor often treated a surprisingly broad range of goods, even those we might consider to have been differentiables (e.g. gold cups) as commodities. While a number of explanations for the emergence of this phenomenon are possible (including the roles of taxation structures, habit, and an intentional or unintentional strategy to limit the status of extrapalatial actors), the commoditization of labor and goods facilitated palatial use of a flexible strategy of obtaining goods through whatever mechanisms were effective, costeffective, and convenient.

### The New Political Economy of Nichoria: Using Intrasite Distributional Data to Investigate Regional Institutions

Jamie D. Aprile, The University of Texas at Austin

Models for regional integration in Late Bronze Age Mycenaean Greece have been dominated by top-down approaches that favor economic institutions since the discovery of detailed economic records in the Linear B tablets from most of the palatial Mycenaean sites. These models have not been tested rigorously in the context of regional systems, and survey data as well as excavated nonpalatial communities have been interpreted primarily in terms of an economically driven method of integration organized by central elites.

In this paper, the distribution of major artifacts classes in the Messenian hinterland community of Nichoria is examined to determine what type of exchange was most likely used to distribute those objects within the village. Most of the commonly found artifacts in the settlement, such as terracotta, nonprecious stone, and bronze objects, appear to have been distributed through independent exchange behaviors, possibly through markets. A limited range of objects, including many that are generally known as prestige goods, such as semiprecious stone, precious metal, and ivory objects, were recovered from only the megaron building and the tholos tomb, suggesting that those objects were brought to the site through social and political exchanges, not economic ones. As such, those objects represent regional integration through social and political institutions. Economic institutions thus functioned more independently than we have previously believed, and they provided a substructure for the elaboration of regional complexity undertaken by the elites in the palace at Pylos.

#### **Crafting the Mycenaean Economy**

Daniel Pullen, Florida State University

This paper examines the organization of craft production and exchange in the Bronze Age Argolid, focusing on the variable relationships among palatial and nonpalatial craft production, exchange, and consumption. The Late Bronze Age Argolid represents an intriguing case study, with several palatial centers (Mycenae, Tiryns, and Midea at the minimum), each of which was the center of a territory and a political economy, and craft production appears to have been organized differently among these centers.

The Mycenaean political economy can no longer be characterized as a monolithic redistributive institution controlled entirely by the palaces. Instead, we now understand that the palatial component of the economy coexisted and interacted with the nonpalatial component, especially in economic realms such as agriculture, ceramics, and chipped stone. Still, recent studies of the political economy continue to focus on the non-palatial component from the perspective of the palatial centers, and consumption studies rarely move beyond mortuary consumption of elite products at palatial centers. This paper aims to rectify this situation by examining the variability in craft production, exchange, and consumption in the Bronze Age Argolid within and outside the palatial centers.

As we can no longer rely on (palatial) redistributive models to account for all aspects of exchange in Mycenaean economies, we must turn to alternate modes of exchange. In light of recent research in Mesoamerica and elsewhere demonstrating the existence of markets, the probability of markets and market exchange in the Mycenaean world is explored.

### SESSION 51 Greek Iron Age

CHAIR: Stella Diakou, Bryn Mawr College

### Pottering About the Positivist Fallacy: Missing the Greek Early Iron Age Through Intensive Field Survey.

Daniel P. Diffendale, University of Michigan

Over the past few decades, what was once termed the "Dark Age" of Greece (ca. the 12th through eighth centuries B.C.E.) has increasingly become known less pejoratively as the "Early Iron Age" (EIA). Discoveries such as those at Lefkan-di-Toumba have altered the former picture of centuries of unrelieved isolation, while literary deconstruction has cast enormous doubt on the historicity of the so-called Dorian Invasion. However, despite the concurrent maturation of intensive field survey as a subdiscipline within Greek archaeology, most recent surveys have reported a dearth of ceramic evidence attributable to the EIA relative to the preceding Late Bronze Age and succeeding Archaic and Classical periods. This dearth has usually been read as evidence of a massive depopulation of the Greek mainland sometime after the end of the Mycenaean palatial system, followed by an equally massive population boom in the eighth century. Pots, it seems, equal people, and absence of pots has been used as evidence of absence of people. The most that can safely be posited, however, given the current state of knowledge, is an absence of diagnostic ceramics.

Diagnosticity is not a quality inherent in sherds; rather, it is a dependent variable of human knowledge. The best-known EIA ceramics—currently the most diagnostic—are decorated wheelmade fine wares that derive largely from mortuary and sanctuary contexts. It should not be surprising, then, that relatively few habitation sites have been attributed to the EIA by field survey. Since the pictures of apparent EIA depopulation repeatedly turned up through archaeological survey fit into the received scholarly narrative of the Dark Age, archaeologists have had little motivation to question these results. Questions of ceramic production, supply, and access (sensu Millett 1991) have barely been broached with regard to the EIA in Greece; archaeological reliance on fine wares has led to historical conclusions of questionable validity. I argue that paying greater attention to undecorated, coarse, and "kitchen" wares is a necessary step toward finding the Greek EIA through survey. I discuss how such an approach has been productive in the study of the Italian EIA as well as the later Greek Dark Age of the Early Medieval period, and how it has the potential to show that the landscape of EIA Greece was not so severely depopulated as commonly argued.

#### The Topography of Early Iron Age Lapithos

Stella Diakou, Bryn Mawr College

This paper presents the preliminary results of my doctoral research on Early Iron Age Lapithos. The region of Lapithos tends to be absent from relevant discus-

sions on Early Iron Age Cyprus, despite the fact that at least three Geometric cemeteries (Kastros, Upper Geometric, Lower Geometric) were excavated in the late 1920s and early 1930s. The various archaeological expeditions to Lapithos failed to produce maps with the location of the cemeteries, thus making any discussion on the topography of Lapithos almost impossible. This, in addition to issues of archaeological visibility and the inaccessibility of the region since 1974, have made Lapithos a terra incognita. However, the pottery from the chamber tombs of Lapithos has been used extensively for the creation of the typology of Cypro-Geometric pottery.

In an effort to understand the topography of the region of Lapithos, I created maps with the location of the cemeteries. This was possible through the study of archival sources, such as excavation permits, topographical sketches, data from the Department of Lands and Surveys and the Geological Survey Department of the Government of Cyprus, as well as discussions with Lapithos' former inhabitants. These maps allow us to discuss the topography of Lapithos and the role of the northwest periphery of the island in Early Iron Age Cyprus. Furthermore, a comparative study of the material from the three main Geometric necropoleis of Lapithos, as well as a discussion of their exact location and association with the tombs of Agia Anastasia and Plakes, provides insights on demographic and sociopolitical developments that took place in the Early Iron Age. The material from the Geometric cemeteries of Lapithos is dispersed among museums in Nicosia, Philadelphia, and Stockholm. This study brings the material together while placing Lapithos within the general context of Iron Age Cyprus.

### **Using Funeral Feasting to Examine Community Change in Iron Age Crete** *David Small*, Lehigh University

Increasing interest in social feasting is highlighting the importance of this institution in charting community change. As Hayden ("Funerals as Feasts: Why are They So Important," *CAJ*19 [2009] 29–52) observes, funeral feasting often creates alliances with economic and political obligations. Positive feedbacks from funeral feasting have often formed the basis for exponential changes in technology, demography, and culture change. Within the archaeological record, evidence for funeral feasting should serve as a flag for periods of intensified community change.

This paper reports on research conducted by the author that applies this concept to isolate periods of intensified community change in several Cretan communities in the period from the Late Minoan to the end of the Iron Age (ca. 1100–700 B.C.E.). These data was chosen for various reasons: (1) A noticed tradition of funeral feasting in the Minoan period should have continued into the post-Minoan periods; (2) A large segment of the evidence we have for communities in this period is mortuary, which offers a chance to create a periodic armature for periods of rapid community change, that could be later tested in actual community excavation; and (3) Wallace (*Ancient Crete: From Successful Collapse to Democracy's Alternatives: Twelfth to Fifth Centuries B.C.* [Cambridge 2010]) correctly points out that a major issue with Iron Age Cretan communities is trying to locate when they underwent a transformation that produced the more standardized polities seen in the Late

Geometric and Archaic periods. Funeral feasting should be associated with these transformations.

Two foci of the research are presented. The first treats the issue of identifying funeral feasting in the archaeological record, an issue that has not been adequately examined. The second creates a chronological armature for the occurrence of funeral feasting and relates that to what we currently know of community change in Crete in the Iron Age.

### Grave Type, Offerings, and Landscape: Some Aspects of Mortuary Practices Performed in Geometric Graves in Argos, Greece

Camila Diogo de Souza, Maison René-Ginouvès

This paper evaluates some aspects of funerary practices performed during the Geometric period (900-700 B.C.E.) in Argos, Argolid. Burial analysis varies not only in number but also according to grave types and architecture, the quantity and composition of offerings, and the use and distribution of the funerary space within the limits of the settlement area, establishing a specific funerary landscape. These changes are related to the theatricality displayed in mortuary practices as a method to define and legitimate social and political roles and interests. Although residential remains are scarce and fragmentary compared to the large amount of graves revealed by the Greek and French excavations in the modern city of Argos in the last 30 years, in the Late Geometric phase, social status can be seen in some aspects of mortuary performance, such as differences in funerary architecture, interment treatment, and disposal of offerings. A significant number of cists used for successive burials containing distinguished weaponry and an impressive number of vases ornamented with an aristocratic repertoire of the Argive-figured style forms particular burial plots in the funerary landscape that can help with understanding and reconstructing social organization during the political constitution of the Argive city state.

#### The Swastika in Geometric Greek Art

Jeffrey M. Hurwit, University of Oregon

Before the Nazis ruined it for everyone, the swastika was an ancient and venerable motif that was found in the arts and crafts of diverse peoples, cultures, and periods. Although the sign meant many different things in many different places, its symbolism is, overall, remarkably auspicious and consistently benign; for example, it is a sign of well being and a solar symbol in the Vedic tradition, it can represent infinity in ancient China, it symbolizes the Buddha's heart and mind in East Asian art, and it is a sign of happiness in Navajo cosmology.

In the vase painting of Geometric Greece (900–700 B.C.E.), however, it is usually regarded as a mere "filling ornament" with no symbolic value whatsoever; like other filling ornaments, it is usually thought to be there simply to take up otherwise empty space, to assuage some primal horror vacui. Now, sometimes filling ornaments really are just filling ornaments. But sometimes they are not and,

as Boardman advises, "we surely dismiss too much as mere 'filling' " and "where special patterns recur in special places we must think again."

Past attempts to account for the frequent appearance of the swastika in Geometric vase painting include A. Roes' theory that the Greek swastika is derived from, and has the same solar symbolism as, the Vedic sign. For S. Brunnsåker and G. Ahlberg, however, it is an "ideogram of motion" that enhances the dynamism or action of certain scenes. There is, in all likelihood, no single, overarching symbolism for the motif in Geometric art, and we are probably wrong to seek symbolic consistency in or universal explanations for it. Still, on a series of Geometric vases (e.g., the well-known Hirschfeld Krater in the Athens National Museum), patterns emerge that suggest the swastika could be not just neutral filler or an indicator of movement but a symbol, even an icon, of violence and death.

# SESSION 5J: Joint AIA/APA Colloquium Finding Peasants in Mediterranean Landscapes: New Work in Archaeology and History

ORGANIZERS: Cam Grey, University of Pennsylvania, and Kim Bowes, University of Pennsylvania

#### **Colloquium Overview Statement**

In recent decades, the countrysides of the Graeco-Roman world have undergone a remarkable series of transformations. In current scholarship, accounts of rural settlement patterns, socioeconomic organization, and agricultural activity have embraced diversity and complexity as their underpinning leitmotifs. Scholars now recognize enormous variation in settlement hierarchies, relations of power, and networks of economic interdependence from region to region and period to period. These accounts have been based on a veritable explosion in the volume and sophistication of regional survey projects, together with an embrace of GIS for modeling rural settlement patterns. They also bear witness to increasing collaboration between the various subdisciplines implicated in the study of ancient landscapes and their inhabitants.

The current state of the scholarship may be summarized as follows. Scholars are prepared to countenance extraordinary diversity in the experience of peasants in the ancient Mediterranean. But they assume that this diversity was underpinned by a set of common experiences and constraints. This panel brings together practitioners in the fields of ancient peasant studies and survey archaeology, with the aim of placing this tension between homogeneity and heterogeneity on a more solid theoretical footing and exploiting more fully the potential of collaborative research for the study of peasants and their landscapes in antiquity. We explore the diversity of available tools for recovering the lived experiences of the peasantries of the ancient Mediterranean, and examine the range of techniques and strategies that have been employed for investigating those peasantries within their topographical, socioeconomic, and political landscapes.

The panelists have been variously trained in Italian, British, and American intellectual and technical traditions, and bring to bear on the problem a range of skills,

approaches, and expertise. Two papers deal with Greek contexts. One (copresented by two panelists) models a collaboration between survey archaeologist and historian in pursuit of the diverse experiences of peasants in the landscapes of the eastern Corinthia, while a second reopens debate on residence patterns and economic regimes in Attica, demonstrating that the two problems are inextricably connected.

Three papers focus on the Italian mainland. One (copresented by two panelists) uses survey and excavation data from northern Etruria to highlight unexpected cultural connections between local peasants and their wealthier, more powerful aristocratic neighbors. A second uses field survey data to engage with the debate over whether peasant economies in Italy can best be characterized as subsistence or profit based. A third combines archaeological survey and excavation with the results of faunal, floral, and geoarchaeological data from southwestern Tuscany to question long-held assumptions about the relative immobility of rural populations and challenge demographic models for population size in rural contexts.

Throughout, the emphasis is on the opportunities provided by dialogue between text-based, archaeological, and explicitly model-derived approaches. We envisage 20-minute presentations, running sequentially, followed by an open roundtable discussion of issues raised by all of the papers. In this way, the collaborative objectives of the panel can best be achieved.

#### **Producing the Peasant in the Corinthian Countryside**

David K. Pettegrew, Messiah College, and William Caraher, University of North Dakota

The modern concept of the ancient peasant has been formed largely through the investigation of the places of rural habitation and work by archaeologists over the last 40 years. In this paper, we present a series of case studies from the eastern Corinthia that place the ancient peasant experience at the intersection of our methods, both historical and archaeological, and the contingent processes of habitation and land use that created the human landscape in the short and long terms. We juxtapose three case studies documented through the Eastern Korinthia Archaeological Survey: (1) the diachronic and busy Isthmus, (2) a relatively isolated Late Classical to Hellenistic site near the harbor of Vayia, and (3) a small inland valley east of Sophiko. The first region, the Isthmus, represents the immediate suburbs of Corinth that always abounded in a range of settlements from farms to towns throughout antiquity and produced one of the densest artifact-rich zones of Greece and the Aegean. The coastal zones near Vayia represent more remote regions that experienced occasional and short-term bursts of investment in settlement, rural production, and fortification. Our third case study, the inland valley known as Lakka Skoutara, is a seemingly isolated upland basin with diachronic patterns of habitation that relate to broad processes of regional and global connectivity, as well as quotidian cultural behaviors like habitation, discard, and abandonment. Through these case studies, we foreground the diverse experiences of Corinthian peasants within their connected and contingent worlds and underscore how our knowledge of their experiences follows the methods we employ.

#### **Placing the Peasant in Classical Athens**

Robin Osborne, University of Cambridge

Over the last generation, there were two major scholarly debates about Athenian agriculture. On one hand, scholars have debated settlement pattern in the Athenian countryside. Did Athenians outside Athens live predominantly or exclusively in villages or were they spread about in isolated farms? On the other hand, they have debated the productivity of Athenian agriculture, disputing how much of Attica was cultivated and how much grain, in particular, the land of Attica yielded. Scholars have also asked what the agrarian economy of classical Attica looked like but have concentrated their answer on the elite, stressing in particular the need of the elite for cash. But these questions have generally been investigated quite separately. In this paper, I show not only that the answers to these questions needs to be linked but also that the richness of the information that we have for classical Athens enables us to establish some very surprising answers to some basic questions.

Classical Athens has been growing in recent years. While the followers of Finley, determined to enable classical Athens to survive through subsistence farming, opted for small population numbers, the most recent demographic calculations put the total population of Attica back in the region of 400,000 people. What few proceed to note is that this gives a population density that is historically remarkably high. The consequences of believing in so high a population depend, in part, on what we believe about its distribution.

The distribution of the population of Athens has two aspects: division between town and countryside and division between isolated farms and villages. The work that has been done on the distribution of gravestones and the life of the demes has shown strong reasons for thinking that a substantial part of Athens population remained resident outside the town, even in the fourth century. Archaeological work has shown that there were some isolated farms, in particular the presence of isolated farms in situations marginal for agriculture. Together this evidence argues for the centrality of agriculture to the livelihood of the majority of Athenians in the Classical period.

But classical Athens has been shrinking in recent years in terms of productive capacity. The optimism of scholars in the 1980s prepared to believe that classical Greeks were intensive gardeners more than extensive farmers has evaporated. Most recent estimates of productivity have been low, with an emphasis on undeveloped cereal crops, relatively low seed–yield ratios, and low productivity per unit area.

The different parts of this picture cannot fit together. If population levels were as high as they are currently thought to have been, productivity cannot have been as low as it is thought to have been unless a large proportion of Athenians were not dependent on the land for their livelihood. If there were a lot of Athenians and if most Athenians were peasants, their productivity must have been high. What sort of peasant economy should we imagine? How much land did an Athenian peasant have access to?

Despite the attention that has been lavished on classical Athens and the well-worn nature of many of the arguments about Athenian grain supply, judicious use of archaeological, epigraphic, and literary evidence can still, I argue, yield a picture of the productivity of the Athenian peasant that defies currently prevailing views.

### Not Your Run-of-the-Mill Cereal Farmer? The Evidence from Small Rural Settlements in the Cecina Valley in Northern Etruria

Nicola Terrenato, University of Michigan, and Laura Motta, University of Michigan

Archaeological excavations of small rural settlements in central Italy were virtually nonexistent until the mid 1980s despite that they represented the most commonly found type of site in field surveys. In the course of the Cecina Valley Project, hundreds of these settlements were located in the western part of the territory of the Etruscan and Roman city of Volaterrae. When two of them were thoroughly excavated, they revealed a much more complex picture of small scale farming than previously imagined. On one hand, the structural evidence showed a high degree of conservatism, with pre-Roman vernacular architecture surviving long into the Imperial period; also, the environmental record was consistent with sustainable mixed farming practices integrated with woodland hunting and gathering activities. On the other hand, an extremely remarkable range of artifacts was recovered, which in any other context would be defined as prestige items, including a bronze statuette, an imitation Egyptian scarab, several decorated metal clasps, finger rings, and coins. These were present at both farm sites and covered the entire chronological range of occupation of the sites. So, in some ways the excavation results suggest a classic peasant society substantially unaffected by the many macro-historical changes that accompanied the Roman conquest, the end of the Republic, and the collapse of the western Roman empire. At the same time, the commonly held assumption that Roman peasants barely managed subsistence was also radically called into question.

The ability to place the results from the two small settlements within their broader subregional contexts allows the creation of some interesting hypotheses about rural peasantry in the countryside of Volaterrae and, more generally, of northern Etruria. In line with recent historical and archaeological work on postconquest central Italy, it can be posited that internal displacement and enslavement of non-Romans were less ubiquitous than generally asserted. Furthermore, a possible connection can be seen between peasant conservatism and urban elite conservatism, perhaps suggesting a symbiotic rather than a purely exploitative link between the two groups. Finally (and perhaps most debatably), a link can be conjectured between conservative stewardship of agricultural and woodland resources and the continued production of a small amount of surplus. Falsifying the Malthusian theory that rural populations grow until the maximum carrying capacity of the landscape is reached, a more stable model can be suggested, in which a buffer is carefully preserved to compensate for bad years and other unfavorable conjunctures. The excavations in the Cecina Valley may open more problems than they conclusively solve, but more exciting work on other comparable sites seems to be poised to make a significant change in the way in which peasant society has been understood in Roman studies.

#### **Stuffed or Starved? Evaluating Models of Roman Peasantries**

Robert Witcher, University of Durham

In the preindustrial economy of the Roman empire, most of the free population were peasants of one sort or another. On this much, scholars agree. But was the average peasant family risk averse, malnourished, and largely untouched by the rise and fall of empire? Or market oriented, better fed, taller and more cosmopolitan than its predecessors and successors? This paper sketches and juxtaposes two broad and opposing perspectives on Roman peasants that have begun to emerge in the recent literature.

The dominant understanding of non-slave rural populations was established by Peter Garnsey in a series of perceptive papers integrating textual and archaeological evidence (e.g., Garnsey 1976, 1979). Eschewing the idealized stereotypes of hardworking and uncorrupted peasants propagated by ancient authors such as Virgil, Garnsey outlined an approach based on subsistence needs and the difficulties of meeting these with traditional agricultural practices, in a risky Mediterranean environment, with the added uncertainties of dispossession and market conditions created by incorporation into the Roman state. More recently, approaching the subject from a different perspective, post-colonial scholars such as Terrenato (2008) and van Dommelen (2006) have argued that the impact of Rome on conquered populations and most especially, the rural majority was negligible. For the average peasant, Roman conquest and integration made no qualitative or quantitative difference.

In direct contrast to this broad position, several scholars have recently outlined the basic building blocks of a revisionist interpretation of the Roman economy, which asserts that the rationality and productivity of Roman agriculture and industry have been significantly underestimated, and that, in effect, "Gibbon was right" (Jongman 2007): the early/mid empire was a period of enhanced economic integration and greater wealth. These improved economic conditions meant the population of which peasants formed the greater part was better nourished healthier, taller, and had access to more material culture leading to radically transformed social identities (e.g., Hitchner 2005; Kron 2008).

This paper considers how and why these two generalized perspectives have developed and evaluates their relative strengths and weaknesses. It is suggested that field survey data and its important evidence for significant regional diversity (e.g., Witcher 2006) may provide one way of accommodating and reconciling at least some of the apparent contradictions of these two general approaches to Roman peasantries.

#### **Excavating the Roman Peasant**

Kim Bowes, University of Pennsylvania

The Roman Peasant Project, based in central-western Etruria (modern Tuscany), represents the first systematic attempt to analyze the houses, diet, economies, and landscapes of the Italian Roman rural poor from the Late Republic through late antiquity. Using the results of a modern field survey, the project subject the smallest surface scatters to geophysical examination and then open-area excavation, with

the objective of producing a series of thick datasets to help bridge the gap between the more shallow knowledge produced by field survey and the excavation of single sites. Faunal remains were interrogated for information on dietary and husbandry regimes, archaeobotanical (including pollen) material provided information on crops and environment, while ceramic analysis provided data on exchange, production, and dining habits. Finally, land units analysis of the surrounding land-scape allow us to produce hypothetical land-use maps, including soil quality and movement analysis. These various data sets were then placed alongside theoretical models for the socioeconomic regimes of peasants that have been derived from comparative contexts. To date, the results have brought into question many long-standing assumptions about peasant economies, demographies, and lifeways.

This paper focuses in particular on two sets of questions. First, it appears that this region was characterized by considerable mobility among its rural inhabitants. Most of the small sites thus far excavated seem to be work sites "storage, processing or manufacture points" rather than dwellings. We suggest that, at least in this area, peasants may have lived in larger, agglomerated settlements, or villages and commuted to satellite worksites. Combined with supporting geoarchaeological data that show peasants moving long distances to collect building stone, and faunal data that describe maximum species diversification to reduce risk, the peasants of this region also appear to have ranged widely, taking advantage of farflung resources. Access to the distant urban markets seems to have been excellent, even at the smallest, poorest sites, while monetized exchange was surprisingly frequent. Second, if a single peasant household characteristically exploited a collection of rural sites, it is possible that survey data significantly over-represent the presence of humans in the rural landscape. Estimates of the size of rural populations throughout antiquity may therefore need to be altered, and this in turn promises to shed new light on the problem of the demographic transformation of late antiquity. The implications of these findings for the interpretation of archaeological data, the application of historical models, and our understanding of rural populations in antiquity are considerable.

# SESSION 6A Cycladic Interactions

CHAIR: Evi Gorogianni, University of Akron

### Aegean Interconnections During the Bronze Age-Iron Age Transition (ca. 1250-1000 B.C.E.): A Network Perspective.

Kimberley A.M. van den Berg, VU University, Amsterdam

This paper is an analysis of the theoretical background of research into Aegean Postpalatial interconnections. I hold that presumptions about the Palatial period have stood in the way of a proper evaluation of these connections and argue that much can be gained from rethinking our interpretative frameworks. In particular, I contend that a network perspective on Aegean Postpalatial interconnections helps to rephrase our research questions.

Until recently, the period following the destruction of the Aegean palaces ca. 1200 B.C.E. was treated as an era of general decline and deterioration. However, it is increasingly realized that the impact of the destructions greatly varied between regions. It has been observed that the sites that had continuous occupation were often situated along the coast, still engaging in overseas contacts. This implies that for survival in the "crisis years," it was crucial to remain connected. Past interpretations of how Aegeans succeeded in doing so depend heavily on existing models about the Palatial period.

Drawing on Wallerstein's theory of world systems, many archaeologists perceive the Aegean palaces to form a more developed center that maintained asymmetrical relations with less complex peripheral societies. For the decentralized world after 1200, however, it is difficult to speak in terms of centers and peripheries. Most importantly, center-periphery interaction fails to explain how contacts could continue without the center to initiate them. As an alternative, I explore the potential of network theory.

One promising model is the so-called scale-free network. In this type of network, some nodes ("hubs") show a high degree of connectivity, whereas most are connected to only a few others. As a result, the network is both robust and fragile: one failing hub will not cause loss of connectedness, but the network will disintegrate when more major hubs fail. By using the scale-free network model, I arrive at the hypothesis that the survival of nonpalatial hubs was key to the continuation of Aegean Postpalatial interconnections.

Network theory provides not only a new interpretative model but also the tools for interrogating the evidence. Particularly useful is the concept of network dynamics. It helps to rephrase the destruction of the palaces as a factor of dynamics on Aegean networks that could have potentially affected the dynamics of the network. I conclude with the observation that to investigate these network dynamics, we must confront the Postpalatial evidence with that of the final Palatial era.

### Dining on the Fringe Again? The Northeast Bastion as a Minoan-Style Banquet Hall at Ayia Irini, Kea: the Ceramic Evidence

Evi Gorogianni, University of Akron, and Rodney D. Fitzsimons, Trent University

Recent reanalysis of the remains in the northeast section of Ayia Irini by the members of the Ayia Irini Northern Sector Archaeological Project has brought to light evidence for the presence of a second Minoan-style building on the site (after House A) in the area of the northeast bastion. Two large, rectangular rooms on the upper storey of this complex, one provided with a paved floor and both adorned with lavish wall paintings, including floral panels and miniature frescoes, appear to have functioned as elite dining halls, while two additional rooms on the basement level were set aside for the preparation and storage of foodstuffs. The design and construction of this complex, as well as the formal and functional arrangement of the space, find their best parallels in the Neopalatial palaces of Crete, in those suites of rooms bordering the central courts which Walter Graham labeled "Banquet Halls." The identification of a second structure on the site that incorporates Minoan-style architectural elements expands the list of Minoan and Minoanizing cultural traits already identified at the site and further strengthens

its position as one of the primary conduits for the reception and transmission of such traits throughout the Aegean in the later Middle and early Late Bronze Age. The present paper strengthens the identification of this complex as one dedicated to feasting activities by focusing on the ceramic assemblages found within it, in particular their significance in terms of economic connections with the rest of the Aegean and intrasite sociopolitical dynamics. At the same time, it examines further the phenomenon of Minoanization by exploring the complex relationship between emulation and resistance in the process of material culture change.

