



2021 ASOR ANNUAL MEETING

VIRTUAL COMPONENT

PROGRAM-AT-A-GLANCE & ABSTRACT BOOKLET

December 9-12, 2021

ASOR anticipates numerous changes to the schedule due to the ongoing pandemic.
Sessions, presentations, times, and locations are subject to change.

Please check the online program for the latest schedule:
www.asor.org/am/2021/schedule-2021.



PROGRAM-AT-A-GLANCE VIRTUAL

This schedule is current as of December 10, 2021. ASOR anticipates numerous changes due to the ongoing pandemic.

WEDNESDAY, DECEMBER 8, 2021

- 1:00–1:45pm (EST)** MEETING: 2021 ASOR Member’s Meeting and Honors & Awards Ceremony
- 2:00–3:00pm (EST)** PLENARY: Virtual Plenary Panel Discussion on, “Living with Legacies: ASOR Archaeo-activism and a Future for 21st Century Archaeology”

THURSDAY, DECEMBER 9, 2021

- 10:00–11:00am (EST)** Archaeology and Biblical Studies
Bioarchaeology in the Near East I
Museums and Social Justice I
So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy I
Archaeology of Egypt I
Archaeology of Iran I
- 11:30am–12:30pm (EST)** Archaeology of Israel I
Bioarchaeology in the Near East II
Museums and Social Justice II
So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy II
Archaeology of Egypt II
Archaeology of Iran II
- 12:00–1:30pm (EST)** Poster Session
- 1:00–2:00pm (EST)** Archaeology of Israel II
New Directions in the Historical Geography of the Ancient Near East
Theoretical and Anthropological Approaches to the Near East
Slaves, Prisoners, and Unfree Bodies in the Ancient Mediterranean World
Archaeology of Jordan
Archaeology of the Black Sea and the Caucasus
- 2:30–4:30pm (EST)** *Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in Archaeological and Historical Studies from the Bronze Age to Medieval Periods I & II (Session ends at 5pm)
Stamp Seals from the Southern Levant (Workshop)
New Realities? A Critical Approach to Recreating Objects for Examining and Presenting the Past (Workshop)
Interdisciplinarity at SiMUR - the Shiraki International Multidisciplinary Undergraduate Research Project (Workshop)
Preserving the Cultural Heritage of the Madaba Region of Jordan (Workshop)
Navigating the “In Between”: Identifying a Career Trajectory in Academia for the Early Career Scholar (Workshop)
Working with Law Enforcement and the Military to Combat Trafficking and Preserve Cultural Heritage (Workshop)

FRIDAY, DECEMBER 10, 2021

- 10:00–11:00am**
(EST) Structures of Power in Southern Babylonia in the Second and First Millennia B.C.E.: From Local Rule to Provincial Existence I
Archaeology, Community, and Mentorship: Celebrating the Legacy of Bert and Sally de Vries
Thinking, Speaking, and Representing Animals in the Ancient Near East: New Perspectives from Texts and Images I
Maritime Archaeology I
Archaeology of Arabia I
- 11:30am–12:30pm**
(EST) Structures of Power in Southern Babylonia in the Second and First Millennia B.C.E.: From Local Rule to Provincial Existence II
Digital Archaeology and History I
Thinking, Speaking, and Representing Animals in the Ancient Near East: New Perspectives from Texts and Images II
Maritime Archaeology II
Archaeology of Lebanon
Archaeology of Arabia II
- 1:00–2:00pm**
(EST) Archaeology and History of Feasting and Foodways I
Digital Archaeology and History II
Gender in the Ancient Near East I
Interdisciplinary Approaches to Resilience, Resistance, and Collapse in the Near East and Neighboring Regions
Archaeology of Syria
Archaeology of Arabia III
Current Directions in Coroplastic Studies
- 2:30–3:30pm**
(EST) Archaeology and History of Feasting and Foodways II
Archaeology of Anatolia
Gender in the Ancient Near East II
Isotopic Investigations in the Ancient Near East and Caucasus
Cultural Heritage: Preservation, Presentation, and Management
(Im-)Politeness Research in Ancient Egyptian Texts
Cultures of Mobility and Borders in the Ancient Near East

SATURDAY, DECEMBER 11, 2021

- 10:00–11:00am**
(EST) Geophysics and Archaeology in Coastal and Shallow Marine Settings
Scribal Hands and Habits in Cuneiform Texts
Archaeology of Cyprus I
Protecting Libyan Cultural Heritage I
Transcending Borders: Geo-Political and Cultural Developments of the Jordan Valley in the Iron Age
The Archaeology of the Kurdistan Region of Iraq I
- 11:30am–12:30pm**
(EST) Art Historical Approaches to the Near East
Technology in Archaeology: Recent Work in the Archaeological Sciences
Archaeology of Cyprus II
Protecting Libyan Cultural Heritage II
Archaeology of the Near East: The Classical Periods I
The Archaeology of the Kurdistan Region of Iraq II
- 1:00–2:00pm**
(EST) Archaeology of the Southern Levant
Understanding Power in the Ancient World: Approaches, Manifestations, and Responses I
Interdisciplinary Approaches to Seals, Sealing Practices, and Administration
Archaeology of the Near East and Video Games I
Islamic Seas and Shores: Connecting the Medieval Maritime World I
Archaeology of the Near East: The Classical Periods II
Network Approaches to Near Eastern Archaeology and History I
- 2:30–3:30pm**
(EST) Approaches to Dress and the Body
Understanding Power in the Ancient World: Approaches, Manifestations, and Responses II
Archaeology of the Near East and Video Games II
Islamic Seas and Shores: Connecting the Medieval Maritime World II
Career Options for ASOR Members: The Academy and Beyond
Network Approaches to Near Eastern Archaeology and History II

SUNDAY, DECEMBER 12, 2021

- 10:00–11:00am**
(EST) Ancient Inscriptions
The Tell es-Safi/Gath Project after 25 Years I
Complexity Without Monumentality: Rethinking Nomads of the Biblical Period
History of Archaeology I
Archaeology of Mesopotamia
From Paganism to Christianity: Transformation of Sacred Space in Sepphoris, the Galilee, and Beyond
- 11:30am–12:30pm**
(EST) The Tell es-Safi/Gath Project after 25 Years II
State and Territory in the Ancient Near East: Mapping Relationships and Challenging Paradigms
History of Archaeology II
Archaeology of Islamic Society I
The True North to the Near East: The Contributions of ASOR in Canada (CASOR) to the Study of the Ancient Near East I
- 1:00–2:00pm**
(EST) Environmental Archaeology of the Ancient Near East
Contemporary Identities and Self-Reflective Approaches in the Study of Ancient Western Asia
Archaeology of the Near East: Bronze and Iron Ages
Archaeology of Islamic Society II
The True North to the Near East: The Contributions of ASOR in Canada (CASOR) to the Study of the Ancient Near East II
- 2:30–4:30pm**
(EST) ArtiBites – Approaches to Digitizing Seals and Tablets (Workshop)
Death and Burial in the Ancient Near East: Open Educational Resources (Workshop)
Theoretical and Anthropological Approaches to the Near East - “Levantine Entanglements” (Workshop)
Reintegrating Africa in the Ancient World (Workshop)
Cultural Heritage: Before, During, and After Crisis (Workshop)



WEDNESDAY, DECEMBER 8, 2021

1:00–1:45pm (EST)

MEETING: 2021 ASOR Member's Meeting and Honors & Awards Ceremony

Zoom link to join on ASOR's [Online Schedule](#)

ASOR Member's Meeting with annual reports from ASOR Officers.

Agenda:

1. Call to Order and Welcome (President Sharon Herbert)
2. Memorial Moments (President Sharon Herbert)
3. Financial Report Summary (Treasurer Emily Miller Bonney)
4. Update on the Work of the Membership and Outreach Committee (Theodore Burgh)
5. Nominations Committee Report and Election Results (Jane DeRose Evans)
6. Honors and Awards (Lynn Welton)
7. Concluding Comments (President Sharon Herbert)
8. Adjournment & 15 minute break before the Virtual Plenary Panel Discussion

Each year at the Annual Meeting, ASOR recognizes individuals who have performed outstanding service for the organization, those who have published exceptional academic work, and those who made significant contributions to our field. The following award recipients were honored at the 2021 Annual Meeting in Chicago and will also be recognized during the Members' Meeting at 1 PM EST on December 8th as part of the Virtual Annual Meeting. Awards were presented by Lynn Welton, Chair of ASOR's Honors and Awards Committee.

WEDNESDAY, DECEMBER 8, 2021

2:00–3:00pm (EST)

PLENARY: Virtual Plenary Panel Discussion on, "Living with Legacies: ASOR Archaeo-activism and a Future for 21st Century Archaeology"

Zoom link to join on ASOR's [Online Schedule](#) or email plenary@asor.org

Moderator: Morag Kersel | DePaul University

Panelists Include:

Lisa Çakmak | Art Institute of Chicago
Geoff Emberling | Kelsey Museum of Archaeology, University of Michigan
Alexandra Jones | Archaeology in the Community, Inc.
Michael Rakowitz | Northwestern University

Watch Prof. Kersel's Plenary Address in Chicago here:

<https://www.youtube.com/watch?v=m8P2XSKhl8m>

VIRTUAL ABSTRACTS

This schedule is current as of December 10, 2021. ASOR anticipates numerous changes due to the ongoing pandemic.

THURSDAY, DECEMBER 9, 2021

10:00–11:00am (EST)

SESSION: Archaeology and Biblical Studies

Stephen Cook | Virginia Theological Seminary

Kuntillet 'Ajrud: Pilgrims' Roadhouse to Mount Sinai (Har Karkom)
Deborah A. Hurn

Avondale University, Cooranbong, NSW, Australia

Kuntillet 'Ajrud in Northern Sinai is a famous and mysterious Iron Age II ruin yielding inscriptions mentioning Yahweh (the God of Israel), Teman, and Shomron (Samaria). Teman in the Hebrew Bible is associated with Mount Paran which appears to be another name for Mount Sinai (Hab 3:3; cf. Deut 33:2). Some scholars suggest that Kuntillet 'Ajrud functioned as a roadhouse for Samaritan pilgrims such as the prophet Elijah who fled from Jezreel to Mount Horeb (Sinai) in the time of King Ahab (1 Kings 19:1-8). However, the traditional site of Mount Sinai—Jebel Musa in Southern Sinai—lies one week's journey on foot from Kuntillet 'Ajrud, too far for the building to have served as a pilgrimage base.

For nearly forty years, paleoethnology professor Emmanuel Anati has advocated for Har Karkom in the Negev Highlands as the true location of Mount Sinai. Har Karkom lies one day's journey on foot from Kuntillet 'Ajrud through Wadi Quraya, an eastern tributary of Wadi al-'Arish in the Central Sinai. The path from Kuntillet 'Ajrud terminates in the western valley beside the Karkom plateau where Anati has surveyed many dwelling and cultic remains. This presentation will explore the idea that Kuntillet 'Ajrud was the ancient equivalent to St. Catherine's monastery but for Israelite pilgrims to Mount Sinai at Har Karkom, not Jebel Musa. Maps, photos, and other evidence will be presented.

Strange Fire Indeed: The Cultic Violation of Nadab and Abihu in Leviticus 10 in Light of New Discoveries in Ancient Near Eastern Sources and Archaeology

Jonathan S. Greer

Grand Rapids Theological Seminary, Grand Rapids, MI, USA

The cultic violation of the "strange fire" offered to Yahweh by Nadab and Abihu in Leviticus 10:1-11 has long puzzled commentators. Similarly perplexing has been the apparently related prohibition of imbibing intoxicating liquids (v. 8) prescribed for all officiating priests following the debacle. This paper considers the episode in the broader context of the use of mind-altering substances in various religious practices of the ancient Near East attested to in texts, iconography, and archaeology—including specific interaction with the recent discovery of cannabis at the Judahite temple of Arad (Arie, Rosen, Namdar 2020) as well as material paraphernalia from other Late Bronze and Iron Age sites. It is argued that the story may be

understood as polemic against the use of mind-altering substances in the Israelite cult.

Arie, E.; Rosen, B.; Namdar, D.

2020 Cannabis and Frankincense at the Judahite Shrine of Arad. *Tel Aviv* 47:1: 5–28, DOI: 10.1080/03344355.2020.1732046.

‘The Inhabitants of these Ruins in the Land of Israel’ (Ezek 33:24): Remarks on Archaeology and the Presence of the Past

Daniel D. Pioske

Georgia Southern University, Savannah, Georgia, USA

Within the Hebrew Bible, there are a number of references to squatters living among the ruins left behind from recent calamities. The first part of this study investigates archaeological evidence from Iron Age contexts in the southern Levant that attests to this phenomenon, examining how the experience of ruins influenced the lifeways of those who once lived at such locations. In light of our own practices of excavations that arose in the modern period, the second movement of this study asks why there is no evidence that any of these Iron Age inhabitants dug among the remains they inhabited to learn about those who lived there before. A response to this question is wed to what historians and theorists have more recently termed “the presence of the past,” or how material remains convey a sense of immediacy and directness, eliding the temporal distinctions between what was and what is now.

The Ugaritic Tale of AQHT; An Etiological Galilean Epos

Rami Arav

University of Nebraska at Omaha, Omaha, Nebraska, USA

Ever since the Ugaritic tale of AQHT was discovered in 1929, it has gained a variety of readings and interpretations. George Barton, in an article from 1941, provides the reason for this—Ugaritic is written with consonants and, therefore, is difficult to interpret. However, the fact that the language resembles archaic Hebrew can help us better understand the texts.

While modern readings and interpretations by Prof. Baruch Margalit and Dr. Shirli Natan-Yulzari have made these texts more approachable, Barton had already realized that the tale of AQHT contains Galilean features and proposed a Galilean origin for the story. I will continue this line of thought and argue that the tale is an etiological story explaining why the peculiar shape of the Sea of Galilee resembles a bow or harp.

In the story, a judge named Danel wished for a son. After a supplication, his child, named AQHT, was born. AQHT is then given a divine bow and arrows. However, when the Goddess Anat asks for the bow from AQHT, he refuses and insults her, saying bows are not made for women. The climax of the story occurs when Anat has AQHT killed. However, Anat does not get the bow, instead it falls into the water and breaks.

In the end, Danel buries the remains of his son in the fishery of Lake Kinneret. The geographical setting of the epic thus deals with Galilean surroundings. These references and other similarities to biblical literature allude to an etiological Galilean epos.

SESSION: Bioarchaeology in the Near East I

Sherry C. Fox | Arizona State University

Health and Life from a Bioarchaeological Perspective: The Human Remains from Abu Salabikh, Iraq

Edward M. Luby

Museum Studies Program/Global Museum, San Francisco State University, San Francisco, CA, USA

In this paper, the results of a bioarchaeological analysis of a small number of Early Dynastic Period III (2600-2500 B.C.) human remains excavated in the 1980s from Abu Salabikh, Iraq, are presented. The 20 individuals identified, which were associated with 16 different burials, are of great significance, because there are few analyses of human remains from Mesopotamia across all time periods, let alone from the Early Dynastic, when Abu Salabikh, and other cities like it, represented the world's first urban centers. Moreover, because little is known about the diet and health of early urban populations from around the world, this paper aims to contribute to an understanding of health in early cities, which have been considered to have been crowded, unsanitary, and unhealthy. The Abu Salabikh human remains are even more distinctive because they are associated with a single residence in an area of domestic housing that was more or less occupied continuously over several generations, during a period without significant political turmoil, thus possibly supplying a snapshot of life and health levels in an early city. After briefly outlining the methods used, including relying on the careful excavation and analysis of the burials, some results and conclusions will be presented. Overall, health appears to have been poor, especially for children, with protracted periods of exposure to unhealthy living conditions in both “wealthier” and “less wealthier” burials, suggesting that wealth may not have been a buffer against poor health in this early urban household.

Bioarchaeological Analysis of the Mysterious Sarcophagus at Al-Karmeli Street, Alexandria

Ahmed Mohamed Gabr¹, Zeinab Said Hashesh²

¹Ministry of Tourism and Antiquities, Cairo, Cairo, Egypt. ²Beni Suef University, Beni Suef, Beni Suef, Egypt

Alexandria is a port city located on the Mediterranean Sea in northern Egypt, built by Alexander the Great in 331 B.C.E. It contains two different large necropoli. The western necropolis belonged to the native Egyptians and dates to (323-30 B.C.E.), while the eastern one belonged to the Greek and Ptolemaic inhabitants, dating to the 4th millennium B.C.E. A salvage excavation at the eastern necropolis was conducted directed by Khaled Abou el-Hamed and Naglaa Abass under a modern settlement at Al-Karmeli street. In July 2018, the Egyptian mission uncovered a 30-ton granite sarcophagus that was intact. When opened, it was filled with reddish liquid and contained the skeletal remains of 3 individuals that were transported to the National Museum at Alexandria. Two middle adult males, and one young adult female, were found together in the sarcophagus, an uncommon occurrence. Placement indicates they were not interred simultaneously but were buried in two different periods of time. Four small embossed gold squares found with them, decorated with an unhooded snake, seed of an opium poppy, a wheat ear or palm branch, and a phallus, which may be associated with pain relief, fertility, rebirth, and protection. The three individuals suffered from dental pathology, including calculus, caries, crowding, and enamel hypoplasia, while one of the males exhibited a trepanation on the right parietal, spinal disease, and degenerative joint disease. Trepanations are rare in

ancient Egypt. The type of sarcophagus and objects, as well as the surgical procedure, suggest a high status.

Preliminary Analysis of the Kissonerga-Ammoudia Cemetery (Paphos, Cyprus)

Anna J. Osterholtz^{1,2}, Angelos Papadopoulos³, Lisa Graham⁴, Vanessa Pappa⁵

¹Department of Anthropology and Middle Eastern Cultures, Mississippi State University, Mississippi State, MS, USA. ²Cobb Institute of Archaeology, Mississippi State, MS, USA. ³College Year in Athens, Athens, Greece. ⁴University of Edinburgh, Las Vegas, NV, USA.

⁵National and Kapodistrian University of Athens, Athens, Greece

In 2008, rescue excavations conducted by the Department of Antiquities uncovered a Bronze Age Cemetery at the site of Kissonerga-Ammoudia near present Paphos, Cyprus. Materials and human remains from these excavations are stored at the District Archaeological Museum until 2019, when an analysis of the human remains and artifacts was begun with a multidisciplinary approach. Here, we report on the demography of the tomb assemblage in relation to the preliminary ceramics and small finds analyses. A total of almost 1300 bone fragments from the tombs were analyzed. MNI and age at death/sex breakdowns determined for each tomb. Though preservation was generally, poor, most tombs contained multiple individuals, with both males and females present. Males and females were in the same tomb and also in tombs with nonadults, suggesting family-based tomb usage. On average, each tomb contained 2.8 individuals, with Tomb 4 containing the greatest number of individuals (n=9). Analysis of the ceramics suggests that the usage of the cemetery may extend from the Early-Middle Bronze Age.

The ultimate goal of this analysis project is the production of a publication tying together analysis of the architecture, ceramics, human remains and small finds to present a holistic picture of mortuary processing during an under-reported time period.

SESSION: Museums and Social Justice I

Katherine Larson | Corning Museum of Glass

Caitlin Clerkin | University of Michigan

New Perspectives on Ancient Nubia: A Virtual and Collaborative Exhibit from the Bade Museum of Biblical Archaeology

Brooke Norton^{1,2}, Melissa S. Cradic^{3,2}, Jessica Johnson^{1,2}, Aaron J. Brody²

¹University of California, Berkeley, CA, USA. ²Bade Museum, Pacific School of Religion, Berkeley, CA, USA. ³University at Albany, SUNY, Albany, NY, USA

This paper presents the initial results of a new virtual exhibition created by the Bade Museum of Biblical Archaeology at Pacific School of Religion in conjunction with a new virtual lecture series co-sponsored by the Archaeological Research Facility at UC Berkeley. The exhibition, titled "New Perspectives on Ancient Nubia," is a collaborative, multivocal project that seeks to reconceptualize the ancient world for public audiences using multimedia, educational, and interactive elements. Its central goal is to de-center the standard focus on Egypt and present an anti-colonial perspective on Nubia not as a periphery of Egypt, as was common in early scholarship, but as a primary subject of academic focus and public presentation. This exhibit is a dynamic, experimental, and living work-in-progress that incorporates curated materials presented over the course of the year-long lecture series. The themes, sites, and materials presented in the exhibit are centered around destabilizing traditional narratives,

highlighting new interpretations, and challenging biases in ancient sources and modern scholarship. Through an exploration of the history and archaeology of Nubia, the exhibit brings in diverse and emerging voices in Nubiology who highlight the complexity of this ancient African civilization and focus on the interconnectedness within Nile Valley cultures. The project explicitly foregrounds inclusivity, multivocality, and social justice in its content as a way to address issues of equity in the field, reframe discussions of Nile Valley civilizations and ancient Africa, and to increase representation of a range of voices, past and present.