### Cretan Connections in Middle Bronze Age Ayia Irini, Kea: An Analysis of Ceramic Shapes and Fabrics from Area B

Natalie D. Abell, University of Cincinnati

During the Middle and early Late Bronze Age, wide-ranging exchange networks linked mainland Greece, the eastern Aegean, and the Cyclades, while contacts with Crete in particular had significant long-term impacts on Cycladic societies. At Ayia Irini, Cretan influences were most intense in the earlier Late Bronze Age; they are evident in the local adoption of Minoanizing pottery types, weaving techniques, architectural features, drinking and dining practices, and religious imagery and/or ideology.

The acceptance of Minoanized practices is anticipated by a long history of trading partnerships between residents of Ayia Irini and Cretan people. Exposure to Cretan ways of doing things at Ayia Irini began with the importation of Cretan products in the earlier Middle Bronze Age, Period IV. These early trade relationships, through which local people met and exchanged products and ideas with Cretan sailors, merchants, and perhaps craftspeople, created the necessary conditions according to which Cretan practices and ideas became appealing to local residents of Ayia Irini. Yet these early processes of interaction have generally been only partially explored. One basic question is, with which Cretan center(s) were the people of Ayia Irini in contact, and did the same relationships continue to be dominant in the later MBA and LBA?

Area B preserves well-stratified remains of Period IV, and can serve as a case study for considering the extent of Cretan contacts in the earlier MBA. An investigation of ceramic shapes, in addition to a macroscopic analysis of ceramic fabrics, has demonstrated that Minoan imported pottery found in Area B derives from multiple Cretan centers. Knossian imports do not appear to outnumber those from other areas of Crete. Implications of this pattern affect interpretation of earlier MBA Keian and Cretan social dynamics. On Kea, the variety of Cretan connections might be the result of local preferences in choosing which Cretan products and technologies to import and adopt, and from which groups of people. On Crete, that no palatial center dominated early MBA trade with Ayia Irini might suggest that no one center was capable of (or interested in) establishing exclusive access to Keian resources, particularly its connections with metal-rich areas like nearby Lavrion. The emergence of Knossos as the cultural and perhaps political leader of Crete in the Neopalatial period may be reflected in the increased prominence of Knossos as a trading partner of Ayia Irini in the later MBA and LBA.

# Kymbes, Strainers, Spirals, Crocuses, Ibexes, Swallows, Dolphins, and Lilies at Akrotiri: Theran Ceramic Vessels of Special Use and Special Iconography

Dimitra Kriga, Technological Educational Institution of the Ionian Islands

Locally produced Late Cycladic I pottery at Akrotiri (Thera) has been a subject of various scholarly discussions over the years in Aegean prehistory. This paper discusses the form and function of a pair of quite rare ceramic vessels, *kymbes* and strainers, from the Theran Late Cycladic I and compares their iconography.

The *kymbes* have not been found anywhere else in the Aegean but Akrotiri, while the strainers seek their origin in the Late Minoan IA and IB pottery in Crete. They are both very characteristic types of vessels and carry many similarities in the decorative pictorial motifs on them. A small number of both types have been found, in comparison to the numerous examples of vessels of the Theran ceramic production during the mature Late Cycladic I period/Late Minoan IA period.

Strainers in Crete are mostly decorated with crocus flowers and spirals. Strainers in Thera are mostly decorated with crocus flowers, swallows, and dolphins.

All the decorative motifs seen on *kymbes* and strainers play a very important role in all aspects of Theran art, and it is of major importance to be noted that both types are exclusively decorated with pictorial themes of flora and fauna. This evidence shows the influence of the monumental art of the frescoes on the smaller-scale and less precise ceramic art. It is probable that their similar decoration might indicate their special and, possibly, ritual function.

### A New Discovery and Interpretation of the Fragmentary Figure Fresco from the House of the Ladies, Thera

Bernice Jones, AIA New York Society

This paper discusses newly discovered remnants of an anatomical outline of a figure partially depicted on a fresco fragment from the House of the Ladies, Thera, and its ramifications. The figure was previously thought by Peterson-Murray and this author to represent a standing large scale woman, and by Marinatos to represent a seated large-scale priestess. The new evidence, however, distinguishes the figure from her garment, shows that she is indeed standing but is smaller than the bending lady at her left and is comparable in size with other Theran children. Her lack of long hair supports her identification as a young girl. Details and comparanda allow for a reconstruction not only of the figure and her garment (replicated and displayed as in art on a live model) but also of the entire fresco, its relationship to the other fresco in the room, and a new iconographical interpretation.

### SESSION 6B Roman Iconography

CHAIR: Rebecca Molholt, Brown University

#### The Case of Adaptive Symbols Used by Deiotarus of Galatia

Matthew Coleman, University of Arizona

Wily, cunning, and shrewd are all words used to describe Deiotarus the Great, first king of Galatia. These words aptly describe the intelligence of a man who was to unite Galatia and turn it into a successful kingdom that survived until the first century C.E. He was able to achieve this amazing feat by understanding the use of ethnic symbols of power.

In this paper, I argue that King Deiotarus used cosmopolitan symbols of leadership to confront and interact with various foreign powers surrounding his kingdom, and he used traditional Celtic images of leadership to maintain power at home. This makes Deiotarus unique as an example of a client-king of Rome maintaining power in multiethnic Asia Minor. Additionally, he is unique among Celtic leaders in adapting to the political dilemma of subservience to Rome without relinquishing ethnically Celtic symbolic power. He was working within a Hellenistic model of kingship—in a diverse area of the ancient world—as a foreigner and a client to a more powerful polity. Deiotarus is an excellent case study of prestige interaction in Hellenistic Asia Minor during the rise of Rome's influence in the region. I propose a study of King Deiotarus in an effort to understand a multicultural prestige economy. This means using a variety of sources, including the letters of his friend Cicero that mention the king and his relationship to Cicero as client and friend. Mention of Deiotarus as a king is also found in Aulus Hirtius and as anachronistic descriptions in Plutarch and Cassius Dio. The archaeology pertaining to Deiotarus is sufficient, especially regarding elite symbols. Some useful sites are his hillforts at Blucium and Peium as well as the tomb of Deiotarus II. Coins are also found in reasonable abundance to analyze important symbols of his reign. While he may seem too obscure a figure in the history of early Roman Asia Minor, the unique position of Deiotarus in the political climate of this region and his need for certain symbols to maneuver through a variety of spheres of power make his iconography important for understanding how a ruler might interact with the different polities with different expectations of prestige.

#### Peace and Pietas in Nero's Later Aes Coins from Rome

Molly Pryzwansky, Duke University

The invective tropes of historiography (e.g., luxuria, incest) dominate our picture of Nero. *Reflections of Nero* (Chapel Hill 1994) illuminates the "myths" of Nero in written sources, while Champlin's *Nero* (Cambridge 2003) strips away the filter of unsympathetic later historians to show that the emperor was aware of, and adept at manipulating, his own image. I build on such work by exploring aes coins from Rome at the end of Nero's reign (65–8 C.E.). While the literary sources stress

Nero's tyranny, his coins depict him as conscious of the traditional language of pietas and eager to convey a message of stability.

Nero's pre-65 Roman aes coins bore 35 variations of 17 themes (*RIC* I2). The range of reverse types "drastically changed" after 65, however, and now centered on two: the Temple of Janus or Roma holding Victory. In Lugdunum, nevertheless, the previously wider range of reverse types (e.g., Annona, Adlocutio, Decursio) continued to be minted alongside Janus and Roma/Victory. Thus, the Roman mint issued a limited number of types, while Lugdunum continued to mint a greater variety of themes. Why the restriction in Rome, and why these particular reverse types?

The reverse types on the Roman coins are multivalent. On one hand, Nero advertises the closing of the Temple of Janus upon the conquest of Armenia (cf. Suet. *Nero* 13). On the other hand, this imagery also evokes the stable and popular pax Augusta. Thus, with the various threats late in his reign (e.g., the Pisonian Conspiracy, the revolt of Vindex), the closing of the Temple of Janus has military resonance, but it also reminds the public that Nero (unlike any challengers) will provide a long, peaceful reign like his forebear. Similarly, the Roma/Victory types emphasize Nero's efforts to rebuild Rome after the fire of 64 but also allude to success in the East. They additionally imply Nero's victory over plots. In these coins, we see Nero turning to traditional, Augustan themes to convey a message of stability, a far cry from the tyrannical monster of the historical sources. Without a pro-Nero ancient history, coins are a good way to balance the hostility of the written sources and to approach the image Nero wanted to project to a Roman audience in his final years.

## **Between a Rock and a Hard Place: Rethinking the Cilicia Mosaic from Antioch** *Tyler Jo Smith, University of Virginia*

The Cilicia mosaic was discovered during the course of excavations at Antiochon-the-Orontes during the late 1930s. Purchased in the summer of 1950 by the University of Oklahoma from the Committee for the Excavation of Antioch (through Princeton University), the Cilicia panel has featured in everything from excavation reports and academic articles to encyclopedia entries and the local newspaper. Incomplete in its preservation, and possibly even altered in antiquity, it originally comprised a large section of the emblema of a triclinium in the Roman House of Cilicia (Room 1) at Seleucia Pieria. Based mainly on stylistic criteria, the mosaic has been dated to the second half of the second century C.E. Two corner mosaics belonging to the same room, each portraying a river personified (Tigris and Pyramos), were also uncovered, and each received almost immediate scholarly attention. Impressive in its size and splendor, the Cilicia figure panel has never received exclusive study. The mosaic panel has, however, been incorporated into discussions of artistic personifications and in reference to the broader social and culture setting of local dining spaces. From its initial discovery at Antioch to its present display on the wall of the ethnographic section of a museum of natural history in the central United States, the Cilicia mosaic presents the opportunity to present the modern "biography" of an ancient mosaic pavement.

This paper presents the archaeological context of the mosaic as it is understood based on excavation reports, as well as an in-plan view of it in the house in which it was originally situated; it then briefly describes the treatment and display of the mosaic since its arrival in North America. The focus of the paper, however, is the iconography. The various interpretations of the missing figure(s) in the central panel, as well as those for the assumed river personifications in the corners, is charted over time and viewed in relation to the publications in which they have featured. On the basis of geographic, historical, and numismatic considerations, a new set of possible identities for the missing figures is proposed, one that makes associations to the west in Anatolia, where Cilicia was located, rather than to the east in Mesopotamia, as has commonly been suggested.

### Bragging Rights and Workshop Practices: The Metrology of Roman Silver

Robert Cohon, University of Missouri-Kansas City

In a paper presented at the 2007 Annual Meeting of the AIA, I established that Roman sculptors sometimes conceived of their marble reliefs in integers of basic units of measure (the digitus [1.85 cm], palmus [7.4 cm], and pes [29.6 cm]), that their actual measurements deviated from exact integers by only a few millimeters, and that studying the artists' use of metrics reveals much about the planning and manufacture of the reliefs. We now can extend this methodology to Roman silver vessels and plates from the Late Republic to Imperial periods. Although archaeologists sometimes describe the weight of Roman table silver in ancient metrics (in part to understand its original financial value), they measure its dimensions only in modern metrics. Significant information has thereby been overlooked.

The large dimensions (a pes or more) of several key works were conceived in integers of ancient units of measure; for example, the diameters of the first-century B.C.E. Aquileia plate in Vienna (1 pes), the Kaiseraugst Meerstadtplatte (2 pedes), the nielloed Mildenhall plate (30 digiti), and Missorium of Theodosius (10 palmi). Indeed, the height of the Missorium's figure of Theodosius was planned at 4 palmi. Several smaller examples of diverse forms were also conceived in integers of palmi or multiples of 5 digiti; for example, the two maenad plates from Mildenhall, scyphi and lances from Hildesheim, paterae from Berthouville, and the Esquiline's Pelegrina ewer.

When silversmiths sized their art in integers, their inaccuracies, usually about 1 to 3 mm, were barely perceptible. They used integers to facilitate the proportioning of the design and the communicating with patrons. Using large units of measure (palmi and pedes), and especially multiples of five for large (palmi) or small (digiti) units, made the dimensions memorable and impressive. They gave the owner bragging rights.

Diameters measured in integers (esp. the pes and palmus) accord with the inscribed records of terracotta vessels from the Graufesenque workshop. The use of multiples of five parallels the weights inscribed on some silver (e.g., the Missorium at 50 pondera) and those recorded in the Liber Pontificalis donation lists. A similar preference appears in Roman architecture. Inaccuracies comparable to those in sizing silver are common in the aforementioned marble reliefs. A similar

use of integers governs even the Symmachi ivory diptychs and Bargello's Adam and Paul diptychs—each a pes high. The tradition continued: the sixth-century Riha silver rhipidion measures within 2 mm of an Early Byzantine pous.

# **Gods, Coins, and Contestation: Cistophori and Power in Roman Asia Minor** *Marsha McCoy,* Southern Methodist University

Cistophori, the standard silver currency used in Asia Minor during the Roman period, become a focal point for a contestation of power in the late Roman Republic between Antony and Octavian that visually and symbolically employs gods to represent the different strategies of the two. Though recent research has clarified many other questions surrounding these cistophoric issues (cf., e.g., R.A. Kearsley, "Octavian and Augury: The Years 30–27 B.C." *Classical Quarterly* n.s. 59 [2009] 147–166), this paper analyzes the divine images on them in order to elucidate their different political strategies.

Antony is the first to present images on cistophori in 39 B.C.E., thus both advertising his union with Octavia and, more importantly, presenting the divine image of Dionysos. Although Antony has no larger Eastern strategy of identification with Dionysos as the "New Dionysos," by associating himself and Octavia with the god, he asserts with this coinage not only a Roman legal right to rule, through his agreement with Octavian, but also a quasi-divine right, by association with Dionysos and the Attalids, who claimed descent from Dionysos. By contrast, Octavian adopts a different visual strategy in 28 B.C.E. when he replaces Antony's cistophori with his own. He retains Antony's innovations, putting his own head on the obverse, but on the reverse he replaces Dionysos with the goddess, Pax. Octavian thus uses the divinity to promote his larger political and social program of peace after years of civil war. If Octavian does not identify himself with Pax, he nonetheless is trying to create a "New Pax" in the East and throughout the Roman world as well.

### SESSION 6C Bronze Age Helladic Mainland Greece

CHAIR: Nicholas G. Blackwell, W. F. Albright Institute of Archaeological Research

# An Analysis of Early Helladic III-Late Helladic I House Architecture and Assemblages

Corien Wiersma, University of Groningen

I present the preliminary results of the analysis of Early Helladic III (EH III), Middle Helladic (MH), and Late Helladic I (LH I) house architecture of mainland Greece. Such an analysis is long overdue because (1) simple domestic architecture has been neglected in Bronze Age studies, (2) analysis of EH III houses enhances our understanding of social changes taking place during this period, and (3) analysis of MH and LH I houses is a source of evidence to trace the existence

and development of social complexity and the rise of the elite during the later MH period, which is so far only substantiated by analysis of mortuary practices. Architecture is usually examined in isolation. However, I also examine associated domestic assemblages.

Approximately 400 houses were selected for the analysis. Architectural details were encoded into a database, and a catalogue of houses was compiled. Based on this data, different types of comparisons are carried out, namely a comparison of houses of a specific time period, within settlements, within regions, and of the different regions. So far, several meaningful patterns have emerged from the analysis, which are discussed according to three different time periods: EH III, MH I–II, and MH III–LH I.

I suggest that the shift from EH II conglomerate architecture to EH III freestanding structures was due to a shift in social relations. The household was emphasized through the creation of freestanding houses and the rebuilding of houses in more or less the same location. The analysis shows that architectural differences existed between central Greece and the Peloponnese that have not been hitherto recognized.

During MH I–II, a transition occurred from apsidal-shaped houses to rectangular houses, and more rooms were created. Some houses were still rebuilt on the same location. The data suggest that a few households started to aggrandize: the area around some houses was partitioned, as if space was appropriated and personalized by the household. Furthermore, several large houses (100 m² and more) were built.

I propose that during MH III–LH I, the composition or meaning of the household changed, and some households started to compete. The data show that fewer houses were rebuilt. Instead, differences between houses became more pronounced; beside freestanding houses, room complexes were also constructed. Furthermore, an increase was seen in the number of large houses.

#### Tool Marks on the Lion Gate Relief at Mycenae

Nicholas G. Blackwell, W. F. Albright Institute of Archaeological Research

There are numerous interpretations of the well-known facade depicting two lions above the middle 13th-century B.C.E. gateway at Mycenae. In comparison, the techniques employed in creating the relief have been understudied. In 1921–1923, Wace identified a series of saw cuts and drill holes in the crevices outlining the lions' bodies but did not go into detail describing or analyzing them. A decade later, Casson advanced our understanding about the facade's manufacture by determining that the holes were made by tubular or hollow drill bits. Since then, no substantial work on the relief's production has been published. This paper fills that gap with new observations about the sculpture that are based on first-hand inspection of the tool marks on the Mycenae facade.

While saws and chisels were used to carve the relief, the importance of the tubular drill in producing the Lion Gate has not been fully appreciated. My research on the facade has identified at least 200 tubular drill holes of various sizes. The considerable number of these perforations, their diverse dimensions, and their locations on the relief illustrate the tubular drill's multifunctional nature. Artisans

used the implement at Mycenae to (1) create a series of holes that delineated the basic form of the lions in the early stages of production, (2) remove segments of stone without cracking or damaging the massive block of hard limestone, and (3) cut mortises for dowels that secured attachments to the facade.

In addition to the essential role that the tubular drill played in the creation of the Lion Gate relief, examination of the drill holes provide greater insights. The perforations aid reconstructions of the position of the lions' heads, which were originally attached to the relief but are now missing. Moreover, the absence of drill holes on specific areas of the facade disproves earlier suggestions that the animals represent griffins. Finally, the inspiration for the Mycenaean use of the tubular drill in monumental sculpture is considered, for a cross-cultural parallel with Anatolian practices is plausible.

# The Great Megara of the Mycenaean Palaces as Symbolic and Performative Space: Toward Functional Integration of the "Throne Room" with Other Palace Structures and Consideration of Means of Political and Religious Legitimation in Mycenaean Greece

Jarrett L. Farmer, University of Maryland, College Park, and Michael F. Lane, University of Maryland, Baltimore County

Building on the interpretations of Joseph Maran and others, we seek to elucidate the architectural and symbolic history of the "great megara" of Late Helladic III Mycenae, Pylos, and Tiryns, as well as their ceremonial uses, through close examination of both architectural contexts and artifactual content. We compare them also to the throne room of Late Minoan Knossos on Crete and to such "megaroid" buildings as the dual melathra of Gla in mainland Greece. The aim of the paper is twofold: (1) to relate the analysis of the purposes and uses of the megaron to similarly conceived studies of other components of the Mycenaean palace (particularly at Pylos) and (2) to explore the manners in which political and religious authority could be embodied and enacted on the stage of the megaron. In other words, the present study attempts to treat the Great Megaron as something other than an instance of a type (throne room, palace, etc.) or indicator of degree of social complexity, and it examines in detail some of the means by which the rulers in Mycenaean society legitimated their power and, by extension, how these means and ways were transformed at the end of the bronze age.

#### A Close Style Pottery Workshop Group of Late Helladic IIIC Middle

Linda Meiberg, The University of Pennsylvania

Late Helladic IIIC Middle Close Style pottery was first identified by Blegen at the settlement of Korakou in the Corinthia. Excavations at Mycenae, however, particularly those at the Granary and the Citadel House, have yielded the largest and best-stratified deposits of this type of pottery. Close Style pottery is characterized by its miniaturist composition of densely packed designs and by a preference for motifs that include elaborate birds, triangular patches, and rosettes. Since Close

Style pottery is found predominantly at sites in the Argolid, it is thought to have been produced there.

Examples of Close Style pottery have been identified as far away as the island of Rhodes in the Dodecanese, attesting to its import there. Locally produced examples, which are stylistically similar but imitate true Close Style, are also found on the island. However, Rhodes's northern neighbor, Kos, has yielded only imitations of the true Close Style.

This paper presents pottery that I have recently identified as belonging to the true Close Style from the settlement site of Seraglio on Kos. This pottery bears similarities to examples from the Argolid and, therefore, I propose that they are the product of the same workshop. It is now possible to assert that Kos, like Rhodes, played a significant role in the trade network between the Argolid and the eastern Mediterranean in the LH IIIC Middle period.

### Funerary Body, Dress, and Identity in Mycenaean Greece

Petya Hristova, Independent Scholar

This paper considers depositional assemblages of adornment from funerary contexts as embodiments of representational practices and identities in Mycenaean Greece. Although historical identifications would remain problematic, symbolic actions, as well as funerary gestures, preserved archaeologically might point at relationships within the community. As Gansell suggests, social and ritual identities can be interpreted through adornment, and "acts of communal ornamentation" can be identified (CAJ 17 [2007] 44). Comparisons of jewelry sets in their contextual layouts in relation to bodies as well as their post-funerary treatment might reveal individual and social identities across a number of cemeteries and burials, elite as well as nonelite, and corroborate what Colburn calls "a well-established élite visual vocabulary" of prestigious personal adornment (in Adornment in the Ancient Mediterranean World, C. Colburn and M. Heyn, eds., [Newcastle 2008] 40). Combining archaeological and other types of evidence would allow identifications of a variety of rituals of everyday life, such as maturation rituals and commemorative practices. From the perspective of the long-term on intersite and intrasite levels, in addition to patterns of ritual change, technological and behavioral changes might point at patterns of ritual in making. The archaeological study of funerary jewelry in relation to bodies might contribute to interpretations of socially meaningful ritual continuity and change, as well as tradition and renewal in funerary and commemorative contexts through practices of remembering, forgetting, and oblivion, including imitation, replication, transformation, reinvention, abandonment, avoidance, concealment, renewal, display, and memorialization.

#### The Conglomerate Quarry at Vapheio-Palaiopyrgi in Laconia, Greece

Anne P. Chapin, Brevard College, Emilia Banou, University of the Peloponnese, and Louise Hitchcock, University of Melbourne

In contrast to the many detailed studies of Minoan quarries, few details have been published on Mycenaean ones. This paper reports on an INSTAP-sponsored

project to document a recently identified conglomerate stone quarry at the Bronze Age site of Vapheio-Palaiopyrgi in Laconia, Greece, in August 2011. Vapheio-Palaiopyrgi is best known for its tholos tomb and its rich grave goods, including the famous gold cups.

The quarry, which preserves some unusual features, including a column base in situ and curved cuttings indicating the quarrying of several additional column bases, lies between the Vapheio tholos tomb and the settlement of Palaiopyrgi. It is proposed that the quarry could be associated with the Mycenaean culture of the Late Bronze Age. Our proposal is based on the topography of the quarry, its relationship to neighboring sites, the importance of the Eurotas Valley in the Mycenaean era, the material (namely conglomerate) that served as a symbol of Mycenaean prestige architecture, and on architectural parallels with sites in the Argolid, particularly at Mycenae.

### SESSION 6D Landscape and Settlements

CHAIR: To be announced

# Same God, Different Times: The Sanctuary of Sinuri, as a Focal Point Amid Shifting Identities in Hekatomnid and Hellenistic Karia

Christina Williamson, University of Groningen

Sanctuaries were typically the locus where social identities at different levels were negotiated by the communities to which they were common. The sanctuary of the local Karian god Sinuri, some 15 km southeast of Mylasa, is an excellent example of this, being the center of a *syngeneia* (kinship group); *syngeneiai* were frequent in Karia and were the base unit of communal identity. At some time between the Late Classical and Hellenistic periods, an unusual transition took place at this sanctuary when the local Pelekos *syngeneia*, who had direct ties to the Hekatomnid satraps, was supplanted by the Pormounou *syngeneia*, who was clearly subordinate to the polis of Mylasa. Using archaeological and epigraphic evidence, I explore in this paper how the Pormounou *syngeneia* then used the Sanctuary of Sinuri to come to terms with their new nested identity under the aegis of the Hellenistic polis.

The Sanctuary of Sinuri was discovered in the 1930s by Louis Robert and was excavated shortly thereafter. The nearly 100 inscriptions that came to light show how strongly this local community had embraced the "epigraphic habit," lacing the walls of their sanctuary with their decrees and, especially, with the lease contracts of land scattered across the territory of Mylasa that they acquired for the god. They also made their own architectural modifications to the temenos that had previously been monumentalized by the Hekatomnids. Although the sanctuary was later destroyed by the construction of a basilica, enough traces are left that allow for a provisional reconstruction of how the Pormounou used their sacred space.

Architecture was employed to articulate ritual practice. The sacrificial feast was central to Pormounou identity and is when they settled their transactions and honored their members with crowns and special parts of the victim, year after year. The repeated rituals and the inscriptions served to imprint the things that mattered into the collective memory of the *syngeneia*. In this paper, I argue that this is how they came to terms with their new subordinate role under Mylasa. I further argue that, since most of the honorific decrees that we know from Mylasa were distributed at such "local" levels through sanctuaries belonging to *phylai* or *syngeneiai*, the Pormounou may be considered as generally representative of the hybrid composition of this Karian polis.

#### New Halos: A Failed City?

Margriet J. Haagsma, University of Alberta, and H.R. Reinders, University of Groningen

The ideals of a sustainable city and household organization about which ancient Greek authors inform us were not always brought into practice, especially not during the Hellenistic period. In this paper, we draw attention to the relationship between domestic activities and their environmental setting on one hand and the connection between Greek cities and rulers during the Hellenistic period on the other. The city of New Halos in Achaia Phthiotis, Thessaly, a large Hellenistic (re) foundation dating to 302 B.C.E., which was inhabited for only 35 years, serves as a case study.

We argue that in interpreting spatial domestic data and house contents, contextualization using additional information such as historical sources and data gathered during an environmental and archaeological survey is necessary. Thanks to the abundance of these various forms of data in New Halos, we have gained new insights regarding the domestic economies of the inhabitants of this city but also new information regarding the policies of Macedonian rulers, such as the Antigonids, with regard to the populations of cities they founded or "liberated."

In the case of Halos, the environmental and archaeological surveys point to a surrounding countryside that was not intensively cultivated and which seems to lack dispersed farmsteads during the period of the existence of the Hellenistic city; this is in contrast to the preceding Classical period. We may conclude that the inhabitants of this large, newly planned urban center could not support themselves by the agricultural yields of the countryside, and that many people lived off an economy partially based on pastoralism. The city must have been dependent on the import of grain from the more fertile plains of inland Thessaly or from overseas. This, and the tight financial control of the Hellenistic rulers, had a negative impact on the viability of the urban environment. The lack of investment in the houses, as well as in the city's infrastructure, contrasts with the impressive defensive installations surrounding the city's gridlike layout. The abscence of a wealthy upper class is a further indiccation of an inability to (and a resistance toward) restore, develop, and maintain this large urban center. The urban center failed and the households must have moved to locations more suitable for their domestic economies.

## Shifts in Settlement Patterns in Hellenistic Thessaly: The Urbanization of Kastro Kallithea in Achaia Phthiotis

Laura Surtees, Bryn Mawr College, Margriet J. Haagsma, University of Alberta, Sophia Karapanou, 15th Ephorate of Prehistoric and Classical Antiquities, and Sean Gouglas, University of Alberta

In the Hellenistic period, population and settlement patterns throughout Greece were significantly altered by changes in the political and economic environment as a result of the civil strife between the Diadochoi in the aftermath of Alexander the Great's death. Similar to other parts of Greece, Achaia Phthiotis in Thessaly, witnessed increased urbanization resulting from synoikism and migration from the countryside in the late fourth to early third century B.C.E. The establishment of new urban centers, such as the polis of Kastro Kallithea, was developed using standard principles of city planning and spatial organization. In the second century B.C.E., political circumstances had altered the balance of power, and Thessaly was incorporated as a Roman province. Under the Romans, there was a shift back to the countryside, and many of the newly established cities were depopulated, abandoned, or destroyed.