Object Journeys: From Baghdad to London — A Case Study of the Purchase History of Old Babylonian Omen Tablets in the British Museum

Nadia Ait Said-Ghanem

SOAS, London, United Kingdom

In 1897, the British Museum received four boxes containing 186 cuneiform tablets sent from Baghdad by an individual named Elias Gejou. After negotiations for the purchase price that lasted on and off for about a year, the Trustees bought the lot for £32 (\$5,863 today). Although this was the only collection Elias Gejou would sell to the British Museum, he was no stranger to the antiquities trade. By the mid-1890s, his two sons Ibrahim and Isaac were establishing themselves as dealers of Iraqi artefacts and would turn this trade into a career that would span over 40 years. Among the 186 tablets Elias Gejou sold, scholars eventually identified two tablets (BM 23158 and BM 23169) as Old Babylonian omens - tablets dated to the Old Babylonian period (2004-1595 B.C.E.) inscribed with lists of predictions made by observing the natural world. The majority of Old Babylonian omen texts - a corpus of c. 275 tablets - comes from similar purchases made by museums between 1880s and 1930s, and museum archives still preserve the written exchanges between curators and dealers related to these procurements. The correspondence preserved in such archives represents a rich source of information both to retrace the provenance history of a corpus, and to reshape the story of these objects narrated in exhibitions and displays. Based on letters in the archives of the British Museum, the present discussion will follow the journey of BM 23158 and BM 23169 from Baghdad to London, as an example of how provenance history should be part of an object's study, and of museum displays.

(Re)Presenting the Past: Towards a Feminist Praxis for Archaeological Museums

Leah R. Neiman

Joukowsky Institute for Archaeology and the Ancient World, Brown University, Providence, Rhode Island, USA

Archaeological museums are uniquely situated to motivate social change in the present by helping visitors to think critically about structures of oppression and privilege in the past. While the past few decades have seen activists push for greater representation and equity in modern and contemporary art museums, the same attention has not been paid to the entrenched andro- and eurocentrism of archaeological museums. This paper demonstrates the benefits of incorporating feminist theory and feminist archaeological scholarship into the interpretation of archaeological collections in museums. I begin by explaining the theoretical grounding before shifting to focus on bridging the gap between theory and practice of feminist curation through the case study of the *Ancient Egypt Rediscovered* gallery at National Museums Scotland. Re-opened to the public in 2019, the

gallery explicitly aims to help visitors engage with the lives of diverse individuals from ancient Egypt; yet the gallery relies on a simplistic androcentric chronology as its framework, throughout which women stand for all marginalized groups whose value is tied primarily to their male relations. However, with some simple but meaningful changes, such as reprioritizing label information and increasing curatorial transparency, the gallery could become an important entry point for audiences to critically reflect on archaeology and intersectionality. These proposed changes demonstrate not only how pre-existing galleries can be modified but the benefit of adopting holistic feminist practices throughout exhibition development. Feminist archaeological museums, which invite visitors to interrogate power dynamics of societies past and present through collections, could soon become standard practice.

Advocating for Un-Naming Museum Legacy Collections: A Case Study of an Egyptian Collection at the Global Museum

Lisette M. Jiménez

San Francisco State University, San Francisco, CA, USA

Museum legacy collections are often comprised of archaeological objects and human remains purchased from the antiquities market. These collections require a level of care and research that necessitates addressing the legacy associated with the collection. Acknowledging these inherited histories and reevaluating these legacies often means museums must address the loss of object context, the problematic practices of colonial collecting, and the traumatic histories of racial bias and racist narratives presented to the public. This paper examines the case study of the un-naming of a collection formerly known as the *Sutro Egyptian Collection* housed in the Global Museum at San Francisco State University. By examining this case study through a diversity, equity, accessibility, and inclusion lens, this paper will explore how the Global Museum is reckoning with the legacy of this collection that was formed in the late 19th century and publicly displayed throughout the 20th century in an institution (the Sutro Baths) that was the site of racial discrimination in the 1890s. I will outline practical steps taken by the Museum to address problematic issues of ownership and the colonial history of this collection while also being more transparent and providing public access to the collection. I will conclude by advocating that additional institutions consider engaging in a similar self-reflective process, which explores past legacies and creates more inclusive legacies for the future.

Intertwined Journeys: Outreach Initiatives in the Department of Ancient Near Eastern Art at The Metropolitan Museum of Art

Sarah B. Graff

The Metropolitan Museum of Art, New York, NY, USA

To use a phrase borrowed from the organizers of the program [Multaka: Museum as Meeting Point](#), museums are places of memory where past and present meet. Since February 2017, the Department of Ancient Near Eastern Art at the Metropolitan Museum of Art has developed several initiatives that aim to foster this connection between past and present through engagement with Middle Eastern heritage and diaspora communities. These initiatives were developed around the following key goals: activating the collection through multiple perspectives, including those not often found at The Met; connecting people with art that is meaningful for their own identities; and developing the museum as a shared public space. These are visitor-focused principles which might appear more closely aligned with the work of museum educators. However, in this

presentation I will demonstrate that these interactions in fact profoundly benefit the department's curatorial work. Through multidirectional engagement with heritage communities, both the responsibilities and the interpretive and relational possibilities available to curators are expanded and deepened.

I will focus on the potential that engagement with heritage communities holds for the recontextualization of objects beyond the suspended animation of the museum display. This entails the application of lived experience to bring the objects back into relation with people, as well as the sharing of cultural knowledge which connects in indirect and complex ways with the ancient past.

SESSION: So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy I

Alison Acker Gruseke | Union Presbyterian Seminary

"No Country for Old Men": On Ugaritic Kirta and the Usefulness of Elderly Men in Antiquity

Stephanie L. Budin

ASOR, Collingswood, NJ, USA

In the Ugaritic Epic of Kirta (CAT 1.14–16), the narrative ends with the now elderly protagonist cursing his son and heir Yassib, "May you fall at the peak of your years! Be subdued while you still make a fist!" (CAT 1.16, Col. VI, ll. 57–58). This was provoked by Yassib's request for the throne, predicated on the argument that "You don't pursue the widow's case, you don't take up the wretched's claim. You don't expel the poor's oppressor. You don't feed the orphan who faces you, nor the widow who stands at your back. Your sickbed is your consort..." (CAT 1.16, Col. VI, ll. 43–50). In this, we see the inability of the elderly to fulfill his duties, and the demands of the young to take his own rightful place in society.

While scholarship has shown that elderly, post-menopausal women typically have improved status and freedoms in the ancient world, the status of elderly men is far less promising. Family patriarchs stand in the way of their sons and thus create intergenerational conflicts that sever the links between fathers and heirs (e.g. David and Absalom, 2 Samuel 15). Loss of bodily vitality and strength bar elderly men from traditionally "masculine" occupations while creating a burden on family resources.

This paper considers the role of elderly men in ANE society and the extent to which their status changes vis-à-vis social engagement and family dynamics.

The Literary Topos of Placing a Young Virgin in an Old Man's Lap: A Rejuvenation Technique in Sumer and the Hebrew Bible (1 Kgs 1:1–4)

Daniel Bodi

La Sorbonne University of Paris 4, Paris, France

Placing a young virgin in the lap of an old man to warm him is a literary topos probably based on an actual ancient Near Eastern practice. It is mentioned in a Sumerian composition known as *The Old Man and the Young Girl*. It tells of an old man who is losing his youthful vigor and virility. He asks the king for advice who repeats the request to a court lady (sekrum). She advises to let the old man marry a young girl (ki.sikil). The king gives orders to the girl to make preparations for the marriage which she carries on, joyfully leaving the palace, asking people to dance. The Sumerian term for the "young girl" (ki.sikil), meaning "the pure, undefiled place" from (ki) "place, spot," and (sikil =ebēbu) "pure," can refer to a virgin, an untouched, non-deflowered

female, although it is usually rendered in Akk. with *ardatu* “maiden, young woman.” The folktale is also mentioned on a small school tablet containing a phrase that appears to be a summary of the whole story: “An old man took a young girl as a wife” (ab.ba ki.sikil.tur-ra nam.dam.šē ba-an-tuku). The phrase represents the essential idea of the story in a nutshell. It reflects a specific situation, an early attempt at rejuvenating old men who lost their virility. The David and Abishag story is presented as an ancient Near Eastern literary topos. It was also an ancient therapeutic technique, as mentioned by Josephus (*Ant.* 7.14.3) and the Rabbis, known as “Shunamitism.”

Care for the Old, Sick, and Weak in Babylonia at the End of the Third Millennium B.C.E.

Piotr Steinkeller

Harvard University, Cambridge, MA, USA

Updating the earlier studies by Claus Wilcke and this author, the present communication will investigate the ways in which the Ur III state (ca. 2100-2000 B.C.E.) provided protection for the most vulnerable members of the society. While concentrating on the old and the sick, it will also consider the forms of support provided for widows, orphans, and other “left out” individuals.

Do Gods Age? Thoughts About Representations of Divine Aging in Cuneiform Literature and Art

Takaoshi Oshima

University of Leipzig, Leipzig, Sachsen, Germany

In consideration of Sumerian and Babylonian belief, W.G. Lambert observes that they created gods in their “image ... male and female” (CRRAL 33). When we look into Sumero-Akkadian myths and legends, however, we see no god suffering age-related disability or dying because of his old age. When we examine ancient Mesopotamian arts, we only see fully-grown deities in fine fettle. Because the Sumero-Babylonian divine society was indeed a reflection of the human world, there must be ageing deities in literature and art, only that we do not realize how they are depicted. This paper will discuss the imagery of ageing deities mainly by examination of Enūma Eliš.

SESSION: Archaeology of Egypt I

Krystal Pierce | Brigham Young University

Towards a Theory of Egypt's God-Kings Chronology

Gary Greenberg

Author, New York, NY, USA

Ancient Egypt's only known multi-dynasty chronologies, the Turin Canon of Kings (ca. 12th century B.C.E.) and Manetho's *Aegyptiaca* (ca. 3rd century B.C.E.), indicate that the 1st Dynasty was preceded by a long list of god-kings with assigned lengths of reign. Unfortunately, the Turin Canon papyrus is badly damaged in this section. Many of the god names and lengths of reign are either damaged or missing. As to Manetho, his original text is lost and what we know about this chronology has survived in wildly inconsistent versions preserved by a few Christian scribes several centuries later. These scholars took great liberties with Manetho's chronology, though they do explain why they made many changes to what Manetho wrote.

This paper introduces the theory that behind these two chronological texts stands a systematic unfolding of the Theban Creation theology with lengths of reign based on solar, lunar, and stellar cycles and that this data can be recovered by tracking error patterns in the Manetho sources. As an introduction to the thesis, this

paper will focus on the Manetho texts and (1) outline several arithmetic errors made by the scribes who passed on the manuscripts, (2) demonstrate several interpretive errors by the redactors which led to erroneous data being used in the various Manetho sources, and (3) offer one major new insight as to what the redactors misunderstood, which—when placed in context—will provide the key to unlocking the chronological and sequential arrays and explain the various inconsistencies in the Manetho sources.

The Middle Kingdom Theban Project: Past Seasons and Future Challenges

Antonio J. Morales¹, Sergio Alarcón Robledo²

¹University of Alcalá, Alcalá de Henares, Madrid, Spain. ²Harvard University, Cambridge, Massachusetts, USA

In the last five years, the University of Alcalá and its Middle Kingdom Theban Project have set up a multidisciplinary and international team of experts that have conducted archaeological excavation as well as epigraphic and conservation work in various tombs located in the necropolises of Asasif and Deir el-Bahari (Luxor), with the major goal of improving understanding of Thebes during the First Intermediate Period and the early Middle Kingdom. These five years of work (2015-2020) have represented a significant step in the preliminary gathering of documentation from previous excavations in the area—mainly by the MMA expedition—and the initial excavation of funerary complexes therein, mainly those of Henenu (TT 313/MMA 510), Ipi (TT 315/MMA 516), Djari (TT 366/MMA 820), and Dagi (TT 103/MMA 807).

After the cancellation of the fifth season due to the pandemic (2020), the Middle Kingdom Theban Project reconsidered the fundamental targets of the project and resolved to incorporate the study of Theban temples, settlements, and provincial territory. Thus, while the fieldwork initiative is confined to the works in the necropolis, our overall research encompasses much more than the funerary target, integrating settlements, temples, necropolises, and province in an unprecedented large-scale, multidisciplinary project aiming at the study of pre-New Kingdom Thebes. In this presentation we shall revisit the initial five seasons of the project in order to provide a comprehensive overview of our work, and present the challenges that we expect to face in exploring the role of Thebes in the construction of the Middle Kingdom.

Ancient Egyptian Funerary Figurines: The Sand Enigma as Key to a New Paradigm

Sharyn Volk

The University of Melbourne, Melbourne, Victoria, Australia

The third specific duty nominated in the task clause of Coffin Text 472 and Book of the Dead Spell 6 refers to the movement of sand by boat. Tasks one and two, turning over the fields and irrigating the riparian lands, are self-evident. Despite the assertion that sand use in ancient Egyptian agriculture would have been common-place, scholars have been unable to agree on its functional application within the framework of these texts. The clause is not only contentious because of lack of accord regarding meaning of the terminology, but also because the directional movement of the sand has been seen as problematic. This presentation will argue that examination of the practical and symbolic meaning of sand in the context of the funerary figurine, and quantitative analysis of the use of prepositions in the clause, provide an alternative lens for consideration of these conundrums. In illuminating an alternative interpretation of the task

clause, a new paradigm for understanding the intention and function of the figurine is revealed.

El-Salamuni Necropolis: The Egyptian- Hellenistic Fusion of Culture Wahid Attia Omran

Lehrstuhl für Ägyptologie, Würzburg, Germany

El-Salamuni is the main necropolis of Akhmim during the Graeco-Roman period. Its tombs reflect the fusion and mix of Egyptian and Hellenistic cultural influences of the local community in Panopolis. They are decorated with the Egyptian funerary afterlife scenes with Hellenistic and Romano influences appearing in the figure and costume of the deceased, the existence of kline burial niches, the geometrical orthostats, and the Greek style of zodiacs.

SESSION: Archaeology of Iran I

Kyle Gregory Olson | University of Pennsylvania

The Numerical Tablet from Tepe Meymunabad: Development of Early Writing in Central Iranian Plateau

Saeed Baghizadeh¹, Rohollah Yousefi Zoshk¹, Hassan Afshari²

¹Islamic Azad University of Tehran, Tehran, Tehran Province, Iran, Islamic Republic of. ²University of Tehran, Tehran, Tehran, Iran, Islamic Republic of

The earliest clay tablets bear a series of crudely impressed signs, and are usually called Numerical Tablets. The first series of numerical tablets were discovered in Susa by De Morgan in 1901-5 in uncertain contexts, and were published mixed together with Proto Elamite tablets by Scheil in 1905. 'Numerical tablet' is the term used for an early writing system in Iran, Mesopotamia, and Syria between 3400-3300 B.C.; a period generally corresponding to the period of Uruk V through Uruk IV.

This article deals with a newly discovered numerical tablet that illustrates a crucial transition and solid connection with clay balls and economic tablets at Tepe Meymunabad in southwest of the Capital Tehran. The form and content of the numerical tablet is entirely consistent with that of the Uruk IV or V tablets from Susa and Chogha Mish. This article also includes details of the chronology and geographical distribution of numerical tablets in Iran and the neighboring regions. The signs on the tablet seem to be related to the impression of the tokens on the surface. The numerical tablets of Tepe Meymunabad offer a unique view of the earliest stages of development of an early writing system in Central Iranian Plateau.

The Formation of Proto-Elamite Union on the Iranian Plateau

Hassan Afshari¹, Rouhollah Yousefi Zoshk², Saeed Baghizadeh²

¹University of Tehran, Iran, Islamic Republic of. ²Islamic Azad University of Tehran, Iran, Islamic Republic of

The Proto-Elamite period is a well-known Culture in the history of the Iranian plateau dated back to 3300-3000 B.C. In this culture, the various communities had integrated in a constant form of social complexity. This socio-political system is based on Proto-Elamite administrative system including tablets, seals and sealings, and so on. The Proto-Elamite culture or horizon were located in a broad geographical area from Uzbaki site (Qazvin plain) Tepe Sofalin (Tehran Plain) in the northern Iranian Plateau, to Shahr-e Sokhteh (Sistan and Baluchestan) and Tepe Yahya (Kerman) in the southeast and up to Susa and other sites within Khuzestan Plain in the southwest. Each site, maintaining the local style and variable phonetic names, suggest a similar administrative system regionally including seals, sealings, and

tablets. These findings show that a probable coming together of Proto-Elamite peoples from around the Iranian Plateau. In this present study, the authors use available information to better understand this emerging socio-political system.

Ethno-Archaeology of Khuzestan Plain Based on Susa II Sealings

Hassan Afshari¹, Rouhollah Yousefi Zoshk², Saeed Baghizadeh²

¹University of Tehran, Iran, Islamic Republic of. ²Islamic Azad University of Tehran, Iran, Islamic Republic of

The ancient people of the Near East in the fourth millennium B.C., due to the various social and environmental reasons, became more urbanized. As a result of development of complexity and specialization, new professions and crafts are appeared. This process led to producing a surplus of manufactured goods and in turn increased trade and exchange. There is evidence that people in the 4th millennium B.C. were using cylindrical seals and sealings for the trade. In this present study, we aim to better understand relationships between seals and sealings from the fourth Millennium B.C. and traditional societies of Khuzestan. These results indicate that new professions related to hand and plow-harvesting, horticultural activities, animal husbandry, pottery-making, and fishing appear in the region. We also provide data about climatic and environmental conditions in the region based on the Susa II seals and sealings.

Conceptualizing the Idea of Iranshahr in the Art of the Sassanid Empire

Somayyeh Astani Kalashami¹, Saeed Baghizadeh²

¹Independent Researcher, Iran, Islamic Republic of. ²Islamic Azad University of Tehran, Iran, Islamic Republic of

Iranshahr is an ancient name used for land of Iran, lexically means the Country of Aryans. This name indicates Iran as a country and Iranians as a nation, which was firstly used in the Third Century A.D. in the inscription of Shapur I in the Ka'ba-ye Zartosht, Cube of Zoroaster, in reference to the plateau of Iran, and Secondly referred as the king of Iranshahr for Shapur I. The Sassanids created a culture that bears the name of Iranian culture and initially relied on Iranshahr, but later became a broad concept with political and cultural implications that included every person with any religion and race who was obedient to royal law. The idea of Iranshahr, first seen in the remnants of the Sassanid era, clearly shows that the Sassanid Empire, in contrast to the Roman government as a foreign enemy, tried to create a unique identity. The cultural achievements of the Sassanids can be clearly seen through their surviving works in Middle Persian literature and the works of art attributed to them. In this article, the authors intend to examine the concept of Iranshahr, including its constructions of this idea in Sassanid art.

Human-Animal Interactions at the Aceramic Neolithic Site of Tell-e Atashi, Southern Lut Desert, Iran

Benjamin Mutin¹, Siavash Samei², Saeedeh Ashari³, Omran Garazhian⁴

¹CNRS (Centre National de la Recherche Scientifique), Nanterre, France. ²The College of Wooster, Wooster, OH, USA. ³University of Tehran, Tehran, Iran, Islamic Republic of. ⁴University of Neishapur, Neishapur, Iran, Islamic Republic of

The Zagros and Taurus Mountains of the Fertile Crescent were home to the primary centers of animal domestication in the Pre-Pottery Neolithic. Research in these highlands has been essential to our understanding of the expansion of farming and herding economies into Europe. In contrast, the relationship between these primary

centers of domestication and the process of neolithization across the vast expanses of the Iranian Plateau to the east remains largely unknown. The southern Lut Desert is of particular interest given that it is located at the juncture of the Near Eastern and Indus Valley worlds. Recent excavations by a joint Iranian-French team at the Aceramic Neolithic site of Tell-e Atashi have begun to shed light on the process of neolithization across the southern Lut. In this paper we present preliminary results of our ongoing zooarchaeological studies at Tell-e Atashi. We examine the implications of our findings for reconstructing the social and economic structure of the site. We also frame our findings in terms of local cultural developments in that region. Finally, we will contemplate how human-animal interactions at Tell-e Atashi can shed light on the relationship between this settlement and the broader Near Eastern world to its west, and with the Neolithic societies of Baluchistan to the east, including the site of Mehrgarh in Pakistan.

THURSDAY, DECEMBER 9, 2021
11:30am–12:30pm (EST)

SESSION: Archaeology of Israel I

Boaz Gross | Israeli Institute of Archaeology, Tel Aviv University

An Update of the Corpus of Hiding Complexes in Palestine: Dating, Distribution and Historical Implications

Dvir Raviv

Bar Ilan University, Ramat Gan, Israel, Israel

Hiding complexes are one of the typical archaeological finds at Jewish settlements in Roman Palestine. These complexes are found mainly in the Judean Lowlands and Lower Galilee and were formed from rock-hewn underground facilities that were no longer in use. The facilities were then linked in a forking network of winding burrows, which created a sort of labyrinth beneath the ancient settlements.

Due to the discovery of Bar-Kokhba finds in many of the systems, as well as the account by Cassius Dio (*Rom. Hist.* 69.12.1), the hiding complexes became facilities identified with the Bar-Kochba revolt. However, the results of excavations and surveys conducted in several dozens of these hiding complexes in Judea and the Galilee indicate the existence of the phenomenon as early as the beginning of the Roman period.

The discovery and study of dozens of hiding complexes in the last decade make it possible to significantly update the corpus of hiding complexes as well as re-review the questions of their distribution and the historical context. A systematic reference to the dating of the systems, their typological characteristics, and the way in which they were integrated into the structures of the countryside make it possible to clarify various issues in the study of these facilities—most importantly the geographical scope of the phenomenon, typology, the designation of the systems, and the scope of the area prepared for the Bar-Kokhba revolt.

Uncommon Roman Burials from Paneas – Caesarea Philippi

Yana Tchekhanovets¹, Marina Bekker-Shamir², Arfan Nagar²

¹Ben Gurion University of the Negev, Beer Sheva, Israel. ²Israel Antiquities Authority, Jerusalem, Israel

Despite the COVID-19 pandemic lockdown of 2020, a series of salvage excavations were conducted in the north-western outskirts of the ancient city of Paneas (Caesarea Philippi). The digs were initiated by the Israel Antiquities Authority and exemplified successful “community excavations”, comprising students from regional colleges and residents of the nearby Druz and Arab villages as well as Jewish kibbutzim.

The excavations exposed part of a suburban cemetery dated to the Roman period, with a number of sealed tombs found empty of any archaeological or osteological remains. Two curious square-shaped stone-built burial structures were exposed in the immediate vicinity and were identified as funerary monuments. The characteristics of these monuments, previously unattested in the archaeological record of the country, seems to be inspired by the funerary architecture of the Palmyrene region typified by its well-known “tower-tombs” structures.

Whereas one of the monuments was discovered empty, the other contained the remains of a cremated young boy placed in a large cooking pot alongside two oil lamps deposited under the structure. To date, the few cremation burials discovered in the country, found at Jerusalem, Caesarea Maritima, Megiddo, and Acco, were all associated

with the Roman military. However, the young age of the Paneas burial precludes a similar identification. Who was this interred individual? Perhaps a beloved son, brother, or lover of some local high-ranking officer or official?

Inscriptions on Ceramic Ring Stands from the Early Roman Period at Khirbet el-Maqatir, Israel

Mark A. Hassler

Virginia Beach Theological Seminary, Virginia Beach, Virginia, USA

Twenty ceramic ring-shaped stands came to light during the archaeological excavation of Khirbet el-Maqatir in the central highlands of Israel. The ring stands functioned as pedestals for round or conical-shaped vessels. Four of the twenty stands remained mostly intact and contained inscriptions. One of these stands included an inscribed word; two stands preserved an alphabetic Hebrew or Aramaic letter; and another stand contained an incision. The stands date to the late Second Temple period. At that time, ritually observant Jews occupied Khirbet el-Maqatir, a fortified village 16 kilometers north of Jerusalem. Khirbet el-Maqatir fell to the Romans in approximately 69 C.E. during the First Jewish Revolt.

SESSION: Bioarchaeology in the Near East II

Sherry C. Fox | Arizona State University

Egyptian Imperial Expansions and Their effect on Lower Nubian Physical Activity

Marylène M.N. van den Hoorn, Sarah A. Schrader

Leiden University, Netherlands

Egypt and Lower Nubia (currently part of Southern Egypt and Northern Sudan) have a complex shared history, with Egypt conquering and colonizing Nubia during the Middle (2050-1650 B.C.E.) and New Kingdom (1550-1050 B.C.E.). Scholars are uncertain as to what extent these imperial expansions affected local populations alongside the military occupation. This study will investigate the impact of the Egyptian presence on the physical activity of the Lower Nubian indigenous C-Group and Egyptian-presenting Pharaonic population.

Entheseal changes, which are points of muscle and ligament attachment sites to bone, of the C-Group ($n=152$) and Pharaonic ($n=31$), dating from the Middle to New Kingdom, were analyzed using age-controlled ANCOVA. Results showed statistically significant differences between upper-body entheses of the samples. Higher enthesal scores of the C-Group compared to the lower scores of the Pharaonic population, suggest that the C-Group did not benefit from the Egyptian presence. This could indicate that appearing as Egyptian or having a certain cultural affiliation with Egyptian culture had a positive influence on the quantity or intensity of strenuous tasks executed. Some scholars suggested that the C-Group population performed mining labor for the Egyptians. While the results do not refute these claims, they also do not correspond to particularly strenuous or long-lasting mining labor.

This study suggests that Egyptian imperial expansions into Lower Nubia had varying impacts on different populations. This may have been based on cultural affiliation, indicating different relationships between Egypt and these populations, which subsequently influenced the diverging imperial approaches experienced by the Lower Nubian populations.

Cribra Femora in Burial Samples from Ayioi Omoloyites in Lefkosia, Cyprus: An Indicator of Thalassemia or a Non-Specific Osseous Variant?

Krysten A. Cruz¹, Nicholas P. Herrmann¹, Despo Pilides², Yiannis Violaris²

¹Texas State University, San Marcos, TX, USA. ²Cyprus Museum, Department of Antiquities, Cyprus

Cribra Femora is a porous lesion on the anterior femoral neck. While its etiology has been debated, researchers have argued that the condition is associated with genetic anemias rather than nutritional anemias. Beta-thalassemia is a genetic anemia endemic to the Mediterranean and has continued to thrive due to the presence of malaria in the region. Similar to sickle-cell anemia, beta-thalassemia is a hemoglobin disorder that has a relationship with malaria which allows a heterozygous individual to survive without contracting malaria. Due to this relationship, the presence of cribra femora in a population may indicate the presence of beta-thalassemia. The Ayioi Omoloyites Bioarchaeological Project focuses on the analysis of three rock-cut tombs excavated south of the old city walls of Lefkosia, Cyprus. The burial samples from Tombs 47 and 48 are limited and date to the Hellenistic period. These tombs likely represent kin-based mortuary facilities. Tomb 49 contains a large commingled sample, which dates to the Early Christian period (5th/6th century A.D.). Only 50.0% (2/4) adult and 50.0% (2/4) of subadult elements from Tombs 47 and 48 displayed cribra femora. The condition is present in 47.4% (55/116) of adult and 57.0% (53/93) of subadult elements in Tomb 49. The presence of cribra femora in all tombs is important because it may indicate the antiquity of beta-thalassemia in Cyprus. Comparison with other osteological evidence considered consistent with thalassemia from the 12th century A.D. Palaion Pamarheion burial sample will be discussed, but these samples did not produce genetic signatures of the thalassemic mutation.

The Differential Diagnosis of External Auditory Exostoses Using Structured Light 3D Scanning

Bianca Casa, Kirsy O. Lorentz

The Cyprus Institute, Nicosia, Cyprus

External auditory exostoses (EAEs) are dense osseous hyperostoses that protrude into the external auditory canal of the human ear. This study presents a new technique for assessing the palaeopathological expression and the differential diagnosis of EAEs in archaeological specimens using three-dimensional (3D) structured light scanning to generate 3D models. EAEs are frequently used as a proxy for repetitive aquatic activity in human bioarchaeology. The accepted aetiology of EAEs in clinical and archaeological contexts is chronic exposure to cold water and or wind. EAEs and osteomata are the most common forms of hyperostotic bone formation in the external auditory canal. Despite this, the differential diagnosis of EAEs and osteomata is not thoroughly addressed in the human bioarchaeological literature and is an important consideration when examining auditory canals for the presence and absence of EAEs. Traditionally archaeological EAEs are observed through morphoscopic and microscopic techniques. Manipulation of a 3D model using CloudCompare software enables metric measurement of these lesions. The shape, location, and size of hyperostotic bone formation in the external auditory canal may supplement the differential diagnosis of EAEs and osteomata. The application of 3D structured light scanning to EAEs is limited by the position of the EAE in the external auditory canal: only specimens presenting EAEs laterally in the external auditory canal may be scanned

for assessment. The application of this digital approach to examining EAEs has seldom been applied in the human bioarchaeological literature and poses a new method for the differential diagnosis, assessment, and visualisation of these pathologies.

SESSION: Museums and Social Justice II

Katherine Larson | Corning Museum of Glass

Caitlin Clerkin | University of Michigan

Who Are Digital Museums For? Changing Audiences, Practices, and Priorities

Pinar Durgun

The Alexandria Archive Institute, San Francisco, California, USA.

Vorderasiatisches Museum, Berlin, Germany

For so long, museums had worried about discouraging physical attendance by making exhibits and programs fully available online. This changed forever with COVID-19. Physical museum visitor numbers have dropped due to closures, restricted travel and tourism, interruption of school visits, and people's fear of visiting crowded spaces. As a response to these changing circumstances, museums have increased their social media engagement and developed more online exhibits and digital programs, some of which aimed to foster diversity and inclusion. But have these digital resources created more welcoming museum spaces for everyone, physically or digitally? Who benefits from these digital resources? Who are they for?

According to the 2020-2021 NEMO Survey, 40% of the participating museums have noticed increased online visits since they have been closed. Going forward, visitors, educators, and researchers will continue to interact with museums digitally. But we will need to do so on sounder ethical and equitable foundations.

What can we, as scholars, educators, and museum professionals of ancient western Asia do? Based on the Digging Digital Museum Collections Project and my museum-based educational work, this paper suggests actions to make our digital museum teaching, research, and curation beneficial to audiences with different needs, interests, and priorities.

Beyond Dead White Guys: Provenance through the Lens of Social Justice

Katherine Larson

Corning Museum of Glass, USA

For the last 20 years, provenance research has been a buzzword in North American museums which hold ancient artifacts. Motivated by heightened awareness of active looting in the Middle East, media scrutiny, and changing professional ethics policies, museums have developed platforms, hired researchers, hosted colloquiums, and digitized documents on the hows and whys of provenance research. However, beyond legal, ethical, and professional standards, museums still struggle to make provenance interesting and relevant to broader audiences. Too often, provenance histories are oriented around narratives of rich dead white guys, thereby perpetuating a colonial mentality about who owns and interprets the past. At the same time, museum operations and their accountability to audiences have been shifting in profound ways—accelerated by the 2020 coronavirus pandemic and Black Lives Matter movement. Community advocates are asking for greater transparency about the nature of collections, how they are cared for and displayed, and who writes the narrative.

In this paper, I explore ways to tie together the threads of provenance research and social justice work. How can museums build on the important foundations of provenance research to explore

considerations such as power, consent, and neo-colonial legacies? In so doing, I argue, museum practitioners can better serve their audiences and continue the important work of understanding the histories of the objects in their collections.

Which Egypt? Bringing Social Justice to Egypt's Dispersed Heritage Heba Hesham Abd El-Gawad

Institute of Archaeology, University College of London, London, United Kingdom

Ever wondered how many Egypts there are out there? There is the Egypt imagined in museums, the one ending by the Byzantine period we read about it in Egyptology books, the eternal Egypt in official tourism campaigns, the one full of monuments void of people captured by Victorian and modern travelers, and the distorted Egypt in Western coverage of Middle Eastern news.

Thus, which and whose Egypt are we referring to when confronting museums' colonial practices and its legacies? In this talk, I will be reflecting on our UCL's AHRC funded Egypt's Dispersed Heritage project journey. Through a program of interventions co-created with communities in Egypt, the project attempts to find new ways of using museum's collections and archives to bring social justice to source communities by amplifying their views and responding to their various local emotional, cultural, social, and educational needs. These resources included street story telling performances, comic strips and graphic novels, and educational resources all in Egyptian Arabic. In this paper we outline the colonial practices and legacies shaping the perceptions and representations of ancient and modern Egypt from Victorian times through to the 21st century. Using some of our outputs as examples, we highlight how we are seeking to reshape these persisting colonial (mis)conceptions and categories of Egypt with contemporary Egyptian voices responding primarily to their needs, not just museums and academia. Museums have responsibility to contribute to source communities' lives today not only care for their objects.

Annexed Artifacts: Bias in the Public Display of Objects from the "Holy Land"

Morag M. Kersel

DePaul University, Chicago, IL, USA

Stereotypical museum culture focuses on objects in vitrines, showcasing the success stories while eschewing associated pesky problems related to geopolitics, ownership, provenance, and archaeological site destruction caused by demand for artifacts. This practice results in distorted displays, inaccurate interpretations of the material record, and injustice. There is a wealth of missing stories amidst the tendency to tell only certain aspects of the artifact's backstory. Museums have the potential to be relevant, socially engaged spaces, acting as agents of positive change and participation. Museums also have the potential to spread misinformation, alienate, and perpetuate injustice. All too often they strive to remain apart from the political and social issues that affect our lives, espousing a neutral stance that is a myth. Museums are not neutral. Injustices can and do occur when museums attempt to maintain an air of neutrality when they should be places of transparency and truth in their public display of the past. The use of the term "Holy Land" reflects a deliberate elision of regional states, which, in this paper, I argue results in the annexing of artifacts and the avoidance of issues related to the legacies of colonialism and imperialism—ultimately resulting in exhibition bias. The exhibition of archaeological artifacts from the

"Holy Land" offers a significant set of examples in curatorial decision-making, untold stories, breaches of public trust, and injustice.

A Proposal for Socially Engaged Artifacts

Yaroub Saad Al Obaidi

University of Pennsylvania Museum of Archeology and Anthropology, Philadelphia, PA, USA

After much research on the term "engagement" from the perspectives of different philosophers, museum professionals, and other thinkers, I have concluded that it is time to think critically about "socially engaged artifacts". This concept can be an effective component of Socially Engaged Art and, using its strategies and tools, can provide a magical touch to activate artifacts. As I read many theories of engagement, a question arose in my mind: Do we go to museums to view dead objects?

All too often artifacts seem to be disconnected from the present. I argue that artifacts in museums are not dead objects because they contain many stories that want to be told. When those stories are activated through guides, they increase the understanding of the objects and their relevance to communities. The relationship between past and present takes place in the minds of people living today, and the discovery of past lifestyles can always be made interesting. I propose that this concept be the beginning of a conversation that can develop into an effective key for engagement in the museum space.

It is the responsibility of the guide to engage the audience where they are and lead them to reach their own conclusions and connections with the past. Institutions can use socially engaged artifacts as the source of inspiration to create murals, workshops, conversations, and activate the museum's archives.

SESSION: So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy II

Alison Acker Gruseke | Union Presbyterian Seminary

The End of Life in the End of Days: Old Age in the Eschatological Context of Qumran

Alexandria Frisch

Ursinus College, Collegeville, PA, USA

Various Dead Sea Scrolls pay particular attention to the age of its members, excluding those of advanced years. Among these texts are those that legislate membership in the sect as it existed at Qumran, whereas other texts anticipate the future eschatological community, denying participation by the elderly. Together these scrolls reveal a glimpse into the lived experience of the sectarians and the ways that their bodies intersected with their beliefs about the soul, sin, purity and the divine.

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The Value and Depiction of Older Age among Neo-Assyrian Queens Amy Rebecca Gansell

St John's University, Queens, NY, USA

Being an old woman in ancient Mesopotamia was a precarious state. But a Neo-Assyrian queen was something beyond a woman. She embodied empire and lived in parallel to the divine. Her longevity was prayed for. Her beauty did not fade, and her identity was eternal. In terms of biological age, cuneiform and osteoarchaeological evidence confirms that some queens did live long. Many queens also survived their kings, and, instead of disappearing into the abyss of widowhood, some served as queen for the next king and/or transitioned into the respected role of queen-mother. Queens remained a presence in life and in death. A queen by definition was perfection incarnate. Her beauty, emulating that of goddesses, was constructed through the multisensory aesthetic of her dress: her crowns, jewelry, garments, cosmetics, coiffure, and fragrance. Thus, her beautiful appearance could be maintained and even enhanced through the accumulation of material wealth over time. In death, queens were buried in their regalia, identifying them forever in their tombs and in the afterlife. Although dress eternalized a queen's beauty, identity, and presence no matter how long she had sat upon the throne, the years of a woman who had achieved a long reign were fundamentally valued. In art, a queen's older age may have been acknowledged, even aestheticized, in the depiction of folds of skin beneath the chin. A fleshy, "double" chin may also have indicated plumpness, which was linked to fertility, including the symbolic fertility of the matron who had born children.

And Then We Laughed Our Heads Off: Sarah and Abraham's Aging Bodies (Gen 17, 18, 21) Amidst Biblical and Post-Biblical Discourses on Old Age

Alison Acker Gruseke

ASOR, USA

The psalmist describes seventy, sometimes eighty, as a human lifespan, but scholars reckon ancient lives at less than half that, with high infant mortality, the necessity of child labor, and few parents living to glimpse their children's adulthoods. Old age might be crowned by glory but also haunted by physical and social vulnerability (Meyers, 2013; Berquist, 2002; Sweeney, 2006). The paper examines Abraham and Sarah's desire for a (male) child, their laughter at the deity's promise of a son—memorialized in Isaac's name—and Sarah's practical attention to the problem of her and Abraham's aging bodies amidst the realities of age in the ancient world and modern scholarly awareness of age rank as a social construction.

Old Texts for Young Pupils: The Idea of Antiquity in First-millennium Scribal Education at Nippur

Enrique Jiménez

Ludwig Maximilian University of Munich, Munich, Germany

During the first millennium B.C.E., the corpus of literary texts copied by pupils in their elementary education varied starkly throughout Babylonia. In Babylon, the curriculum was heavily focused on what one might call the "Marduk syllabus": Enūma eliš, Marduk's Address to the Demons, Ludlul bēl nēmeqi, and literary prayers to Marduk are ubiquitous in school tablets from that city. Outside of Babylon itself, however, these texts were hardly ever used in elementary education, and instead students were assigned texts more suited to their geographical and theological circumstances.

In the city of Nippur, many elementary school tablets preserve extracts of literary texts that in most other cities were excluded from

the scribal curriculum. A first attempt at collecting, organizing, and classifying these tablets has yielded a total of 200 exemplars, the majority of which were previously unpublished. These tablets contain lexical and literary material copied by students in the first stages of their education: the literary material, in particular, has proven much more heterogeneous than previously assumed.

As will be argued, in many cases texts are chosen because of their actual or perceived antiquity. This is the case of some newly found extracts from, among others, Hammurapi's Law Code and Sargon's Birth Legend, both of which deal with kings from remote antiquity. Similarly, recently identified extracts of texts such as Atrahasis and Šimā milka may also reflect an antiquarian bias in elementary education, since these poems are elsewhere attested only sporadically in first millennium tablets.

SESSION: Archaeology of Egypt II

Krystal Pierce | Brigham Young University

The Emergence of Egypt's Southern City: Preliminary New Kingdom Findings in the Mut Precinct

Michael R. Tritsch

Yale University, New Haven, CT, USA

Continuing work initiated by Elaine Sullivan in 2005, this paper explores the archaeological excavation of Violaine Chauvet, located in the rear of the Precinct to the Temple of Mut in Luxor (ancient Thebes), Egypt, from 2018 to 2020. The Johns Hopkins University Expedition unearthed New Kingdom domestic material, preliminarily dated to the first half of the 18th Dynasty. The findings included a considerable number of articulated, mainly red-painted, mud brick features in close proximity to two column bases and a stone feature consisting of pavers and a standing sandstone architectural element with a cavetto cornice and torus roll. Originally interpreted as a small neighborhood chapel, the nature of this domestic environment has been revised based on new findings—more closely relating it to "reception rooms" in houses at Amarna and Deir el-Medina. The sandstone feature bears a striking likeness to a "divan," and the painted mud brick is consistent with niches and altars found in such rooms, where the color red appears almost exclusively on door frames and niches. However, the style of painting at Mut is distinctly unique. These findings provide new insight into domestic life and religion prior to the Amarna period and likely identify a local regional style in domestic architecture, possibly speaking to the representativeness of Deir el-Medina to other New Kingdom habitation sites.

A New Statue at Thmouis: Isis or of Arsinoe II?

Robert J. Littman¹, Jay Silverstein²

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2010 excavations at Tell Timai (Thmouis) revealed a diorite, headless statue dressed in a flowing dress, which was tied with the Isis knot. This paper will contend with the question of whether this statue depicts Isis or Arsinoe II dressed as Isis? Arsinoe II (ca. 318-270 B.C.) was the daughter of Ptolemy I and was married to her brother, Ptolemy II. Initial comparable analysis suggests a resemblance to a statue discovered in Alexandria's harbor which has been identified as Arsinoe II.

In addition to this similar statue, excavations at Thmouis reveal connections between Arsinoe II and the city where the statue under question was uncovered. Thmouis is the southern extension of the city

of Mendes where Ptolemy II (husband of Arsinoe II) placed the Mendes Stela in the Temple of Banebdjedet. This stela explains that in August 280 B.C.E. he visited Mendes to restore the Temple. The stela also shows Ptolemy II appealing to the Egyptian gods as the pharaonic celebrant of the cult and acknowledges Banebdjedet, elevating him to the kingship. Moreover, two mosaics found at Thmouis depict a pharaonic queen wearing a boat-shaped hat. This image likely depicts Arsinoe II. Finally, in 2011 reused remains of a temple, with a cartouche of Ptolemy II, were discovered at Thmouis. These finds create a firm connection between the couple and the city.

Across Egypt, Ptolemy II erected mortuary temples to worship his dead sister-wife as *Thea Philadelphus*—including the Arsinoeum in Alexandria and another in Memphis. He also created a festival, the Arsinoea, and a cult to establish the divinity of the Ptolemaic dynasty. Ptolemy II was trying to mitigate issues facing foreign Greek rule by depicting himself and his queen as Osiris and Isis. Arsinoe II's connections to Thmouis, Ptolemy II's use of divine image as propaganda, and the similarity of this statue to the one uncovered in Alexandria makes the identification of the statue as Arsinoe II (depicted as Isis) likely.

Identifying Inequities in American Egyptology: Initial Results of the Egyptology State of the Field Project

Anne Austin¹, Stacy Davidson², Emily Cole³, Jessica Johnson⁴, Sara Orel⁵, Kathleen Sheppard⁶, Jason Silvestri⁴, Jennifer Thum⁷, Julia Troche⁸, Clara Wright⁹

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Following the protests against the murder of George Floyd in the summer of 2020, many U.S. academics recognized the urgent need to reform diversity and inclusion in our fields. However, within Egyptology, basic questions still remain unknown: how many Egyptologists are there in the United States? How much representation do different groups have among current Egyptologists? What barriers do underrepresented groups experience, and how do we overcome those to have a more diverse field?

In order to address these questions, we began the Egyptology State of the Field Project. This project includes both survey and interview data aimed at identifying (1) the demographics of the field of Egyptology and the inequities faced by underrepresented populations; (2) roadblocks for graduate students and early career scholars on the Egyptological job market; and (3) experiences with accessibility, professional development, and completion/retention for graduate students and early career scholars.