Kastro Kallithea was founded around the end of the fourth century as a new city with heavy fortification walls and an orthogonal city plan; the city probably also minted its own coinage. Occupation of the city continued into the first century B.C.E., albeit perhaps with a reduced population. In this paper, we present evidence, collected in the urban survey for the establishment, occupation, and abandonment of Kastro Kallithea and explore how the urban space was manipulated and reconfigured by its inhabitants over the life of the city. We examine the impetus for urban living and assess to what extent Kastro Kallithea fits in with the historical picture outlined above in respect to urban planning, shifts in settlement patterns, and fluctuations in urbanization visible in Thessaly and the rest of Greece during the Hellenistic period.

# Paesants in the Taurus Mountains: Research in the Territory of Pednelissos (Southwest Turkey)

Lutgarde Vandeput, British Institute at Ankara

The Pisidia Survey Project has been investigating archaeological remains in the territory of Pednelissos in Pisidia. The polis is located in the southernmost fringes of the Taurus Mountains, overlooking the Pamphylian Plain. Its territory covers mountainous areas as well as the foothills below and may even have touched upon the plain itself. Remains of rural life have proven immensely rich and testify different types of settlements and their development throughout time. Some settlements were abandoned in the Roman Imperial period, especially those at locations chosen specifically for defensive purposes, but some of them were reoccupied in late antiquity. Changes in settlement pattern can be traced from the Hellenistic period onward and are especially well documented for late antiquity, when rural life seems to have reached its highest density. Distance to the central polis seems to have influenced the settlement pattern, and large, walled settlements appear in several of the more remote valleys and seem to have taken on the role of center in

a limited area of the territory. Around them figure the same smaller entities as recorded around Pednelissos itself; more specifically, different types of farmsteads.

The remains also yielded surprising insights into the economy of the area in the course of time. Numerous elements of press installations are preserved, testifying to an intensive olive tree cultivation and olive oil production. Most spectacular however, is the discovery of eight ceramic production units that all produced the same red slipped Late Antique tableware known as Late Roman D, or the so-called Cypriote Red Slip Ware. The discovery indicates that Late Roman D Ware was either produced in southwest Asia Minor and not in Cyprus or that the Cypriote Ware was imitated on a very large scale in southwest Asia Minor. Regardless, the discovery has huge consequences on the way in which economy in late antiquity should be examined.

#### 2011 Harbor Survey at Burgaz, Turkey

*Elizabeth S. Greene*, Brock University, *Justin Leidwanger*, Institute for the Study of the Ancient World, New York University, and *Numan Tuna*, Middle East Technical University

In July 2011, a team from Brock University collaborated with Middle East Technical University (METU) to initiate a comprehensive exploration of the four harbors at Burgaz in southwest Turkey. The survey took place within the context of ongoing excavations by METU onshore at the site suggested by Bean and Cook ("The Cnida," BSA 47 [1952] 202) as the settlement of the Knidians before their move to the tip of the Datça peninsula. To understand the maritime landscape of Burgaz during the Archaic through Hellenistic periods, three primary research goals were established: (1) to map visible remains of architectural features, (2) to document the ceramic record on the harbor floors, and (3) to identify shipwrecks in the area.

The 2011 season focused on Harbors 1 and 4, together with the sea wall and related installations connecting these two facilities. Results of bathymetric survey in Harbor 1, along with prior geophysical prospection, suggest significant siltation in the early harbor, the dimensions of which likely included some of the adjacent low-lying farmland. The pottery record within and outside the harbor reveals no conclusive evidence for significant use beyond the Early Hellenistic period; the earliest finds probably date to the Late Archaic period. Architectural technique, layout, and ceramics all suggest that Harbor 4 and the intervening area served the workshops established in the city after the classical habitation. Viewed together, the construction and location of the two harbors may indicate evolution of the maritime landscape in response to environmental, economic, and sociopolitical conditions.

# Lessons Learned from Five Years of Use of Portable X-Ray Florescence at the Excavations at Corgilia, CV (Umbria, Italy)

David B. George, Saint Anselm College, Mary Kate Donais, Saint Anselm College, and Claudio Bizzarri, The Archaeological and Environmental Park of the Territory of Orvieto

Corglia is a multiphased site that begins in the eighth century C.E. and persists to the Late Antique, with very strong Hellenistic Etruscan, Roman Republican, and Imperial phases. Over the last five years, the excavation has systematically applied portable X-ray florescence (XRF) instrumentation to assist the ongoing excavation. The excavators have now been able to test the data gathered by XRF with data from actual excavation, as well as, in some cases, with data from digestive chemical analysis. This past season's excavation of an Etruscan foundation deposit along a wall, as well as further excavation of an exedra of Roman Imperial date, has allowed the excavators to test the implications of the XRF data against actual structural data and to modify protocols for XRF data collection.

The paper focuses on three structures: the hydraulic floor of an exedra that is likely part of a fountain system, a series of walls, and a series of tile floors; each structure gives a different lesson about the use of XRF. As the exedra was excavated, two segments of hydraulic floors were exposed. From the initial disposition, it was uncertain whether the two segments were part of the same floor or were two floors, one replacing the other. The data from the XRF indicated that the floors sufficiently differed statistically in their trace elements to understand them as two distinct floors. After further excavation, it became evident that the two sections had to belong to the same floor, and that the exedra had collapsed at its southeastern corner, resulting in a break of the wall and floor as it twisted off its foundation and fell 50 cm. On resampling the two floor segments with XRF, it became clear that angles of reflection as well as the raw number of sample points, were an issue. Reprocessing the earlier data with different statistical models also demonstrated the need to increase the number of samples and randomize the data by varying both the operator of the instrument and the issues of selection of the appropriate trace elements to weigh. The association of tile floors and mortars within walls indicated by XRF was confirmed by subsequent excavation and ceramic finds associated with the walls. But both materials presented the excavators with important lessons about how to sample with XRF material situated in different orientations and the importance of randomizing the collected data by rotation of the operator.

### SESSION 6E Roman Italy

CHAIR: Lothar Haselberger, University of Pennsylvania

#### Social Memory and Identity in the Central Apennines Under Augustus

Stephen A. Collins-Elliott, Florida State University

The Augustan period has been seen broadly as a watershed in the study of the regional cultures of Italy. Firstly, traditional studies view it as the conclusion of a process of social and cultural homogenization, by which indigenous cultures were masked over and regional differences were blurred. Secondly, it has been perceived as a period of rejuvenation, when older religious rituals and places were restored and incorporated within an Augustan framework that was manifested through public festivals and monumental building projects connected with the emperor. This traditional view, however, takes for granted Italian unity under Augustus, the imperial discourse that promoted that unity, and the ways in which different communities managed their cultural identity in this volatile environment.

I propose to use the theory of social memory—that is, how a community shapes its identity through the construction or destruction of narratives, monuments, and other activities that serve to remind or forget—to illustrate the ways in which Samnite identity was refashioned under Augustus. By studying monumental sites of the Pentri, a Samnitic tribe of the central Apennines, I suggest that this period did not see celebration of ancient heritage of the Samnites but the oblivion of their past to reform their perceived identity. This is evidenced by the continued abandonment of many important rural sanctuaries that had been monumentalized in the third through second centuries B.C.E. and that had served as centers for political and religious display in that period. Places that had comprised a primary point of reference for Samnite identity no longer did so. At the Pentrian town of Saepinum, extensive town planning covered over the earlier Hellenistic phases of the site, thus erasing visual traces of the past. New monumental building was undertaken at the initiative of local elites as well as members of the imperial household. I suggest that these changes in the monumental landscape of Samnite society were driven by a local elite who sought both to distance themselves from their own legacy in the Social War, in which they comprised the core of the Italian insurgency, and to engage themselves within a new Augustan order. In addition to archaeological evidence, the portrayal of the Samnites in literature (e.g., Livy 8.23.8–9, Strabo 5.4.11–12), as former rivals to Rome, once a threat but no longer noteworthy, suggests a similar process of accommodating a former enemy through narrative memorialization.

#### Fourth Season at the Vicus ad Martis Tudertium

Rangar Cline, University of Oklahoma, Sarah Harvey, Kent State University, and John Muccigrosso, Drew University

The fourth season of excavation at the site of the Vicus ad Martis Tudertium, along the Via Flaminia near Tuder/Todi, was dedicated to exploring with small

sondages an area 100–150 m to the north of the previously excavated area of this fairly large settlement around the medieval church of S. Maria in Pantano. This exploration was motivated by the results of remote sensing that have been applied to the area surrounding the church, and the specific locations for excavation were guided by geomagnetic survey performed in 2009 and 2010 by colleagues from the University of Perugia.

The ground level rises as one proceeds north, and it was hoped that this would help with the challenges caused by a recently risen water table, which last year prevented further excavation of already explored earlier strata. In addition, we hoped to discern whether areas farther away from the church, which might have been constructed in an area with unusual features, showed different types or phases of construction or habitation. In particular, we were curious about the latest phases uncovered and hoped that the higher ground level better preserved them.

In the end, excavation did reveal similar usage patterns in this area, and some of the later phases do seem to have been better preserved, though they still lie fairly close to modern ground level and, for example, wall superstructures were not better or more extensively found. Several types of evidence point to the same kinds of later adaptation of the site as already found, and several finds of wall plaster with recognizable impressions on their backs point to methods of building construction.

We continue to find small objects of everyday and rare use, including several small dice, suggestive perhaps of the recreational activities that might be expected to be found at a stopping point on a route such as the Flaminia.

The earliest levels explored this season produced material that enables us to push back the origin of the vicus by several decades. Once again, we reached the water table, which continues to remain at heights not seen in decades.

We plan to return to the area around the church to explore several intriguing structures visible in both geophysical survey and aerial photography. In addition, we continue to explore at a less intensive scale the area immediately around the site and connections with the catacombs at Villa San Faustino.

The Roman Villa on the Piano della Civita of Artena (Lazio, Italy): Changing Settlement Patterns from the Middle Republican Age to the Early Middle Ages *Jan Gadeyne*, Temple University, Rome, and *Cécile Brouillard*, Institut National de Recherches Archéologiques Préventives, France

At about half a mile to the south of Artena, a small town 40 miles southeast of Rome, are the remains of an ancient settlement known today as the Piano della Civita. Here, parts of an ancient city wall and a monumental terrace, both in polygonal stone work, have been preserved. Excavations by Lorenzo Quilici in 1964 and 1968 led to the reconstruction of the urban plan of the settlement. Between 1979 and 1995 Roger Lambrechts directed several excavation campaigns in which numerous buildings dating to the Early Republic, which were destroyed by fire between the late fourth and early third centuries B.C.E., were investigated.

In this paper, we focus on the Roman villa that has been excavated since 1995 on the monumental terrace. These excavations have yielded a wealth of information regarding its use in antiquity. First, they have shown that several buildings,

destroyed like the rest of the settlement in the late fourth–early third centuries B.C.E., dotted the terrace before the villa was built. Second, it brought to light a Roman villa of the first century B.C.E., planned around an atrium and peristyle and provided with a wine press. In the first century C.E., a small bath complex with wall paintings and another room with a black-and—white geometrical mosaic floor were added. Finally, after modifications of the original plan and new construction had profoundly changed the identity of the villa during late antiquity, an early medieval structure was excavated in 2010, next to which four gold coins of the middle of the seventh century C.E. were found.

The 1000-year occupation of the Piano della Civita in Artena illustrates the most important moments in the use and transformation of the countryside south of Rome, from the urban design of the republican age to the existence of a villa during the heyday of imperial Roman to the development of a new type of settlement during the Late Antique and Early Medieval periods. It also reveals the influences that the area was subjected to the major cultural forces of the time: Italic, Roman, Byzantine, and (maybe) Germanic. A geophysical survey of the terrace executed in 2010 and the excavation campaign of 2011 (its second year under the auspices of Temple University, Rome) have allowed us to further refine the understanding of this unique process.

#### **Temples of Roman Grumentum's Forum**

Attilio Mastrocinque, University of Verona

The University of Verona has conducted seven campaigns at Grumentum under the direction of Attilio Mastrocinque. A round temple with an altar was discovered close to the Capitol. Its porch has been partially excavated and partially identified thanks to magnetometry. This temple is placed at the center of the Roman town and probably had an ideological meaning in the city planning of Roman Grumentum. Unfortunately, there is no inscription or image that reveals the name of the god who was worshipped. This paper presents the results of this research, as well as several virtual images of the sacred area.

A room close to the Augusteum was also investigated, and a layer with remains of an important meal were discovered. They are probably a part of what was prepared for a festival. A short preliminary report of the bones, ceramics, and other finds are also presented. A virtual reconstruction of the temple will be presented as well.

#### A Cubiculum for the Sick in the House of the Surgeon in Ariminum

Margherita Carucci, Helsinki Collegium for Advanced Studies

During maintenance work on the gardens of Piazza Ferrari in Rimini, Italy, in 1989, the chance unearthing of some Roman ruins led to the excavation of a more extensive area, including a Roman house, a Late Antique palace, and a Byzantine homestead. Among the excavated structures in this area of the ancient Ariminum, the Roman house is certainly the most impressive building because its interior has been preserved almost intact following the abandonment of the area in the

mid-third century C.E. after a fire, until its recovery in modern times. Remains found in the excavated spaces include wall paintings, floor mosaics, and, more importantly, an extraordinary collection of surgical instruments that clearly shows that the house owner was a surgeon receiving and treating his patients in two rooms of the domestic building: a cubiculum and an office floored with the mosaic of Orpheus.

The arrangement of a cubiculum in a *taberna medica* offers the opportunity to gain a deeper understanding of the uses of this room type in imperial times. In Latin texts, in fact, the cubiculum of the Roman house is often described as the room where people recover from sickness in exceptional, temporary situations. In the House of the Surgeon, by contrast, the cubiculum serves as the specific, permanent setting for the sick. How did a cubiculum in a medical facility function? How was it arranged in relation to the surrounding spaces? Does the architectural and decorative layout of the surgeon's cubiculum differ from that of the multifunctional cubiculum of the Roman house? How was the domestic intimacy of the surgeon's family protected while patients were admitted into the *taberna medica*? With the support of archaeological and textual records, as well as other evidence of medical practice (esp. in Pompeii), the paper aims for a broader understanding of the uses of the Roman cubiculum.

# The Villa of the Antonines Project in the Ager Lanuvinus: The 2011 Season of Investigation

Deborah Chatr Aryamontri, Montclair State University, and Timothy Renner, Montclair State University

Among the major elite residences in the area of the Alban Hills, the Villa of the Antonines, located at the 18th mile of the Via Appia, in the ancient Ager Lanuvinus, is so far the least explored. While the attribution of this villa to the imperial family of the Antonines has been put forward since the 18th century, the overall layout of this complex is largely unknown. The reported discovery there in 1701 of busts portraying several members of the Antonine family, today part of the Capitoline Museums collection, as well as passages in the Historia Augusta, fit well with the remains of the impressive baths still standing today, very briefly investigated in the early 1990s by the Soprintendenza per i Beni Archeologici del Lazio. In 1996, part of a large, curvilinear structure with 1 m thick foundation walls and a water channel, was uncovered west of the baths but not explored farther. In 2010, Montclair State University began a multiyear project aimed at not only clarifying the nature of the curvilinear building and its relationship to the thermae but also understanding the extent and layout of the estate as a whole, which must have extended across the territories of at least two modern towns. A brick stamp of Faustina the Younger supports an Antonine dating for the basic layout of the building, while several additional walls urge us to further investigate pre- and post-Antonine phases of the villa. The discovery in 2011 of a coin of Caligula and three terracotta fragments, whether from freestanding statues or architectural sculpture, further adds to the growing impression of a multiperiod site. Archaeological strata continue to reveal hundreds of displaced fragments of decorative precious marbles, such as giallo antico, porphyry, and serpentine, and

multicolored glass tesserae (including gilded ones) further attest to the presence of luxuriously appointed rooms. West of the curvilinear structure, the 2010 geophysical surveys produced evidence only for numerous foundations that do not cohere well with the plan of this building. However, further testing during the 2011 season suggests the possible continuity of the curvilinear structure into a complete circle or oval, introducing the interesting possibility of Commodus's amphitheatre "at Lanuvium" as mentioned in the *Historia Augusta*. All these new data must be investigated thoroughly so that we may more fully understand this fascinating curvilinear building and the villa as a whole.

# SESSION 6F: Colloquium Fraught Antiquities: Fakes and Forgeries

ORGANIZERS: *Mont Allen*, University of California, Berkeley, and *Stephanie Pearson*, University of California, Berkeley

#### **Colloquium Overview Statement**

Although often treated as mere curiosities extraneous to our discipline, forgeries are anything but. Their creators count among our canniest students, and they craft with us in mind. No objects are more carefully constructed to meet our own expectations and match our own conceptions of what is plausible and what is not. By cleaving so closely to established scholarly consensus so as not to raise suspicion, and by forcing questions of authenticity, forgeries can serve to throw into the starkest possible relief the extent and limits of our knowledge. For this reason alone they deserve our careful consideration.

Sadly, the study of forgeries has gained new urgency on other grounds, thanks to current events in the Middle East. Knowing that their objects are less likely to be spotted when they can be slipped into a market flush with real illicit antiquities, forgers prefer to work in the wake of widespread looting. As a result, the recent wholesale plundering of sites in Egypt, and the likelihood of similar occurrences in Libya, makes a rash of future forgeries lamentably likely.

The time thus seems ripe for a colloquium session devoted to this rich yet distressing topic. Our papers have been selected not only for their cultural coverage (Greek, Roman, and Etruscan) and the variety of media addressed (gold jewelry, wall paintings, carved gems, marble sculptures, bronze figurines, and even medical instruments) but also for the range of issues raised. Two papers treat the various tools available for ferreting out fakes: "A Gold Pectoral in the Metropolitan Museum of Art" tests those appropriate to Etruscan jewelry, while "Little Big Lies: Forgeries of Ancient Gems" does the same for engraved stones from the Greek and Roman worlds. The other three take a step backward, examining the various ways in which forgeries are packaged to meet the expectations of scholars and the desires of collectors: "Artful Deceptions: The Comte de Caylus, Winckelmann, and Forged Roman Wall Paintings" looks at how forgers of frescoes crafted their works to appeal to contemporary luminaries in the 18th century; "Dubitanda on Display: Roman Sculptures and Authenticity in the Museum" does the same for 19th- and 20th-century forgeries of ancient marbles; and "Real Fakes, Fake Fakes, and Au-

thenticating Marbles by Isotopic Analysis" tackles the problems raised by objects that were not manufactured to deceive but later found themselves rebranded as genuine antiquities.

#### **Little Big Lies: Forgeries of Ancient Gems**

Kenneth Lapatin, The J. Paul Getty Museum

The motivations for forging engraved gems, or seals, have changed over the years. In the early sixth century B.C.E., the Athenian statesman Solon prohibited gem carvers from retaining impressions of the their work (Diog. Laert. 1.57), and more than half a millennium later, Lucian (*Alex*. 20–1) described methods of counterfeiting seals and sealings to gain access to confidential documents. Modern forgers, however, have been less motivated by identity theft than by market demand for precious antiquities. Giorgio Vasari names Renaissance carvers who imitated ancient gems to "extraordinary advantage," and by the 18th century, Philipp von Stosch could complain about the prevalence of forgeries, particularly of gems bearing the signatures of ancient carvers, which vastly increased their value.

To address this problem, Stosch published in 1724 a bilingual book, lavishly illustrated with 70 large-format plates engraved by Bernard Picart, entitled *Gemmæ antiquæ cælatæ*, scalptorum nominibus insignitæ / Pierres antiques gravées : sur lesquelles les graveurs ont mis leurs noms (Amsterdam). Ironically, far from establishing a definitive corpus of genuine gems against which others could be judged and fakes sniffed out, as Stosch intended, this widely distributed tome only fanned the flames: 60 years later, Dominico Augustino Bracci produced a similar book, Commentaria de antiquis scalptoribus qui sua nomina inciderunt in gemmis et cammeis/ Memorie degli antichi incisori che scolpirono i loro nomi in gemme e cammei (Florence), which was much larger—two volumes, with twice as many plates and 660 pages of commentary. A few of the ancient names that modern carvers, stimulated by the cupidity of wealthy collectors, applied to their work were supplied by Pliny and other classical authors. But many additional names were taken from genuine ancient gems, as published in works like those above—or invented outright—and cut into literally thousands of modern stones.

This paper concentrates on the lasting allure of two renowned ancient carvers, Pyrgoteles and Dioskourides, who fashioned the seals of Alexander the Great and the emperor Augustus, respectively. I present both obvious fakes and "ancient" gems in various collections that continue to be attributed, optimistically, to the hands of these masters, exploring some of the reasons for their relative success and—by comparing their materials, shape, technique, iconography, style, and letter forms to those of unequivocally genuine works—some of the evidence for their eventual detection.

# Artful Deceptions: The Comte de Caylus, Winckelmann, and Forged Roman Wall Paintings

Laure Marest-Caffey, University of California, Berkeley

The discovery and subsequent unearthing of Herculaneum in the first half of the 18th century fueled a keen interest in ancient wall painting. The scholarly curiosity and collecting craze of antiquarians and "Grand Tourists" were spurred by the secrecy surrounding the excavation and publication of the finds from the Campanian city. In such a context, the forgery of Roman wall paintings, which had begun in the 17th century, reached its peak in the 1750s and 1760s with works produced by gifted and resourceful artists.

These forgeries were not only acquired by illustrious collectors but also admired by some of the most respected scholars of the time, including Johann Joachim Winckelmann and Anne-Claude de Pestels, also known as the Comte de Caylus. They both published in their major works, respectively *Geschichte der Kunst des Alterthums* (1764) and *Recueil d'antiquités égyptiennes, étrusques, grecques et gauloises* (1752–1767), examples of ancient wall painting that were subsequently proven to be counterfeits. While these "artful deceptions" may seem fanciful to the modern eye, they were in fact specifically designed to meet the expectations and needs of 18th-century antiquarians.

This paper presents two case studies of known 18th-century forgeries of Roman wall paintings, produced by the neoclassical painter Anton Raphael Mengs and the lesser known Giuseppe Guerra. It demonstrates that the forgers were not only cognizant of the scholarly debates of their time but also of the taste of their contemporaries. The fresco representing Jupiter kissing Ganymede, for example, now in the collection of the Galleria Nazionale d'Arte Antica in Rome, was clearly designed by Mengs to cater to the personal preferences of his friend Winckelmann. Likewise, Guerra created scenes directly inspired by literary sources and sometimes supplemented them with an undeciphered—and purely fictitious—script that suited 18th-century hermeneutics and scholarly ambitions.

# **Dubitanda on Display: Roman Sculptures and Authenticity in the Museum** *Jessica Powers*, San Antonio Museum of Art

In this paper, I explore the problems raised by questions about the authenticity of Roman marble sculptures in modern museum collections. How is authenticity to be defined and what constitutes a forgery? How can such objects be responsibly presented to a museum's diverse visitors? As case studies I examine four sculptures now in the San Antonio Museum of Art: two male portrait heads, a torso of Aphrodite, and a fragment of a strigil sarcophagus. All were acquired as ancient works from dealers in Italy and the United States in the 1960s by a private collector, and all four were included in a larger gift to the museum of Roman sculptures and Greek vases in 1986. Each presents distinct problems of identification and interpretation. One of the male heads is a mid 20th-century replica of an unknown Roman, the so-called Marius, in the Munich Glyptothek. The second portrait and the sarcophagus fragment are ancient but have undergone extensive modern reworking that has significantly altered their appearance. The Aphrodite torso, the

most perplexing of the group, appears to be an 18th- or 19th-century forgery, complete with "restorations" that were subsequently removed.

In assessing these sculptures, I discuss the challenges presented by the physical and archival evidence for each. The appearance of all four sculptures was manipulated to make them attractive to the art market and potential collectors. These interventions range from enhancing the iconography (adding figural decoration to the sarcophagus fragment) to changing a sculpture's function (recutting a head from a relief to appear freestanding) to altering the marble surface (creating the impression of age-related damage). Like their physical appearance, the ownership histories of these sculptures, too, may have been massaged to increase their appeal. Two of the works under discussion were said to have previously belonged to aristocratic European families—alleged provenances that offered a certain cachet to the prospective buyer but are difficult either to prove or disprove. The four sculptures thus represent varying degrees of "authenticity," and I conclude by considering options for addressing their complex circumstances within the museum setting.

# Real Fakes, Fake Fakes, and Authenticating Marbles by Isotopic Analysis: Evidence from the Museum of Art and Archaeology, University of Missouri

Benton Kidd, Museum of Art and Archaeology, University of Missouri

Over the course of its 53-year history, the Museum of Art and Archaeology has acquired a number of potentially dubious objects. One that has raised suspicions since its acquisition in 1989 is an unusual portrait of the emperor Hadrian, usually said to be the emperor in the guise of the Greek hero Diomedes. Though the type is known elsewhere, repeated inquiries into the portrait have claimed it to be a Baroque imitation. Quite recently, the majority of the museum's white marble antiquities were tested for provenance. Many of these results were predictable, but the highly unusual result for the portrait of Hadrian both links it to other works stylistically and puts to rest the question of its authenticity.

Many other of these "suspicious" objects, however, were ultimately determined to be forgeries. These include some bronze figurines, a set of medical instruments, a pair of Erotes earrings, and a few small marbles such as a "maenad" figurine and a cinerary urn. The question that arises with these objects is whether they were manufactured by forgers with the intent to deceive or whether they were created as obvious antique imitations that eventually left their original owners and only later found their way to the antiquities market as genuine. Good forgers do their homework carefully and produce objects based on genuine ancient prototypes, copying their characteristics carefully. Can we really imagine bad forgers who made slipshod imitations, combined a few generic ancient characteristics with their own fanciful touches, and then attempted to sell them as genuine? The last scenario seems rather unlikely—unless these objects were not intended as forgeries at all, but rather as curios or tourist souvenirs. Moreover, a number of the objects presented in this paper are not of particular significance or value and have very anomalous characteristics, which would make them unusual candidates for forgeries. We thus have to ponder why they would have been forged at all, if such was the intent. This paper thus addresses the issue of "real fakes" vs. "fake fake", and attempts to disentangle the two.

#### **SESSION 6G: Colloquium**

# Performing Politics: Ritual, Space, and Performance in the Bronze Age Aegean and Near East

Sponsored by the Near Eastern Archaeology Interest Group

ORGANIZERS: *Lauren Ristvet*, University of Pennsylvania, *Glenn Schwartz*, Johns Hopkins University, and *Emily S. K. Anderson*, Johns Hopkins University

#### **Colloquium Overview Statement**

All human societies provide stages for countless performances, including rituals, festivals, plays, spectacles, and daily acts of self-presentation. Recently, archaeologists have considered how these phenomena can help us to understand economic or political processes. Performances can be central to the articulation of political and social identity. Indeed, spaces of performance are often also spaces of political negotiation, where power relations can be established, affirmed, debated, and undermined. While performative actions are richly diverse within and across cultures, they share a common tension between repetition and singularity, what Richard Schechner calls "restored behavior." Such actions, performed in specific places and times, are simultaneously understood to repeat, re-manifest, or reference actions that occurred before—be that in a mythical moment, by previous generations, or in the abstract antecedence implied in "traditional" activities. Conscious awareness of this behavior, sometimes described in terms of social and/or ritual "role" playing, is typically thought to define performative action and to invest it with a distinct and legitimating power.

Papers in this session explore the distinctive character of performative actions by focusing on their potential social and political roles in the Bronze Age Near East and Aegean. The authors query the sociopolitical dynamics—both explicit and implicit—of activities ranging from diplomatic feasts to water rites, involving figures as seemingly dissimilar as kings and craftspersons and within contexts as close as a funerary chamber and as vast as a regional landscape. Three primary themes structure the papers: (1) investigating performative action as a fundamental means of sociopolitical maintenance, negotiation, and even subversion (various papers discuss moments of social change and development through this lens); (2) considering the role of performative activities at various sociospatial scales and as a means for creating social links that cross social boundaries (boundaries concerning status, community, distance, etc.); and (3) problematizing somatic experience as a crucial dimension of sociocultural performance that shaped memory, relationships, and the efficacy of activities.

Through such considerations, participants use the context of the session to develop a greater sense of what might constitute an archaeology of performance and how it could provide an analytical means through which to better approach the lived sociopolitical experiences of people in the archaeological past.

DISCUSSANT: James C. Wright, Bryn Mawr College

### Rituals of Diplomacy: Pilgrimage, Sacrifice, and Statehood in the Early Second Millennium B.C.

Lauren Ristvet, University of Pennsylvania

In northern Mesopotamia, the early second millennium B.C.E. witnessed a period of secondary state formation following nearly three centuries of settlement abandonment and decreased societal complexity. The political landscape of this "recovery" was highly fragmented, and competition between polities from Iran to the Northern Levant was omnipresent. Major powers, including Ešnunna, Mari, Elam, Ekallatum, and Babylon, controlled the fertile plains of Syro-Mesopotamia for a few years or decades during the 19th and 18th centuries B.C.E. Smaller cities, like those located in the Habur Valley of present-day Syria or south of the Sinjar Mountains in Iraq, also fought battles that were sometimes linked and sometimes separate from the conflicts of the great powers. Nonetheless, this political division existed alongside a unitary cultural landscape of shared ritual and political symbolism and practices that transcended the linguistic and ethnic diversity of this area. These ritual practices drew upon diverse sources, including pan-Mesopotamian religion, mythical history, and tribal ideology.

The many archives from these polities—including Šehna, Qattara, Alalakh, Mari, and Babylon—document the nearly constant warfare of the period, and provide evidence for the practices of diplomacy, especially treaty negotiations. Indeed, diplomacy is the central concern of several of these archives. In addition to the treaties and correspondence, large numbers of administrative texts record the material aspects of diplomacy, including cultic and ambassadorial journeys, gift-giving, and the religious rituals that were an essential part of the state ceremonial. In Mesopotamia, the performance of myriad separate and interlinked rites were as constitutive of alliance as the composition of a treaty. Moreover, these rituals are accessible to archaeological inquiry using several methodologies.

This paper investigates the material and textual records of three ceremonies that accompanied treaty-making: the sacrifice of equids, ritual donations of silver and textiles, and divine and royal pilgrimage. This discussion highlights the importance of the performative nature of these rituals and analyzes how they created an ideal model for society, one that diverse political actors sought to manipulate in the context of interstate relations.

#### **Performing Kingship in Mycenaean Pylos**

Dimitri Nakassis, University of Toronto

States, especially Mycenaean states, are often modeled as stable, reified objects held in place by fixed hierarchical systems. But even the most static regimes require a lot of work to maintain; this is especially true for ritual performances that serve to reestablish the social relations between individuals, groups, and institutions.

In this paper, I explore the performative contexts involving the king of Mycenaean Pylos, using a combination of textual, archaeological, and iconographic evidence. The Pylian king was a central figure in large-scale feasting ceremonies, which collectively comprised a significant share of palatial staple finance. Arguably, these feasts served to convert economic goods into symbolic capital, accu-

mulating prestige for the palatial center and the king. Yet the performative work of the king did not end here. There is evidence that the king also manipulated his official and personal personae to portray his official obligations as personal largesse. If it is the case that the highest official in the polity actively manipulated his personae in this way, his audience can hardly have been composed of passive dupes who openly accepted palatial hegemony. Instead, feasts must have been arenas in which groups and individuals actively participated; this is consistent with the textual evidence, which routinely records contributors outside the palatial administration. The consideration of royal performance in Mycenaean Pylos, therefore, leads to a broader appreciation of the role of feasts, not only in reflecting social and political orders but also in actively constituting them.

#### Sacrifice and Spectacle in Bronze Age Syria

Glenn Schwartz, Johns Hopkins University

Ongoing research at Tell Umm el-Marra in the Jabbul Plain of western Syria has concentrated on the study of the emergence of complex urban societies in the third and second millennia B.C.E., the "second urban revolution" of Syria and northern Mesopotamia. In the mid–late third millennium B.C.E. (Early Bronze Age), excavations have shown that the center of the Umm el-Marra site acropolis was used for a large complex of elite tombs and associated ritual installations. It is proposed that the rituals of ancestor veneration and sacrifice that were performed here acted to materialize elite ideologies, as did the location of the complex on a high, central point in the middle of the community.

After a period of site reduction or possibly abandonment ca. 2200–1900 B.C.E., second millennium B.C.E. (Middle Bronze Age) reoccupation was centered on a monumental round stone platform (Monument 1) built atop the earlier tomb complex. In the center of Monument 1, excavations have documented the evidence from Shaft 1, a 6 m deep stone-lined feature containing 10 layers of carefully deposited bodies of animals interred above 13 human skeletons. The evidence from both the humans and the animals indicates that the individuals were sacrificed (killed ritually) in a central location open to view by the rest of the community.

In this paper, ideas from performance theory are used to consider the meaning, purpose, and political implications of the ritual and sacrificial behaviors in the Early Bronze tomb complex and the subsequent Middle Bronze monument. The nature of the actors and the audience, restriction or openness of access and its political ramifications, and sensory dimensions of the activities performed are discussed. More broadly, the paper considers the ways in which performance theory may or may not be applicable to non-textual and non-art historical data.

# The Work of Hands: Seal Use and Social Incorporation on Late Prepalatial Crete *Emily S.K. Anderson*, Johns Hopkins University

Seals of the Late Prepalatial Parading Lions Group constituted one of the earliest interregional stylistic and iconographic glyptic groups on Crete. In marked divergence from earlier traditions, these seals were canonically fashioned of im-

ported hippopotamus ivory and engraved with elaborated, differentiated motifs typically involving lions. I consider how these pieces of material culture were embedded within broader shifting sociocultural spheres in this period, where evidence suggests the persistence of cultural traditions and crucial elements of social change. To this end, I work with components of performance theory that query the transformative potential of performance, and, in particular, how performance of traditional roles and practices can serve not only to reproduce preexisting social norms but also, to potentially provide the space for innovation and enduring change, especially if occurring within highly charged arenas of community action.

I consider two aspects of the Parading Lions seals in this light. First is the crucial context of craft production. The Parading Lions carvers were performing an old craft practice but with new valuable material, innovative design, and the social and technical constraints of an unprecedented shared interregional stylistic/iconographic tradition. I discuss how the role of the seal carver and his or her work could have developed and contributed to community formation in this period, drawing on my analyses of the Parading Lions material. Second, I consider contexts of seal use, treating the seals' roles as sociosymbolic objects of adornment and in the creation of impressions, a process that may have been performed publicly. Here, I examine how the objects' distinctive attributes imply changes to traditional processes and social functions of seal use, and how the seals may have been used within innovative arenas of social action on Late Prepalatial Crete, including newly emergent regional venues.

# Water, Place, and Performance in Hittite Landscapes: A View from the Yalburt Spring

Ömür Harmanşah, Brown University

Yalburt Yaylası spring monument is one of the well-known "sacred pool" complexes from Hittite Anatolia, with its commemorative inscription of Tudhaliya IV (1237–1209 B.C.E.). The monument is located on a high-pasture landscape, on the northwestern edge of the Hittite "Lower Land" in Konya province near Ilgın, overlooking a major route that connected Konya Plain to the west. Tudhaliya's inscription in hieroglyphic Luwian commemorates military victories in western Anatolia, much discussed in literature on Hittite history and geography. Yet the archaeological context of the monument remains unstudied. The pool and the adjacent mound were excavated between 1970 and 1975 by Ankara Anatolian Civilizations Museum, but the results of these excavations remain unpublished.

This paper presents the preliminary results of a new regional survey project in the immediate environs of Yalburt and archival work on the 1970s excavations. Yalburt survey aims to understand diachronically the archaeological landscape around Yalburt and to place this monument in the context of settlement and geomorphological history while developing a rigorous methodology for an archaeology of place. In the first season of fieldwork, we identified several new settlements on the plain of Ilgın, Çavuşçu Lake Basin, and the highland pastures around Yalburt and also studied the Hittite dam of Köylütolu. The preliminary results of our fieldwork suggest that in the 13th century B.C.E., a program of agricultural rehabilitation and water management was under way in this western frontier. The

construction of the Yalburt monument should be understood in the context of such landscape processes.

In this paper, I compare the Yalburt monument with the sacred pool complex at Eflatun Pinari, which is located farther south in the Beyşehir Lake Basin, in relation to the Hittite practice of constructing stone-built reservoirs at abundant springs. These two places of cultural significance tell two different stories, both in terms of the genealogies of their making and in terms of their trajectories of use. Inspecting their architectural form and landscape context comparatively, the Eflatun Pinari monument appears to be dedicated to mountain and spring deities with an emphasis on ritual performance, whereas Yalburt presents a much more politically charged commemorative monument that appropriates such local cult practices and houses narratives of the state. The paper argues that places are never isolated or authentic locales, instead they are, constituted by sustained local practices, far-reaching associations, and political interventions. Places are always hybrid and eventful as sites of negotiation between the cultures of locality and supra-regional processes.

#### **Ritual Performance and Spatial Organization on Minoan Peak Sanctuaries**

Alan Peatfield, University College Dublin, and Christine Morris, Trinity College, Dublin

Clay figurines from the mountain peak sanctuaries of Minoan Bronze Age Crete number in the tens of thousands, yet they remain among the least understood of Minoan artifacts. This is not just in relation to their morphology and representation but also in relation to the patterns of their spatial distribution on the peak sanctuaries where they were used and deposited.

Since the excavation of the first peak sanctuary, Petsofa, in 1903, it has been understood that the human figurines portray the worshipers and their concerns for their own health and welfare rather than deities. In the course of our ongoing study of the Atsipadhes Korakias peak sanctuary, we have consistently demonstrated that the spatial distribution of the finds is indicative of patterns of offering, and more significantly, reveals the process of ritual performance. Our recent application of GIS technologies to the Atsipadhes assemblage has reinforced these conclusions and offers new methods for the study of intra-site spatial organization.

In this paper, we discuss how we have incorporated GIS into our study methods. More broadly, we discuss how the both the Atsipadhes figurines and the finds from other peak sanctuaries are revealing elements of popular (as opposed to elite) ritual that offer new insights into our understanding of Minoan religion and society.

# The Stench of Decay: Marking Mourning Through Odor in Early Fourth Millennium Northern Mesopotamia

Jill Weber, University of Pennsylvania

In the early fourth millennium, the site of Tell Brak experienced expansion in settlement size and complexity. Its urbanization was marked by increasingly specialized use of space and grouping of activities. Rubbish discard was also specifically sited, as indicated by the formation of the Tell Majnuna "satellite" at this time. The Majnuna mound is composed of very specific rubbish: four human-burial events dateing to 3800–3600 B.C.E., followed by 5 m of quickly buried rubbish from industrial-scale production.

Episodes of corpse burial, reburial, disposal, and feasting point to the performance of standardized mortuary and funereal rites and customs. Studies of such rites and customs often focus on the invocation of social and ancestral "memory" as their key components. However, the evidence from Tell Brak and Tell Majnuna suggest rites of forgetting.

I suggest that decay of the human corpse and its accompanying odor provided a concrete reckoning of the physical transition from life to death. This decay and odor was later mimicked and reenacted to finalize the transformation of the dead; when decay and odor were no longer in evidence, the dead were no longer among the living, either physically or socially. This marked their social death and the end of obligations toward them. Similar rites were accorded buildings and installations of social import. Their physical death was accompanied by decay and its signifying odor to convey the message of social death and properly mark its transition from living to dead space as a foundation for renewal.

The generalized applicability of such rites of death and forgetting suggests that their performance was well known, and that they were generally accepted amid an urban body politic of at least some shared cultural and moral values. The use of smell makes public the passage of time and the accepted end of the transition between life and death, social obligation, and forgetting.

### SESSION 6H The Politics of Archaeology

CHAIR: Rebecca K. Schindler, DePauw University

**Easter Island Statue Project, AIA Conservation Initiative: Fifth Season Field Report** *Jo Anne Van Tilburg,* Cotsen Institute of Archaeology

The Easter Island Statue Project is a holistic archaeological program encompassing a range of resources to clarify the role of more than 1,000 documented statues in inferred human behavior. We are currently conducting scientific excavation and analysis procedures on two highly significant monolithic stone statues in their original, dramatic quarry setting. The AIA Conservation Inititative is an integrated pilot project of intervention and mitigation centered on said statues. The statues, and indeed all archaeology on Easter Island (Rapa Nui), are fundamentally infused with issues of Rapa Nui identity. Diverse community and offical decision-making structures have been challenging, and this paper explores the value of partnership formation enabling informed consideration of such issues as site destruction caused by unprecented levels of tourism, ethics and values clarification, intellectual property rights in the digital age, and sustainability in an era of global social change.

# Building Host Nation Partnerships for Archaeological Investigation and Preservation: Native American Consultation as a Model

Laurie W. Rush, CRM Program, Fort Drum, New York

United States government agencies, including the Department of Defense, have proactive Native American consultation policies and procedures. U.S. archaeologists who work in this capacity have become experienced in the diplomatic arena of building partnerships for responsible archaeological survey, site evaluation, preservation, data recovery, and mitigation measures. Many of these colleagues find that, over time, consultation emerges as the most rewarding aspect of their work. There is also no question that the opportunity to work with members of descendant populations results in far more sophisticated and accurate interpretation of challenging and newly discovered archaeological features.

After visiting sites in the U.K., Italy, and Turkey, and interviewing archaeologists who work in the U.K., Turkey, Italy, Albania, and Libya, it is becoming increasingly clear that successful Native American consultation philosophies, approaches, and methods can be used as a model for establishing long-term partnerships with host nation communities overseas. As political dynamics and governing bodies change dramatically throughout many international areas of archaeological interest, traditional behavior patterns may no longer be viable for achieving long-term goals of access to archaeological deposits. In addition, as storehouses continue to overflow with artifacts, past approaches to excavations and collections must be reconsidered.

The Native American consultation model offers methods for discovering shared goals, establishing effective cross-cultural communication, showing respect, developing meaningful outreach programs, negotiating long-term object conservation and storage, and forming personal relationships, all in the context of completing outstanding archaeological research and preservation. All too often, generations of the present fail to preserve, protect, and pass on the physical expressions of culture to the generations of the future. Archaeological investigation and preservation of archaeological sites can provide shared goals and an opportunity for cross-cultural and transnational dialogue. The key is for archaeologists to develop the skills needed to work with community members to conceive and implement long-term archaeological projects, and studying successful Native American consultation programs can be extremely helpful in this regard.

# What Students Think about Cultural Heritage: Teaching Archaeological Ethics to Undergraduates

Rebecca K. Schindler, DePauw University, and Terri Bonebright, DePauw University

As the world's cultural heritage is increasingly threatened by looting, military action, and modern development, the education of the public and, in particular, our students is critical as archaeologists work toward preserving that heritage. Most college students have not seriously considered the ethical issues related to the study, display, and preservation of cultural heritage. U.S. college students have limited firsthand experience with archaeological sites or even the presentation of cultural artifacts in a museum setting. Nevertheless, they have been exposed to

archaeology via the popular media and have consciously or unconsciously formed opinions about the rights of various parties—governments, individuals, and institutions—vis-à-vis the study, stewardship, and ownership of the world's cultural heritage. If we are to have informed, critical, and responsible conversations with students about ethics and cultural heritage, we need to create a learning environment that is conducive to such conversations. There are many excellent resources now available to archaeologists who desire to introduce the subject of ethics into their classrooms; to make effective use of these resources we must have a better understanding of the attitudes and opinions our students hold.

Over the last four years at DePauw University, we have been surveying student attitudes toward cultural heritage. As an archaeologist who regularly teaches archaeological ethics and as a psychologist who has an interest in how students' misconceptions may influence their ethical reasoning in the classroom, we want to understand better the underlying attitudes toward cultural heritage that our students bring to the classroom. This paper presents an analysis of our data. At the beginning of each academic year, we surveyed first-year students and seniors on a range of issues, from the protection of cultural heritage during times of war to the rights of descendent communities to the responsibilities of archaeologists. Preliminary results show that our students' backgrounds and experiences affect their attitudes toward ethical issues related to cultural heritage, particularly private vs. public ownership/stewardship of artifacts. Moreover, students hold underlying principles that inform their values about those issues. In this paper, we argue that understanding the perceptions of our students is necessary for the effective teaching of ethical issues in archaeology, and that incorporating discussion of ethics into the classroom can help students to think critically about cultural heritage issues.

### SESSION 61: Colloquium

### **Beyond Thrace: Recent Fieldwork in Bulgaria**

Sponsored by the Eastern Europe/Eurasia Interest Group

ORGANIZER: Denver Graninger, American Research Center in Sofia

#### **Colloquium Overview Statement**

The sensational discoveries in Bulgaria in the past two decades have cast unique light on the elite culture of classical and Hellenistic Thrace. The manner and methods of these excavations, however, left much to be desired, as did the interpretation of recovered finds, which often remained captive to the dominant ideology of an earlier era. This colloquium brings together archaeologists who are working within the geographical space of Thrace but who are focusing on more chronologically diverse phenomena, extending from the Late Paleolithic to the Early Byzantine periods, and deploying a fuller range of sophisticated survey and excavation methodologies and techniques. Their research has profound implications for the history and archaeology of the Balkans, and also of the broader central European, Pontic, and eastern Mediterranean backdrop; for example, the Balkan Valley Project documents early movements of animals and hominins from Anatolia to southeastern Europe, while the Strouma Valley Project is currently exploring

prehistoric settlement patterns along a major corridor connecting the Balkans with the Aegean; similar questions are posed by the Tundzha Regional Archaeological Project, the findings from which are problematizing traditional conceptions about the structure of Thracian kingdoms in the pre-Roman period; while excavations at Apollonia Pontica are beginning to open up material perspectives on early Greek colonists in the region and their interactions with native populations, a long-term research program conducted at a series of sites in north-central Bulgaria is offering a fresh look at the dynamic character of urban and rural settlement from the Late Roman to Early Medieval periods. Another thread links these papers. Each reflects a tradition of international collaborative research that took root during the earliest archaeological expeditions in Bulgaria and is now again flourishing; such developments promise the possibility of a return to a Thrace that is at once more complex and relevant than previously recognized.

DISCUSSANT: Zosia H. Archibald, University of Liverpool

# The Balkan Valley Project: Results of Surveys for Paleolithic Cave Sites in the Tundzha Valley

David Strait, State University of New York, Albany

The Balkan peninsula lies at the gateway of Europe; it is one of very few pathways along which mammals, including humans, can enter or leave the continent. It is very likely that Paleolithic human populations dispersed through modernday Bulgaria during the Pleistocene as the advance and retreat of continental glaciers affected prevailing environmental conditions.

In the fall of 2010, a joint Bulgarian and American research team (the Balkan Valley Project) conducted surveys and preliminary excavations in southeastern Bulgaria focusing especially on caves in the Strandja Mountains east of the Tundja River valley. This research has documented the first evidence of Paleolithic occupations in this region of Bulgaria. More than 30 caves were assessed for their likelihood of preserving traces of human activity, and formal test excavations were conducted at two caves, Leyarna 1 and 2, near the town of Malko Tarnovo. Leyarna 2 preserves Late Pleistocene fauna, including equids, hyaenids, ursids, and canids. Flint artifacts were found in situ in association with the fauna, demonstrating convincingly that humans occupied this region during this time period. In addition, Late Pleistocene fauna were recovered as surface finds from a nearly collapsed cave, Mechata Dupka. These fauna preserve interesting skeletal elements, suggesting the presence of archaic populations of, particularly, cave bears. Fossils that had previously been recovered from the cave indicate the presence of pre-Late Pleistocene fauna, making this site significant paleontologically. In future campaigns, the Balkan Valley Project will survey in the northern Tundja Valley to provide a broader picture of how Paleolithic humans were distributed across Pleistocene Bulgaria.

# The Middle Strouma Valley Archaeological Survey: Settlement Patterns in the Eastern Balkan Peninsula in Late Prehistory (Neolithic–Late Bronze Age)

Bogdan Athanassov, New Bulgarian University

A consequence of the information flow between west and east after the fall of the Iron Curtain in 1989 was the evaluation of the interpretative potential of archaeological field surveys in Bulgaria. A new regional project centered on the Middle Strouma Valley (southwest Bulgaria), initiated in 2009 by the New Bulgarian University and building on earlier survey work conducted in the region in the 1970s and 1980s, aims to contextualize sites in the landscape and to better understand their catchment areas, so that questions related to the hierarchical place of the settlements, as well as to their economic, strategic, and even political role, can be tackled.

Field campaigns in 2009 and 2010 documented 126 archaeological sites and their surroundings in the middle of the valley of Strouma. The total lack of Paleolithic and Mesolithic sites registered by previous research was confirmed. The region lacks suitable cave entrances and shelters; it is possible that Paleolithic and Mesolithic sites in the region were open-air and, therefore, destroyed by the intensive erosion characteristic of this part of the valley. Erosion is probably also the cause for the underrepresentation of sites during other periods, such as the fourth millennium (transitional period between the Copper and the Early Bronze Age), the Middle Bronze Age, and the Medieval period.

The rich data on Early Neolithic sites, however, has allowed the project to trace the process of the spread of the Neolithic way of life. We do not observe a gradual establishment of Early Neolithic sites from south to north but a frogleap-like appearance of agricultural villages reminiscent of the colonization of the Oaxaca Valley in Mesoamerica. A peculiarity of the Middle Strouma Valley, still to be explained, is that tell sites did not accumulate either in the Neolithic (sixth millennium B.C.E.) or in the Copper Age (fifth millennium B.C.E.). After a relatively dense occupation in the Neolithic, when settlements were located on river terraces close to fertile alluvial land, an episode of relocation of settlements occurred in the Copper Age. A trend toward the settling of outstanding promontories, which offer strategic position, is characteristic for the fifth millennium B.C.E. The settlement patterns of the fourth millenium and the Bronze Age are still poorly understood.

# Tundzha Regional Archaeological Project 2009–2010: A Diachronic Survey Campaign in Bulgaria

Adela Sobotkova, University of Michigan, Ann Arbor, and Shawn Ross, University of New South Wales

In 2009–2010, the Tundzha Regional Archaeological Project (TRAP) conducted a total of four seasons of systematic archaeological survey. Two regional landscapes were explored: the suburban territory of the Hellenistic Thracian capital of Seuthopolis in the Kazanluk Valley, central Bulgaria, and a rural hinterland of the middle Tundzha watershed in the Yambol region, southeast Bulgaria. Both landscapes are connected with the Tundzha River, and both fell within the realm of Odrysians in the classical and Hellenistic eras. The survey was diachronic and

multidisciplinary, combining pedestrian survey with satellite remote sensing, legacy data verification, paleoenvironmental research, geophysics, and limited test excavations. A range of field-walking approaches were adopted to accommodate diverse environmental conditions.

The two study areas produced very different data sets, indicating variations in settlement patterns and demographic trajectories between the regions. The results from the Kazanluk indicate sparse semipermanent settlement in the immediate hinterland of Kazanluk during late prehistory but may also have revealed an earlier regional center. The Yambol study area proved to be a landscape of small, evenly distributed villages along watercourses with mortuary areas on the ridgeline between. Neither region, however, displays the variation or hierarchy in settlements that one would expect from a complex, let alone state-level, society before the Roman period, a finding that is difficult to reconcile with the literary evidence and mortuary remains (the ubiquitous, diverse, and often wealthy burial mounds dating from the Bronze Age through the Roman period).

# Two Decades of Archaeological Research in Apollonia on the Black Sea (Sozopol, Bulgaria): The Classical Necropolis and the Temenos

Margarit Damyanov, National Institute of Archaeology and Museum, Bulgarian Academy of Sciences

In 1992, a chance find on a beach led to the start of archaeological investigations in the necropolis of Apollonia Pontica, a Milesian colony founded in the late seventh century B.C.E. on the Black Sea coast of present-day Bulgaria. Almost two decades later, rescue excavations necessitated by intensive construction in the booming resort have resulted in unearthing more than 1,500 graves that span the period from the mid fifth to early third centuries B.C.E. The graves seem to have been organized in family plots that allow for tracing the evolution of the burial practices through several generations. This classical and Early Hellenistic necropolis stretches for some 4 km to the south of the ancient city and reflects the heyday of the polis. In the same period, small sites were excavated in the Old Town of Sozopol that covers the ancient city. Major results, however, were obtained in 2009-2011 during investigations on the island of St. Kirik, where a major temenos of the Greek polis was discovered. The site yielded important materials dating to the colony's foundation. The site was thoroughly reorganized in the early fifth century B.C.E., when a monumental altar and a stone temple were erected. This new construction marked a stage of "monumentalization" of the city. A few decades later, the Apollonians invited the sculptor Calamis to create a 13 m high colossus of Apollo.

# From Roman City to Late Roman Fortress, and from the Countryside to Early Byzantine Hilltop "Settlements": Twenty-Five Years of Research in North-Central Bulgaria

Andrew Poulter, University of Nottingham

In collaboration with our Bulgarian colleagues, research excavations on the site of a Roman city (Nicopolis ad Istrum) began in 1985. The primary objective was to research (and publish in three volumes) the excavations on the site of a remarkably well-preserved Late Roman city (late fifth to sixth centuries C.E.). The excavations also uncovered significant remains of the Early Roman period. Applying modern techniques (e.g., ceramic quantification, zooarchaeolgy, archaeobotany, finds analysis), it was possible to reconstruct the economic, as well as the physical, character of Nicopolis from as early as the beginning of the second century to the late sixth century C.E. What proved to be a dramatic change occurred in the sixth century when the site was rebuilt as a military and ecclesiastical stronghold with a dramatically different economy; instead of exploiting its rich agricultural hinterland, the early Byzantine city relied on a "market garden" supply of foodstuffs, supported by imports from the Near East.

The aim of the second program was to discover how such a dramatic change took place. This involved two separate but related projects: the excavation of a Late Roman fortress and the development of a new form of intensive, site-specific survey to explore the character of "high-status sites" (mostly villas) within the ancient city's territory. The results demonstrated that the villa economy (on which Nicopolis depended) came to a violent end in the last years of the fourth century, and that, from the early fifth century, control of the land was in the hands of communities of farmer/soldiers, which had replaced the city as the dominant force in the countryside.

The third program, currently in progress, involves the excavation of a hilltop site and is planned to also include an extension of the survey methodology applied in the second program to examine settlement change or fragmentation, both in the fertile lowland and in the upland zone where the new site of Dobri Dyal lies. It is hoped that the application of the same research methodology applied in the two previous programs will now allow us to understand more fully what happened on the Lower Danube toward the end of antiquity (sixth to early seventh centuries) and the creation of the first Bulgarian kingdom.

### **SESSION 7A: Colloquium**

### The Archaeological Significance of Herod the Great

Sponsored by the Near Eastern Archaeology Interest Group

ORGANIZERS: Barbara Burrell, Brock University, and Kathryn Gleason, Cornell University

#### **Colloquium Overview Statement**

Archaeology is usually a matter of the *longue durée*, and we find few individuals powerful enough to affect material remains so thoroughly that things made after their lives look different than they did before. One of these was Herod, king of Judaea (r. ca. 37–4 B.C.E.). Having conquered rather than inherited a kingdom, he skilfully balanced alliance with the Romans with the demands of Hellenistic monarchy. He built prodigiously throughout his reign, founding entire cities, fortresses, and palaces, and endowing architectural and cultural projects even outside his realm.