In February 2021, we launched our project by offering an online, anonymous survey open to all self-identified current and former Egyptologists in the United States. We collected data from over 200 individuals covering demographic, educational, and professional information. In this paper, we present the initial results of the survey by identifying the demographic makeup of U.S. Egyptology in terms of age, race, ethnicity, gender, sexual orientation, and religion. We also present responses to questions about exclusion and discrimination in order to evaluate how to improve diversity and inclusion in our field in the future.

SESSION: Archaeology of Iran II

Kyle Gregory Olson | University of Pennsylvania

The Interactions of the Persian Gulf Northern Coast during the Fifth Millennium B.C. Based on the Excavations in Chahr-Rustai Site Mahsa Taheri

Islamic Azad University Central Tehran Branch, Tehran, Iran, Iran, Islamic Republic of

Very few pre-historic sites have been identified in Bushehr Province and in general on the northern coast of Persian Gulf. In fact, most of the discoveries are more recent than Elam Period, mostly historical and Islamic Period. The Chahr-Rustai site is located beside a village with the same name, in region of the Hayat Davood District, Genaveh County. The site is one of the few identified and studied prehistoric sites in Bushehr Province. The first season of archeological excavations in this site was conducted in June 2012 in order to determine the frontages and stratigraphy; the results revealed a seasonal and temporary settlement of the fifth millennium B.C. and absolutely comparable with the middle Bakun culture on the Persian Gulf northern coast.

The Seljuk/Early Islamic? Metalwork Hoard from Astarabad, North Of Iran: Preliminary Rescue Excavations Report in the Religious Building

Mohammad Esmail Jelodar¹, Habib Rezaee²

¹Associate Professor, Department of Archaeology, Faculty of Literature and Humanities, University of Tehran, Tehran, Iran, Islamic Republic of. ²Archaeologist of Golestan Cultural Heritage Organization, Gorgan, Golestan, Iran, Islamic Republic of

After several discoveries of metal hoards from Nahavand, including (a) a silver hoard in the National Museum of Iran, (b) the Harari Collection in the Memorial Institute of L.A. Mayer (both with unknown provenance), (c) the Shimkent/Chimkent Collection related to Sayram SU, and (4) the metal objects from Meymaneh in Afghanistan, the first invaluable hoard of metal objects was found in modern city of Gorgan (Ancient Astarabad) during a rescue excavation of a religious building. In the center of the trench, (depth: 245cm), a hoard hidden in a rectangular space, measure 186×110 cm, was unearthed.

This hoard includes some 400 bronze objects, which are mainly related to light bronze objects. These objects include oil lamps, lampstands, candlesticks consisting of base, shaft, tray and other components, oil container, vessels related to the light, different types of decorative handles, and evidence of metalworking including two partite metal molds, oil lamp bronze molds and so on.

The only entrance of this hidden storage room was sealed and capped by a large stone slag, and the whole structure was covered by cobbles placed in a clay mortar. Although the western part of the storage area has been damaged by workers, there was evidence of metalworking in the shape of melted materials and slags. This paper is a preliminary report on the context of the hoard and its contents. Preliminary observations indicate that this hoard, containing highly valuable and luxury objects, was hidden at once for unknown reasons, may be for subsequent melting.

Deh Luran Archaeological Landscape: First Assessments Based on Remote Sensing and Ground Observation

Mitra Panahipour¹, Mohsen Zeynivand², Amir Khanmoradi³

¹New York University, USA. ²University of Tehran, Iran, Islamic Republic of. ³Bu-Ali Sina University, Iran, Islamic Republic of

This paper presents the results of the first remote sensing-based assessment and the first season of revisiting field survey in the Deh Luran archaeological landscape. The plain and highlands of Deh Luran were part of one of the earliest systematic archaeological investigations in the Near East. Those first efforts resulted in significant discoveries about the development of social complexity, early agricultural settlements, water management techniques, and highland-lowland interactions. Nevertheless, Deh Luran—along with its adjacent landscapes in Iran and Iraq—has unfulfilled potentials, particularly concerning applications of improved survey methods, chronological understandings, and theoretical approaches. After a long halt to the research in Deh Luran and with the growth of new techniques in landscape studies, this region is now providing a perfect environment to address questions about settlement dynamics, different patterns of land-use, and urban-hinterland connections from prehistory to the Medieval periods.

A History of Heritage Diplomacy: American Archaeology in Iran, ca. 1930 to Today

Kyle G. Olson

University of Pennsylvania, Philadelphia, PA, USA

American archaeological expeditions have been an important link between the United States and Iran for over 100 years. While there have been few official channels of diplomacy between the two countries for the past four decades, archaeology has historically been among the most robust modes of cultural and institutional ties between these two nations otherwise at diplomatic loggerheads. Currently, however, due to American foreign policy, American archaeologists are mostly prevented from accessing field sites in Iran, and Iranian archaeologists face extraordinary challenges in accessing the American museum collections that hold massive assemblages of objects of Iranian heritage. Together, these twinned conditions of restricted access have led to the near death of the once-vibrant field of Iranian archaeology in the U.S. and have left Iranian archaeologists bereft of crucial data for understanding some of the country's most important heritage sites and landscapes.

Here, I focus on the expedition records and personal correspondence of American archaeologists active in Iran at university and fine arts museums; historiographical works, including articles and monographs written in both English and Persian; and career-trajectory oral history elicitations with Western archaeologists active in Iran from the 1960s to today and with Iranian archaeologists holding academic posts in the US. These documents and eyewitness testimonies illuminate how these institutions and their representatives undertook the practical activities of heritage diplomacy in the past and how we might yet again look to the past to bring about a better future.

THURSDAY, DECEMBER 9, 2021
12:00–1:30pm (EST)

SESSION: Posters

Sarah Wenner | University of Cincinnati

Hunting along the Tigris: New Interpretations of Earthworks and Monumentality

Francesca Simi¹, Paola Sconzo², Amir Ahmadpour²

¹Università degli Studi di Udine, Udine, Italy. ²Universität Tübingen, Tübingen, Germany

On the left bank of the Tigris in the modern Kurdistan Region of Iraq, in an area today partially flooded by the Mosul Dam reservoir, lies an enigmatic monumental enclosure known in the literature as the “Tigris Wall.” Before its partial submersion under the waters of the modern lake, the large L-shaped embankment, about 4 by 4 km long, enclosed an area of ca. 1600 ha, overlooking the Tigris and its alluvial plain. By means of a holistic strategy that includes different levels of analysis (remote sensing; pedestrian and UAV photogrammetric surveys; excavation; and settlement pattern analysis), this paper addresses the structure, its context and environment. Relying on the results of this multi-disciplinary approach, we present an updated discussion of the structure’s possible functions and interpretations. Parallels from North Mesopotamia and neighbouring regions are used to suggest that the Tigris Wall may be the first archaeologically known hunting park in the region, probably dating to the Late Sasanian or Early Islamic Epoch.

The ArchaeoTrail App

Stephanie Döpper, Matthias Ludwig, Iwan Gurjanow

Goethe University, Frankfurt am Main, Germany

Archaeological sites offer valuable insights into the past. Without a good presentation, however, it is difficult to communicate this knowledge to the general public. The newly developed ArchaeoTrail App does just this and offers the opportunity for visitors to discover the archaeological sites on their own.

The ArchaeoTrail App is based on the successful two-folded system of MathCityMap (www.mathcitymap.eu), which entails a web portal and an actual app for mobile devices. The portal (www.archaeotrail.org) aims at the scientists and research institutions that want to generate archaeological tours for sites all around the world. With just a few clicks, texts, photos, audio files and videos can be uploaded in the web portal. By doing so, a new tour is automatically created. In the smartphone app, visitors are guided by their GPS along a suggested route to the various stations of the tour. They receive brief information in the form of texts and multimedia and, for school groups and families, small quizzes are even provided.

ArchaeoTrail was initiated and is currently run by Stephanie Döpper in collaboration with Matthias Ludwig and his team, who are responsible for the project’s technical realization. The project is sponsored by the Volkswagen Foundation within the framework “World Knowledge – Structural Support for ‘Rare Subjects.’”

The Use and Transformation of the Smiting Pose during the Aegean Bronze Age

Tenninger J. Kellenbarger

Temple University, Philadelphia, PA, USA

This research will focus on the use of the smiting pose in the Eastern Mediterranean during the Bronze Age. This poster will focus

on the transference and transformation this pose underwent between the Aegean world and Pharaonic Egypt. This study will track the pose’s use, transference, and importation to the Aegean world, along with changes made in its form as the pose is exported back to the Eastern Mediterranean. Presently, the smiting pose in its developed form is only seen in the Aegean on signet rings, seals, and sealings during the Late Minoan I-II period with few later examples dating to Late Helladic III. Once the use of the smiting pose of man versus man declines in the Aegean, there is a noticeable change in the representation of the smiting Pharaoh in Egypt. The stiff image of the smiting Pharaoh in Egypt after Late Minoan II (roughly dynasty XVIII in Egypt) begins to change and becomes reminiscent of how the Aegean’s structured this pose. The following periods in Egypt continue this tradition, with examples extending into the Iron Age. A digital timeline showing the stylistic development of the smiting pose is being created to supplement the current research and subsequent dissertation. The timeline will be accessible via a QR code for the viewers.

The Most Important Minoan Woman

Louise A. Hitchcock¹, Madaline Harris-Schober²

¹University of Melbourne, Parkville, Victoria, Australia. ²University of Melbourne, Australia

This poster presentation considers the role of female gender and power through the interpretation of a diminutive bronze figurine buried in a votive pit at the Minoan town site of Palaikastro in east Crete in the Neopalatial or Second “Palace” Period (ca. 1700-1450 B.C.E.). Found over one hundred years ago, the figurine has attracted little attention beyond brief publications of drawings and photos, with a brief description. I intend to argue that far from being obscure, she represented fame and power in Minoan times, despite a lack of individuating features and a diminutive size of just 4.5 cm in height. The figurine was found in a pit containing evidence of feasting and sacrifice in the form of bovine bones and horn cores, along with other votive objects such as clay bull heads and clay lamps. Although her facial features were not well defined, she is unusual for being the only bronze figurine from Crete with her hands placed on her hips, a gesture associated with high status on seals and sealings. She is also one of only two female bronze figurines wearing jewelry in the form of a necklace, a feature more common to male figurines of the period. The nature of the deposit, gesture, and find spot suggests that she was far more important than originally believed, perhaps the most important Minoan woman in Crete.

A New Archaeological Map of Central Asia in Antiquity

Zachary Silvia

Bryn Mawr College, Narberth, PA, USA

This poster presents the project “An Archaeological Map of Central Asia in Antiquity” (AMCAA), a new archaeological gazetteer for Hellenistic Central Asia that draws together known sites dating to the Hellenistic, post-Hellenistic, and Kushan period. Presently, there is no single resource, in print or digital format, that provides a comprehensive, multi-regional overview of known Hellenistic sites in Central Asia. This new archaeological map will provide students and scholars of Hellenistic Central Asia with an easy geospatial referencing system for the advancement of future work in the field. This database provides a single, open-source resource for known sites, considering all published Soviet, post-Soviet, and European archaeological surveys of Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan. Approximately one thousand Hellenistic through Kushan period sites

have been meticulously mapped in this database thus far, with several hundred more to be added by project completion in Summer, 2022. AMCAA will be published as an open-source digital format online for immediate user download as a GIS shapefile, hopefully by the end of 2022. Users will be able to engage with data that includes site names, geographic coordinates, a new site referencing system, fieldwork history, fieldwork strategy, site specific bibliographic information, general chronologies from the 4th century B.C.E. – 4th century C.E., and limited typological information. This project is developed and undertaken by Zachary Silvia alongside his doctoral research and facilitated by a 2020-21 Digital Scholarship Graduate Fellows award from Bryn Mawr College.

Middle Bronze Age Agriculture at Tell el-Hayyat, Jordan

Steven Porson¹, Patricia Fall¹, Steven Falconer¹, Suzanne Pilaar Birch², Elizabeth Ridder³

¹The University of North Carolina at Charlotte, Charlotte, NC, USA.

²University of Georgia, Athens, GA, USA. ³California State University San Marcos (CSUSM), San Marcos, CA, USA

Carbonized cereal grains from approximately 120 samples from the Middle Bronze Age site Tell el-Hayyat in Western Jordan (site range 2000-1600 cal B.C.) allow us to infer the cultivation strategies implemented by ancient farmers. We compare the floral assemblages between archaeological contexts and across four distinct occupational phases. The Middle Bronze Age is marked by a period of urban renewal following the 4.2 ka B.P. regional drought and the subsequent abandonment of Early Bronze settlements. Thus, this study provides a unique insight into the regional agriculture of this time. At Tell el-Hayyat we see a slow shift in crop management over time towards a decline in hulled barley (*Hordeum vulgare*) and a potential increase in emmer wheat (*Triticum dicoccum*). This agrees with our previous findings from Tell Abu en-Ni'aj, Jordan, which suggest the predominance of hulled barley during the late Early Bronze IV.

'Let's Talk about Clay, Baby': An Investigation into the Origins of the Linear B Administrative Documents through the Application of Phylogenetic Theory

Emily S. M. Tour

University of Melbourne, Melbourne, Victoria, Australia

During the Bronze Age (ca. 1900-1200 B.C.E.), three administrative scripts were employed in the Aegean – the undeciphered Cretan Hieroglyphics (CH) and Linear A (LA), which both centered on Crete, co-existing until CH's disappearance; and the later Linear B (LB), representing an early form of Greek, found predominantly on Crete and mainland Greece.

An increasing number of scholars have argued for a strong affinity between the various administrative document types associated with CH and LB – a problematic proposal, given the multi-century separation of the two systems in the archaeological record, and the wide acceptance that the LB script itself was adapted from the more chronologically proximate LA.

As the chronological gap between LB and CH cannot be closed using current evidence, a new approach is required to elucidate whether CH or LA were more likely to have inspired the LB documents.

This poster will introduce a methodology drawing from the biological theory of phylogenetics. Focusing on close comparison of various physical ('phenotypic') characteristics, this method facilitates the assessment of whether similar document types are 'genetically'

related, or if they instead exhibit similar characteristics due to the phenomenon of convergent evolution.

Results from case studies piloting this methodology will also be presented. As the findings demonstrate, there is stronger evidence to support the LB documents having directly 'inherited' components from LA (albeit with modifications), than from CH.

This approach offers a new way of assessing the potential interrelationships between ancient administrative systems, particularly when traditional forms of evidence are lacking.

Aspects of Creativity in the Assyrian Dream Book

Matthew C. Ong

University of California, Berkeley, Berkeley, CA, USA

Working with the framework of Conceptual Metaphor Theory and cognitive creativity research, I argue that the Assyrian Dream Book contains a number of interesting semantic properties reflecting what is known as 'exploratory creativity.' This kind of creativity reflects the idea of a creator fashioning an object by metaphorically traversing a creative path in the space of conceptual possibilities. I argue that the features in the Dream Book which illustrate this creativity are spelled out in omen prodoses, and include conceptual elaboration and abstraction, contextual frame shifting, and a quasi-random enumeration of elements in a given knowledge domain. I also argue that the Dream Book can be seen as a series of blocks of omens which instantiate cognitively rich semantic domains and which are linked by principles of creative association. Each block in turn is generated by a kind of 'exploratory walk' that capitalizes on the hermeneutic techniques familiar to advanced cuneiform scribes. The arguments I present should be of interest to Assyriologists because they indicate Akkadian omen collections reflect elements of creativity usually reserved for fictional narrative. Rather than thinking of an Akkadian lexical list or omen compendium as an exhaustive survey of a given domain of knowledge, we should recognize within it a heuristic exploratory principle akin to what is found in creative story-telling.

Excavating Site 12 in Timna Valley: More Light on (Edomite?) Copper Smelting in the Turn of the 1st Millennium B.C.E.

Sarah J. Richardson¹, Willie Ondricek², Erez Ben-Yosef²

¹University of Manitoba, Winnipeg, MB, Canada. ²Tel Aviv University, Israel

The copper rich Timna Valley, located north of Eilat, Israel, covers roughly 80 square kilometers and was the source of copper that was traded widely in the Mediterranean Basin throughout the early Iron Age (~1200-800). Archaeological excavations and surveys in the Timna Valley have been carried out by the Central Timna Valley Project of Tel Aviv University since 2012 (<https://www.tau.ac.il/~ebenyose/CTV/>). These investigations have focused on multiple copper smelting camps as well as mines where the copper ore originated.

During the 2020 excavation season (February 7-18 and December 20-31), Site 12 was excavated for the first time. Five areas were opened, three to explore crudely built architectural remains visible on the surface and two to examine depositions of smelting waste and their relation to nearby architecture. Among the finds are multiple short lived organic samples (seeds) that yielded carbon 14 results and four sets of human remains. The seeds provided 14C dates that place the occupation of the site in the 11th-10th centuries B.C.E., well after the period of Egyptian hegemony in the region. These results strongly support the paradigm that the most intense exploitation of the valley's copper ore occurred during the turn of the 1st millennium B.C.E., when

the local tribes of the Arabah and neighboring regions coalesced into a political unit (Edom) that orchestrated copper production and trade. The finds shed more light on the organization of production, technological achievements, burial practices and more.

Indicators for the Downward Trend in Ancient Studies in the USA

David Danzig, Valeria Zubieta-Lupo

Save Ancient Studies Alliance, Teaneck, New Jersey, USA

Many people involved in Ancient Studies academic fields perceive a downward trend in enrollment in and university support for Ancient Studies, and more urgently in the recent closing of some departments. Although data is available, little research has been done on this topic to date. As part of the new nonprofit organization, Save Ancient Studies Alliance (saveancientstudies.org), we have undertaken a project to research this, based on primary data that is publicly available in the United States. In the vein of the American Academy of Arts & Science's "Humanities Indicators" project, we analyze data that serves as a proxy for overall trends in Ancient Studies. To date, we have completed analyses of the indicators of ancient language course enrollment and Ancient Studies degree completion.

Our results regarding ancient language course enrollment show that the overall decline in language course enrollment at US colleges has been acutely evident among ancient languages. Using data from the Modern Language Association's "Language Enrollment Database, 1958–2016," we found a precipitous drop in recent years, 2006–2016. Similarly, our analysis of Ancient Studies degree completion data from the National Center for Science and Engineering Statistics shows a general decline. From 2007–2017, the number of completions in undergraduate degrees dropped by 30%. Our projections for the next decade are disconcerting.

The purpose of our work is to put numbers to this steady and silent crisis in Ancient Studies fields, and to identify clear indicators of the decline to help policy makers and institutions in finding solutions.

Investigating Changes in Human Diet At Tell Kamid El-Loz, Lebanon Between the 2nd And 1st Millennium B.C.E. through the Analysis of Plant Microremains From Dental Calculus

Shira Gur-Arie, Philipp Stockhammer

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Tell Kamid el-Loz, identified as the site of Kumidi in the Amarna Letters, is located in the Lebanese Beqa Plain on the central trade axis between the southern Levant and the early urban centers of Syria. Human settlement on the tell flourished during the Middle (ca. 2000–1600 BC) and Late Bronze Age (ca. 1600–1200 B.C.), as attested by the temples and palaces uncovered during excavation and lost its importance in the Iron Age (1200–600 B.C.), the most important find in the subsequent Persian period (600–330 B.C.) being a large cemetery.

Approximately 108 burials of individuals dated between the Middle Bronze Age and the Persian period were uncovered at the site. Some of these burials had previously been investigated within the framework of the Max Planck Harvard Research Center for the Archaeoscience of the Ancient Mediterranean (MHAAM) at the Max Planck Institute for the Science of Human History in Jena (MPI-SHH) to identify population genetic developments, biological relationships between individuals, their mobility, and diseases. In addition, many of the individuals were radiocarbon dated. Of these burials, fifteen usable samples of dental calculus from individuals dating to the Middle Bronze Age through to the Persian period were studied using phytolith

and starch analysis to understand the diversity and dynamics of individual human nutrition. Here, I will present the initial results of the micro-remain analysis carried out on dental calculus from individuals at Kamid el-Loz and outline the next steps for the project.

Sumerian Networks Jupyter Book

Adam Grant Anderson, Niek Veldhuis

University of California, Berkeley, Berkeley, CA, USA

The goal of the Sumerian Network project has been to build reproducible socio-economic networks from the Ur III textual archives housed in online databases (e.g. ORACC and BDTNS). We applied novel computational methods for name disambiguation, and in the absence of 'gold-standard' data, we built a series of networks based on name instances in textual attestations for c. 15,000 documents from ancient Puzrish-Dagan. This research project has brought together archaeologists, cuneiform specialists, experts in Computational Text Analysis and Natural Language Processing from around the world. Current results for reproducible network models are available in Jupyter Notebooks [<https://github.com/niekveldhuis/Sumerian-network>] and Gephi Networks [<https://github.com/admnrdn/Gephi>].

Each of the network graphs reflect the roles and titles of each named entity within their social, institutional, geographical, and temporal substrates. These networks of micro-economic transactions are measured statistically, leveraging mathematical formalization and geo-spatialization for macro-economic models. Current results have yielded a century of "stock market" exchanges and a social-spatial map of the individuals and institutions in the historical annals of the Ur III texts. The combination of these elements has enabled the progress toward unsupervised disambiguation of the Ur III prosopography, which in turn reveals latent organizational structures, resulting from the sum of individual actors, institutions, and geographic names, when modeled both spatially and temporally. The repository for the ongoing research is hosted by GitHub with an interactive Jupyter Book [<https://niekveldhuis.github.io/sumnet/welcome.html>].