There has been a great deal of debate on whether Herod's projects were influenced more by Rome, the Hellenistic East, or local traditions. But there has been little attention to their effect on what followed. The spectacular new finds at Herod's burial place, Herodium, make this a fruitful time to turn from the influences on Herod and instead look at his impact on the various material remains subsequent to his rule.

This session examines Herod's influence, from large-scale archaeological remains (landscape, monumental buildings, architectural decor) to small (coins, tableware, and dining habits). It also examines the newly found paintings from Herodium, and traces their repercussions through the decor of elite Jewish residences in Jerusalem and elsewhere. From these remains, we hope to reconsider not only, Herod's intentions in building as he did but also how his innovations were interpreted, accepted, or rejected, by elites and others of his realm.

## Buildings for Mass Entertainment: Tradition and Innovation in Herodian Construction

Zeev Weiss, The Hebrew University of Jerusalem

The monumental public buildings in the cities of ancient Palestine show clear signs of the penetration of Graeco-Roman culture. Their beauty, splendor, and massive presence, perceptible in antiquity when passing by their looming shadows, are still visible in the theaters and hippodromes at many excavated sites throughout the region. Herod was the first to introduce games and spectacles into the Roman East. His building projects for these activities were a grandiose expression of the king's desire to maintain a positive rapport with Rome and to integrate Roman cultural patterns into his realm—an ambitious agenda that ultimately revolutionized the leisure habits of the indigenous populations. Herod's dream of integrating Palestine culturally into the rest of the Roman empire and transforming it into a Roman enclave succeeded far beyond his rule and beyond the bounds of his realm.

This paper discusses the buildings for mass entertainment—theaters and hippostadia—constructed by Herod the Great in Jerusalem, Samaria, and Caesarea, as well as the palaces in Jericho and Herodium. It explores the nature of the finds and traces the architectural sources that shaped the buildings Herod introduced into his realm. It will be demonstrated that their construction, like that of his other monumental projects, was characterized by creativity, daring, and innovation, exhibiting local yet eclectic features that combined a variety of Graeco-Roman traditions. Herod used existing architectural models, cast new elements in them, adapted them to meet local needs, and consequently created a slightly different monument from that known elsewhere.

#### Herod's Villa Maritima at Caesarea in its Mediterranean Setting

Kathryn Gleason, Cornell University

The promontory palace at Caesarea Maritima is indicative of Herod's active participation in the tastes of the emergent Roman imperial court, which was (voraciously) sampling its empire in the first century B.C.E. On first impression, it is the kind of surfside villa against which Roman philosophers inveighed as being against nature. In fact, Josephus describes this specific quality as a point of pride for Herod in his building activities at Caesarea. The earlier phase of this palace is carved into bedrock at sea level, its buildings designed to withstand the surf. But a closer examination of this villa in its urban context challenges any notion that it emulates the leisured settings of Baiae or the Bay of Naples. The upper court of the palace, situated higher on the promontory, is integrated with the hippodrome and theater of Caesarea's entertainment district. In this respect, it draws from the earlier promontory palace at Halicarnassus and the basileia at Alexandria, both familiar to Herod. The overall plan of the palace is most closely allied with Herod's other palaces.

In this official residence, Herod deftly reworked Hellenistic and Roman sensibilities in architecture, landscape, entertainment, and decor to assert his hegemony as king of Judea, while supporting the Augustan imperial program. Thus, when Marcus Agrippa and Herod exchanged visits over the years, whose appetite for innovation was greater? This paper explores the maritime villas of this period to situate this clever building in its time and afterward.

#### Roman Wall Painters in Herodian Judaea

Silvia Rozenberg, The Israel Museum, Jerusalem

Herod's palaces in the land of Israel were elaborately decorated with Second and early Third Style wall paintings. The high quality of the fresco work, the preparation of the walls and colors according to the Roman precepts, and the use of imported colors suggest that trained craftsmen worked in these palaces. The stylistic and compositional aspects and the fine workmanship of some of the decorations allow us to assume the presence of artisans who were trained in the western provinces of the Roman world, perhaps even connected with the *bottega colta* in the service of Augustus and Agrippa.

The clear adoption of Roman modes of decoration raises many questions; the new paintings with depictions of sacred landscapes and symbolic images discovered in a royal box adjacent to a small theater in Herodium shed light on these and provide new insights. Indeed, it seems that, through analyzing of individual motifs, decorative schemes, and peculiarities of execution, we can recognize the hallmarks of a single decorative conception, and even the work of a specific decorating team. Herodian wall paintings of the type discovered in Herodium probably influenced subsequent painting trends in Israel and Nabatea, and perhaps even the Augustan view of decorative art in general. This paper provides a closer understanding of Herodian art and its relationship with Augustan art in the Early Roman period.

#### The Legacy of Herodian Wall Painting in First-Century Jerusalem

Richard Teverson, Yale University

My paper argues that one legacy of Herod's wall paintings was not any particular style or iconography, but his methods of adapting Roman and Hellenistic artistic traditions for his Judean context. Herod introduced in his palaces select elements of Italian painting pioneered by the imperial family. Appropriating Second and Third Style motifs, Herod constructed artistic and political spaces to accommodate local Judean identities within the wider Augustan cultural realm.

I investigate the reception of Herod's palace paintings by local patrons via comparison with wall-painting remains excavated by Broshi and Avigad from houses in Jerusalem. The archaeological contexts allow comparison between earlier designs, found as fragments in fills dated to Herod's reign (37–4 B.C.E.), and those in situ during the Roman sack of Jerusalem in 70 C.E.

While paintings from Herod's reign reveal tastes ranging from the Hellenistic to the height of Augustan fashion, the later material is plainer. In the "palatial mansion," preserved painted layers show white stucco ashlars (ca. 50–70 C.E.) covering and replacing earlier Third Style walls. These reversals of Mau's four styles have been taken as flat rejection of Roman influences and of Herod's paintings' political vision and cultural legacy in the first century's polarized political climate. However, closer analysis of this house reveals its patron's complex use of Roman models. By referencing the absent styles, the paintings suggest and control for the viewer their relationship to Rome. This technique of knowing adaptation was Herod's legacy; one capable of rejecting Herod's politics even as it drew from his art.

#### Tradition vs. Innovation: Architectural Decoration in Herod's Realm

Orit Peleg-Barkat, The Hebrew University of Jerusalem

A particular inconsistency underlies current evaluations of King Herod's architectural projects in Roman Judaea. While multiple studies have considered the architectural plans and geographic distribution of the buildings Herod commissioned, they have neglected features of these structures that were critical to Herod's broader polemical agenda, namely their exterior and interior architectural decoration.

Closer attention to architectural decoration offers a renewed perspective on Herod's use of monumental display to situate his own kingdom within the empire at large. His increased reliance on the Corinthian rather than Doric order, for example, appears to reflect Augustus' choice of the Corinthian order as representing the new Roman taste. His introduction into local architecture of particularly Roman architectural elements, such as the stucco ceilings of the "coffer-style" and the console cornice, moreover, transformed the adornment of buildings throughout Judaea. Herod's recently discovered tomb in Herodium exemplifies how these new Roman trends were incorporated into the local Hellenistic architectural tradition.

I suggest that Herod's decorative program impacted the tastes of many of his subjects; the architectural decoration in cities such as Jerusalem demonstrates how the innovations introduced by Herod to the local architecture were embraced by the well-to-do citizens of those cities. In the Jerusalemite necropolis, for example, certain tombs reflect an influence of the decor of Herod's tomb. In peripheral cities and smaller sites such as En-Gedi and Gamla, however, the architectural decoration maintains the local Hellenistic tradition. In these sites, the Doric order continues to be popular, and entablature elements are rare.

#### Herod the Tastemaker

Andrea M. Berlin, Boston University

Herod the Great is recognized, and deservedly so, for his stunning architectural creations. Less acknowledged but equally pivotal was the effect of his lifestyle and cultural affectations on Jewish society. Before Herod, there is little evidence in Judea for items common in the classical Mediterranean, including formal dining rooms, frescoed walls, mosaic floors, decorated tablewares, and even variously shaped cooking vessels for different recipes. After Herod, wealthy Jews embraced classical culture. They entertained in well-appointed dining rooms, prepared Roman recipes in Italian-style pans, served from decorated dishes, and dined on individual place settings of slipped and painted pottery.

The chronology is decisive and significant. In the early first century B.C.E., though formal dining rooms appear in the palaces of Hasmonean rulers, there is no evidence for such among wealthy Judeans. Not until the later first century B.C.E., after Herod built elaborately decorated dining rooms in each of his palatial abodes, do such rooms and the associated array of decorative accoutrement appear at Jewish sites. Distribution is country-wide: Sepphoris, Yodefat, and Gamla in the north; Horvat 'Eleq in the central area; and Jerusalem and Khirbet el-Muraq in the south.

Such cosmopolitan displays evoke the banquets of Greek and Roman custom, where formal individual service was typical. However, their appearance in Judea only after their adoption by Herod suggests more than a long delayed cultural borrowing. Herod himself set the tone for and inspired local elites who, following his example, likely used these meals as potent status events to reflect and augment their own social positions.

#### What do Herod's Coins and Those of his Successors Have in Common?

Donald T. Ariel, Israel Antiquities Authority

Some of the coin types used by Herod the Great are quite original, while others appear to continue earlier Hasmonean types. Scholars have characterized these types in rather divergent ways: all pagan, all Jewish, intentionally ambiguous, or "pagan-for-the-dated-coins-but-Jewish-for-the-undated-coins." The approach taken here is that they aimed primarily at avoiding offending Jewish sensibilities. Though the types were likely chosen by mint officials, they would have taken their cue from Herod himself. Definite pagan cult symbols were not employed, and, with one exception, representations of living things did not appear.

Later coins of Herod's descendants, Archelaus, Antipas, and Agrippa I, show a continuing sensitivity to their Jewish subjects—at least when those coins were minted in their population areas. Herod did not mint coins in Gentile regions, and we cannot know how such coins would have looked had he done so. But we do know that Herod was pro-Roman—especially when out of the Jewish setting.

This paper argues that the particularly pro-Roman coins minted by Herod's descendents in Gentile regions are probably a continuation of this same dichotomous behavior. The Herodian approach may also have influenced the policies of municipal coinages of Jewish/Samaritan population centers such as Tiberias, Sepphoris, and Neapolis.

### SESSION 7B Roman Funerary Images and Ritual

CHAIR: Anne E. Haeckl, Kalamazoo College

# The Use of Lead in Central Italian Funerary Contexts: New Evidence from Gabii Anna Gallone, The Gabii Project

In 2009, an 800 lb. lead sarcophagus was found during the excavation of a central sector of the ancient Latin city of Gabii, a site located about 12 miles to the east of Rome. Two additional burials in which lead was lavishly used in the architecture of the tombs emerged during the 2011 excavation campaign. These burials are part of a small necropolis of *cappuccina* and *fossa* graves that developed during the early Imperial period, when the city contracted progressively to become a mere village alongside the Via Praenestina.

The three burials, dated to the first century C.E., have in common the use of a great quantity of lead, but they differ widely with respect to layout and typology. In the first case, the sarcophagus was made of a single sheet of thick lead that was wrapped around the body of the deceased, an adult individual; the sarcophagus itself was then covered with an A-framed structure composed of tiles and a marble slab, all of which was capped by a concrete podium. In the second instance, the body of an adult female was placed directly on top of a single rectangular lead sheet and was then, in turn, covered with a *cappuccina* of tiles, lining the long sides

with two lead slabs. All three of the slabs are of a standard size and weight. The final tomb in question is a child burial contained in a small terracotta sarcophagus that was then sealed with a thin lead lining.

The three lead burials lie only meters apart from one another and date to the same phase of the city's life, suggesting the existence of a local mortuary practice without clear comparanda from other sites in central Italy. The use of lead in funerary contexts is quite rare in the Mediterranean area and, when known, has previously been related to coffins. Furthermore, these lead coffins are mostly found in the northern and eastern provinces of the Roman empire and are slightly later in date. The burials from Gabii thus represent an interesting and intriguing context in which to investigate these uncommon funerary habits that highlight the supply, reuse, and consumption of precious metal in the urban contexts of Roman Italy.

#### **Facing Death: Isolated Heads in Late Etruscan Tombs**

Keely Heuer, New York University

The François tomb in Vulci, dated to the second half of the fourth century B.C.E., is best known for its magnificent series of wall paintings decorating its central chamber that depicts scenes from Greek epic and myth as well as episodes from early Etrusco-Roman history. But no scholarly attention has been paid to the three frontal, isolated female heads painted on the scale-patterned torus that runs along the top of the walls and that are centered above three of the seven doorways leading to side chambers. An additional sculpted and painted head of Charun looks down from the coffering of the ceiling in the main chamber.

Besides the François tomb, such heads occur in other important late Etruscan tombs featuring sculptural decoration. Examples include the Tomba dei Rilievi at Cerveteri, where a male head and a female head on the wall each flank the central funerary bed, and the facade of the Tomba Ildebranda at Sovana, where the column capitals feature heads emerging from acanthus calyxes. Beginning in the late fourth century B.C.E., isolated heads began to appear on Etruscan sarcophagi and in the following two centuries on stone and terracotta cinerary urns.

Prior to ca. 350 B.C.E., heads do not appear to have functioned as a funerary motif in Etruria. I propose that the Etruscans derived this new imagery and its iconographic meaning through cultural contacts with Magna Graecia, most likely at sites with strong Etruscan ties like Capua in Campania. Images of isolated heads proliferate in southern Italy and Sicily, occurring most often on South Italian red-figure vases, roughly a one-third of the published corpus (more than 7,000 examples), beginning in the third quarter of the fourth-century B.C.E. As South Italian vases decorated with heads are found almost exclusively within tombs and isolated heads are paired consistently with imagery having funerary associations, the motif appears to have been intentionally selected to symbolically express local beliefs in the hereafter. Heads, both painted and sculpted, also decorate fourth century B.C.E. South Italian tombs, often in a similar manner to contemporary and slightly later Etruscan tombs.

The transference of the isolated head motif and its funerary associations from Magna Graecia to Etruria offers further evidence of a seemingly indigenous attraction to representing the head in isolation on the Italian peninsula and likely provides the iconographic underpinnings for later phenomena in Roman art, such as acanthus leaves on the bases of funerary busts.

#### Rereading the Faliscans: New Discoveries From Past Excavations at Narce

Jacopo Tabolli, La Sapienza University of Rome

In the last decades of the 19th century, at the dawn of the unification of Italy, an innovative project for the first archaeological cartography of Italy was promoted by the Ministry of Public Education. This project started and ended in just a few years because of the unexpected discovery, about 30 km north of Rome, of a peculiar area recognized as the ancient Ager Faliscus described by Greek and Latin sources. The only Italic-speaking region on the western shore of the Tiber, the Ager Faliscus was surrounded by Etruscans, and a huge number of necropoleis, sanctuaries, and settlements were excavated, revealing ancient towns such as Falerii and Fescennium, famous from the Iron Age through the period of Romanization. The richness of the orientalizing necropolis on the Narce Hills made a strong impression on scholars, and the archaeological finds were acquired for the first public collections of the newborn Etruscan Museum of Villa Giulia in Rome. Some of the tomb groups discovered were purchased by foreign institutions and are now in the collections of the University of Pennsylvania Museum in Philadelphia and in Chicago, at the Field Museum.

This great season marked the birth of the modern scientific excavation of the pre-Roman civilizations of Italy. The main part of the materials found in those years remains unpublished today. In the last three years, I have analyzed two ancient necropoleis of Narce, I Tufi and La Petrina, consisting of approximately 150 tomb groups, excavated from 1890 to 1894. My survey has located the exact positions of the two burial grounds, creating a new cartography, thanks to the discovery of archival documents conserved in Italy. The tomb groups can be dated from the second phase of the first Iron Age to the Early Orientalizing period (eighthseventh centuries B.C.E.). The project also involved the analysis of an unpublished excavation of 1933 on the acropolis of Narce, where layers belonging to the same chronology were discovered. With a record of about 1,600 objects, it was possible to create a coherent system of typology and the first chronological sequence of Narce. The aim of this paper is to present this exceptional material (vases, bronzes, and some human remains) and to compare the chronological sequence with other pre-Roman sequences, especially that of Veii, the nearest Etruscan town. Narce seems to have depended more on Etruscan Veii than on its fellow Faliscans, even Falerii, the capital of the Ager Faliscus.

# The Via Cristallini Complex: A Case Study for Neapolitan Funerary Ritual in a Changing Roman World

Allisa J. Stoimenoff, The University of Texas at Austin

The hypogea of Neapolis are a series of communal chamber tombs clustered in the area outside Porta San Gennaro. This paper focuses on a specific set of four tombs dubbed the Via Cristallini complex. These tombs are architecturally unique

among the hypogea because each one contains two chambers. In the Via Cristallini complex, the upper chamber housed cinerary urns, while the lower chamber contained kline-shaped sarcophagi carved into the natural stone. The epigraphic evidence demonstrates that the division of rite was not made along linguistic lines, considering both Latin and Greek inscriptions appear in both chambers. It also indicates that the tombs were generally shared by members of the same family, including freedmen.

Contrary to the traditional fourth- to third-century B.C.E. dating of the Via Cristallini complex, I propose that the tombs were created in first century B.C.E. The continuation of Greek-type tombs during the Roman period is, in part, due to Neapolis' unique status as a haven for and proponent of Greek culture in Italy well into the Roman period. Both epigraphic and artistic evidence point in this direction. The presence of the toga in several of the funerary reliefs in the Via Cristallini tombs is significant to the dating of the tombs because in early Neapolitan funerary reliefs the deceased tends to wear the Greek chiton.

This paper also challenges De Petra's theory that the structure of the Via Cristallini tombs represents a two-part funerary ritual, in which the body was laid out to decay in the lower chamber before cremation burial in the upper chamber. The structure of the tombs themselves seems to preclude such a funerary ritual, since the laying out and desiccation of the corpse would have taken place in the lower chamber, making collection and removal for cremation particularly difficult. If a two-part ritual existed, the funerary beds would have been located in the upper rather than the lower chamber. Furthermore, a deposit of bones found beneath the lower chamber of Tomb C suggests that bones were disposed of after desiccation, not cremated. Two distinct rites were, indeed, present, but each reflected a distinct cultural norm; cremation catered to a traditional Roman mentality, while inhumation was preferred by those who wished to stress their Greek connections.

# **Guitar Heroines: Female Pandoura Players in Funerary Art of the Severan Period** *Anne E. Haeckl,* Kalamazoo College

In her book *Matrona Docta: Educated Women in the Roman Elite from Cornelia to Julia Domna* (London and New York 1999), Hemelrijk introduces a discussion of Roman ambivalence toward the role of music in the education of elite women with a pointed question, "vice or social grace?" Roman opinion was divided about whether or not the mastery of musical instruments was an appropriate activity for privileged women, even when their skills were acquired and performed privately, in dignified domestic settings far removed from the disreputable milieu of public entertainment. It is therefore significant that respectable female pandoura players suddenly become fashionable in Roman funerary art during the early third century C.E., a period when the erudite empress Julia Domna personified feminine virtue in Severan dynastic propaganda. This paper identifies a series of private funerary monuments in which the pandoura appears exclusively in the hands of affluent Roman girls, women and divine psychai, where it serves as a gendered status symbol of female refinement, accomplishment, and harmonious marital love.

The pandoura is a type of lute, a guitar-like stringed instrument with a rounded triangular or pear-shaped body and a long neck that terminates in a decorative

tailpiece. A musical instrument of Egyptian or Near Eastern origin, the pandoura seems to have entered the classical world in the fourth century B.C.E. (cf. the pandoura-playing Muse on the Mantinea Base). In Severan funerary art, female pandoura players appear as both subsidiary and central figures. On sarcophagus reliefs with affectionate banqueting couples, well-dressed mortal women or winged psychai play pandouras while prominently seated next to the kline. In funerary portraits on a sarcophagus lid in Rome's Capitoline Museum, a sarcophagus in Nemi, a stele of Lutatia Lupata in Merida, Spain, and a statue from the Yasmina cemetery in Carthage, female subjects proudly play or stand beside pandouras. Because they accompany togate, scroll-reading husbands, the pandouraplaying women on the Capitoline and Nemi sarcophagi are clearly respectable Roman wives. As compositional pendants, the spousal attributes of pandoura and scroll visually equate feminine skill in the musical arts with masculine learning. It is tempting to connect the new third-century popularity of the pandoura, a musical instrument of Eastern heritage, with patronage by the Syrian empress Julia Domna. While there is no evidence that Julia Domna ever strummed a pandoura, Dio Cass. (75.3.1–2) notes with approval that Caracalla as emperor learned to play the lyre, indicating that stringed instruments were indeed associated with social and intellectual sophistication in the Severan imperial court.

#### A Distribution Scene on a Palmyran Funerary Relief

Fred C. Albertson, University of Memphis

A limestone funerary relief from Palmyra, currently on display in the Museum of Fine Arts, Boston (acc. no. 1970.346), belongs to the series of "small banquet reliefs," a late second- to early third-century type characterized by common dimensions, shape, and distinctive framing moldings. While the subject matter of all the other members of the group share a religious theme, either depictions of the so-called funerary banquet or animals associated with Palmyran deities, the Boston relief is unique in that it illustrates a genre scene, where three male figures sit around a table on which rest recognizable piles of tokens or coins. The event has previously been identified as a gaming scene by Vermeule (BurlMag 113 [1971] 45), while a money exchange could also be postulated. However, for various reasons, the Boston relief does not conform iconographically to either of these. Instead, a better comparison is provided by a group of fourth-century contorniates (A. Alföldi, et al., eds., Die Kontorniat-Medaillons. Vol. 2 [Berlin 1990] 171-172 no. 117) that can be identified as representing the distribution of these very same contorniates prior to the festivals they commemorate (A. N. Zadoks-Josephus Jitta, Mnemosyne 4 [1951] 83, 88, no. 23, pl. 2.8). It is argued here that the Boston relief illustrates the same act of distribution, although in this case, it is the distribution of tesserae terracotta tokens of either circular or rectangular shape, issued for admission to the cultic banquet and widely known from hundreds of surviving examples from Palmyra. Although the relief is still to be viewed as depicting a genre scene, this new identification now corresponds to the religious theme of the small banquet series as a whole and rightly associates the represented activity within a distinctive Palmyran context.

## Heu Me Miserum! The Rhetoric of Misericordia in Roman Depictions of the Fall of Troy

Jennifer Muslin, The University of Texas at Austin

Stories of the destruction of cities (*urbs capta*) are always compelling. The well-known events of the fall of Troy (Iliupersis) are a prime example, including killing, burning, rape and murder, enslavement of women and children, temple plundering or other offenses to the gods, and lamentations. Although by the late first century C.E., the Iliupersis and urbs capta had become trite stock motifs in Roman rhetoric, literature, and art, they continued to serve as powerful vehicles for gaining emotional and sympathetic responses (*misericordia*) from contemporary audiences in contemporary circumstances. But how?

When rhetorically representing the Iliupersis and the urbs capta, Horace (*Ars P.* 125–155) and Quintilian (*Inst.* 8.3.68–69) advise speakers to relate the events as episodes so as not to overwhelm the audience and render the material trite, while the author of the *Rhetorica ad Herrenium* (4.39.51) advocates a bird's eye overview for describing the fall of a city to evoke the most powerful sympathetic reaction.

Using these two rhetorical models, I investigate Iliupersis depictions in first century C.E. Roman art in light of literary testimony of viewer engagement and visual narrative devices (onlookers, instructions) that elicit *misericordia*. Specifically, I examine Iliupersis depictions on three Fourth Style fresco paintings in the ala of the House of the Menander (1.10.4) at Pompeii and six "Iliac" tablets. The Menander paintings employ an episodic approach, each showing a different scene related to the Iliupersis (Trojan Horse, Rape of Cassandra and Helen, Death of Laocoon), while the Iliac tablets take a bird's eye view of these events. Although they display the same fabulae, the two groups' media, forms, structures, and iconography differentiate them from each other and work to engage the viewer in diverse ways.

Other scholars have suggested a genealogical preference (e.g., Trojan family descendants) or an interest in simply showcasing one's erudition by selecting Iliac themes for private art. Instead, I argue that the emotionally provocative power of the Iliupersis/urbs capta motif caused the recollection of "poetic memory" (intertextual links to other urbs capta descriptions) and was the prime motivator behind the theme's popularity in Roman art and literature. The Iliupersis was a familiar story to most levels of Roman society, from visual, oral, or literary culture, yet it was one that could continually be renewed by the application of its model to contemporary situations. The changing elements were the interpreter and the circumstances of interpretation.

#### Remembering Children in the Roman Catacombs

Jenny R. Kreiger, University of Michigan

The presence of children in the ancient world—not to mention their activities or social roles—can be difficult to detect archaeologically. For the relatively few children who received them, funerary monuments provide valuable glimpses of children and those who commemorated them. The Roman catacombs offer tens of thousands of burial plaques, which, when studied together, can shed light on

children in the urban population of the third and fourth centuries C.E. Using a sample of more than 3,700 burial plaques drawn from five catacomb complexes (as represented in the *Inscriptiones Christianae Urbis Romae*), I examine the use of words and images on these plaques to determine whether age-linked patterns of commemoration exist, and if so, how they reflect the commemorators' attitudes toward children, living and dead.

The bulk of my sample comes from the catacomb of Domitilla, from which I drew plaques with and without images. Noting that commemorative patterns differ minimally between these two types, I collected plaques with images from the complexes of Callistus, Vibia, Sancta Crux, and the Coemeterium Maius, all of which differ in size and location within Rome. I present my findings in terms of how words and images are used with different frequencies for people of various ages and genders, with special attention paid to how infants (up to one year) and young children (up to seven years) are distinguished from older children and adults. I observe that, in some ways the commemorators set children apart from adults (e.g., in the use of the epithet innocens), while in others, children and adults share qualities (e.g., in the use of the *chi-rho* as a decorative element). Patterns like these hold broadly across all complexes, but each complex practices its own "commemorative habit," or set of common practices from which commemorators usually chose.

I compare my findings to historical evidence for changing perceptions of childhood and children's characters in this period, as well as considering changes Christianity may have brought to children's social roles. I also note how the commemoration of children may suggest a new understanding of the "business" of commemoration, particularly of the role that *fossores* (diggers) might have played in the development of catacomb commemorative traditions. I hope that the examination of additional complexes will further develop the catacombs' potential as a resource for archaeological and social-historical research, especially for the study of ancient children and childhood.

### SESSION 7C Post-Pharonic Egypt

CHAIR: To be announced

# A New Perspective on Greek-Egyptian Relations: Lead Objects from Heracleion-Thonis, Egypt

Elsbeth M. van der Wilt, University of Oxford

Underwater excavations in Abuqir Bay, east of Alexandria, led to the identification of two towns on the seabed. One of these sites is Heracleion-Thonis, a harbor town and customs office at the mouth of the Canopic branch of the Nile. Pottery indicates activity from the end of the seventh century B.C.E to the middle of the second century B.C.E., although some rare Roman sherds were also found. It was the first harbor incoming ships would have passed en route to Naucratis. On the same branch of the Nile, the two towns would have had a close relation-

ship. My research concentrates on the large numbers of lead objects found at Heracleion-Thonis.

An overview of the lead objects shows the unique nature of the assemblage, particularly in an Egyptian context. Parallels are found from around the eastern Mediterranean; lead objects with an Egyptian provenance, however, are scarce. In this paper, I explore the parallels for the lead objects and what they tell us about the people in Heracleion-Thonis. One good example for this is the lead weights. Weights with symbols allow for dating according to the weight standard. Lead weights are a common phenomenon in the Greek world, and these Greek weights are the most numerous in the corpus, which also yielded the first demonstrably Athenian weights found in Egypt. These particular weights date to the second half of the fourth century B.C.E.

Greek pottery and epigraphic evidence are normally the main pieces of evidence for Greek presence in Egypt. This paper demonstrates that lead objects from Heracleion-Thonis provide a new perspective of life in an Egyptian border town.

#### Tell Timai, Egypt: 2011 Season

Robert J. Littman, University of Hawaii at Manoa, and Jay Silverstein, University of Hawaii at Manoa

The ruins of Thmuis (Tell Timai) are a rare instance of an entire Nile Delta Graeco-Roman-Egyptian city in an excellent state of preservation. While the site has suffered considerable degradation over the last century, particularly over the last 10 years, the University of Hawaii has begun work there, securing a moratorium on further encroachment. Results from the 2009–2011 seasons have begun to illuminate the Hellenistic occupation in the northern portion of the city. Of particular interest is an extensive kiln district, with evidence of the manufacture of highquality vessels from imported Aegean clays during the third and early second century. Two episodes of leveling associated with urban renewal are visible, with one event associated with destruction. The 2011 excavations revealed the skeleton of a man killed in the destruction as well as a cache of coins and ceramic vessels that date the event to the second century. Excavations were also begun in the east central portion of the tell, where a large, red granite statue pedestal and column base were visible, with the associated buildings, dating to the Late Roman period. A total of 1,320 finds and 1,900 kg of pottery was recovered and analyzed, including many ceramic depictions of Isis and Bes. Until now, what is known of Thmuis has come from a handful of Greek authors and a few fragments of burnt papyrus; this new archaeological data represent a leap forward in our understanding of the Delta during the classical era.

# Importing the Profane to Export the Divine: Ceramic Production and the Perfume Industry at Tell Timai, Egypt, in the Fourth Century B.C.

Nicholas F. Hudson, The University of North Carolina at Wilmington

The field season of the University of Hawaii excavations at Tell Timai (ancient Thmuis) in the eastern Nile Delta produced a small cache of fine ware juglets from

a kiln context. Some of the sherds were clearly wasters, which, along with their find context, suggests they were produced at Tell Timai. What makes these juglets stand out is not their form or function but the material from which they were made, consisting of an extremely fine fabric with surfaces that were burnished to a fine polish, creating a texture similar to soapstone. Despite the evidence that the juglets were produced on site, the clay used to create them was clearly imported. A chance discovery at the end of the season of an amphora containing raw clay similar in quality and fineness to the juglets adds further evidence that clay was imported to Thmuis for the production of these small vessels. The juglets, reminiscent of Greek lekythoi and Phoenician unguent bottles, should be associated with the perfume industry for which Mendes, the mother city of Thmuis, was famous.

This paper presents the archaeological data and interpretive possibilities of the Thmuisian production history of this functionally specific class of juglet in the fourth century and beyond, arguing that the ceramic evidence can help inform us on the production, exportation, and local consumption trends of the perfume industry at Tell Timai from the fourth through second centuries B.C.

#### **Votive Practice at Herakleion-Thonis**

Sanda S. Heinz, University of Oxford

Herakleion-Thonis is a sunken city off the coast of Egypt, at the mouth of the Canopic branch of the Nile. The city was discovered in 2000 by the Institut Européen d'Archéologie Sous-Marine, and it has since been surveyed and excavated every year. The finds date from the seventh to the second centuries B.C.E. and many are truly spectacular. In addition to colossal statues, more than 60 shipwrecks, monumental architecture, and more than 300 statuettes and amulets have been found.

Many past studies on Egyptian religion have been concerned with less mobile remains (temples, temple reliefs, royal statuary) and texts. Despite this fascination with religion, however, small-scale votive objects, direct signs of interaction between the worshipper and deity, have received relatively little attention. New studies have increasingly begun to broach the problem, primarily by working within limitations and using museum material.

The Late and Ptolemaic periods saw a huge growth in the number and type of votives dedicated in temples across the country. This phenomenon, however, is still little understood, and few sites or votive categories have been examined closely in an archaeological sense. The statuettes from Herakleion-Thonis are some of the first to be studied in depth from a single site, and they provide a starting point for understanding this widespread dedicatory phenomenon.

In this paper, I discuss the statuettes from Herakleion-Thonis and their role as votive objects. I first present the typological divisions among the statuettes and dedication patterns across the site, highlighting defined votive deposits and their significance whenever possible. I then compare the figures from Herakleion-Thonis with those of other sites in Egypt, particularly the types of statuettes dedicated at each site and how these subjects may relate to local or foreign influences. Several preliminary individual articles have been published about statuette deposits from sites throughout Egypt, but the data have never been collated and used compara-

tively. These data thus are used here to determine to what extent the Herakleion-Thonis figures are similar and different from figures dedicated elsewhere, and how these votives as a whole relate to dedicatory practices in Egypt.

# Identity and Burial Practices at Graeco-Roman Abydos: The 2011 Season of the Abydos Middle Cemetery Project

Thomas Landvatter, University of Michigan

Abydos is a site steeped in indigenous Egyptian tradition, as it is the burial place of the first kings of state-level Egypt, the site of multiple cemeteries in near constant use for 3,500 years, and a major cult center to the god of the dead, Osiris. Its association is almost invariably with Pharaonic civilization, but the site continued to act both as cult center and as cemetery through the entire Graeco-Roman period.

Though Abydos has been extensively excavated since the mid 19th century, the focus has been almost exclusively on the Pharaonic material (ca. 3000 B.C.E.–332 B.C.E.), with little attention paid the Graeco-Roman sections of the cemetery. This is a glaring gap in our understanding of the site, as development of the cemeteries of Abydos during the Graeco-Roman period is vital to answering questions of interactions among Egyptians, Greeks, and Romans and their effect on identity. New data from the 2011 season of the University of Michigan Abydos Middle Cemetery Project (AMC) has shed some light on these questions. In this paper, I address who was still buried at such a site in this period, how and why different choices were made with respect to mortuary treatment vis-à-vis earlier practices, and how individuals and groups interacted with and altered an already dense landscape.

In a season conducted between January and February 2011, excavation was concentrated in areas expected to yield Graeco-Roman period remains based on the results of early 20th-century excavations, the AMC surface pottery survey, and magnetometric survey conducted in 2009. Excavations yielded a small cemetery zone dated to the Graeco-Roman period based on pottery finds. The area is focused around a monumental animal hypogeum, apparently used for the burial of cat mummies. Fourteen human burials were excavated from within a variety of structures, including individual vaults and family tombs; several were also surface burials. This area acted both as a cemetery zone and as a ritual complex, with evidence of ritual activity associated with tombs and the animal hypogeum. The Old Kingdom zones previously excavated by the project are clearly different in organization from this area, particularly with respect to the importance of animal cult. However, there are also continuities in basic structure. This paper also addresses the direction of future research in this important and understudied area of the cemetery.

# **Colossal Statuary Group from the Underwater Excavations at Herakleion, Egypt** *Emma Susan Libonati*, University of Oxford

The ongoing underwater excavations conducted in the Abukir Bay by Franck Goddio and the Institut Européen d'Archéologie Sous-Marine have already yield-

ed a startling amount of archaeological material for the cities identified as Herakleion and East Canopus. The academic publication, including the archaeological context, of the statuary from these excavations was the subject of my dissertation.

In this paper, I discuss the colossal grouping of a king, Isis-queen, and Hapy from the submerged site of Herakleion. There are few comparable statues to the grouping, whose material, quality, and detail are exceptional. All three statues were repaired or recarved in antiquity, but their proportions, which constitute the one variable that cannot be changed in usurpation, confirm they were manufactured in the Ptolemaic period and were not recycled from earlier statues. Notable discussion points include the purpose of a large statue of a deity, the choice of an archaicizing sheath dress for the Isis-queen, these statues' relationship to the Pharos colossi, and the original display context for these pieces at Herakleion. The intention of the Herakleion group seems ideological, intended to stress the political and religious aspects of the prosperity and abundance of Egypt, emphasized by the use of Hapy in the grouping.

# SESSION 7D Recent Research in Central and East Asia

CHAIR: Susan E. Alcock, Brown University

### Time and Space on Akkadian-Period Cylinder Seals: Representations of the Rising Sun God

Janice Barrabee, University of Pennsylvania Museum of Archaeology and Anthropology

During the Akkadian period (ca. 2350–2150 B.C.) in Mesopotamia, cylinder seals most often depicted vibrant images of animal combat and intricate scenes detailing the activities of the gods. Seals with scenes of the rising sun god form a popular category of the latter. The solar deity was represented ascending between two mountains, standing between two gates, often flanked by attendants, and approached by divine and human beings. At times, the scenes contained landscape elements. In addition, cultic items were sometimes evident.

Using examples of Akkadian-period seals stemming from the cemetery of Ur in southern Mesopotamia that are now part of the University of Pennsylvania Museum collection, this paper explores the range of imagery on seals depicting the rising sun god and the meaning behind these scenes. These seals portray a moment in time—sunrise—providing images of the conceptualization of that time-frame. They also describe the place of the sunrise and engender an examination of ritual space, Mesopotomian cosmology, and real vs. mythical landscapes and territory. The images on the seals can be related to representations of the place of the rising sun god and the beliefs surrounding the rise of the sun hinted at in third millennium texts and more completely delineated in second- and first-millennium literary, religious, and historical compositions. This paper demonstrates how these seals corroborate and enhance our understanding of the ideology and cultic practices associated with sunrise each morning in ancient Mesopotamia.

### Theorizing "Landscape" in Ancient Cultures: An Assyrian Case Study

Ann Shafer, American University in Cairo

In recent archaeological literature, "landscape" studies abound. This paper takes a critical look at Archaeology's engagement of this conceptual trajectory by examining its premises and conclusions. As a means to test this approach more rigorously, it presents one particular ancient Near Eastern case study: the Neo-Assyrians, who are well known for the creation of an imperial "landscape" and a highly developed palace culture that supported it. Traditionally, scholarly narratives of the Assyrian empire have been driven by an aesthetics-based approach to monumental artwork and a historical reading of accompanying texts. In a more nuanced approach to the same material, this paper asks how we might use contemporary theories of place-making and other analytic strategies to raise new methodological questions. To accomplish this in ancient Assyria, a multilevel research strategy is necessary, including a more in-depth and interpretive reading of Assyrian textual sources, the incorporation of archaeological survey discoveries, and the inclusion of lesserknown commemorative sites in outlying territories. Examples of transcultural and transtemporal comparisons are also discussed. Although this paper focuses on the Assyrian example, ultimately it addresses how contemporary theory is changing our canonical ways of viewing the past.

# Making Memory in a Monumental Landscape: A Parthian-Period Town in Azerbaijan

Susannah G. Fishman, University of Pennsylvania

The changing meanings of a monumentalized landscape can provide a useful way to explore how memories of the past shape the present. These massive reminders of those who came before can be manipulated in many different ways, but they cannot be easily ignored. In the Parthian period, the southern Caucasus existed within a landscape that had been imprinted with various unified narratives at different times but latterly functioned within a period of political fragmentation. This disunity allowed different settlements to develop their own ways of relating to the past. The site of Oglanqala in Azerbaijan is here used as a case study to explore how ancient remains were incorporated into new occupations in the Parthian period. After examining the particular evidence of Oglanqala, it is placed into a broader regional context to further elucidate the complexities of memory in this region.

Oglanqala was initially occupied in the Early Iron Age, experienced its densest period of occupation during the Urartian and Achamenid empires, and was reoccupied in the Parthian period. In earlier incarnations, Oglanqala was characterized by a fortress that served as the center of a small polity. However, during the Parthian occupation, the inhabitants built permanent domestic settlements around the site for the first time, and the fortress fell into general disuse. Even if the existence of the citadel was not an original motivation for the reoccupation of Oglanqala, it remained a large presence in the center of the village. Such a presence could not have been ignored, and it seems to have found a place in the local

narrative. What had been a sign of a greater political superstructure became a site of local meaning-making.

Oglanqala exemplifies only one means of relating to the past employed in the Parthian southern Caucasus. Some political centers such as Armavir and Artachat rebuilt structures from the Urartian empire. Other sites chose to build nearby extant remains from both the Urartian and the Achaemenids periods. Finally, some sites chose to settle on previously unoccupied land. Even if the presence or absence of older structures was not a decisive factor in the initial site-selection process, it was a fact that would need to be incorporated into each settlement's collective memory.

#### Reexamining the Decline of Hellenistic Ai Khanoum

Jeffrey D. Lerner, Wake Forest University

The site of Ai Khanoum, or "Moon Lady," is located in the ancient country of Baktria (northeastern Afghanistan) along the Amu Daria (ancient Oxos). Although the ancient name of the city is lost to us, we do know that it was settled by Greek colonists, who administered the region, and controlled its agriculture, trade, and commerce, and mined the Badakhshan mountains for their rich mineral resources, especially lapis lazuli.

While excavations conducted between 1964 and 1978 by the French Archaeological Delegation in Afghanistan were never completed, and the site has since been destroyed, enough material was recovered to allow for a general picture of the city's history and to glean some insight about the Hellenistic Far East. But the finds also raised questions. One of the most intriguing is what caused the city's demise. The current reconstruction holds that the Greek inhabitants simply abandoned the site soon after the death of the Greek Baktrian king, Eukratides I (ca. 170–145 B.C.E). His death is also believed to mark the end of Greek rule over Baktria and the beginning of a nomadic hegemony enjoyed by the Da Yuezhi, the forerunners of the Kushana kingdom.

A reexamination of the evidence—ceramic, epigraphic, literary, and numismatic—reveals that the Greeks of Ai Khanoum "abandoned" their city at a much later date and for reasons other than the incursion of the Da Yuezhi. This paper argues that there is nothing to substantiate the notion that the nomadic conquest of Baktria was wrought with apocalyptic results for Ai Khanoum or the region in general. On the contrary, it suggests that the city continued to flourish economically and politically under nomadic hegemony well into the first century B.C.E. In this regard, the key to understanding the Greeks' abandonment lies in considering catastrophic events that occurred well south of the Paropamisadai (modern Hindu Kush), where another group of Greeks, the so-called Indo-Greeks, ruled a region that extended from southern Afghanistan to the Indian subcontinent.

#### A Chronology of the Persian and Hellenistic Ceramics from Bactra

Charlotte E. Maxwell-Jones, University of Michigan

The site of Bactra in north-central Afghanistan is one of the largest sites in the country, with the two main areas covering almost 500 ha. A fortified site from at least the Persian period, it was occupied continuously until it was abandoned in the Late Islamic period.

There have been numerous studies of Bactra, from Charles Edward Yate's survey in 1886 through the last excavations in 2008. The most recent series of excavations were conducted by the French Archaeological Delegation (DAFA). The first of these, directed by Alfred Foucher, led to the publication of the ceramic material by Jean-Claude Gardin. When DAFA left Bactra in the 1960s, before the discovery of Ai Khanoum, the "Bactrian Mirage" still predominated, as they had not reached pre-Kushan levels in Bactra. The most recent excavations by DAFA in 2004–2008 have uncovered strata of the Kushan, Hellenistic, and Persian periods, with residual material reaching into at least the Iron Age.

This paper presents the preliminary results of the first comprehensive study of the Persian and Hellenistic ceramics from Bactra. In addition, a more thorough study of the Kushan material than was previously possible is discussed. The ceramic chronology of the painted wares is introduced, and Bactra's trade connections with other cities in Bactria during the Persian and Hellenistic era, including Ai Khanoum, will be examined.

## A Water System in the Niya Kingdom: Transfer of a Tank-Water System from Gandhara in the Second–Fourth Centurie C.E.

Arnaud Bertrand, Ecole Pratique des Hautes Études, Paris

The scholarly consensus is that the Chinese Han dynasty military force (second century B.C.E.—second century C.E.), when progressing near or within the city oases of the southern and northern Taklamakan Desert (in the modern Xinjiang region, western China), introduced agricultural and water-management techniques to the region. But the discovery of watertanks on the site of Niya (southern Taklamakan Desert oasis) indicate that this influence was not one sided. Water systems and agricultural technology was also influenced by the west; namely, migrants from the Gandhara region (Pakistan) introduced a tank-based water technique within the agricultural, economic, and, perhaps, religious system of the Niya oasis during the kingdom of Kroraina's rule over the southern Taklamakan territory (third–late fourth centuries). I show that this water system probably originated as a result of this migration and had a clear impact on the method used to store and regulate water on the site in the three last centuries of its existence.

Scholars have demonstrated that this western migration from Gandhara occurred progressively during the Kushan dynastic rule over central Asia (40–260 C.E.) and northern India and ended by the late fourth century C.E. They used the Kharoṣṭhī script to organize the bureaucratic system of this kingdom, which spread mainly from Niya, Endere, and Miran to the salt lake of Lop Nor in Loulan ("Kroraina" in the Kharoṣṭhī script) in the east. This migration also played an important part in the spread of Buddhism through Xinjiang.

Considering the historical, philological, and archaeological evidence that confirm this migration, I suggest a western influence in the development of these water tanks discovered on the site of Niya. If my assumptions are correct, we may start to change our East-to-West vision of Chinese-only influence on agriculture and water development over these Xinjiang oases in the early centuries of the first millennium C.E. Moreover, if this tank-based system is confirmed to be a technique imported during this migration, we could retrace the path of this route as well as the hydrographical and agricultural landscape built during this period.

# SESSION 7E: Colloquium New Models of Trade and Supply in the Roman Empire

ORGANIZERS: *Tyler Franconi*, University of Oxford, and *Candace Rice*, University of Oxford

#### **Colloquium Overview Statement**

This session presents current investigations into the economics of trade and supply within the Roman empire. In particular, this session aims to assess the extent and scale of regional and microregional integration of economic systems within the larger Roman economy.

Regional needs varied because of many factors. To meet these needs, areas were supplied by both local and long-distance resources, though the mechanics of this supply are not fully understood. The level of interregional economic connectivity needs further investigation. How important was local production relative to imports, and what socioeconomic reasons can we see behind this relationship? To what extent was trade driven by consumer demand? How did imperial and private enterprise influence the movement of commodities? How much knowledge did merchants and producers have of their destination markets, and was trade truly as haphazard as some scholars would have us believe?

To begin to address these issues, this session encompasses a range of new research being carried out in the field of Roman economics. Following a brief introduction to the above questions, each paper presents a specific case study. The first paper investigates the issues on a broad scale through an examination of the stone trade on a local, regional and interregional scale. The papers then progress geographically across the empire, from the northwest provinces to the Far East. The second paper discusses the ways in which the Rhine frontier was supplied with amphora-borne products. The third paper investigates the fulling industry in central Italy, examining how a key part of the textile trade operated within specific urban environments. The fourth paper examines coastal Lycia to understand how a region with low agricultural output depended on the sea to support a prosperous urban landscape. The final paper approaches trade from an epigraphic standpoint, examining the organization of exotic trade through the establishment of Nabatean agents in Italian cities to facilitate the import of foreign goods. The session concludes with a discussant.

These papers are diverse in their approaches and geographic foci but are united within the discussion outlined above. By investigating these issues, we illustrate

some of the many ways in which different areas interacted with one another throughout the Roman period, and how this contributed to an overall "Roman economy."

DISCUSSANT: William V. Harris, Columbia University

#### Local, Regional, and Interregional Dynamics in the Roman Stone Trade

Benjamin Russell, Kings College London

Stone is an awkward material, durable but heavy, difficult to transport and to carve. Nevertheless, in aggregate terms, far more stone was quarried and consumed in building and sculptural projects between the beginning of the first century C.E. and the end of the third century C.E. than at any time previously and for at least a thousand years afterward. Even in areas with a preexisting tradition of stone-working, Roman rule stimulated investment in stone on an unprecedented level.

Two related trends underpin this phenomenon: (1) a widespread growth in aggregate demand for stone of all type in this period and (2) targeted and disproportionately elevated demand for high-quality or colored marble. Imperial commissions played a major role in this process, setting the tone for activity more generally. In aggregate terms, however, more stone was consumed by the non-imperial market. The bulk of this material moved only short distances to satisfy localized demand; few cities, in practice, were located far from their primary source of adequate stone. It is against this background of the everyday, highly localised stone trade that the evidence for the regional, and even interregional, movement of stone needs to be understood.

This paper examines how this enormous demand for both ordinary and prestigious stone, was met. It also asks what the distribution of different materials, and the uses to which they were put, tells us about the impact of geography, transport costs, and simple logistics on the supply of stone. Using evidence from quarries, shipwrecks, and urban sites, it argues that stone, as a durable and traceable material, has a considerable amount to add to our understanding of different and interlocking spheres of economic activity—not to mention economic interconnectedness more generally—in the Roman world.

#### River Trade and the Supply of Amphoras to the Rhine Frontier

Tyler Franconi, University of Oxford

This paper seeks to examine the ways through which the Rhine frontier of the Roman empire received amphora-borne products over the course of the first three centuries C.E. While it has long been argued that the riverways of Gaul allowed for high levels of traffic into the continent, quantitative evidence for these trade routes has been noticeably lacking, leaving us with many assumptions and few facts. This paper examines the riverine networks of northwest Europe and the extent of their navigability, taking into account key factors such as flow direction, flow

velocity, flow output, and seasonal variations in these figures. It then examines the quantified amphora assemblages of some 40 excavated sites along the 1,200 km length of the Rhine River, taking a panoptic and comparative view toward the evidence. Such an approach allows one to speak of regional and microregional networks of supply and whether or not they were facilitated by river trade. Other methods of travel, (i.e., roads and the sea), are examined as possible alternatives, with an eye toward reevaluating the long-held belief that rivers were always more cost efficient than roads, and that the sea was the most cost effective. This paper argues that, while this hierarchy of transport convenience may hold in theory, in practice it is much more complex. In doing so, this case study develops a more nuanced view of the ways in which a region could be supplied over time.

# **Demand, Scale, and Rationalization: The Fulling Factories of Ostia and Rome** *Miko Flohr,* University of Oxford

This paper uses the material remains of large-scale fulling workshops (*fullonicas*) from Ostia and Rome to discuss how the extremely high demand for all kinds of goods in Rome and the surrounding metropolitan area could transform the ways in which this demand was met and resulted in forms of organization and patterns of investment that were unique in the ancient world and seem to have few parallels in world history before the industrial revolution.

Fulling was a procedure that aimed at polishing or recovering woolen garments, particularly mantles and cloaks, both new and used. While fulling in the Roman world is often considered part of the textile production chain, it actually was closely affiliated with trade and consumption; the evidence, especially from Rome and Ostia, strongly suggests that fulling of new clothes was often import-related and primarily oriented toward local demand; the large *fullonicas* of Ostia and Rome dealt with clothes that had been produced elsewhere and were destined to be sold on the metropolitan market. This makes these workshops an ideal data set to discuss the transformative effects of the Roman metropolis on the scale and organization of supply.

Comparing the large *fullonicas* of Ostia and Rome with those at Pompeii, one can sketch a fairly detailed picture of the relative scale of these workshops and of the social and economic contexts in which they operated. This paper shows that there was a sharp contrast between the relatively small-scale, family-run workshops at Pompeii and the large-scale fulling factories at Ostia and Rome, and argues that this contrast was caused by the extremely high structural demand for new clothes on the metropolitan market, which made it attractive for traders to invest in large-scale fulling facilities and enjoy economies of scale. It is also argued that the social and economic consequences of their choices must not be underestimated; these *fullonicas* are at straight odds with what we conceive of as "pre-industrial," and their remains show how, at least in the city of Rome and its environment, the economy to a certain extent shaped society rather than the other way around.

# **Supply, Demand, and the Maritime Economy of Lycia During the Roman Period.** *Candace Rice*, University of Oxford

The Lycian landscape is striking. Described by Strabo as rugged and hard to travel, the province is largely unfertile. Yet during the Roman period, particularly from the second century C.E. onward, the region witnessed increased prosperity and urbanization. This paper addresses the reasons behind this success, hinted at by the remainder of Strabo's description that the region was exceedingly well supplied with harbors (14.3.2).

While agriculture is typically heralded as the primary basis of the ancient economy, ever increasing research is highlighting the importance of nonagricultural factors in the Roman economy. Lycia, an area with a very small percentage of arable land, provides an informative case study into the diversity of the Roman economy. In this landscape, a dense network of ports provided the necessary interface for the supply of the region, from essential commodities such as grain and oil to luxury items, and for the exportation of locally produced goods on both a regional and interregional level.

This paper examines the archaeological evidence along the coastline of Lycia to elucidate the various economic factors involved not only in the subsistence of the province but also in its wealth. Combining various fields of evidence, such as soil conditions, harbor infrastructure, urban production, imports, monumental building, and imperial benefaction, this paper argues that Lycia looked to the sea for its wealth. In doing so, this paper addresses a number of related questions: To what extent were various ports along this coastline integrated into the trading network of the Roman Mediterranean? Did integration vary based on the size of the port, its facilities, or the productive capabilities of its hinterland? Did certain ports become more successful at the expense of neighboring ports, or did increased trade facilitate a more general, widespread prosperity? To what degree was trade focused internally toward the hinterland vs. externally across the Mediterranean? In exploring these questions, this paper presents a nuanced view of how supply and demand both required and facilitated a largely maritime-based economy in Lycia.

# Roman Trade with the Far East: Evidence for Nabataean Middlemen in Puteoli *Taco Terpstra*, Columbia University

Puteoli, a major Italian harbor town serving Rome, was an important port for trade with the East. It was a central hub for the Alexandrian grain fleet; high-value goods such as Tyrian purple dye arrived there, too. The town probably also saw the movement of products from areas further afield and from outside the empire: spices, silk, and frankincense from Arabia, China, and India. However, in contrast to Pompeii, where excavations uncovered an Indian ivory statuette representing a voluptuous nude female figure, Puteoli has not yielded such direct evidence for connections with the Far East. Indirect evidence does exist.

A small but significant body of inscriptions from the Greek world and Italy provides evidence for trade routes to the West maintained by Nabataeans. These Nabataean merchants likely functioned as middlemen, bringing commodities from the Far East to the markets of the Roman empire. This paper investigates this

evidence, concentrating on the position of the Nabataean community in Puteoli. The paper argues that the members of this community served as agents in a commercial supply network that spanned an enormous distance and that facilitated East–West trade.

### SESSION 7F Athens

CHAIR: Ann Steiner, Franklin and Marshall College

# Detecting the Summer Solstice at Athens: A New Interpretation of the Siebensesselplatz

Gerald V. Lalonde, Grinnell College

Examination of textual, geographical, and astronomical evidence revives and corroborates the 19th-century interpretation of Theophrastos (De signis tempestatum 4), that Phaeinos, an Athenian metic of uncertain date, reckoned the business of the solstices, specifically the approximate time of the summer solstice, by visual observation of the northernmost point of sunrise over the peak of Mount Lykabettos from the region of the Akropolis. That is, Phaeinos was not observing from the summit of Lykabettos, as is argued more recently. It follows from Phaeinos' accomplishment that ancient Athenians could also determine the summer solstice, vital for the religious and secular purposes of keeping a lunar calendar in rough synchrony with the solar year and its seasons, by observation of the most northerly point of sunset. The elaborate monument of seven rock-cut thrones, the Siebensesselplatz, or Heptathrono, of unknown date on the northwest slope of the Hill of the Muses has been variously explained as a judicial tribunal, the bouleuterion of a deme, an exedra for rest or relaxation, and, most often, as part of a large metroon marked by the rupestral horos, ἱερὸν/Μητρός" (SEG 41 121). Because of the unique form of the monument, its distance from the inscriptions with which it has been associated, and its implausible relation to the texts of those inscriptions, none of these explanations of the site has met with much agreement, and most of them have been introduced with the sentiment that the thrones are still a mystery. A more thorough study of topography, epigraphy, and architecture directed to the interpretation of the seven thrones demonstrates that the location of the monument amid mainly domestic rock-cuttings, its lack of a roof, and the elements of its design, especially its arrangement of the thrones side by side and oriented to a point very close to the northernmost point of sunset over Mount Aigaleos are all features peculiarly suited to an observatory for the visual calculation of the summer solstice. The prominent location of the Siebensesselplatz suggests that it was sculpted from the rock hillside before the largely domestic foundations of the area, and, therefore, that it may be dated to at least as early as the Archaic period.