The Efficiency of GPR Survey: In the Case of Excavations at Tel Rekhes

Hidemasa Hashimoto¹, Toru Kishida¹, Hisao Kuwabara¹, Shuichi Hasegawa²

¹Tenri University, Tenri, Japan. ²Rikkyo University, Tokyo, Japan

Recent developments in technology have brought various innovations to conventional archaeology. One technology in particular is Ground Penetrating Radar (GPR) survey. This new tool gives surveyors the ability to investigate underground structures without having to dig. This poster presents the results of the GPR surveys conducted in 2015–2016 at Tel Rekhes, a site in the lower Galielle Region of Israel, and it compares them with the results of the excavations of the site in order to examine the efficiency of GPR surveys.

During the second phase of excavations (2013–2017), GPR surveys were conducted in order to complement and expand our limited excavation area. Through GPR, we were able to accurately locate the northeastern corner of the building complex. A GPR survey was also conducted on the lower shelf of the mound, where large settlements of the Late Bronze to the Early Iron Age were expected from our previous excavations. The results of one of the GPR surveys was consulted for the 2019 field season and the choice of excavation area was based on that information. Although excavations at the site are

still underway, several walls and a large space have been successfully uncovered, as expected from the GPR survey.

The case at Tel Rekhes demonstrates that a GPR survey before excavation can efficiently aid in the excavation of a site, and that an excavation can also verify the credibility of GPR data. By synthesizing both results prudently, GPR will be of great help to small-scale excavation teams.

Remote Sensing and Remote Work: New Insights into the Social and Scientific Structure of Conflict Archaeology

Michelle Fabiani¹, Fiona A. Greenland²

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Remote sensing technologies have long provided archaeologists with opportunities to conduct off-site and virtual research and collaboration. Developments since 2016, including political instability in the Middle East, intensifying climate change, and the global pandemic have sparked new questions about the scientific effectiveness of remote collaborative structures. They have also highlighted the intersecting needs of archaeologists as they balance work and personal life. What do we know about the scientific robustness of new work scenarios in archaeology? Based on in-depth interviews with archaeologists who collaborated remotely during an intense period of the Syrian civil war ("conflict archaeologists"), we address this question and illuminate the processes and structures they used to ensure scientific reliability and robustness in their work. The findings have implications beyond conflict archaeology, and for the wider landscape of archaeological collaborative structures adapting to remote work and remote technology.

Illuminating Civilian-Military Relations in Roman Nabataea: An Analysis of Ceramic Oil Lamps from Humayma's Roman Town

Lilly Hickox

University of British Columbia, Vancouver, BC, Canada

The archaeological site of Humayma, in Jordan's Hisma desert, has a long history of permanent settlement, beginning with the Nabataeans, followed by Roman, Byzantine, and Islamic populations. Upon the annexation of the Nabataean Kingdom in 106 C.E. by Emperor Trajan, the Provincia Arabia became part of a pan-Mediterranean Roman culture. In the second century C.E., a Roman fort and town emerged at Humayma and the nearby King's Highway was renamed the Via Nova Traiana.

In the author's 2020 study of the ceramic oil lamp corpus excavated by J.P. Oleson from Humayma's Roman Fort, few Roman-style lamps were identified, while the Nabataean lamps predominated and continued in layers as late as the Byzantine period. To understand the significance of these lamp trends at Humayma and in the greater framework of Nabataean and Roman relations in the region, the author, with materials provided by M.B. Reeves, expanded the analysis to the excavated structures outside the fort. Focusing on the bathhouse, domestic structures, and the Nabataean and Roman shrine, this 2021 remote project involved the creation of a catalogue and analysis of over 150 ceramic oil lamp fragments and 16 complete lamps from the 1995-2012 excavations. This poster summarizes the ceramic oil lamp findings and considers the cultural dynamics between the Roman military and local civilian populations by comparing the ceramic oil lamp collections from these areas and the fort. This project was generously funded by ASOR's Student Summer Stipend program.

Using Pyrite as a Proxy for Tracking Climate and Sea Level Changes for the Last 8,000 Years: A New High-Resolution Record from the Kebara Wetland, NW Israel

Loren Clark^{1,2}, Kendall Mahony³, Gilad Shtienberg^{1,2}, Richard Norris³, Assaf Yasur-Landau⁴, Thomas E. Levy^{1,2}

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Assessment of high resolution paleoenvironmental fluctuations are critical for analyzing major challenges that coastal communities face due to climate and sea-level change. Catchment basins possess high potential for investigating such changes due to their ability to capture the environmental history through the deposited sediments. This project analyzed a wetland sequence from the narrow connector along the western arm of the Fertile Crescent that contains an expanded sequence of the environmental history of this culturally significant region. The extracted core (KBMN3) extends up to 15 meters in length, with alternating gray-brown clayey-silt units with dark gray-black clayey-silts. The units are constrained through ¹⁴C and OSL dating between ~8000 and 2000 years before present, representing a high-resolution dataset for the coastal plain in NW Israel. Microscopic analysis of sediment samples has also yielded variations of organic, geologic, and mineralogical material assisting in the environmental interpretation. One such indicator used for the temporal analysis is pyrite, which forms in saline environments, and can be linked with fluctuations in salinity, sea level changes, and plant growth. Results show pyrite in organic-rich deposits, whereas little to no pyrite is found in the intervening paleosol deposits. In conjunction with correlative climate data from nearby sites, like Soreq Cave, as well as Mediterranean Sea core 9509, the pyrite from KBMN3 can provide a regional dataset for environmental change. This regional environmental record could be then used for understanding when the Kebara wetland was an available resource for inhabitants along the Carmel coast during the Pre-Pottery Neolithic-Iron Age.

Griffin Objects in Late Bronze Age East Mediterranean: Context, Material and Meaning

Emily L. Simons

University of Melbourne, Melbourne, VIC, Australia

Griffins became an increasingly popular motif throughout the Late Bronze Age (LBA), c. 1600–1150 B.C.E., in the eastern Mediterranean. Although the main iconographic features (a lion's body and predatory bird's head and wings) remained remarkably stable during this period, considerable contextual, spatial, and temporal variation occurred. While several studies have investigated key characteristics of griffins, work remains in tracing patterns of use, material and distribution. This poster presents a preliminary analysis of LBA griffins, focusing on different contexts and media. Due to the importance of context, this study excludes unprovenanced objects that can conceal (or worse, distort) patterns in the data. One initial key observation is the high incidence of objects bearing griffin motifs in mortuary contexts. This finding may indicate a preservation bias; however, it may also suggest that the use of griffins in funerary customs had symbolic importance. Images of griffins in a range of materials (e.g., semi-precious stones, frescoes, gold) are also found in authoritative and administrative

contexts such as monumental buildings or tholoi, demonstrating the varied roles of the griffin. Regional clusters centred on Knossos, Mycenae, Pylos, Megiddo, and Enkomi reflect the motifs widespread popularity as a form of visual display. The analysis of the context and media of griffin objects provides new insights into the role of these composite creatures during the LBA.

Tell Fara South: Re-examining a Century-Old Excavation

Paula Phillips

University of Melbourne, Melbourne, Victoria, Australia

Tell Fara South is an archaeological site on the Nahal Besor (Wadi Ghazze) between modern day Gaza and Beersheba in southern Israel. Excavations on behalf of the British School of Archaeology, under the direction of Flinders Petrie, were carried out over three and a half seasons from 1927-1931. Subsequent work at the nearby site of Tell el Ajjul (1931-1934, 1938) however, resulted in much of the Fara material relocated to museum basements and storage facilities where it has remained largely unexamined and unpublished. In an effort to address this issue, the 're-examining Fara' project is currently undertaking a re-assessment of the Middle Bronze to early Late Bronze material to better understanding the nature of the site and its function ((1800-1550 B.C.E.). The dataset, recovered from two settlement areas on the mound itself, the remains of a large monumental six pier gate, and around eighty tombs from four of the cemeteries in the surrounding plain, consists of around two thousands objects, both locally made and imported. To date, the material hints at a more significant role for the site than previously suspected and an involvement with Cyprus, different to most of the surrounding sites.

The Magic of Motherhood in Chalcolithic Kissonerga-Mosphilia

Natalie G. Boyd

University of Wales Trinity St. David, Lampeter, Ceredigion, United Kingdom

The Lemba Archaeological Project oversaw excavations at Kissonerga-Mosphilia between the 1970s and 1990s, revealing an important Chalcolithic settlement (c.4000-2300 B.C.). In 1987, near the wall of building 994, a pit (unit 1015) was excavated and found to contain a unique assemblage of objects. These included a ceramic model of a house, ceramic and stone figurines, stone tools, flint, shell and bone, with further ceramic vessels and bowls, fire-cracked stones and pebbles, in soil and ash. This assemblage is rare as it is related to a settlement and not a mortuary context. Studies of the stone and ceramic figurines have established a link with pregnancy and childbirth. The house model and figurines showed deliberate damage, and the bowl had been plastered, indicating the objects were of value and power, requiring concealment and the closure of their 'life.'

This poster considers the assemblage as a whole, to determine not only the function of the items within the assemblage, but to seek out the rituals and superstitions associated with childbirth in this time and place. A better understanding of these objects as one group allows us to better appreciate the range of sensory experiences of those who came into contact with the objects and therefore the power and magic these objects held. From here we have a better concept of how the expectant mothers sought to shield themselves and their babies from the dangers of parturition and why the objects had to be so carefully removed from society once their time was over.

A Geospatial and Typological Investigation of Late Antique Coins From Umm el-Jimal, Jordan

Neil I. Van Kanegan

Calvin University, Grand Rapids, MI, USA

This poster reports on a project that categorizes and classifies late antique coins from the site of Umm el-Jimal, Jordan. These coins are classified on the basis of figures, inscriptions, and people depicted on the obverse and reverse of the coin, the age of each coin, as well as the denomination of the coin. Geospatial analysis via ArcGIS is accomplished by mapping each coin with reference to mintmark and the on-site location where the coin was found. It is argued that this location-based analysis can help to determine patterns of trade and commerce within the eastern provinces of the Roman Empire, the Eastern Byzantine Empire, and the Umayyad Caliphate. Evidenced from coins found on-site, commerce at Umm el-Jimal spanned from the first century B.C.E. to the seventh century C.E.

This project builds on a background of applying geospatial methods and technologies to the field of numismatics in an ancient/archaeological context. Additional material that lays the groundwork for this project includes published research investigating commerce, trade, infrastructure, and development in the ancient/early medieval near east, as well as recent research that has used Umm el-Jimal's ceramic corpus to investigate the site's connection to economic and trade networks. This project also seeks to delineate areas of economic significance within the Umm al-Jimal complex by means of mapping clusters of coins found on site and correlating the locations of these clusters with ages and themes present in the coinage. This kind of categorization and investigation also contributes valuable information about the social class and wealth of the occupants of this former Roman trading post.

Prestigious Wood Imports and Timber Use in the Late Byzantine Village at Ein Gedi, Israel

Brita Lorentzen¹, Gideon Hadas², Orit Peleg-Barkat³

¹Cornell University, Ithaca, New York, USA. ²Dead Sea-Arava Science Center, Israel. ³Hebrew University of Jerusalem, Jerusalem, Israel

We present results from analyzing a wood assemblage from a Late Byzantine village in the Ein Gedi oasis. Wood remains were collected by the Ein Gedi Oasis Expedition in 2013-2019 from eight structures and an alley, and consist primarily of collapsed roofing material, household objects, and furniture, which were destroyed with the village in the mid-6th century C.E. Thirty-one samples are worked wooden elements, including pegs, tenons, and the wooden frame of a bed or stool.

Identified taxa include local plants (e.g., date palm, tamarisk, acacia, willow) from the desert and within the oasis, and native and cultivated Mediterranean taxa (e.g., pine, jujube, cypress, walnut) from nearby in the Judean Hills. Several high-quality imported timber taxa are also present, including cedar and boxwood from the northeast Mediterranean and false ebony (*Dalbergia melanoxylon*) from the Horn of Africa, likely transported to Ein Gedi via the Red Sea. This is the first confirmed identification of false ebony wood remains outside of North Africa during the Roman-Byzantine Periods and in Israel during any period in antiquity.

Our analysis demonstrates that Ein Gedi's inhabitants were part of a vast network of long-distance maritime and overland trade during the Late Byzantine Period, which linked them not only with prestigious wood resources in both the Mediterranean and sub-Saharan Africa, but also to skilled and specialized craftsmen, who shaped these

materials. Documentation, including ongoing 3D scanning, of the site's worked wood remains further provides rare new data on Byzantine-era furniture and woodworking techniques.

Using Cultural Packages to Identify Iron Age Occupants of Surviving North Sinai Egyptian Fortresses

Stuart Ibrahim

University of Melbourne, Melbourne, VIC, Australia

My research analyses the fate of the northern Sinai / southern Levant Egyptian fortresses ending at Gaza (the Ways of Horus) between the Bronze Age collapse and the Levantine campaign of Shoshenq I (c. 924 B.C.), primarily using the Third Intermediate Period Bubastis Portal temple relief at Karnak, contemporaneous archaeological and textual evidence in the region, and an in-depth timeline to provide an alternative perspective.

The limited textual and archaeological evidence, the Medinet Habu Battle relief and Papyrus Harris, dated to the 20th Dynasty reigns of Ramesses III and IV, show that this fortress chain lasted until after Ramesses VI. The 21st Dynasty Papyrus Golenischeff and the archaeological evidence confirm that two to four sites survived in the eastern Nile Delta, while other cultural groups resettled the remaining sites in the southern Levant.

Which cultural groups are present in the Levantine sites, though, is not yet fully established. The archaeological evidence confirms that the Philistines and Canaanites had varying degrees of influence in this region. Part of my analysis has been to ascertain how best to interpret the limited evidence available. While I previously addressed this topic at the 2020 ASOR Conference poster presentation, my analysis of Philistine and Canaanite cultural packages forced me to refine my criteria for distinctly Philistine and Canaanite material remains and how much they reflect the presence of either cultural group. In that of this, my current presentation will provide my updated results.

Anaharath, Amarna Letters (EA237-239), and Tel Rekhes

Takuzo Onozuka¹, Hidemasa Hashimoto², Hisao Kuwabara², Shuichi Hasegawa³

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The town of Anaharath, mentioned in Egyptian historical records in the 15th century B.C.E., is thought to have been located north of the Jezreel valley in the southern Levant. It is included in the town list of Thutmose III and is known as one of the targets of the second campaign of Amenhotep II.

It was Aharoni who identified Anaharath with Tel Rekhes about half century ago. Then in the 2000s, interdisciplinary research on the Amarna Letters conducted by Tel Aviv University showed that the three tablets (EA237-239) probably originated from Tel Rekhes based on their petrographic observations. Although these views have been generally accepted, information on the site itself is based on the old survey results and needs to be updated in light of the recent excavations.

In this poster, we will present the Late Bronze Age remains excavated in 2008 and 2016 by the current project and reconsider the site identification. The excavations have only partially reached the Late Bronze Age strata, due to the later period accumulation. Nevertheless, it was confirmed that the settlement would have been surrounded by a perimeter wall in the beginning of the Late Bronze Age, and that a settlement of the Amarna period existed on the site. The preliminary

results of our pilot petrographic study of typical pottery of the period are then examined for comparison with the tablets.

Viewing the Distribution of Stone Tools at Tel Burna through Network Analysis

Shih Hung (Benjamin) Yang¹, Chris McKinny², Itzhaq Shai¹

¹Ariel University, Ariel, Israel. ²Gesher Media, Portland, Texas, USA

Several methods have been applied to understand the typologies, functions, and provenances of stone tools in the ancient Near East, but digital network analysis between stone tools, related artifacts, and spaces is still rarely used. Network analysis, which has been widely implemented in other archaeological inquiries, is a potential method that has been mainly used for understanding the distribution of ancient sites and route networks in different geographical settings. The assemblage of stone tools was found in an enclosure in Area B1 at Tel Burna, Israel. This enclosure is dated to the 13th century B.C.E. and the finds suggest that the enclosure was used for Canaanite ritual activity. The purpose of this poster is to explore how network analysis can also be applied within this context and to determine the relationship between stone tools. The method sets the distribution of stone tools as a basic pattern, calculates the optimizing X- and Y-coordinate and generates networks based on the typologies, functions and relative positions of stone tools. The algorithm of the calculation uses Python as the coding tool with multiple built-in packages. Results will show the relationship between stone tools and other artifacts, as well as demonstrate the similarity and difference between patterns of distribution and networks. This will provide advanced insights into how the space and human cultic activities related to each other within the Canaanite cultic enclosure at Tel Burna during 13th century B.C.E.

Multimedia Tools for Teaching in a Post-Pandemic World

Christine L. Johnston¹, Chelsea A.M. Gardner²

¹Western Washington University, Bellingham, WA, USA. ²Acadia University, Wolfville, Nova Scotia, Canada

During the COVID-19 pandemic, many post-secondary instructors adjusted their syllabi to include accessible digital materials as part of virtual learning. Many valuable resources existed prior to 2020, including online collections and databases like the Cuneiform Digital Library, virtual museum tours and institutional digital humanities projects like Digital Karnak, and media such as recorded lectures, videos, and podcasts. However, within the last two years, available resources have expanded exponentially as faculty, museum experts, institutions, and enthusiasts invested significant time and labour in developing online content. From digital excavations to virtual site tours, students can now interact with the ancient world in ways that had previously been impossible.

New projects range from expensive, institution-based initiatives (e.g., digitized museum collections and VR builds) to more grassroots projects (e.g., Everyday Orientalism and Peopling the Past). These interactive and innovative resources allow us to design curricula for ancient Mediterranean studies that break-free from objectivist learning and traditional textbooks, creating opportunities to enhance learner engagement and facilitate the construction of more tangible connections with the peoples and cultures of the past. This poster explores two distinct forms of educational digital media—podcasts and videos—and discusses best practices for incorporating these media into undergraduate ancient Mediterranean studies courses. These case studies will highlight examples that incorporate digital ancient world media in student-centered curricular design and

authentic active learning assignments. We will discuss the pedagogical methods and rationale behind the strategies of using digital media, and showcase the benefits these resources afford teachers and learners alike.

The Necropoleis of Esgbus and the Decapolis

Katherine Clayton

Andrews University, Berrien Springs, MI, USA

During the time of the Decapolis Tall Hesban existed as the Roman city Esgbus, a city on a major trade route towards the sea. This paper compares the occurrences of certain types of tombs in the cities of the Decapolis region to those of the Esgbus necropolis to use as a potential clue to whether or not Esgbus was included in that region. A series of books, articles, and excavation reports were used to find specific information about the internal layout of tombs in cemeteries from as many cities as possible. This information was then entered into a table to better show which types occurred most frequently. Results show that the loculi and acrosolia layouts occurred most frequently. Horizontal and vertical shaft tombs were also commonly used. These results imply that these burial traditions, in reference to tomb style, have carried from the main Decapolis cities to Esgbus. Which in turn implies that Esgbus, at least, had close relations with those cities or was a part of the region. Further study needs to be done to create a more in-depth picture of the traditions that carried over from the main cities to Esgbus.

House of Pottery: Hoarding Riches or Communal Storage? A Late Chalcolithic Context from Chlorakas-Palloures, Cyprus

Maria Hadjigavriel

Leiden University, Leiden, South Holland, Netherlands

The development of social organization and complexity in Late Chalcolithic Cyprus (ca. 2900-2400 B.C.) is a topic we know little about, with indications for a shift from an egalitarian to a more unequal society from a hand-full of sites in the west and southwest of the island. Recently, an intriguing context that can contribute to this topic has been unearthed at the Chalcolithic settlement Chlorakas-Palloures: an in-situ pottery cluster within a building, comprised of primarily Late Chalcolithic storage vessels and bowls, laying over plastered floors and a hearth, and accompanied by large quantities of ground stone and chipped stone. A parallel of this building is the so-called Pithos House at the nearby site Kissonerga-Mosphilia, where the dense concentration of certain artefacts has been interpreted as the centralization of agricultural surpluses by budding elites. The newly found building at Chlorakas-Palloures allows us to revisit the interpretation of such contexts.

Funded by a grant from the Leiden University Center for Digital Humanities (LUCDH) awarded to Marina Gavryushkina and Maria Hadjigavriel in 2020, this context was thoroughly excavated in 2021. Digital documentation techniques such as photogrammetry, 3D GIS and laser scanning were employed to record and reconstruct the archaeological context in the greatest detail possible. This poster is focused on the pottery aspect of this project, presenting the workflow developed in the field, the preliminary results of the pottery analysis and some first interpretations concerning pottery technology, social organization and the possible functions of this building within the settlement.

Importation and Appropriation: Revisiting Tell el-Yahudiyeh ware and local production in Cyprus at the dawn of the Late Bronze Age Artemis Georgiou

University of Cyprus, Nicosia, Cyprus

The final stages of the Middle Bronze Age and the inception of the Late Bronze Age in Cyprus (ca. 1750-1550 B.C.) coincide with dramatic transformations in the island's settlement pattern, which was reformed to accommodate an emergent economic system that revolved around the procurement and extra-insular transshipment of copper. It was during this decisive period that the Cypriot communities established systematic commercial links with other regions of the Mediterranean, heralding the much more intensified connections during the course of the Late Bronze Age.

The contribution aims to provide an updated overview of one of the earliest attestations for the participation of the Cypriot communities in the established commercial networks of the eastern Mediterranean, vis-à-vis juglets of the so-called Tell el-Yahudiyeh ware that were imported on the island from Egypt and/or Syria-Palestine, as precious commodity containers. This ceramic class is distinguished by a characteristic fabric, with a polished surface, embellished by elaborate punctured decorations. The poster will illustrate consumption practices of the imported Tell el-Yahudiyeh juglets and their contents within the newly founded coastal gateway centers, and the appropriation of the 'exotic' by the Cypriot communities for social and political preeminence. The contribution will also examine the impact of the imported Tell el-Yahudiyeh ware on the local production of finewares, elaborating on the transformations observed in the island's ceramic industry during this critical era.