#### **Recent Excavations in the Athenian Agora**

John McK. Camp II, American School of Classical Studies at Athens

This paper presents the results of the excavations in the Athenian Agora by the American School of Classical Studies at Athens. It reviews the past three years of work, including the season of 2011. Topics to be covered include a new sculpted Hellenistic statue base, the use and history of the Panathenaic Way, the final years and abandonment of the Stoa Poikile, material from a Late Roman well, and the alternating occupation and abandonment of the area of the agora after the Late Roman period.

#### The North Court of the Erechtheion

Mary Hollinshead, University of Rhode Island

The irregular temple of Athena Polias on the Athenian Acropolis, conventionally known as the Erechtheion, challenges our notion of Greek architectural form, with its varied ground levels, perpendicular porches, and unroofed precincts. In this paper, I focus on the theatral court that lies between the temple and the north circuit wall of the Acropolis as a location for important rituals and as an integral part of the temple.

Details of construction and precisely matched dimensions indicate that the three steps of the temple's crepidoma continued perpendicular to its north wall, with an additional nine steps above them leading 3.1 m up to the temple's east facade. Cuttings along the inner face of the Acropolis circuit wall suggest that another rank, of eight steps, extended from the north end of the 12 steps west, parallel to the long axis of the temple. The theatral nature of these arrangements was emphasized by marble paving of the area framed by the steps and the temple. Both steps and paving are clearly contemporary with the Erechtheion, creating a secluded court whose importance was signaled by its relationship to the temple and its comparable monumental treatment.

This intimate north court, with space for, at most, 200 standing observers and limited access, would be a suitable setting for the rites of the Plynteria and Kallynteria, in which the revered ancient wooden statue of Athena was brought out of the temple, undressed, cleaned, and adorned with fresh garments. These were solemn rituals; the days of their occurrence were considered inauspicious, not occasions for large public celebrations. The court afforded proximity to the temple and privacy, as well as facilities for viewing that framed the rituals.

The north court is not a building, but it is thoroughly coordinated with the temple and its ancient rites. Few published plans of the Erechtheion include this formally constructed theatral area, but they do show the temenos of Pandrosos on its west side, another enclosure open to the sky. In the case of a structure as uncanonical as the Erechtheion, it is difficult to know how to draw the limits of the temple, literally as well as figuratively. With its irregular form and closely connected courts, the Temple of Athena Polias not only encompassed ancient sacred loci but also anticipated subsequent architectural developments by incorporating varied built structures on multiple levels in a fifth-century version of a building complex.

# The Kekropion and its Relation to the North Terrace Wall and to the Erechtheion *John R. Caulk*, Independent Scholar

Iakovidis' convincing array of Mycenean foundations brought a welcome sense of structure and orientation to the topography of the Athenian Acropolis. Most scholars have relied on the lines of his system of retaining walls to orient each successive structure within this Mycenean context. This paper aims to fine-tune Iakovidis' structures by questioning the line he established for the north wall of his Terrace III. I show that the two small Mycenean pieces on which he based his alignment may actually have been the foundations of a raised stone walkway such as that found by Holland under the north wall of the Erechtheion, and that the actual line of the Mycenean north wall might have been defined by the huge corner stone illustrated in Stevens' bedrock plan of the western terrace foundation. This proposed new alignment would match the orientation of the stone fragment from the huge votive column to the first king of Attica that was built into the west wall of the Erechtheion, and it would establish the rationale for its unique orientation on the site

The monument itself was systematically destroyed by the Persians; however, its existence is attested by two discoveries: the oddly oriented cuttings in three courses of the west wall of the Erechtheion documented by Stevens, and a large fragment of an Ionic capital found by Korres, which, when complete, would have been 2 m wide. The capital suggests a huge votive column, probably on a plinth, perhaps supporting something like the Naxian sphinx. It would have predated the Peisistratid Temple of Athena Polias and dominated the lower sanctuary of Athena's Olive Tree in which the Erechtheion was built. It raises the question whether the term "Pandroseion," which was applied to the temenos of the Olive Tree west of the Erechtheion, was a name invented subsequent to the Persian sack to deflect attention from the harsh and obvious loss of the monument that had given its name to the precinct prior to 480 B.C.E.

# The Athens of the South: William Bell Dinsmoor and the Design of the Nashville Parthenon

Barbara Tsakirgis, Vanderbilt University

Dinsmoor is best known for his *Architecture of Ancient Greece* (New York 1927), a tome that long served as *the* textbook on ancient Greek architecture. In his younger years, Dinsmoor cut his teeth on the topic of Greek architecture not only by training as an architect but also by consulting on the construction of the interior of the permanent Nashville Parthenon. This paper traces the history of Dinsmoor's participation in the Nashville project, including his contributions to the design of the Nashville Parthenon and what he may have taken away from that experience as background for his scholarly work on Greek architecture.

The Nashville Parthenon was first constructed as the centerpiece of the celebration of Tennessee's centennial year of statehood. Because the stucco and lathe building proved so popular with the residents of Nashville, the Athens of the South, the architect Russell Hart was commissioned in the 1920s to rebuild it in permanent form. It has long been known that the overall plans of the build-

ing were based on Penrose's measurements of the Periclean Parthenon, and that Dinsmoor was invited to participate in the design of the interior. Using archival records deposited in the Nashville Public Library and the archive of Dinsmoor's papers held at the American School of Classical Studies at Athens, I show that the Nashville Parthenon might be seen as a laboratory for Dinsmoor's ideas about the Parthenon, especially the placement of the image of Athena Parthenos.

In 1927, for the Nashville project, Dinsmoor drew a detailed plan of the interior of the Parthenon; he requested that Hart return this and other drawings so that he could use them in his forthcoming but never published study of the Periclean Parthenon. In addition to the plan of the interior, Dinsmoor included detailed renderings of the Ionic order, based on that of the Propylaea, and the doorways. In the manuscript for his intended book on the Parthenon, Dinsmoor cites his calculations for the Nashville Parthenon in his reconstruction of the interior of the cella, and in a letter to an unknown recipient, he notes that his reconstruction of the height of the Athena Parthenos is based on his earlier studies that were realized in the built form of the Nashville Parthenon. As Dinsmoor's book on the Parthenon was never published, the interior of the Nashville replica physically expresses his ideas about the ancient building.

#### The Stoa Poikile, Eastern Influences, and Imperial Ideology

Lincoln T. Nemetz-Carlson, The Ohio State University

The Stoa Poikile of Athens was constructed in the 460s, primarily to house large-scale monumental paintings of mythological scenes and, strangely, at least one representation of an actual historical event. The surprising depiction of a historical battle, unprecedented in the monumental art of mainland Greece, has long been attributed to changing notions of time and human agency brought about by the democratic process and the unexpected defeat of the Persians.

This paper argues that, while it was indeed the experience of the Persian Wars and the ensuing involvement of Athens in the eastern Aegean that inspired the historical mural of Marathon, its novel nature should not be attributed to a new sense of confidence or to an emerging Panhellenic ideal. Rather, it is argued, the practice of large-scale painting and monumental depictions of historical events were adapted from eastern Greek, and possibly even Persian, traditions. On one level, the eastern influences of the Stoa—most likely commissioned by the political circle of Cimon, an Athenian with extensive eastern familial connections, and funded by a victory in Asia—may merely represent increased interaction with Asiatic Greeks and their customs during the early days of the Delian League.

The paper further suggests, however, that the design of the Stoa may have been intentionally invoking and reformatting Persian and Near Eastern symbols to celebrate the defeat of Persia in the eastern Aegean and to negotiate Athens' emerging role as imperial hegemon over formerly Persian territories. Building on Margaret Miller's groundbreaking scholarship, which has encouraged us to recognize that Athenian views towards Persian culture were far more nuanced than the common "self vs. other" polarity allows, and recent work by Raaflaub showing that the Athenians borrowed much of their imperial mechanisms and ideology from the Persians, the paper concludes by suggesting that the reformatting of eastern ar-

chetypes was a common feature of the Cimonian building program. Like the Ring of Minos painted cycle in the Theseion and the construction of watered gardens, the ultimate symbol of eastern luxury in the Greek imagination since the time of Homer, the Stoa was designed to both convey and justify Athenian imperial ambitions in the East.

# SESSION 7G: Colloquium Gender Identities in Pre-Roman Italy

ORGANIZERS: Eoin O'Donoghue, National University of Ireland, Galway, and Lucy Shipley, University of Southampton

#### **Colloquium Overview Statement**

In recent years, both gender and identity have become topics of discussion and debate in classical archaeology. Scholars have worked to unravel the different aspects of identity, such as ethnicity, class, age, and race; parallel to this, they have also examined the lives of men, women, and "other gendered" individuals in the past. While both types of analysis have produced much needed scholarship, particularly work on the underrepresented figures of a previously andro- and ethnocentric vision of the classical world, they have remained apart from one another, and the role of gender in the construction of identity has been understudied. This imbalance has been particularly marked in the context of pre-Roman Italy, and it is this issue which this session seeks to address. More specifically, it aims to incorporate advances in gender theory from the wider archaeological and anthropological community into a subdiscipline that has remained traditionalist. It will do so through the analysis and reevaluation of often familiar evidence, and aims to provoke a lively debate into the role of theories of gender and identity, in particular, and in archaeological theory more widely.

The presenters address a wide-ranging set of themes and a variety of questions: the roles, statuses and identities of men and women in the various pre-Roman societies of Italy; the interaction of gender with other forms of individual or group identity; the construction of gender identity through material interaction and at different phases in the life-cycle; and the boundaries between male and female identities and areas of activity. The commitment to gender theory binds the papers to the goals of the session. Villanovan burials containing ambiguously gendered grave goods are reanalyzed within their sociopolitical framework in "Warrior Princesses and Weaving Warriors: Reexamining Constructions of Early Etruscan Gender." The construction of male identity and its significance in Chiusine society is examined in "Brothers in Arms: The Masculine Body and Gender Identity in Archaic Etruria." An examination of the visibility of gender in offerings at sanctuaries is presented in "Explorations of Gender in South Italian Votive Deposits: Why So Many Female Clay Figurines?" "Eternal Personae: The Performance of Etruscan Identity in Chiusine Cinerary Urns" balances gender and identity to consider the creation of identity in burials from Chiusi. "Playing Gender Roles, Performing Gender Relationships: Etruscan Elite Identity 550–450 B.C.E." similarly addresses the goals of the session through a gender-centric reanalysis of well-known Greek

ceramics from the cemeteries of Tarquinia and Vulci. In "Agency and Gender in Etruscan Graves: A Reconsideration of Burial Practices and Representation," the regional differentiation of funerary customs is used to shed new light on gender in diverse social contexts.

DISCUSSANT: Gretchen E. Meyers, Franklin and Marshall College

### Warrior Princesses and Weaving Warriors: Reexamining Constructions of Early Etruscan Gender

Kate Kreindler, Stanford University

Biological sex and gender of Late Villanovan and Early Etruscan burials are typically assigned on the basis of grave goods, with weaponry and armor signifying male burials while weaving equipment and jewelry indicate female burials. A small number of burials from major Late Villanovan and Etruscan cemeteries such as those from Veii and Tarquinia contain both "male" and "female" grave goods, thus defying simple gender assignment; these burials have been found at the Monte Michele and Quattro Fontanili necropoleis of Veii and the Selciatello, Selciatello di Sopra, and Monterozzi necropoleis of Tarquinia, as well as at Osteria dell'Osa and Castel di Decima in Latium Vetus, never numbering more than five burials per cemetery. Some scholars have noted the odd nature of such burials but then explained away these idiosyncratic graves by claiming the context was insecure or the tomb was disturbed. Others have suggested that such burials belonged to elite women who derived their status from male family members, therefore explaining the presence of "male" grave goods; the burials are assumed to always belong to women, who alone are capable of gender-bending, while males were incapable of being buried with "female" objects. These interpretations fail to look closely at the burials themselves or to examine these burials diachronically; furthermore, they unquestioningly assume a male/female binary based on biological sex.

In this paper, I attempt to reexamine these gender-bending burials, focusing predominantly on the necropoleis of Veii, Tarquinia, Cerveteri, and Osteria dell'Osa. I situate these burials in the historical context of the 10th through seventh centuries B.C.E., arguing that ambiguously gendered burials, which were limited to a small segment of the population, were common to central Italy, and that the practice took on added importance as an expression of Etruscan identity in the eighth and seventh centuries B.C.E., when contact with the eastern Mediterranean dramatically increased. To make this argument I question the assumed male/female binary, using Judith Butler's notion of gender performativity and Jose Muñoz' idea of disidentification to argue that maintaining but altering the practice of ambiguously gendered burials allowed Etruscans to assert a distinct identity during a period of heightened cross-cultural interaction.

### Brothers in Arms: The Masculine Body and Gender Identity in Archaic Etruria

Eoin O'Donoghue, National University of Ireland, Galway

A large quantity of the scholarship dedicated to gender identity in pre-Roman Italy has focused on Etruscan women and, consequently, male identity has often been overlooked; gender, after all, comprises two main categories, male and female, in all societies with a recorded history. This paper endeavors to partially redress this imbalance with an examination of male identity in archaic Chiusi, ca. 580–480 B.C.E. The evidence for the creation and maintenance of male identity is examined through an analysis of funerary practices from Chiusi and the neighboring settlements in the Val di Chiana. This study focuses on the iconography of the well-known sixth-century cippi. Additionally, the sociopolitical significance of male gender identity is considered in the broader context of social change in Iron Age central Italy.

Some of the most informed recent scholarship on gender identity in the field of pre-Roman archaeology has focused on the human body as a fundamental nexus for ideological expression. I take this a step further by approaching the construction of Chiusine male identity through the lens of personhood. This paper demonstrates that persons, particularly in this case their gendered person, are constituted, deconstituted, maintained, and altered through social practices. With specific reference to the evidence here, personhood, and the construction of a specific male identity, is studied through the rituals of the aristocratic funeral.

In addition to analyzing the roles and activities that formed the basis of male identity, I place this survey within its broader social context by evaluating the function of male gender identity in broader Chiusine society. It is argued that elite male identity was a vector through which men could manifest social authority; however, this authority was becoming unstable in the context of an increasingly competitive political landscape. In sixth-century central Italy, growing city-states like Chiusi vied for control over natural resources and trade networks and sought to maintain and increase their territories. Consequently, it is argued that the status of the idealized elite male within this contentious environment constituted a significant component of a complex political system, that, in turn, helped to maintain the basis of aristocratic power.

# Explorations of Gender in South Italian Votive Deposits: Why So Many Female Clay Figurines?

Alexandra Sofroniew, Independent Scholar

Gender is visible in South Italian votive deposits in several ways. One of the most striking is in the anthropomorphic clay figurines, the vast majority of which depict women rather than men. This fact raises questions about how a gendered votive object relates to the gender of the dedicator and the gender of the deity within the sanctuary context. Is votive choice conditioned by gender? Which objects might men be dedicating? Which women? Are certain sanctuaries more "masculine" or more "feminine" in their purpose and patronage?

In this paper, I discuss how votive objects can be considered gendered and why particular votive types may have been chosen for dedication, addressing the questions raised above. My evidence is drawn from several Italic and Greek sanctuaries across southern Italy, namely Valle d'Ansanto in Samnium, Rossano di Vaglio in Lucania, Santa Venera at Paestum, and the sanctuaries of Metaponto and her chora. These sanctuaries have been chosen because they have large, well-published votive deposits and they offer case studies of diverse local conditions: Greek/native, rural/urban, inland/coastal. All the sanctuaries flourished from around the sixth–third centuries B.C.E. Rather than discuss each sanctuary in turn, however, I compare select examples from the deposits. I hope to demonstrate not only how we can see gender in these votive deposits but also why it is a useful tool for analysis of votive material.

# **Eternal Personae: The Performance of Etruscan Identity in Chiusine Cinerary Urns** *Theresa Huntsman,* Washington University in St. Louis

My paper analyzes the sculpted lid figures of Hellenistic-period cinerary urns from Chiusi to reconsider "portraiture" as it relates to the construction of personal identity in Etruscan funerary practice. Scholars have tended to study these objects either as predecessors to veristic Roman portrait sculpture or as manifestations of Greek influence in Etruscan art and banqueting customs. Rather than a simple reflection of physical appearance, I argue that the Etruscan mortuary "portrait" was a collection of mutually affirming social indicators that reflected familial relationships, prestige derived from participation in the banquet, and the need for the deceased to maintain agency in the afterlife through the animated funerary effigy.

Building on the work of Francesco de Angelis and the CHARUN project, I created a database for the nearly 600 known figural Chiusine urn lids across European and American collections. My quantitative and qualitative analyses of aspects such as sex, attributes, inscriptions, osteological remains, and archaeological contexts, eventually to be incorporated with GIS, compare chronological and spatial patterns in the representation of males, females, and families. Most importantly, I draw together now dispersed tomb groupings of urns and burial assemblages from Chiusine necropoleis such as the Bonci Casuccini collection. Despite differences in material, sculptural detail, and attributes, the re-assemblage of original archaeological contexts reveals a clear trend. In preserved chamber tombs, the urns were placed on low benches or in niches. Likewise, most urn effigies have their heads turned up and outward, as if to address living family members entering the tomb for each new deposition. Unique in the Mediterranean, these effigies seek to bridge the gap between Etruscan life and afterlife; individuals actively participate in celebrated social customs alongside family members and the necessary accoutrement. Even though scholars rightly contest their level of individualism, the urns' socioreligious function grants them specificity beyond mere appearance.

My combination of art historical visual analysis, archaeological contexts and chronologies, mortuary theory and space, and statistical approaches leads the discussion of Etruscan portraiture past a point of comparison with the Graeco-Roman world. Instead, nuances of gender and family interaction and presentation can receive due focus. I highlight the spectrum of differences in a small, yet highly varied Etruscan settlement at Chiusi while revealing the essential motivations behind

funerary display. This study yields new insight not only in later Etruscan burial practice but also in Etruscan conceptions of the afterlife and, most importantly, the self.

## Playing Gender Roles, Performing Gender Relationships: Etruscan Elite Identity 550–450 B.C.E.

Lucy Shipley, University of Southampton

In this paper, I reconsider a much used corpus of material: Greek imported ceramics from Etruscan elite funerary contexts from the coastal cities of Tarquinia and Vulci dating to 550–450 B.C.E. Rather than using the images from these painted vessels to consider gender practice in Greece, I argue that they are equally, if not more, relevant to the gender identities of the people who extensively used and later curated them rather than to the distant painters creating scenes for export. I suggest that these images provide a consistent message of idealized gender performance, influencing the daily practice of men and women familiar with them, reinforcing normative behavior, and glamorizing acts of gender maintenance and construction.

Through a compositional analysis of many scenes, I argue that, along with the performance of individual gender identity through activities depicted in the vessel paintings, a further aspect of this identity may be seen: the shared gender identity of couples. In the process of such an analysis, the role of these artifacts as actors in themselves will also be central; discussion about forms, vessel shapes, and context are as pivotal as the painted images in creating a fuller vision of the position of imported Greek ceramics in the lives of their Etruscan owners in Tarquinia and Vulci. In these scenes of intimacy and affection alongside images of masculine and feminine individual gender creation, as well as through their forms and functional uses, it is possible to see a more nuanced idealized scheme of performance in this material, in which men and women are expected to conform and perform both separately and together. I deliberately focus on heterosexual relationships and the normative bond of marriage to examine ideas about the continuation of elite status through successful marital bonds resulting in a stable transition of wealth and assets between generations. This paper brings together theoretical ideas about gender and a composition-based analysis of these images through discussion of individual scenes and consideration of wider patterns of representative practice to present a vision of joint gender performance in relationships as key to understanding society and identity in these Etruscan coastal cities.

# Agency and Gender in Etruscan Graves: A Reconsideration of Burial Practices and Representation

Carrie Murray, Brown University

Etruscan funerary practices have been used as an insight into Etruscan social organization, from burial forms to the use of space in cemeteries. Differences in burial practices related to gender should also be investigated as a crucial area for understanding Etruscan culture, with regional variations and change over time.

This paper explores three aspects of Etruscan funerary archaeology. First, I discuss the limitations that exist in identifying gender in the burial record and how the tradition of determining gender via the categorization of grave goods in "Villanovan" cremation burials created an inappropriate dichotomy of warrior males and wool-working females. Second, I reexamine how the symbolic use of grave goods, such as chariots at tombs in Caere and Veii, develops a whole new understanding of the expression of gender for elite Etruscans in light of iconographic evidence of elite life from outside the funerary sphere. Finally, I demonstrate how the unique form of burial in Chiusi during the Archaic period illustrates a heightened visual expression of gender roles and individual identities through the production of the so-called Canopic urns.

The differences in burial practices across the region through time relates to the various and changing social needs of Etruscan societies who wished to represent the deceased in terms of communal, familial, and individual identities and in terms of gender roles. This paper illustrates how the potential meanings of grave goods can be better understood by considering these items of material culture in multiple social contexts, including more nuanced interpretations behind funerary practices. Theories of gender archaeology and agency are discussed in light of the increased regional variability in burial practices and visibility of genders in burials.

# SESSION 7H: Colloquium Reading between the Lines: Word, Image, and Architecture

ORGANIZERS: Amy Papalexandrou, Central Texas Society, and Brenda Longfellow, University of Iowa

#### **Colloquium Overview Statement**

Monumental inscriptions traditionally have been studied for the documentary evidence they convey. Aspects of their materiality and visuality are often overlooked when texts are divorced from original contexts and relegated to such corpora as the Inscriptiones Graecae and Corpus Inscriptionum Latinarum. In this session, we seek to reunite inscribed words with the buildings that originally invested them with local meaning, tangibility, and the power to communicate in three-dimensional spaces and multisensory environments. Our approach builds on the treatment of inscriptions as both text and object in Cooley's edited volume The Afterlife of Inscriptions (London 2000) and the exploration of the multiple roles played by text and image in Newby and Leader-Newby's edited Art and Inscriptions in the Ancient World (Cambridge 2007). We focus on monuments of the Roman period, here broadly defined as the first century B.C.E. through the seventh century C.E., and move freely between the eastern and western parts of the empire. A chronological approach affords opportunities to consider continuity and change over a broad swath of time that encompasses enormous transition in the cultural, political, and religious makeup of the ancient world.

We insist on the importance of case studies, not only because individual edifices have not been adequately discussed in terms of their inscribed components but also because this approach reveals the great diversity of ways that inscriptions were visually conceived by patrons and physically encountered by audiences. The first three presentations focus on issues of self-presentation within honorific and funerary contexts. Exploring inscribed monuments as diverse as an honorific statue on Delos, the mausoleum of Augustus in Rome, and the Tertullus monument in Carthage, each presentation considers how the appearance and message of the patron's text are integrated into, and augmented by, the larger visual and architectural environments. Sacred space and its articulation through word and image are investigated in the final three studies, with dedicatory inscriptions taking center stage. These explore how patrons creatively manipulated environmental experience not only of architectural space (the Temple of Artemis at Sardis) but also of the surrounding urban fabric (the Secretarium Senatus and Santa Martina in Rome) and across local landscapes, whether real or imagined (the Church of the Holy Martyrs Lot at Khirbat Mukhayyat in Jordan). By focusing on the interplay of words and images in specific architectural contexts, this session contributes to our understanding of how inscribed monuments were conceived and experienced.

## The Monument of C. Billienus in the Portico of Antigonos Gonatas on Delos *Mantha Zarmakoupi*, University of Cologne

This paper focuses on the monument of C. Billienus in the portico of Antigonos Gonatas as a means to address the ways in which Italians self-fashioned themselves on Delos in the first century B.C.E. The monument was dedicated at the end of the second or beginning of the first century B.C.E., at a time that the Athenian klerouchoi and principally the Italian settlers, "the former theoretical rulers, the latter effective rulers on Delos," were building and making dedications in and around the hieron of Apollo to affirm their authority. The monument was subsequently damaged and repaired, probably after the Mithridatic sack of Delos in 88/7 B.C.E. By analyzing the style of the larger than life cuirassed statue, the different languages used in its dedication and repair (ID 1854), and its location inside the portico of Antigonos Gonatas at the northeast end of the sanctuary, this paper discusses the stylistic, textual, and visual strategies used by the Italian community on Delos in the construction of their identity. The cultural framework of the sanctuary was rapidly changing, as the island had become a free-trade commercial base under nominal Athenian supervision, and the choices in style, language, and architectural context of this monument shed light on the distinct and competing modes of self-fashioning in the public realm of cosmopolitan Delos.

#### **Envisioning Empire: Augustus and the Res Gestae**

Benjamin Rubin, Williams College

Prior to his death in 14 C.E., the emperor Augustus composed a short autobiographical work known as his *Res Gestae*. According to Suetonius (Aug. 101.4), the *Res Gestae* was originally inscribed on two bronze columns in front of Augustus' mausoleum in Rome. Scholars have traditionally interpreted this inscription as an elaborate form of elogia similar to the speeches delivered at the funerals of Republican aristocrats. The size and scope of the *Res Gestae*, however, was unlike any-

thing in Republican Rome, except perhaps for Pompey's triumphal inscription. The only other comparable precedents, in fact, were the lengthy autobiographical inscriptions of earlier Hellenistic and Achaemenid kings.

In this paper, I argue that the *Res Gestae* inscription was part of a carefully contrived visual and architectural program designed to liken the power of Augustus and his empire to the great kingdoms of the Hellenistic East. As Strabo (5.3.9) famously observed, the architectural superstructure of Augustus' "Mausoleum" bore a clear conceptual, if not literal, resemblance to the tomb of King Mausolus of Halicarnassus. The regal character of Augustus' mausoleum was further reinforced by the Egyptian obelisks flanking its entrance, and by the inscription of the *Res Gestae*, which in this context recalled the funerary epitaphs of Asian kings such as Darius I of Persia and Antiochus I of Commagene. Through its imposing scale and domineering content, the inscription of the *Res Gestae* effectively conveyed to viewers "both literati and illiterati alike" the power, resources, and monarchical ambitions of Rome's first emperor

#### The Tertullus Monument in Roman Carthage

J. Marilyn Evans, University of California, Berkeley

The tomb of Marcus Vibius Tertullus was found in 1992 in the Yasmina necropolis outside the southern gate of Roman Carthage. A monumental inscription records the name and age of the deceased, while other inscriptions found nearby connect the Vibii to the ruling elite and suggest that they were breeders of circus ponies. The tomb, constructed in the second century C.E., belongs to an indigenous style of funerary architecture, and its sculptural program likewise suggests a desire to perpetuate local connections; sculpted horsemen on the sides may refer to his family's occupation and affiliation with the nearby circus. At the same time, its iconography draws from a distinctly Roman repertory, including funerary erotes and trotting pigs that guide the viewer around the building to the west facade. Here, a togatus reading from a scroll sits beneath the prominent inscription as the lupa suckles Romulus and Remus nearby. The interplay of word and image invites speculation. Do architecture, sculpture, and inscriptions work together to call attention to the local and Roman status claims of the deceased? Can we reconstruct the intentions of the patron regarding viewers' appreciation of, or even circulation around, the tomb as dictated by the sculpted and inscribed components? In this paper, I consider how inscriptions illuminate aspects of the tomb's sculptural iconography while creating visual and metaphorical relationships between the monument and the immediate surroundings of necropolis, city, and circus.

### A Victor's Message: The Talking Column of the Temple of Artemis at Sardis

Fikret Yegul, University of California, Santa Barbara

An inscription in Greek is carved on the base of one of the well-preserved columns of the Temple of Artemis at Sardis, the fourth largest Ionic temple in the world and one of the most impressive in its natural setting. The column, rising to a height of 18 m, informs the passerby that the torus and plinth of its base are

carved of a single block of marble paid privately and proudly declares "of all the columns, I was the first to rise." Recently suggested on epigraphic information to the early or mid second century C.E., the inscription provides new and crucial information on the unusual Roman history of the temple. More interestingly, the base of the column, decorated by overlapping bay leaves, is fashioned like a wreath gathered by fluttering ribbons at one end and a bronze eight-point star, or medallion, "pinned" on the other glorifying the column as a victor in a competition of architectural and civic munificence. Although the tradition of donating parts, especially columns, to temples by local leaders and royal patrons was an Anatolian and Mediterranean tradition going back to the Archaic period, the competitive message of a talking column and the handsome decoration of its base as a victor's crown appear unique. Integrating text, architecture, and decoration, it allows us a glimpse into the minds of the builders for whom the structural challenge of raising a truly monumental column with few equals in the classical world was worth celebrating.

#### Rewriting Urban Space at the Secretarium Senatus in Rome

Gregor Kalas, University of Tennessee, Knoxville

In 412, Rome's urban prefect Epiphanius restored the Secretarium Senatus by honoring the founder, Flavian the Younger. Trials for senators occurred in the secretarium, occupying a former taberna that funneled visitors from an honorific arch through the Forum Iulium and finally toward the Forum of Augustus. This trajectory projected senatorial authority into formerly imperial space. Indeed, a now-lost inscription links Epiphanius with Flavian, whose father lost a senatorial battle opposing the emperor Theodosius I.

Epigraphic evidence that Epiphanius used restoration to reassert local aristocratic control appears in a seventh-century inscription, probably placed on an altar in the secretarium now converted into the Church of St. Martina. The Christian inscription, destroyed along with the church in the 17th century, describes relics of St. Martina conjoined with those of saints Concordius and Epiphanius. St. Epiphanius is an evident duplication of the urban prefect's name, whose inscription remained on the cornice of the transformed secretarium. More importantly, the seventh-century Latin hagiography of St. Martina specifies that an imperial Roman tribune, Limenius, walked from the Tullianum prison close to the Secretarium toward the palace but was captivated by the extremely pleasant odor emanating from the imprisoned saint. While neither the secretarium nor its axial position with respect to the Forum of Augustus appear in the saint's life, the saint's wafting fragrance violates the same imperial boundaries that had vexed prefect Epiphanius. Reading between the lines of the lost inscriptions leads to analysis of the ritual paths that placed senators and saints in opposition to emperors.

# Bulls, Altars, and a Christian Jerusalem: Psalm 51 in Text and Image in the Church of the Holy Martyrs Lot and Procopius, Jordan

Sean Leatherbury, Corpus Christi College, Oxford

The apses, walls, and floors of early Christian churches across the Mediterranean were filled with mosaic images and inscriptions, conceived of and meant to be read as essential, intertwined parts of decorative programs. During the reign of Justinian, patrons and artists rarely placed explicitly Christian images on the floors of Christian buildings. However, when they did, the persons in charge of planning and executing the mosaic decoration intended to convey specific messages.

This paper examines the linked Greek text and visual representation of Psalm 51 (50 in the Septuagint) on the mosaic floor of the Church of the Holy Martyrs Lot and Procopius at Khirbat Mukhayyat in modern-day Jordan, dated to 557 C.E. The pairing of the last line of Psalm 51, "then will they offer up young bulls on your altar," with the image of bulls processing toward an altar would have evoked a range of meanings beyond the psalm's textual plea for mercy and salvation. I argue that the mosaic text and image referenced contemporaneous Justinianic building projects in Jerusalem and forced the viewer to reflect on the dramatic contrast between previous Jewish animal sacrifices at the temple with the "righteous" spiritual sacrifices of Christianity. The unusual placement of the mosaic in the church at Khirbat Mukhayyat, at the west end of the nave and oriented toward the entrance to the west, encouraged the viewer to consider the full range of meanings conveyed by the decorative program while facing the referenced city, Jerusalem.

# SESSION 71: Colloquium Hittite Anatolia: Beyond the Bridge

Sponsored by the Near Eastern Archaeology Interest Group

ORGANIZERS: Lee Ullmann, Columbia University, and Susan Helft, Rutgers University-Newark

#### **Colloquium Overview Statement**

The Hittite civilization of central Anatolia was rediscovered a little over a century ago when archaeologists first carried out systematic excavations at Boğazköy. Until that time, much of what was known about the Hittites of the Bronze Age was based on references and connections to the Bible and Classical literature. Consequently, until fairly recently, the Hittites have been examined through the lens of the Indo-European cultures to its west and/or the cuneiform cultures to the east. In the preceding two decades exciting new archaeological excavations in Turkey and important breakthroughs in Hittitology have greatly increased our knowledge of Hittite civilization. The goal of this colloquium is to refocus attention on the uniqueness of Hittite material culture based on the most current archaeological research. The papers presented here cover distinctive aspects of the Hittite material world, ranging from small finds such as glyptic art and glass objects to large scale monumental constructions of Hittite fortifications. By bringing together a

diverse group of scholars who approach the material from various disciplines we hope to provide original insights into the nature of Hittite cultural identity.

#### **Water Cult Structures in the Hittite Period**

Yiğit Erbil, Hacattepe University

According to ancient Near Eastern beliefs, all of nature and natural events are individual entities that act with consciousness. In practices of cult, these reflections of nature were personalized with images of great gods. The early religions of Anatolia, just as in other parts of the world, were based on the interaction of man and nature, and the most important powers of nature were the life-giving earth and the water that nurtured it. The roots of Hittite religion can be traced back to these early concepts. Cult practices, the result of many changes and additions that occurred over a long period of time, were based on a system of reward and punishment. Secular and religious messages were presented together with the satisfaction of the gods and social messages. Archaeological data recovered from Hittite settlements within the last 20 years reinforces our previous knowledge and facilitates our comprehension of water-cult practices. This is particularly the case with Room 2 in Boğazköy and the cult complexes located in "Südburg," Eflatunpınar, Yalburt, and the Kuşaklı pools, including the stepped tunnels. The geographical conditions of central Anatolia, which includes the core settlement of the Hittites, were also instrumental in the development of water-cult practices in the Hittite religion. Consequently, indoor and open-air pools, stepped tunnels, and dams constitute the archaeological data to clarify the practice of the water cult with the help of inscriptions. Hittite water-cult practices reveal the interconnection between religion and state. These practices are observed in ceremonies involving communication with the gods of the underworld, the cult of the dead, the cult of the ancestors, and the cycle of the seasons. However, cult practices in water structures served more than one purpose, including wishing for a productive year, the prosperity of the society and empire, propaganda of the "divine rights" of the kings, and consolidation of the imperial power.

#### **Hittite Seals and Hittite Identity**

Susan Helft, Rutgers University-Newark

One of the most distinctive features of Hittite civilization is the form and decoration of Hittite royal and bureaucratic seals. In clear distinction to the heraldic or vibrant scenes on contemporary Babylonian and Assyrian cylinder seals, Hittite kings maintained a centuries-old tradition of large biconvex or semiconvex stamp seals with few or no figural decoration. These images were direct representations of the Hittite king and his court abroad, for when pressed into diplomatic documents, they made their way between the ancient Near Eastern and eastern Mediterranean courts. As such, they carry a singular importance as purveyors of Hittite identity. This study of Hittite glyptic art brings to the fore several elements that were an intrinsic part of Hittite cultural identity, not least being the emphasis in seals on the uniquely Anatolian hieroglyphic script. An assertion of Hittite cul-

tural identity is most clear on Hittite royal seals that encode a particularly Hittite political ideology based on the relationship between the king and the divine; but even more common seals tell us about the status of the individual and the role of women in Hittite society.

# Hittite Military Architecture as an Identifying Process for Imperial Propaganda and Political Unity

Tommaso de Vincenzi, The Sapienza University of Rome

According to an analytical study, Hittite military architecture is divided into two main categories: *Kastenmauer* and *Casematte*. The widespread use of these two building techniques across the central and southern regions of Anatolia, indicated by the towns of Hattusha, Alaca Höyük, and Mersin, shows their significance for the development of Hittite military architecture as one of the primary elements for codifying itself as part of an ideological process of identification inside the Hittite empire. The widespread use of a standardized model for defense—a thick fortification wall with a series of internal divisions made with transverse walls that form rectangular or square compartments and towers jutting out beyond the walls, along whose path stand gates flanked by deep rectangular towers—seems to be a functional element in the representation of a political message of identity and unification.

#### Glass Objects from Büklükale in Light of Hittite Glass Manufacturing

Kimiyoshi Matsumura, Japanese Institute of Anatolian Archaeology

During the past season of excavation at the site of Büklükale, located in Karakeçili, approximatley 100 km southeast of Ankara, Turkey, several glass objects were unearthed. The city dates to the Hittite empire and is situated on the bank of the Kızılırmak. One of the more intriguing objects discovered was a piriform bottle, found next to a Hittite tablet. This glass bottle is possibly the most well-preserved glass object found in a Hittite context. Comparanda are known from the sites of Nuzi, Assur, and Tell al Rimah in Iraq, and Tell Brak in Syria. D. Barag proposed that the Mitannian kingdom was the center of glass production in the Middle to Late Bronze Age because of similar patterns of distribution of such glassware with Nuzi Ware. Thus, one would assume that a glass bottle found in central Anatolia indicates a cultural connection between the Hittite kingdom and Mitannni. However, there are several unique motifs on the body of the glass vessel, and certain techniques were used that do not seem to correspond with Mesopotamian glass production. Moreover, texts from Boğazköy, the Hittite capital, describe the process of manufacturing glass. Are stylistic differences and knowledge of manufacturing techniques sufficient to attest to a Hittite art form? This paper investigates the archaeological evidence of glass production as a form of Hittite art to illustrate the difficulty of trying to infer Hittite identity through material objects.

#### **Divinity in Hittite Rock Reliefs**

Steve Karacic, Bryn Mawr College

Rock reliefs preserve some of the best examples of Hittite art, yet they remain poorly understood. A reliable classification would add to the understanding of Hittite royal identity and its unique ideology. However, scholarship has treated the reliefs as peripheral and less sophisticated relatives of Near Eastern art, forcing the carvings into a historiographical framework that remove their Anatolian contexts. As a result, attempts at categorizing the reliefs have met with limited success. The error in previous approaches was to found classifications on conceptions of divinity that overlooked certain particulars of Hittite religion, specifically its plethora of deities and the relative frequency of apotheosis. Texts and glyptic indicate Hittite kings and queens underwent deification, and in the reliefs they appear with divine attributes. Thus, it is likely the reliefs depicted the rulers as gods. The other non-mythological characters of the reliefs have similar divine attributes, suggesting they, too, claimed divinity. A classification of rock reliefs must incorporate the flexible and inclusive components of divinity in Hittite religion.

I propose a new categorization, focusing on the accouterments and actions of the figures. The representations are either priestly or striking a military pose. When correlating these categories with the distribution of the reliefs, a pattern emerges. The priestly figures appear in areas with additional ritual contexts, contributing to the sanctity of these spaces. In contrast, the militaristic representations occur in liminal spaces, suggesting that they provided a cosmological protection against trespassers. This new categorization sheds further light on the role of the Hittite king as military and religious leader, while also indicating that the Hittite belief system allowed the extension of regal identity to other elite members of society.

#### **AUTHOR INDEX**

Abbe, Mark	64	Berlin, Andrea M	240
Abbott, Marcus	182	Bernard, Seth	
Abell, Natalie D	203	Bertrand, Arnaud	254
Adams, Matthew J		Bienkowski, Piotr A	
Ajootian, Aileen		Bilgen, A. Nejat	12
Alberti, Lucia		Bittner, W.S.	
Albertson, Fred C		Bizzarri, Claudio	
Alcock, Susan E		Blackwell, Nicholas	208, 209
Allen, Mont		Blinkhorn, Edward	
Allen, Susan E	1	Blume, Clarissa	
Alonge, Mark	4	Boatwright, M.T	
Altman-Lupu, Jennifer	81	Bobou, Olympia	
Amelia R. Brown	105	Bocancea, Emanuela	
Anderson, Emily S. K		Bond, Sarah E	
Andrews, Margaret M		Bonebright, Terri	231
Apostolakou, Štavroula		Bonney, Emily Miller	89, 135
Aprile, Jamie D		Bowes, Kim	
Aravantinos, Vassilis		Brangers, Susan Fugate	
Archibald, Zosia H		Bravo, Cristina	
Ariel, Donald T		Brouillard, Cécile	
Arrington, Nathan		Brownlee, Ann Blair	40
Artzy, Michal		Buccellati, Giorgio	65
Aryamontri, Deborah Chatr.		Buell, D. Matthew	
Athanassopoulos, Effie	153	Bührig, Claudia	113
Athanassov, Bogdan	234	Burke, Brendan	. 36, 173, 175
Atiyeh, Christine	4	Burns, Bryan E	
Averett, Erin W		Burrell, Barbara	237
Avery, Emerson	107	Buxton, Bridget	15
Baljon, Cornelis J. (Neil)	16	Camp II, John McK	260
Banou, Emilia	211	Caraher, William	197
Barker, Craig	19	Carpenter, Tom	43
Barletta, Barbara A	17	Carter, Tristan	130
Barrabee, Janice	251	Carucci, Margherita	219
Barrett, Caitlín E		Casson, Aksel	
Barr-Sharrar, Beryl		Cates, Gwendolyn	
Bauer, Alexander		Caulk, John R	
Baughan, Elizabeth P	5,7	Chalikias, Konstantinos	69
Bauman, Paul		Chandlee, Sarah	
Beatrice, Jared S.		Chapin, Anne P	
Beaudry, Nicolas	22	Chapman, Sarah	
Becker, Jeffrey A		Chevalier, Pascale	
Beeston, Ruth		Chi, Jennifer	
Begovic, Vlasta		Childs, Laura A	
Bell, Sinclair		Chirico, Elena	
Bennett, Michael		Chountasi, Maria	
Berenfeld, Michelle L		Christians, Paul	
Bergmann, Bettina	112	Christodoulou, Skevi	50

Clarke, John R	64	Doonan, Owen	16
Cline, Eric H		Dumser, Elisha	42
Cline, Lea		Eaby, Melissa	24
Cline, Rangar		Ebbinghaus, Susanne	
Clinton, Miriam G		Egan, Emily Catherine	
Cloke, Christian		Ehrlich, Simeon D	
Cohen, Margaret E		Elias, Jonathan P	
Cohon, Robert		Ellis, Steven	
Cole, Keenan		Elton, H	
Coleman, Matthew		Emanuel, Jeff	
Collins-Elliott, Stephen A		Emberling, Geoff	
Colombini, Matteo		Emmerson, Allison	
Conrad, Matthew		Eppihimer, Melissa	
Contreras, Fernando		Erbil, Yiğit	
Cooper, Catherine L		Evans, Harry B	
Coqueugniot, Gaelle		Evans, J. Marilyn	
Corsi, Cristina		Fagan, Garrett	
Costin, Cathy L	100	Fappas, Ioannis	
Cothren, Jackson		Farmer, Jarrett	
Counts, Derek		Feinman, Gary	
Crerar, Belinda		Ferguson, Jonathan	
Cuneo, A.E		Fiedler, Manuel	
D'Angelo, Tiziana		Fiema, Zbigniew	
Dabney, Mary K		Findley, Andrew	
Dakouri-Hild, Anastasia		Fisher, Elizabeth A	
Dally, Ortwin		Fishman, Susannah G	
Damyanov, Margarit		Fitzsimons, Rodney D	135, 202
Darby, Erin		Flohr, Miko	
David, Jonathan K	13	Foley, Brendan	
de Gregory, J. Rocco		Franconi, Tyler	
de Grummond, Nancy T		Franks, Hallie	
De Sena, Eric John		Fredrick, David	167
de Souza, Camila Diogo	195	Frey, Jon M	154
de Vincenzi, Tommaso	274	Frischer, Bernard	30
de Vries, Bert	65	Gadeyne, Jan	218
Dea'dle, Taufik		Gadot, Yuval	
Deaton, Russell	167	Gagne, Laura	85
Déderix, Sylviane	138	Galaty, Michael L	190
Diakou, Stella		Gallone, Anna	
Dibble, W. Flint	166	Gates, Marie-Henriette	6
Dierckx, Heidi	37	Gatzke, Andrea F	115
Diffendale, Daniel P	193	Găzdac, Cristian	127
DiGregorio, Chad	38	Gee, Regina	
Dillon, Sheila		Gensheimer, Maryl B	156
Dimitrov, Zdravko	110	George, David B	
Dobbins, John J	29	George, Graham	
Doevener, Franziska		Gjipali, Ilirian	1
Donais, Mary		Gleason, Kathryn	

Glennie, Ann	84	Inall, Yvonne L	66
Gnade, Marijke		Jacobsen, Jan K	139
Golofast, Larissa	105	Jazwa, Kyle A	173
Gordon, Jody Michael		Johnson, Jessica S	86
Gorogianni, Evi	201, 202	Johnson, Paul S	187
Gouglas, Sean	214	Jones, Bernice	204
Graninger, Denver		Judas, Beth Ann	131
Graybehl, Heather		Kaefer, Thomas	
Greene, Elizabeth S		Kahn, Lisa	39
Grey, Cam		Kaiser, Alan	166, 168
Gunter, Ann C		Kakoulli, Ioanna	64
Haagsma, Margriet J		Kalas, Gregor	271
Haeckl, Anne E		Kapranos, Epaminondas	
Hagan, Stephanie		Karacic, Steve	
Haldon, J		Karapanou, Sophia	
Hale, John R		Kardulias, P. Nick	
Handberg, Søren		Karkanas, Panagiotis	
Harmanşah, Ömür		Keen, Paul	
Harris, William V		Kidd, Benton	
Harvey, Sarah		Kila, Joris	
Hasaki, Eleni		Knappett, Carl	
Haselberger, Lothar		Knodell, Alex R	174
Häser, Jutta		Kolb, Bernhard	
Hatzaki, Eleni		Kontokosta, Anne Hrychul	
Heath, Sebastian		Kopestonsky, Theodora	
Heinz, Sanda S		Köse, Veli	20
Helft, Susan		Kramer-Hajos, Margaretha	
Henderson, Tanya K		Kreiger, Jenny R	
Hernandez, David		Kreindler, Kate	
Herrmann, Nicholas P		Krieger, William	
Herrmann, Virginia R		Kriga, Dimitra	
Heuer, Keely		Kron, Colleen	
Hitchcock, Louise		Krotscheck, Ulrike	
Hobart, Michelle		LaFayette, Shannon	
Hodos, Tamar		Laidlaw, Anne	
Hollinshead, Mary		Lalonde, Gerald V	
Homsher, Robert		Lancaster, Lynne C	56, 58
Höpken, Constanze		Landvatter, Thomas	
Hoppa, Robert D		Lane, Michael F	
Horowitz, Mara T		Langdon, Susan	
Horsely, T.J		Langley, Maia M	
Hristova, Petya	211	Langridge-Noti, Elizabeth	
Hruby, Julie	191	Lantzas, Katie	
Hudson, Nicholas F		Lapatin, Kenneth4	
Huntsman, Theresa		Lawson, Lori	
Hurwit, Jeffrey M		Leach, Eleanor W	
Hussein, Angela M		Leatherbury, Sean	
Iacobelli, Amanda L		Lee, Mireille	

Leidwanger, Justin215	Monsieur, Patrick A	172
Lenaghan, Julia43	Moore, Andrew	1
Lepinski, Sarah64	Morgan, John D	145
Lerner, Jeffrey253	Morin, Jacques	10
Levine, N	Morris, Christine	229
Libonati, Emma Susan250	Motta, Laura	
Limp, Frederick167	Muccigrosso, John	217
Littman, Robert J 248	Murphy, Joanne M.A	
Lockey, Ian M158	Murray, Carrie	
Lockwood, Sean8	Murray, William M	
Longfellow, Brenda268	Muskett, Georgina	
Lorenzo, Kristian96	Muslin, Jennifer	
Low, Polly163	Myers, Steven Lee	
Luby, Edward65	Nakassis, Dimitri	
Lucore, Sandra K90	Nehrizov, Georgi	
Lupack, Susan36	Nemetz-Carlson, Lincoln	262
Lupton, Carter 77	Newhard, J.M.L	
Lynch, Kathleen115	Nichols, Andrew G	
Lyons, Claire 89	Nikolaus, Julia S	
Lytle, Ephraim 144	Nocera, Daira	23
MacKinnon, Michael189	Norman, Naomi J	
Madole, Sarah 157	O'Donoghue, Eoin	
Maggidis, Christofilis 35, 37, 79, 81	O'Neill, Edward	
Maher, Matthew P 18	O'Neill, Michael	97
Makowsky, Lynn40	O'Reilly, Dougald	65
Marest-Caffey, Laure223	Ogus, Ésen	154
Marshall, Gilbert38	Oliver, Graham	164
Martens, Brian A 186	Oltean, Ioana	126, 128
Mastrocinque, Attilio219	Onjala, Isaya	
Matsumura, Kimiyoshi 274	Opitz, Rachel S	
Maxwell-Jones, Charlotte E 254	Osborne, James F	
McClure, Sarah B1	Osborne, Robin	117, 198
McCoy, Marsha208	Ott, Jeremy	22
McDavid, Allyson E156	Ousterhout, Robert	
McFadden, Susanna64	Özgen, İlknur	
McKillop, Heather65	Packer, James E	95
Meiberg, Linda210	Paga, Jessica	162
Melisch, Claudia M62	Paleothodoros, Dimitris	
Merced, Jasmine 167	Panagopoulou, Eleni	38
Mersereau, Rebecca38	Pánczél, Szilamér	128
Meyers, Gretchen E142, 264	Papadimitriou, Nikolas	135
Miller, Naomi F70	Papalexandrou, Amy	
Miller-Collett, Stella G	Papantoniou, Giorgos	
Mitropoulos, Athina180	Pappi, Eva	
Mitsopoulou, Christina 53	Parkinson, William	
Modrall, Emily91	Parslow, Christopher	
Mogetta, Marcello 61, 68	Patnaude, Ann E	
Molholt, Rebecca	Paul, Gerhard	159

Peacock, David P.S	99	Russell, Pamela J	45
Pearson, Stephanie	64, 221	Salay, Jr., Paul W	171
Peatfield, Alan		Sanev, Goran	
Peleg-Barkat, Orit		Sapirstein, Philip	
Peña, J. Theodore	98, 102	Saunders, David	40
Perry, Ellen	93	Scahill, David	
Peruzzi, Bice		Schallin, Ann-Louise	109
Peterson, Sarah E		Scham, Sandra	
Pettegrew, David K		Schindler, Rebecca	230, 231
Phebus, Angelina D		Schipper, Friedrich T	
Podrug, Emil		Schmid, Stephan G	
Poulter, Andrew		Schon, Robert	
Powers, Jessica		Schörle, Katia	
Pratt, Catherine		Schrunk, Ivancica	
Press, Michael	122	Schwab, Katherine A	
Proudfoot, Trevor		Schwartz, Glenn	
Pryzwansky, Molly		Schwarz, Shirley J	
Pullen, Daniel		Scott, R.T.	
Rabinowitz, Adam		Scotton, Paul D	
Raff, Katharine		Sebastiani, Alessandro	
Ramsay, Jennifer		Sevara, Christopher	
Reger, Gary		Severson, Kent	
Reinders, H.R		Sewell, Jamie	
Reiterman, Amanda S		Shafer, Ann	
Renner, Timothy		Sharvit, Jacob	
Rice, Candace		Shear, Julia L	
Riebe, Danielle	80	Shears, Ryan	
Rife, Joe	170	Shelton, Kim	
Rinne, Katherine		Sherratt, Susan	
Rissman, Paul		Shipley, Lucy	
Rissolo, Dominique		Silverstein, Jay	
Ristvet, Lauren		Slane, Kathleen Warner	
Roberts, Ben		Small, David	
Robinson, Elizabeth C		Smith, Angus	
Roby, Thomas		Smith, Susan Kirkpatrick	
Rodriguez, Andrea		Smith, Tyler Jo	
Rojas, Felipe A		Snively, Carolyn S	
Roller, Lynn		Snodgrass, Elisabeth	116
Romano, David		Sobotkova, Adela	
Rose, C. Brian		Sofroniew, Alexandra	
Rose, Marice		Sönmez, Ali	
Ross, Shawn		Souza, Randall	
Royal, Jeffrey G		Spurza, Joanne M	
Rozenberg, Silvia		St. P. Walsh, Justin	
Rubin, Benjamin		Stackowicz, Christopher J	
Rupp, David W		Stamatopoulou, Zoe	
Rush, Laurie W3	9, 116, 231	Stamos, Antonia	
Russell, Benjamin		Stark, Robert	

Stein, Samantha 56	Van Tilburg, Jo Anne	65, 230
Steiner, Ann142, 259	Vandeput, Lutgarde	
Stephens, Janet67	Vansuch IV, Joseph R	142
Sterrett-Krause, Allison E 188	Vassileva, Maya	2
Stinson, Philip 155	Vella, Clive	
Stissi, Vladimir118	Verdonck, Lieven	187
Stoimenoff, Allisa J243	Vermeulen, Frank	187
Strait, David233	Verstraete, Johannes	133
Strasser, Thomas F38	Vetters, Melissa	109
Surtees, Laura 214	Vieweger, Dieter	112
Swan, Carolyn123	Viitanen, Eeva-Maria	72
Tabolli, Jacopo243	Visonà, Paolo	140
Talbert, Richard69	Vitale, Salvatore	133
Taylor, Laurel 54	Vykukal, Rachel	177
Taylor, Rabun 97	Wagman, Robert S	79
Teffeteller, Annette T88	Wallace, Lacey M	57
Terpstra, Taco258	Wallrodt, John	
Terrenato, Nicola 60, 68, 199	Walthall, D. Alex	89
Teverson, Richard239	Wanner, Robert	125
Thomas, Michael L142	Warden, P. Gregory	139, 142
Thomas, Richard115	Watrous, L. Vance	33
Thorn, Jed M 120	Weber, Jill	229
Tomber, Roberta 98, 103	Wegener, Cori	39, 116
Totten, Darian M141	Weir, Allison J	73
Trentacoste, Angela C 55	Weiss, Dan	126
Triantaphyllou, Sevi136	Weiss, Zeev	237
Truemper, Monika18	Weistra, Elizabeth	110
Tsakirgis, Barbara261	Welch, Katherine	154, 156
Tsingarida, Athena120	Welch, Michael	39
Tsipopoulou, Metaxia137	Wernecke, D. Clark	65
Tuck, Anthony 84	Wiersma, Corien	208
Tuna, Numan215	Williamson, Christina	212
Tykot, Robert H 71, 130	Witcher, Robert	200
Uhlenbrock, Jaimee 108	Wrenhaven, Kelly L	179
Ullmann, Lee272	Wright, James C	136, 225
Urquhart, Lela91	Wueste, Elizabeth A	
Valente, Tatiana171	Yasur-Landau, Assaf	11
Van Damme, Trevor 175	Yavuz, Mehmet Fatih	
Van de Moortel, Aleydis136	Yegul, Fikret	
van den Berg, Kimberley A.M 201	Zachos, Konstantinos L	146
van der Wilt, Elsbeth M247	Zarmakoupi, Mantha	269