Revisiting Typologies and Social Behaviour: The case Study of Tulip Bowls in Prehistoric Bronze Age Cyprus

Rafael Laoutari

University of Cambridge, United Kingdom

Typology and archaeology undeniably go hand and hand, and there is almost no archaeological material that has not been systematized within a form of classification at some stage. Applying typologies refers to a conceptual process during which certain similarities among things are prioritized, while their differences are silenced. Therefore, typologies provide the opportunity of unfolding the relationship between things, human choices (past and present) and social practices. Nevertheless, there is a danger of creating vacant taxonomies that do not reflect past behaviours, especially when the traits chosen for determining a type are not scrutinised in terms of what they meant, what they did and why they are privileged. This poster aims to illustrate how the concept of typology can be productively used in the understanding of social behaviour and the diachronic investigation of social practices. It focuses on the so-called 'tulip bowl', a type of small open vessel primarily identified at the Prehistoric Bronze Age site of Bellapais-Vounous (1930s excavations) in Cyprus. Here, tulip bowls are revisited in terms of their morphological and functional parameters (e.g., volume, use-wear), their role in the cosmology of the 'Vounousian' people and their involvement in the deathways of this community. The overlooked diversity within this type, which moves beyond its decorative patterns, its role in the life and death of people and the selected continuity of certain attributes through time demonstrates how the concept of typology can be dynamically used for elucidating practices and choices, while noting social continuity and change in past behaviours.

Chronological Break or Technological Continuity? Re-assessing the Transition between the Middle and Late Chalcolithic Ceramic Traditions at Kissonerga-Mosphilia

Sergios Menelaou

Archaeological Research Unit, University of Cyprus, Nicosia, Cyprus

It has long been argued that a sharp break occurred in the transition from the Middle to the Late Chalcolithic period, obvious in drastic transformations of the ceramic traditions of sites in southwestern Cyprus. Perhaps the most representative site with evidence of such technological changes is the settlement of Kissonerga-Mosphilia, owing to its comprehensive sequence in terms of longevity and documentation. Previous studies have defined this transition in the morphological and decorative repertoire (painted versus monochrome tradition), as well as the switch from calcareous to non-calcareous raw materials and innovations in the clay recipes at a macroscopic level. This has been explained through the lens of an increase in the standardized production and the emergence of craft specialization during the Late Chalcolithic, which further resulted in a rather unprecedented ceramic uniformity. Whether such novel technological choices and crafting practices should be seen as part of new sociocultural elements, associated with renewed extra-insular influences during the Late Chalcolithic, this requires a meticulous investigation. Hence, with an aim to expand this past research by means of a more detailed, analytical study, a set of samples from both phases have been examined with thin section petrography. Following a *chaîne opératoire* approach, important insights were achieved into the micro-scale, diachronic transformations of the visual appearance and technical developments that distinguish the pottery of this transition. In fact, there seems to be a clear break in some aspects and continuity in others, accompanied by changes in the structure and diversity of the ceramic assemblage.

Creating a Digital Reference Collection for Cyprus' Fauna

Anna Spyrou

The Cyprus Institute, Nicosia, Cyprus

Animal remains are among the most common category of finds in archaeological excavations in Cyprus that can provide answers to a wide range of archaeological questions, ranging from domestication to ancient cooking practices. Since animal remains must be identified first in order to be of any use and interpretive value, the most fundamental aspect of Zooarchaeology is the identification of animal bones to element and species level. There are many cases, however, in which the use of a physical (tangible) reference collection is not possible either due to lack of space and money or simply because archaeologists are working in the field, far away from institutions and museums owing a reference collection. These constraints have paved the way for the introduction of digital technologies in Zooarchaeology. The digital era ushered a proliferation of virtual versions of reference collections, from high resolution photographs to 3 dimensional digital renderings and physical replicas. These developments have significantly improved the rate and reliability of identifications in the field by removing barriers of access. This poster presents the first-ever attempt to create a digital reference collection for animal bone identifications on the island of Cyprus. Even though several reference collections exist on the island today, these are scattered in different institutions and archaeological research centers. The aim of the current digitization project is to bring these collections together in a virtual environment with major scientific, educational and societal impact.

TOURATH Project: Preserving and Protecting Tunisian Cultural Heritage

Mohamed Amine Hamdi, Ines Mathlouthi

Tunisian Scouts, Tunis, Tunisia

Tourath project will conduct in phase one, a program of activities engaging youth scouts and non scouts into the preservation and protection of Historic and cultural monuments in all 24 regions. These activities consist of granting cultural badges for 25000 youth in 24 regions, conducting dialogue and training sessions supervised by experts targeting more than 140 youth in all regions and 6000 students in 50 universities, it also includes various exhibitions in 24 regions valorizing Tunisian cultural heritage focusing on 14,000 non scouts.

TOURATH will raise awareness among youth scouts and non scouts and train 140 participants to become a responsible citizen who would be able to preserve and protect Tunisia's most valued treasures and this will enhance the feeling of belonging to a unique and diverse cultural identity of over 3000 years.

Tourath will also plan and organize excavation activities in phase 2 with more than 1200 volunteers camping in all major historical and archaeological sites dispersed in all 24 regions, obviously the focus will be on sites under threat by nature or human excessive activities. The excavations will be all supervised by experts in the field.

The project would present a MERIT BADGE of ARCHAEOLOGY to scouts volunteers after completing a list of periodically updated requirements throughout the project's activities. This aims to encourage youth scouts to learn more about their heritage and find solutions to the present threats. Furthermore, this Badge would be used regularly for Cultural scouting activities for years to come.

THURSDAY, DECEMBER 9, 2021

1:00–2:00pm (EST)

SESSION: Archaeology of Israel II

Boaz Gross | Israeli Institute of Archaeology, Tel Aviv University

The Chalk Vessel Assemblage from Tel Beth Shemesh East in Light of the Chalk Industry of the Second Temple Period

Karolina Hruby¹, Danny Rosenberg¹, Boaz Gross^{2,3}

¹University of Haifa, Haifa, Israel. ²Israeli Institute of Archaeology, Tel Aviv, Israel. ³Tel Aviv University, Tel Aviv, Israel

The emergence of the chalk vessel industry at the beginning of the Second Temple period in ancient Israel did not occur in a void. The *Halakhah* classified stone vessels as objects of inalienable purity, suitable for ritualistic use. Due to the concentration of raw material sources east of Jerusalem and the special status of the city, the chalk vessels were quarried, manufactured and used primarily in Jerusalem and its surroundings. The vessels appeared in virtually every Jewish settlement during the Second Temple period, and they mark the presence of Jewish populations. Because of the strong relationship of these vessels with Judaism, their production and use rapidly ceased after the destruction of the Second Temple in 70 C.E.

An assemblage of 49 Judean vessels was recently recovered at Tel Beth Shemesh East. The site is located in the eastern part of the Judean Shephelah, west of Jerusalem. The area was settled by Jewish communities both prior to and after the destruction of the Second Temple. However, the abundance of Judean vessels in this region is significantly lower than in the Holy City and its immediate surroundings, where there was a concentration of chalk quarries and workshops. Therefore, the assemblage from Tel Beth Shemesh East offers a unique insight into the roles these ritual vessels played within Jewish settlements located outside of the religious center of Jerusalem and continuing after its destruction. We will address some issues regarding the typo-morphological preferences of the vessels and their production.

A Previously Unpublished Assemblage of the Babylonian: Persian Period from Tell en-Naşbeh

Jeffrey R. Zorn

Cornell University, Ithaca, NY, USA

Recent archival work among the Tell en-Naşbeh materials housed in the Badè Museum in Berkeley, CA turned up evidence of a previously unpublished assemblage of in situ jars that were excavated in April, 1932. These jars seem to belong to the Babylonian-Persian period at the site. While records of the assemblage were obviously known to the excavators, for some unknown reason the jars were not published or discussed as such in the original 1947 site report. This paper discusses how the archival material was discovered, issues involving the interpretation of these old excavation materials, the unusual context of the jars, parallels for the jars, and how they add to our knowledge of the site and its history following the Babylonian destruction of Jerusalem.

Tsunami-Derived Sediments Identified in the Destruction Sequence of an 8th Century Warehouse in Caesarea Maritima, Israel

Charles Everhardt IV¹, Uzi Ad², Ofra Barkai^{1,2}, Hendrik Dey³, Peter Gendelman², Roi Jajiel^{1,4}, Lotem Robins⁵, Joel Roskin⁶, Jacob Sharvit², Naomi Porat⁷, Beverly Goodman-Tchernov¹

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Coastal archaeological sites have the potential to preserve evidence for past geological events in well-confined anthropogenic contexts. According to nearshore sedimentological records, a tsunami struck the coast of Caesarea Maritima, likely coinciding with a major earthquake in 749 C.E. during the early Islamic period. Archaeologists have found anomalous sand and shelly layers from the same time period during excavations of structures near the shore. These layers have variously been interpreted as construction fill, dune development, or general abandonment. Recently, an excavation of a warehouse adjacent to the harbor uncovered this same deposit, allowing it to be analyzed in detail to determine its taphonomic history. The deposit is comprised of a thick, well-sorted sand layer with semi-articulated sequences of building stones, followed by independent matrix-supported building stones. The entire deposit is sandwiched between an underlying, abandoned early-8th century floor and, from above, by a late-8th century floor; thereby constraining its age to sometime mid-8th century C.E. Two sediment cores from the deposit, as well as reference samples representative of various nearby depositional environments, have been analyzed for grain size distribution, foraminiferal assemblage, Optically Stimulated Luminescence (OSL) dating, and relative age by portable luminescence (POSL). The combination of results indicates that the sandy deposit was formed from the transport of offshore marine sediments during a single high-energy inundation event. The results of this study will contribute to the understanding of high-energy tsunami deposits preserved on land in Caesarea Maritima and, more broadly, to the understanding of tsunami sedimentological studies in geoarchaeological contexts.

SESSION: New Directions in the Historical Geography of the Ancient Near East

Chris McKinny | Texas A&M University Corpus Christi

Kyle Keimer | Macquarie University

Aharon Tavger | Israel Heritage Department at Ariel University

Bethlehem and Netophah in Benjamin and the Purport of the List of Returnees (Ez 2:2–35; Neh 7:25–38)

Aharon Tavger¹, Oded Lipschits²

¹Ariel University, Israel. ²Tel Aviv University, Israel

The list of returnees, which appears twice in the book of Ezra and Nehemiah, has been dealt with by many past scholars. Some have perceived this list as describing historical realities of immigration into Judah during the Persian period, of the boundaries of the province of Yehud, or of Hasmonean period settlement. Others saw it as a combination of various lists, which were gathered by the redactors for literary and ideological purposes.

The majority of the toponyms that are mentioned in this list are located inside the traditional Benjaminite inheritance. Exceptional sites are Bethlehem, Netophah, Lod, Hadid, and Ono—all of which have been identified out of Benjamin.

In this paper, we suggest identifying Bethlehem and Netophah, from this list, at two sites within the western part of Benjamin—both of

which were apparently settled during the Persian period. Moreover, we argue that the list of returnees, even if it consists of different lists, reflects settlement processes that occurred in this region during the early Persian period. Although most of the rural sites north and east of Jerusalem ceased to exist following the Babylonian destruction of the city, many sites remained intact during the Persian period—a time when many additional new sites were erected in the western parts of Benjamin and along the main road going towards Lydia. It seems that this expansion westward, together with some wishful geographical aspirations, inspired the redactors to insert Bethlehem and Netophah and to also include Lod, Hadid, and Ono in the description of the Benjaminite settlement.

The Eastern Border between Manasseh and Ephraim and a New Identification of Khirbet el-Marjame

Shay Bar

Haifa University, Israel

Josh 16:6-7 describes the eastern border between Ephraim and Manasseh: “And the border went out toward the sea to Michmethah on the north side; And the border went about eastward unto Taanath Shiloh, and passed by it on the east to Janohah; And it went down from Janohah to Ataroth, and to Naarath, and came to Jericho, and went out at Jordan.”

Scholars have attempted to identify the places mentioned (Taanath Shiloh, Janohah, Ataroth, and Naarath). These proposals were mainly based on available cartographical and textual evidence, while the geographical, and especially the archaeological data were based on limited sources.

Reevaluating the published archaeological data and a better understanding of the topography of the region allows for a critical assessment of earlier identifications and a new proposal for this boundary. This proposal suggests that the eastern route of this boundary parallels the main geological features of the region. The easternmost location is Khirbet Tana el-Foqa (Taanath Shiloh), located at the northeastern foot of the dominant Elevation Point 868 ridge. From there, the border turns east-south-east along the foot of the southern extension of this ridge, east of Khirbet Yanun (Janohah), and continues south along the foot to Khirbet el-Marjame (Ataroth—a new identification for this important Iron Age II fortified city). It then runs southeast—following the steep Wadi ‘Aujah canyon—to Khirbet ‘Aujah el-Foqa (Naarath) and continues southeast to Jericho.

A Tale of Two Swords in the Book of Samuel: The Geography of the Demise of David’s Enemies

Chris McKinny

Gesher Media, USA

For millennia, readers of the Book of Samuel have been drawn to the narrative of David’s dramatic rise to the throne of Israel (1 Samuel 16–2 Samuel 5). This paper will suggest a new geographical interpretation, which may provide a key interpretive clue for understanding the literary framework that the author/editor of Samuel employed in conveying David’s eventual triumph over his foreign and (un)friendly foes. Without giving too much away, I will question traditional geographical understandings of 1 Samuel 31 in light of the interpretation of the early excavations (Fisher, Rowe, and Fitzgerald) of Beth-shean. I will also discuss a possible connection between the narrative and the recently discovered (massive) early Iron Age fortifications at Philistine Gath (Tell es-Safi). The conclusions of this paper will not impact ongoing archaeological and historical questions

concerning the historicity of David’s “kingdom.” However, they will demonstrate the importance of re-examining previous syntheses between archaeology and the biblical text, as well as the need to incorporate new archaeological discoveries into well-known ancient dramas.

Visualizing the Tomb of The Royal Steward: The Preliminary Results of The Mount of Olives Funerary Monuments Digital Survey

Matthew J. Suriano, Ming Hu

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The Mount of Olives Funerary Monuments Digital Survey was organized at the University of Maryland to study a small group of monolithic tombs in Jerusalem’s Silwan Necropolis that date to the late-Iron Age. This group includes the Tomb of the Royal Steward. In 1871, Charles Clermont-Ganneau removed two inscriptions from this tomb, one of which is the Royal Steward Inscription, acquiring them on behalf of the British Museum where they now reside. The virtual project at UMD has begun the process of reconstructing the tomb and reuniting the inscriptions with the tomb, virtually, through digital modeling. The reconstruction effort covers three monolithic tombs, including both the Tomb of the Royal Steward and the so-called Tomb of Pharaoh’s Daughter, as well as their topographical setting on the Mount of Olives. The project does not involve field work, but is based on published plans, unpublished archival materials, and museum artifacts. The models created through this project will allow scholars to visualize the tombs and their inscriptions set within a landscape and unencumbered by urban development. This paper will present the preliminary results of our work, beginning with the analysis of maps and historic photographs, and including the models created through this initiative.

SESSION: Theoretical and Anthropological Approaches to the Near East

Tobin Hartnell | American University of Iraq, Sulaimani

Darrell J. Rohl | Calvin University

Reading Between the Lines: Affordances and Material Properties of the Amarna Tablets

Karlene Shippelhouste

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A letter from Tushratta to Amenhotep III (EA 23) is divided into five sections, each marked by a pair of lines impressed into the clay tablet. The line placement punctuates the textual distinction of paragraphs in the letter. What do the lines on the tablet afford the reader? This paper considers the application of affordance theory to cuneiform tablets. Using a selection of the Amarna tablets sent between the great kings, as a case study, one can view the tablet as an environment that, in conjunction with the text, offers the reader a range of interpretative potentialities. The psychological theory of affordances posits that objects through their physical properties (actual and perceived) allow a viewer potential use possibilities and constraints. Can affordances reveal communicative strategies embedded in the material properties of tablets? This paper examines the affordances of clay tablets such as Tushratta’s section rulings. It will also define tablet size, shape, weight, color, and layout, as well as clay composition, and non-linguistic markings as affordances. Each aspect individually or in concert with others has the potential to affect how a tablet and its text are encountered. By “reading” the lines on tablets, I argue that it is possible to discern patterns among the Amarna diplomatic

correspondence which can help scholars analyze how certain affordances could shape the overall messaging of a tablet.

Oral Tradition as a Source of Interpreting Archaeological Data Habab Idriss Ahmed

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This paper will demonstrate to what extent we depend on oral traditions as tools for documenting history. Oral traditions are considered by historians as unreliable sources for studying history. However, it is a valid means for preserving and transmitting history. I would like also to show how far we can proceed when dealing with oral language in terms of telling stories of different languages by oral tradition tellers and data collectors. In addition, I demonstrate the importance of oral tradition in interpreting archaeological evidence for cases that lack of material information.

Oral tradition is an account of information passed down by the word of mouth from generation to another. It consists of all verbal testimonies, which are reported by statements concerning the past. Vansina emphasized that these must be distinguished not only from written statement, but also from material culture that might be used as a source of knowledge about the past.

Before the development of written language, oral history was the primary means of conveying information from one to the next. The most common form of this transmission is through story-telling and recitation of epic poetry. The combination of oral tradition with the morals and rituals passed down by word of mouth is known as Folklore. Oral tradition can help create an identity for any given community because it reflects different aspects of life.

Varieties of Judean Identity in Mid-First Millennium B.C.E. Central Babylonia

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In this paper, I examine the variety of identities and lifeways of Judean immigrants attested in the Yaḥūdu and Murašū cuneiform text corpora of the 6th-5th centuries B.C.E. This falls under the umbrella of my dissertation project on ethnicity dynamics of immigrant communities in the mid-1st millennium B.C.E. in Central Babylonia, including Nippur and the surrounding regions. The presence of Judean immigrants in Babylonia mainly originates from forced transplantation by Babylonian imperial forces in the early 6th century BCE, as described in the Hebrew Bible. The development of Judean identity in Babylonia has been a topic of scholarly discussion for some time. Previous studies have employed Biblical and cuneiform evidence to examine identity in connection with religious practice, exile and return migration, personal names, and economic and social circumstances.

I take a different approach from the common methodology in Ancient Near Eastern Studies of socio-economic classification for investigating immigrants, foreigners, or ethnic people. This paradigm is useful for exploring issues of personal freedom versus institutional control over lives, of hierarchicalized political power in society, and of economic and political administration. However, it is not so useful when examining identity. Instead, I investigate types of social interactions and elements of social signaling that are likely to be meaningful for identity, including intra-Judean interactions, women and marriage, cultural mixing in personal names, identity maintenance in prominent socio-economic positions, and local organizational roles.

I then place these findings in the context of general trends I find regarding Judean ethnic identity in Central Babylonia.

Enacting Danger: Acrobatic Performance in the Bronze Age Near East

Rachel Webberman

University of California, Berkeley

The body is a fundamental site of experience and meaning-making. Acrobatics, a mode of bodily movement that explores the limits of physical ability, offers a distinctive vantage point from which to observe ancient attitudes towards the body. Acrobatic performance, in particular, takes beliefs about the body, physical ability, and gender, and presents them back to society, sometimes subverting these beliefs, sometimes reinforcing them. In this paper, I explore the evidence for acrobatic performance in the ancient Near East through a combination of theoretical reflection and empirical case studies. Considered through the lens of bodily semiotics, embodiment, and performance theory, acrobatic spectacle offers unique insight into how the people of the ancient Near East understood the limits and abilities of their bodies, how these attitudes were (or were not) gendered, and how the individual and collective experience of bodies in motion helped define and/or contest cultural norms. Drawing on textual and art historical evidence for extreme bodies and acrobatic performance in Bronze Age Mesopotamia and Anatolia, I suggest new interpretations of several key objects and draw connections between textual references to professional acrobats and visual depictions of acrobatics. I also explore the ways in which a deeper theoretical engagement with bodily movement can transform our understanding of these figures, their embodied experience, their social position, and the meaning produced by their performances.

Controlled Chaos: Violent Goddesses and the Permissiveness of Divine Gender Roles in the Ancient Near East

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In the pantheons of the ancient Near East, the goddess Anatu stands as an outlier. While most deities generally follow the gender mores of their cultural milieu, Anatu acts outside of the accepted norm. Rather, she is depicted as exercising power over male deities and humans alike through her explosive and violent nature, resulting in both cosmic and terrestrial death and life. An awareness of this atypical role is embedded within the texts via comments made by these male figures, yet she was widely worshiped throughout the ancient Near East, indicating that her nature was permitted.

Identifying her role in the cosmos and why her bending of gender norms was valued furthers our conception of cult in the ancient Near East. But, because the social behaviors of the divine echo those of humanity, Anatu's paradoxical juxtaposition of the feminine with the masculine may also lead to a more nuanced understanding of how femaleness was defined and regarded in the ancient world.

To decode this dynamic, we can apply a cultural anthropological approach in comparing Anatu to her descendent, the Hindu goddess Kālī, whose immoderate and unpredictable violence is understood to be essential in maintaining cosmic order. Both goddesses act as symbols of what ought not be, and yet is—acknowledgement that destruction is inescapable, but so is creation, and that which destroys may also create. By examining the elements of Kālī's functionality in a traditionally patriarchal culture, we can better appreciate Anatu's reception in the ancient world.

The Anxiety for Sovereignty: Esarhaddon and the Substitute King Rituals of 671–669 B.C.E.

Yuecheng “Russell” Li

University of Colorado, USA

This paper historically contextualizes the three substitute king rituals of Esarhaddon between 671–669 by complicating the current understanding of this ritual during the Neo-Assyrian period. Relying on the discussions of Carl Schmitt, Michel Foucault, and Giorgio Agamben on sovereignty as an interrelational political concept, it argues that the ritual exemplifies the twofold anxiety of the Neo-Assyrian king for maintaining sovereignty: the sovereignty of bodies, his own and those of others, as well as his political authority vis-à-vis the divine in the vast yet often unsettled Neo-Assyrian empire. This paper examines the theoretical features of the Neo-Assyrian substitute king ritual in light of the politics of body sovereignty and highlights that: 1) the ritual presupposes a division of one’s bodily and socio-political entity and the king’s sovereignty over both aspects of his people; 2) its performance is triggered by a conflict of divine and monarchical sovereignty, in which an institutionalized body of knowledge and rites help the king cope with the conflict; and 3) the ritual requires the king’s renunciation of his bodily sovereignty and provides a framework within which the king recovers his losses through his retained political sovereignty. It concludes with an analysis of Esarhaddon’s layered anxiety for sovereignty as external political upheavals and the concern for his own health catalyzed the necessity of performing three substitute king rituals in 671–669 with a view towards political expediency.

SESSION: Slaves, Prisoners, and Unfree Bodies in the Ancient Mediterranean World

Ella Karev | University of Chicago

Enslavement to God: Moving Beyond Metaphor in the Mediterranean

Chance Bonar

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In the study of enslavement in the ancient Mediterranean, scholars have tended to treat enslavement to deities as merely metaphorical, titular, or not “real.” In this paper, I build upon recent work in religious studies on the historiography of religion and the language of enslavement in order to argue that enslavement to deities was not an uncommon or fictive phenomenon, but was a relationship between a human and deity believed to have tangible social, economic, and political consequences. With evidence ranging from (although not limited to) the biblical book of Leviticus, paramone inscriptions at Delphi, Egyptian self-sale documents, the apostle Paul, the early Christian Shepherd of Hermas, and the depiction of the Isaic cult in Apuleius’s *Metamorphoses*, I suggest that language of enslavement to deities might be better understood when ancient sources are read with the assumptions of their writers in mind—namely, that deities were conceived of as historical actors to whom people could be enslaved and to whom one might have commensurate obligations as to a human enslaver. While by no means exactly the same as human-human enslavement, the language of human-divine enslavement impacted whether or not some people could be (re)enslaved, defined their relationship to a deity and a community, and delimited how a life could be lived.

Incarceration, Enslavement, and the Slippery Archaeology of Unfreedom

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Unfree bodies were a staple of the ancient social and material landscape, and yet we know little about the spaces that they inhabited. This is especially the case regarding prisons. Mommsen’s impact cannot be overstated: the notion that Romans did not engage in penal incarceration has been repeated *ad nauseum* in the century since the publication of *Römisches Strafrecht*, and has led archaeologists and historians alike to neglect the search for ancient prisons. Yet, Vitruvius tells us that every Roman forum had three things: a *curia*, a treasury, and a public prison. This fact alone should focus archaeologists’ minds to look for carceral spaces. And yet to date, only one Roman prison has been securely identified: the most famous prison in the ancient world, the *Carcer-Tullianum* in Rome.

Put simply: we are not finding ancient prisons because we aren’t looking for them. My talk will begin by offering an overview of what literary, legal, papyrological, and inscriptional sources suggest we should expect to see when looking at a Roman prison. Then, I will use a database of 35 suspected Roman prisons that I compiled along with Matthew D. C. Larsen to offer a general typology of ancient carceral spaces. I will conclude by discussing three examples (Pompeii, Simitthus, and Mainz), and the way that each troubles our notions of unfreedom, and the archaeological distinction between enslavement and incarceration.

Defixiones: Hidden Transcripts of Master-Slave Relations

Scott G. Chase

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E. R. Dodds referred to the third and fourth centuries C.E. in the Roman empire as an ‘age of anxiety.’ The Roman slave system, in particular, produced anxieties for all of its participants. Slaves feared being beaten, sexually exploited, or sold. Masters feared escape, revolt, and retributive violence. Acting upon these anxieties, magic became a strategy that both master and slave deployed against one another. In this paper I hope to shed further light on ancient slavery through an examination of three previously published defixiones (curse tablets) that lay bare common anxieties associated with enslavement: alienation, escape, and disobedience. My investigation is important to the study of ancient slavery for several reasons. First, enslaved persons left few material remains and literary sources favor elite voices. Frequently, scholars retroject evidence from slave systems in other times and places to shed light on strategies for navigating imbalanced social relations. Defixiones, as both artifacts in themselves and textual documentation representing local attitudes and beliefs, present some of the best material evidence from the lives of individual slaves and masters. Second, magical texts operate outside normal modes of discourse, and as such can be productive in adding nuance to understandings of ancient slavery gleaned primarily from elite literary sources. Here, I employ James Scott’s theory of hidden transcripts as a potential model for incorporating the evidence of defixiones. In contrast to the public social scripts of domination and submission, both masters and slaves expressed their otherwise unspoken anxieties through a shared ritual vocabulary.

Between Coercion and Consent: How Words Enslaved the Pyramid Builders

Victoria Almansa-Villatoro

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It is commonly acknowledged in Egyptology that the Egyptian pyramids were not built by slaves but coerced laborers. However, these workers' freedom was impaired by a centrally imposed ideology that fostered community service. This paper explores how the Old Kingdom pharaoh willingly employs language to obfuscate the boundary between state coercion and subjects' consent by means of ambiguous expressions of commands and euphemisms of control. The 5th and 6th Dynasties royal letters sent to officials and inscribed on the latter's tomb walls will be studied using the methodology of Critical Discourse Analysis (CDA) that investigates how ideology is transmitted by institutional language masked as commonsense. The Egyptian commonsense was capable of associating a meaning of authority to words that in actuality code the king's volition. Other rhetorical ways of imposing royal power through the ambiguity of speech include the use of the verb *wD* "command" as the kingly equivalent of the private *Dd* "speak," or euphemisms that promote an expansionistic ideology. Private loyalty is highlighted through ambiguous expressions like the word *stp-zA* which appears in texts with the meaning of "bodyguard," a group of trusted elite individuals, or a place in the palace where courtiers report to the pharaoh. Hence, it is argued that language was used by the Old Kingdom state to transmit an ideology of royal coercion disguised as private consent and service. The concept of slavery and individual freedom in Ancient Egypt needs to be deconstructed and the enduring power of words to silently "enslave" people similarly acknowledged.

SESSION: Archaeology of Jordan

Marta D'Andrea | Sapienza Università di Roma

M. Barbara Reeves | Queen's University

Wall Thickness as a Phase Indicator in Haurra's Roman Fort

M. Barbara Reeves

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The Roman fort at Haurra, Arabia (modern Humayma, Jordan) was built in the early second century A.D. and occupied by a progression of soldiers and civilians as late as the mid-sixth century. Over that four hundred-year period there were various phases of construction, expansion, damage, and reconstruction that excavators with the Humayma Excavation Project have identified based on a combination of archaeological finds and historical information. The nature of the fort's internal walls makes it difficult, however, to assign particular walls to particular phases of construction or reconstruction due to the fact that internal walls are generally built from a mixture of recycled Nabataean blocks, cobbles, and mudbricks set in mud and that repairs were sometimes restricted to wall sections rather than an entire wall. In an attempt to determine which walls date to the initial phase of the fort's construction versus later phases, this author expanded on previous discoveries (by Oleson and Reeves and Harvey) that standardized increments of the Roman foot were employed by the engineers designing the fort and also in Haurra's ceramics building materials. Standardized wall thicknesses based on 0.5 increments of the Roman foot are documented elsewhere for Roman brick walls (e.g. 2 feet, 2.5 feet, 3 feet) and Roman mudbrick walls (1.5 feet). When the thicknesses of walls within the fort were converted into Roman feet, patterns became apparent. The implications of specific wall

thicknesses for dating this fort's phases of occupation will be discussed.

Results of the Recent Excavations 2018/ 2019 at Tall Zira'a: The Iron Age II Settlement and the Hellenistic Fortification

Katharina Schmidt

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Tall Zira'a is located in the Wādī al-Arab in northwestern Jordan, near the ancient Decapolis city of Gadara. The settlement history of the site can be traced from the Early Bronze Age to the Islamic period, and has been explored from 2001 to 2009 by a team of the German Protestant Institute of Archaeology (GPIA) and the Biblical-Archaeological Institute Wuppertal (BAI). Since 2018, excavations at Tall Zira'a have been resumed by a team of GPIA Amman and are funded by the German Archaeological Institute (DAI).

The campaigns in 2018 and 2019 show interesting results on the Iron Age II and Hellenistic periods, which will be addressed in the lecture. On the northern edge of the tell, Iron Age IIB dwellings were uncovered. From one of these house complexes, the entire inventory including a stamp seal has been preserved, providing valuable insights into the living conditions of this period. In the Hellenistic period, and especially in the Hasmonean time, large reconstruction works were carried out on the tell. During this period, a large fortress was built, which is still at least three meters high, and its construction destroyed large parts of the Iron Age settlement. Numerous coin finds from the time of Alexander Iannaeus show that during this period there must have been a military post at Tall Zira'a possibly related to the siege of Gadara. The results of the excavations allow further conclusions to be drawn about the history of the settlement at Tall Zira'a and the region.

Khirbat al-Mukhayyat as Meeting Place: A Comparative Analysis of the Hellenistic Cooking Pot Assemblage

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This paper will present the results of the comparative analysis of the Hellenistic cooking pots from Khirbat al-Mukhayyat (also known as Town of Nebo), located 6 km northwest of Madaba in central Jordan. The main aim of this paper is to introduce the forms of Hellenistic kitchen ware discovered at this site and provide preliminary conclusions about interactions between the site and its surroundings. Excavations conducted by the Khirbat al-Mukhayyat Archaeological Project (KMAP) between 2014 and 2019 revealed a collection of over 60 complete or nearly complete Hellenistic (3rd - 1st century B.C.E.) cooking pots. These vessels were intentionally buried in secondary deposits as a part of ritual activities.

A morphological analysis divided the corpus into 5 main types. Seven identified fabric groups suggest that the cooking pots belong to multiple production centers. Further analysis has revealed parallels from multiple sites including Akko, Anafa, Dor, Gezer, Jericho, Jerusalem, Pella, Samaria, and Sidon, indicating that Mukhayyat was a meeting place for various communities living in the region during the Hellenistic period.

This assemblage confirms the theory that the Hellenistic cooking pots are the continuation of a long-lived form distributed along the coasts of the Dead Sea and throughout the Levant. Differences among local versions are consequently minor and restricted to small details of body shape, surface treatment, and rim and neck form. The cooking pots of Mukhayyat are affected by the same transregional trends and

are part of a common Hellenistic Levantine koine of the 4th – 1st centuries B.C.E.

The Ritual Landscapes of Murayghat: An Early Bronze Age Site in Central Jordan

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During the Early Bronze Age, burial patterns changed and cemeteries became very visible in the landscape, compared to the often underground or less visible above-ground cemeteries in the Late Chalcolithic. Dolmen fields are one component in these changes and they tend to pair with Early Bronze Age sites, indicating a connection between the socio-political organization of the Early Bronze Age and the ritual development. In Jordan, several dolmen fields exist, concentrated in a strip from Northern to Central Jordan, including the field at Murayghat. The site of Murayghat consists of a whole landscape with a central knoll, showing horse-shoe shaped, circular and rectangular standing stone structures, surrounded by dolmen fields, standing stones, and other stone structures. The dolmen (originally over 150) are nearly all visible from the central knoll. The central knoll itself has megalithic structures, which have partly been excavated and showed large walls, that contained several unusual ceramic vessels (between others a double-handled Murayghat bowl) and many large basalt grinders. Architecture and material culture indicate not domestic, but public/ritual function for these structures. They will thus be discussed in the context of changing societies in the beginning of the Early Bronze Age.

Loess is More: Social Complexity Through the Lens of the Petrographic Microscope at Khirbat al-Jariya, Jordan

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Khirbat al-Jariya (KAJ) is an Early Iron Age copper production site located in the Faynan region of southern Jordan. The site, excavated in 2006 and 2014, was occupied from the mid-11th to mid-to-late 10th centuries B.C.E. and represents the early phases of copper production in Faynan (Liss et al. 2020). Ongoing analysis of the ceramic assemblage from Area B at KAJ—a large, centrally-located structure—has uncovered typological links to ceramics from the monumental structure in Area R at the nearby site of Khirbat en-Nahas. The presence of parallels among high-quality ceramics at KAJ's Area B—including both elaborate forms such as an apparently local cup-spouted jar phenomenon and imported red-slipped and burnished fine wares—suggests the presence of elites at the site and in the region who exclusively controlled the exchange of copper. These regional connections are investigated through compositional analysis, including optical mineralogy and ceramic petrography. The results of these analyses indicate that red-slipped and burnished wares at the site are likely imports from the Western Negev, suggesting the involvement of elites in Area B in interregional exchange. The compositional study of the remainder of the ceramic assemblage also sheds important light on the hypothesis of external vs. local control of copper production in the Faynan region during the Iron Age, as well as on the widely discussed phenomenon of slag-tempering of ceramics from the Wadi Arabah.

A Nabataean Kitchen? Preliminary Findings from the 2019 Excavations from Element 139, Ad-Deir Plateau, Petra, Jordan

Josie Newbold

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In 2019, the Brigham Young University (BYU) Ad-Deir Monument and Plateau Project (AMPP) began excavations of a Nabataean Era (300 B.C.E. to 300 C.E.) building discovered during the 2013 GPS mapping survey of the Ad-Deir Plateau, in Petra, Jordan. This building was possibly a part of a complex of structures associated with the Great Circle, a circular pool 60 meters in diameter that may have been utilized to protect the Ad-Deir Monument from seasonal flooding. Clearance and study of this ashlar-walled structure began in 2019, resulting in the discovery of what may have been a Nabataean kitchen that potentially was destroyed during an earthquake in 31 B.C.E. Nabataean kitchens have rarely been discussed in scholarly publications, which makes this find unique and important in understanding daily life in Nabataean society. Additionally, the association of Element 139 with the Great Circle made this structure particularly important in understanding the usage of the Ad-Deir Plateau. This report presents the preliminary findings from excavations of this building in the Spring of 2019.

Architectural Decoration from the Temple of the Winged Lions, Petra: Revisiting On-Site Lapidaria and the AEP Archive

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The architecture of the Temple of the Winged Lions (TWL) has been studied for over 40 years. This Nabataean-roman era site was first excavated and published by Philip C. Hammond of the AEP (1974-2005), and was subsequently the focus of conservation, excavation and further publication preparations by ACOR's TWLCRM Initiative (2009-present). Despite extensive research on the temple, surprisingly little is known about its decorative features. While the temple's basic layout, the column orders, and its famous winged lion capitals, are largely understood, few architectural elements have been published and discussed to date.

Questions remain regarding the overall variability in design. For example, detailed analyses reveal significant differences, providing insights into the skills of the craftsmen and suggesting a more complex typology of capitals. These insights apply broadly to Petraean and Nabataean architecture, allowing for an identification of standardization processes in design and production.

Through a 2020-21 TWL Publication fellowship at ACOR, the author has fully reviewed and cataloged all decorative stones documented by the AEP, and systematically documented the remainder of known architectural elements from on-site lapidaria. Evaluating archival data with this recent documentation allows for a more precise assignment of individual elements to the temple and identification of elements from surrounding buildings. This paper presents initial results of the analysis, an overview of different types of architectural elements, and a discussion of the interaction of decorative stone and stucco elements. Comparison with other buildings in Petra illustrates the importance of the TWL for understanding Nabataean architectural decoration.

SESSION: Archaeology of the Black Sea and the Caucasus

Lara Fabian | Albert-Ludwigs-Universität Freiburg

the role of heritage monitoring as an instrument of both deterrence and trust-building in conflict zones.

Passing into the Mountains: A Landscape Investigation of the Vedi River Valley of Armenia

Zichen Bai, Peter Cobb

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The Vedi river valley sits along the southeastern edge of the Ararat plain in Armenia, with the Vedi river flowing into the Araxes river. A large fortress, likely built in the Late Bronze Age and reused into the Medieval period, protects the entrance to the valley and highlights the significance of this valley as a transportation route throughout history. This route connects the plain of the Araxes up into the Gegham mountain range to the east - with Lake Sevan lying beyond to the northeast and Syunik province to the southeast. Thus, here a broad and fertile agricultural zone links to the mineral-rich mountains, which still invite copper and gold extraction today. In order to better understand past life and mobility in this valley as part of a field project begun in 2019, we are undertaking a landscape investigation of the valley to map sites as well as to characterize transportation and local land use. We hope to contribute to the dialogue on the archaeology of life at plain-mountain intersections. Our research deploys the usual landscape archaeological toolkit - site mapping, least cost path analysis, and remote sensing - while also experimenting with machine learning. Building off our 2019 surface survey, we hope that travel restrictions will soon ease so we can ground-truth our latest remote sensing results. Initial indications are that a network of fortresses protected multiple sections of the route up into the valley in at least the Medieval period.

Caucasus Heritage Watch: Nagorno-Karabakh and the Threat of Cultural Genocide

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During fall 2020, long-simmering ethnic tensions between Armenia and Azerbaijan over the disputed territory of Nagorno-Karabakh erupted into a brief but catastrophic war. A Russia-brokered ceasefire transferred several provinces to Azerbaijani control and with them over a thousand Armenian cultural heritage sites. Since the beginning of the decades-long conflict, Armenian medieval and early modern monuments within Azerbaijan have fallen victim to a systematic campaign of cultural erasure, an increasingly common weapon of authoritarian states seeking to suppress minority populations' claims to civil rights. There is reason to fear the extension of this campaign to the cultural sites newly transferred to Azerbaijan. On-the-ground monitoring is not possible as Azerbaijan has not granted a UNESCO mission access. Efforts to promote reconciliation have been plagued by a clamor of claims and counter-claims of heritage destruction by both sides. The situation requires a non-partisan monitoring effort to help deter attacks on heritage, investigate purported damage, and assist in building trust. The increasing availability of high-resolution satellite imagery has proven an effective tool for remotely monitoring cultural heritage at risk in the Middle East, North Africa, and Asia. In this paper, we present the initial monitoring missions of the Caucasus Heritage Watch, a new satellite-imagery based monitoring project arising from partnerships between our research team and heritage stakeholders in the region. We describe the monitoring infrastructure and initial results, and set the project within broader conversations on

THURSDAY, DECEMBER 9, 2021
2:30-4:30am (EST)

SESSION: Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in Archaeological and Historical Studies from the Bronze Age to Medieval Periods I & II (2:30-5:00pm)

Yuval Gadot | Department of Archaeology and Ancient Near Eastern Cultures,
Tel-Aviv University

Joe Uziel | Israel Antiquities Authority

A Closer Look: The Houses on the South-eastern Hill of Jerusalem in Economic Perspective

Margreet L. Steiner

Independent researcher, Leiden, Netherlands

Since the 1990s household archaeology has become an integral part of archaeological research in the Levant. For the Iron II period in Ancient Israel most research has been directed to the smaller provincial towns such as Tell en-Nasbeh, Tell Halif and Beer Sheba. Surprisingly, the city of Jerusalem has not yet been touched although 19 Iron II house complexes with some 50 rooms have been uncovered on the south-eastern hill by Kenyon and Shiloh alone, with later excavations yielding more and more houses. Research on the eight houses excavated in the so-called 'royal quarter' on top of the stepped stone structure permits us to catch a glimpse not only of the economic activities conducted there but also of the entanglement of the inhabitants with the wider world. They were neither farmers living in the town and producing agricultural commodities such as wine or olive oil, as in many smaller towns, nor were they artisans working for the royal court and the administrative elite. They were part of a middle class of traders and artisans, living in a prestigious location and producing objects for the inhabitants of Jerusalem while engaging with the wider world.

Dining on the Verge of Destruction: Cooking and Dining Habits during the First Century C.E.

Barak Monnickendam-Givon, Salome Dan-Goor

Israel Antiquities Authority, Jerusalem, Israel

Excavations at the so-called "Jeremiah's Pit" (conducted by S. Dan-Goor and Y. Tchekhanovets of the Israel Antiquities Authority) yielded a large assemblage of pottery vessels, all dated to the second half of the first century C.E. The pottery assemblage filled an ancient water reservoir. It was found on the slopes of the City of David, just outside Jerusalem's old city. The pottery assemblage gives a glimpse into the daily life of the residents of ancient Jerusalem during the first century C.E. The large pottery assemblage dumped in the reservoir yielded a varied corpus of vessels, comprised of cooking vessels, tableware, utility vessels, storage jars, lamps, and miniature vessels. As part of the assemblage, a large number of complete cooking vessels were found. The complete cooking vessels alongside the vast repertoire of tableware are ideal for reconstructing cooking and dining behaviors. This will be done by analyzing the size, shape, ware, and percentage of different vessels representing various cooking techniques and dining habits. Further analysis of soot patterns remained of cooking vessels helps reconstruct cooking methods applied by the residents of ancient Jerusalem.

Our presentation will focus on the cooking and dining habits and behaviors as reflected by the rich pottery repertoire from "Jeremiah's Pit" excavations. We will do so by analyzing the assemblage itself and comparing it to other assemblages found in nearby Jerusalem and

other Early-Roman sites, placing the assemblage in a broader Eastern Mediterranean context.

The Head of All those Villages: Jerusalem and Nahal Repha'im as Case Studies for Urban and Rural Nature of the Judean Highlands during the Middle Bronze Age

Helena Roth

Tel Aviv University, Tel Aviv, Israel

This paper reviews the published finds from Middle Bronze Age (henceforth: MBA) contexts in Jerusalem and those of the MBA rural settlement uncovered at Nahal Repha'im, in order to trace the modes of integration and interaction of these sites with their environs and within themselves. For this purpose, aspects of subsistence economy and trade, social stratification, and expressions of power are examined.

The Judean Highland society appears to have been flexible in its economic strategies, shifting from sedentary to mobile, all while preserving social ties. The picture that emerges is of a complex social system of rural communities, largely independent with limited integration modes. Within this system, Jerusalem presents a relatively long and continuous occupation of the site and an ability to control human labor and advocate social power to some extent. In relation to the rural site at Nahal Repha'im, Jerusalem prevails as a stronger entity, which was involved to some extent in the regional and intra-regional trade networks of the MBA, yet very different than other contemporary urban centers along the coastal plain.

New Archaeological Evidence for the Babylonian Conquest of Jerusalem

Nitsan Shalom¹, Elisabetta Boaretto², Oded Lipschits¹, Yuval Gadot¹

¹Tel Aviv University, Israel. ²Weizmann Institute of Science, Israel

This paper will present new macro and microarchaeological evidence of the destruction of Jerusalem originating from new excavation areas and from a reevaluation of past excavation results, in order to fully reconstruct the 586 B.C.E. events and shed new light on the dimensions, extent and goals of Babylonian activities in Jerusalem.

The Babylonian campaign to Judah is considered a major turning point in the history of the land. In accordance with the biblical description, scholars reconstructed the time following the destruction as a dismal period, when the land was desolate. However, archaeological evidence has shown that this destruction did not encompass all regions of Judah, and life continued on a reduced scale. As for Jerusalem itself, archaeological remains attributed to the destruction were found in many locations throughout the city. However, close scrutiny of the archaeological evidence shows that even here the process of destruction was more complex than previously thought.

The question of Jerusalem's destruction and its extent has been examined so far through the use of traditional tools, such as biblical research and archaeological surveys and excavations. In this paper, a reanalysis of the evidence based on microarchaeological research of new excavation areas will be presented, in order to discuss the nature and extent of this event.

Slicing through the Time Plateau: Overcoming Problems in Iron Age Chronology in Jerusalem

Johanna Regev

Weizmann Institute of Science, Rehovot, Israel

The Iron Age of Jerusalem, which saw the rise and fall of the Judean kingdom, became the era that formed a platform for the history of Jerusalem to take its course for 2500 years.

Until recently, ceramic typology has been almost the only tool used for dating the Iron Age in Jerusalem, leaving the contexts discovered with a rather large range of possible dates. As a capital city, centuries of building activities have further complicated the archaeological picture left behind.

In the past five years, radiocarbon dates aimed for chronology building and collected using microarchaeological sampling methods have been incorporated in all major excavations in Jerusalem, including Iron Age strata. However, due to the so called “Hallstatt plateau” in the calibration curve, samples dating between 800-500 B.C. all give similar calibrated ranges, creating a challenge for dating this particular period, which also coincides with a large part of the Judean kingdom period.

The recent excavations in the city of David have exposed multiple, superimposed Iron Age pottery rich layers, from which in-situ contexts were sampled, characterized and dated. Using dense multi-stratigraphic measurements originating from varied contexts, such as fireplaces, dumps, mortar, plaster, allow for “short-lived wiggle matching” through stratigraphic modelling of the layers and features, and consequently “slicing through the plateau”, providing a higher precision for this intriguing period. As for now, this method has the highest potential for reaching a stage where we can continue with higher precision tools to play the “name the king game” in Jerusalem.

Underlying Bedrock of the City of David Ridge, Jerusalem: The Natural Hill-scape, the Fundamental Resource of Site Foundation and Formation

Joshua S. Errington

Macquarie University, Sydney, NSW, Australia

A detailed bedrock study yields insight into key construction phases including area preparation, the procurement of building materials, quarrying methods and tool usage, and some building methods. Furthermore, integrating detailed bedrock mapping with local topography enables a tentative reconstruction of the natural hill-scape. This serves as a basis in examining site utilization by the earliest of settlers and the significance of this topography in later construction – be that in the Bronze Age or through to the Medieval Periods.

Detailed mapping and topographic reconstructions have been undertaken previously of Jerusalem. Zimmermann (1876), Warren (1884) and Keummel (1906) each produced detailed surveys and extrapolation of Jerusalem’s most ancient landscape, but without the resolution or accuracy stemming from the last century’s worth of extensive excavations. This paper presents the findings of a long-awaited update; the detailed mapping of bedrock exposure of Jerusalem’s Eastern Hill.

In hill-country sites, bedrock and natural topography (generally) dictated the means by which a village, town or city were settled, built-up and expanded. This was certainly the case in Jerusalem, where the underlying bedrock dictated how terraces could be shaped for construction and defense; how the plateau could be best utilized on only a narrow ridge; how water and sewage could be directed through the site itself; or how a valley could be repurposed to direct thousands of tourists on pilgrimage.

Radiocarbon Chronology of Jerusalem: The Challenge of Dating 5000 Years of an Urban Environment

Elisabetta Boaretto¹, Johanna Regev¹, Doron Ben-Ami², Yuval Gadot³, Joe Uziel²

¹D-REAMS Radiocarbon Dating Lab, Weizmann Institute of Science, Israel. ²Israel Antiquities Authority, Israel. ³Institute of Archaeology, Tel Aviv University, Israel

The relatively detailed historical record of Jerusalem and the importance of Jerusalem throughout history, makes Jerusalem a key site for the history and archaeology of the Near East. The absence of an absolute chronology for Jerusalem has left large area for discussion and disagreement between the archaeology and the historical events and at large for the regional development of the southern Levant.

Different from a tell, the urban environment of Jerusalem present different challenges for radiocarbon dating. Building reused for centuries, destructions of different nature, removal of layers and very limited and fragmented in situ contexts required a new approach to build a reliable, precise and accurate time skeleton for Jerusalem’s history.

Methodology was based on detailed analysis of the stratigraphy, recognition of floors and activities based on microarchaeology proxies, mapping of time with dense radiocarbon dating including intrusive features. We have now more than 200 radiocarbon dates that cover about 5000 years of history. Resolution of the new chronology is at the level of single historical figures (as in Wilson’s Arch) and the relocation in time of large monuments (e.g. Gihon tower). Previous excavations (e.g. Shiloh’s Area E) can now be integrated in a new chronological framework given the fine stratigraphic resolution obtained with radiocarbon dating. The tailoring of radiocarbon sampling in the field has proven to be fundamental to reduce the noise, avoiding exacerbated modeling and improving the chronology of Jerusalem.

WORKSHOP: Stamp Seals from the Southern Levant

Stefan Münger | University of Bern

Ido Koch | Tel Aviv University

A Critical Discussion on the Concept of “Groups” in Stamp Seal Production in the Southern Levant

Nadia Ben-Marzouk

Tel Aviv University, Tel Aviv, Israel

Scientific research has long confirmed that the human brain is wired to categorize. While it is therefore natural to group features in glyptic studies, what underlying assumptions do we make when doing so? The objective of this paper is to provoke discussion on the methods and categories by which groups are established, as well as the larger social implications of shared features. First, this paper will briefly survey the history of grouping in stamp seal production in the southern Levant and then raise the following questions for discussion: What assumptions do we make when grouping features? Are these objective categories? How does the process of grouping allow us to better understand the relationship between seal use and a community? A new framework will be proposed for moving from descriptive categorizations of features to an approach that allows for the explanation of continuities and points of divergence in social practice as they pertain to stamp seals.

Methodological Approaches and Research Perspectives on Southern Levant Stamp Seals: A Focus on Signet-Rings

Giulia Tucci

Tel Aviv University, Tel Aviv, Israel. Bern University, Bern, Switzerland

Stamp-seals represent a case study that enriches archaeological contexts with fundamental information about the circulation of people, materials, technologies, and to better understand the cultural environment of a society. The second and first millennia B.C. in the Southern Levant are periods of dynamism, with a large number of agents in contact with each other. Here we find an opportunity to detect the different aspects connected with seals typological and technological development, as well as distribution and consumption. I will present my contribution using as a starting point the methodology applied in my PhD research on the Jewelry of the Southern Levant during the Late Bronze. The focus will be on examining the material class of stamp seals in the context of personal ornamentation and their possible multiple functions within the material culture of the Southern Levant in relation to the society producing and consuming such artefacts. Such a research would provide a possible setting to address issues of primary importance, such as mobility, cultural contacts, entanglement, foreign presences, and social interactions. All this without losing the anthropological side of the research, paying attention to the singularity of the “users” of the seals (collective and personal identity, origin and social position). Seals as *markers* of status/rank/role? This argument will open the way for future considerations on the ultimate purpose of seals, when used in their primary function, as witnesses of transactions, whether commercial or administrative, and the evaluation of the object, once decommissioned, as a luxury good, often treasured and inherited.

Steatite Scarabs from the Second Millennium B.C.E. Southern Levant: A Chaîne Opératoire Approach

Noa Ranzer

Tel Aviv University, Tel Aviv, Israel

Scarabs found in numerous southern Levantine sites in contexts dating to the Middle Bronze Age and the Late Bronze Age were produced both in Egypt and in the southern Levant. In this paper I will present the sequential phases of the scarabs’ production, i.e., the *Chaîne Opératoire*. This reconstruction emphasizes the social context in which scarabs were produced and raises some questions related to how steatite was imported from Egypt to the southern Levant.

The Megiddo Fibula: A Possible Assyrian Reproduction Amulet

Ben Greet

Universität Zürich, Zürich, Switzerland

In the Megiddo Volume I, a fibula with a stamp seal is recorded amongst the finds of Strata IVA-III, dated to the Iron IIB. On the fibula’s left arm is the head of the demon Pazuzu and on its right is an eagle, with the stamp seal depicting a kneeling caprid with a branch. This paper aims to confirm the previous assumptions of the fibula’s Assyrian influence/origin through provenanced comparanda and posit a new joint meaning between the imagery of the fibula based around reproduction. The head of Pazuzu has been shown to be used as a protective amulet during pregnancy, whilst the eagle can be connected to both pregnancy and the birth process through the Myth of Etana and its link to other protective amulets. Even the caprid and branch could be linked to concepts of fertility and, possibly, to specifically

male fertility. Thus, this tripartite imagery covers almost the entire reproduction process from fertility, to pregnancy, to birth.

Intersecting Stamp Seals and Gendered Bodies

Bruno Biermann

University of Bern, Bern, Switzerland

What do we know about the gender of wearers and users of stamp seals from the southern Levant? The interest of Biblical Archaeology in glyptics has long been focused on the identification of biblical, elite male persons. Such an approach reproduces a patriarchal and status specific representation of history. However, most of the seals from the southern Levant do not bear personal names.

To reevaluate the relevance of southern Levantine stamp seals for gender-historical questions, I suggest an alternative approach based on Gender Archaeology. Stamp seals are a particularly interesting part of material culture regarding gender issues due to the intersection of material culture and human bodies they provide. Their high numbers, broad dissemination, and common accessibility to persons of various social status, gender, and origin renders seals ideal for such an approach. And if gender is performed by engendered bodies, who in turn are shaped by such performances, this also is the case for material culture related to the body. Thus, both aspects, gendered social performances and material culture can be present in the archaeological record. Consequently, recent excavations in the Southern Levant increasingly employ bioarchaeological methods systematically, enabling extensive insights into social structure, but also sex and gender constructions of individuals. Employing the final reports of the Leon Levy expedition to Ashkelon, I will demonstrate the productive insights yielded by the intersection of glyptics and Gender Archaeology.

Towards a Handbook for the Description, Documentation and Study of Scarabs

Vanessa Boschloo

Ghent University, Belgium

A critical look at the large body of publications on scarab-shaped seal-amulets makes it painfully clear that different approaches to their description and classification are used side by side, causing confusion to the untrained eye that aims to identify, describe, document, date or interpret these small objects. This is partly due to the highly detailed surface characteristics, to the continued use of methodologically problematic or outdated classification systems, and to the fact that scarabs were manufactured over a time span of nearly two millennia and by different cultures, from Nubia to Western Asia and southern Europe. Several attempts have been made to develop standardized systems that allow categorizing the wide variety of scarabs’ typological features or so-called design classes, but these are based on datasets from a particular period, region or site. Archaeologists and museum professionals have expressed the need for a handbook that sets standards and collects best practices for the description and documentation of scarabs. This contribution will evaluate established protocols and present the groundwork for the creation of such a manual, which will be a joint effort of leading scarab specialists and will cover scarab production of the 2nd and 1st millennium B.C.E.

WORKSHOP: New Realities? A Critical Approach to Recreating Objects for Examining and Presenting the Past

Emily Miller Bonney | California State University, Fullerton
Leann Pace | Wake Forest University

Teaching Ancient Egyptian Hieroglyphs through Virtual Reality Brent E. Davis

University of Melbourne, Melbourne, Victoria, Australia

In this presentation, I discuss my experiences using Virtual Reality (VR) to teach ancient Egyptian hieroglyphs. Students of my four-level course in hieroglyphs have access to two VR models:

(1) At the end of each semester, students in all four levels are given the opportunity to tour a scientifically scanned, life-size VR model of Nefertari's tomb in the Valley of the Queens, whose walls are covered with inscriptions; students can wander around the tomb for 90 minutes or more, reading whatever they can. Students find this experience enormously engaging and enormously encouraging, as each time they tour the tomb, they can see how much more they've learned over the past semester, manifested in how much more they can read. This exercise is conducted in our Virtual Reality Lab.

(2) Students also have access, on an ad hoc basis, to our custom-built Library of Egyptian Stelae—a VR space containing 3D replicas of over 50 Egyptian stelae, arranged along the walls of four interconnecting rooms labeled Old Kingdom, Middle Kingdom, New Kingdom, and Late Period. As the students wander from room to room, they can pause and study the stelae that interest them the most. A plaque beside each stela gives its date, provenance, and topic. This exercise is conducted with untethered headsets that can be brought directly into the classroom for use during lessons.

I will discuss and demonstrate the profound effect that these experiences have on the students and their learning.

Virtual Pasts and Presents: Plaster Casts, 3D Modelling, and Accessing Ancient Forms in Modern Spaces

Emily S. S. K. Anderson

Johns Hopkins University, Baltimore, MD, USA

In this paper I discuss my current research project that examines both the history of a now disbanded collection of plaster casts of classical sculpture from 19th-century Baltimore and the virtual re-collection of the casts in a walkable 3D exhibit. Questions of replication, embodiment and access are considered as two eras and technologies of "virtual" reproductions are set in juxtaposition. I will focus in particular on the question of access and how the process of reproducing ancient forms brings with it opportunities for broadened and altered access, while also potentially changing the identity of the "originals" themselves. The case of Baltimore invites us to consider historic restrictions on access to collections given implicit and explicit discriminations based on race and class and how, through replicas, access can be changed and the status of the ancient cultures developed through new cultural association born of that changed access.

Reproducing the Past in Multiples: Shaping Past and Present Narratives

Emily Miller Bonney

California State University, Fullerton, Fullerton, CA, USA

In this session, we reflect on reproduction as a way of thinking about how people have engaged with materials and artifacts across time—yet, in many respects, this is not a new consideration. In 1901, Sir Arthur Evans, while excavating the site of the Palace at Knossos on

Crete, found fragments of a faience figurine—of which only the torso and upper hips were preserved. The raised right hand of the figurine appeared to hold a bit of cord. Twenty-five years later, in the wake of significant restorations, the fragment emerged as the snake-wielding votary of Evans's Snake Goddess from the Temple repositories. Though only designated as a votary, the figure has quickly superseded the Goddess in power and prevalence and has become one of a half dozen iconic images for the Bronze Age culture of Crete, the so-called Minoans. Replicated in a broad array of media, including Barbie Dolls and earrings, the figure even made an appearance at the opening ceremonies of the Olympic Games in Athens and is a foundational icon for various iterations of the goddess movement—such as the Ariadne Institute. She has become the Snake Goddess in the popular imagination. The journey of this fragment calls us to reflect on the power of recreations to recast the past in both trivial and politically significant ways. The figurine was deployed not only to comment on a particular narrative of Minoan religion but was a device in tying Crete, through Athens, as the foundation of western civilization.

Re-creating Ancient Egypt in a Brave New World: Students' Stories Sarah J. Scott

Wagner College, Staten Island, NY, USA

In order to support students in learning about the past, it is helpful to design creative ways for students to immerse themselves in material culture. Through a post-colonial lens, teachers of ancient history, anthropology, archaeology, and art history strive to approach their material through concepts of hybridity and non-essentialism. With undergraduate students, such approaches are essential as we tackle difficult questions about diversity and inclusion. How can we approach the ancient world through multiple perspectives and seek to understand complex networks of relationships between groups? Objects-based learning is key—artefacts serve as mediators in social environments in order to better help our students understand the past and the present. Students in an Ancient Egyptian Art course at Wagner College embarked on a brave assignment asking them to place artefacts from the past in a new setting, encouraging a methodology informed by concepts of hybridity and non-essentialism. Combined with knowledge gained in a partner class, Soundscapes of Science-Fiction Film, students set the stage for a short science-fiction story based on ancient Egypt. This paper will share some of the stories created by the students and present students' perspectives on what they learned about ancient Egypt by placing these artefacts in a newly-imagined cultural context.

Experimental Archaeology: Making a Good Impression

Kristine Garroway

Hebrew Union College, Los Angeles, CA, USA

The role of experimental archaeology can be beneficial in helping to revive crafting practices of the past. It allows for replication, reproduction, and recreation of items in various mediums. This paper will examine a modern cylinder seal impression and trace its history from creation to final product. Because of their small size, their ubiquity at sites, and their relative ease of transportation, cylinder seals are often found on the antiquities market. While some who buy them are collectors, others are tourists who want a piece of the past. Many battling the antiquities market say that education is a big key in stopping the looting. Being able to learn how to create a cylinder seal through experimental archaeology can help foster appreciation for the craft, revive the practice of carving on hard stones/gemstones, bring

awareness to the high level of craftsmanship needed to create seals, and train generations of scholars who can study and then pass on the craft.

WORKSHOP: Interdisciplinarity at SiMUR - the Shiraki International Multidisciplinary Undergraduate Research Project

Misha Elashvili | Ilia State University

The Geoarchaeology of the Shiraki Plain

Christine Brandon, Michael Zimmerman

Bridgewater State University, Bridgewater, MA, USA

Modern, high resolution geophysical techniques such as ground penetrating radar (GPR) allow archaeologists to image the subsurface in a non-invasive way, whether the goals are landscape mapping, excavation planning, or the identification of nonrenewable cultural resources. In the case of the SiMUR Project, this technique was used in the Summer of 2019 to determine discrete features for examination from Late Bronze Age communities. Additionally, GPR surveys and sediment cores revealed evidence of a lake and stream network which existed on the Shiraki Plateau, on the Iori Plain in Georgia, an interfluvium between the Iori and Alazani River Valleys, at the time at which these communities were active. This suggests that the climate of the Shiraki Plateau in the Late Bronze age was wetter, with enough water to support sustained occupation. At some point in the Early Iron Age, the Shiraki Plateau underwent dramatic environmental changes, leading to the abandonment of these communities. In this virtual workshop, we will present subsurface maps of these hydrological features, as well as key features of Late Bronze Age sites on the Shiraki Plateau, including the discovery of a burial chamber, and explore the causes of its abandonment in the Early Iron Age, either as the result of climate change or anthropogenic land degradation processes. We will also detail plans for the creation of an interdisciplinary GPR training program at Bridgewater State University, as well as possible research applications for this endeavor.

3D Scanning in Archaeology: The SiMUR Virtual Museum

Giorgi Datunashvili

Ilia State University, Tbilisi, Georgia

In Archeology moveable and static artefacts needs to be documented. Nowadays we have graphical fixation which is done by hand drawing. This method is getting old and we can use photogrammetry and 3D modelling to get more accurate and visually appealing data. Using hand drawing we make couple of drawings and it takes a lot of time and effort and we never get 100% accuracy. Using photogrammetry we can get results where we get analog 3D model of scanned object which can be used for different purposes. With this technique we can explore artefact from any angle and create dynamic cross sections. Using photogrammetry we reduce time and increase accuracy. The data that we get from this technique can be received from laser scanning too but advantage is that photogrammetry is much cheaper than laser scanning. Photogrammetrical shooting can be done on any object that camera can see. It can't capture transparent and shiny objects but there is solution for this problem also with special solution. Virtual museums are capable of holding very big amount of data, with space dependent on hard disc storage. Visual information is 100% identical to real object, using photogrammetry method. Received information will be processed to be prepared for virtual reality engine. This technique is modern method for fixating movable and static

artefacts. This technology gives us opportunity to make data more accessible to people who are interested in this field.

Climate Change and Adaptation at the Shiraki Plateau

Mikheil Elashvili

Ilia State University, Tbilisi, Georgia

The study of past environmental changes and their effects on former human societies delivers key information to reconstruct former human-environmental interactions, but also to project future climate changes and their effects on human societies. Our intended study will focus on South-Eastern Georgia (Caucasus region), that experienced long-term environmental changes during the late Holocene.

Our study area represents the semi-arid Shiraki Plain. The region is characterized by semiarid climate conditions and shows an open dry steppic landscape today. Geomorphologically, the Shiraki Plain represents an almost flat area with a size of ca. 800 km² and an average height of 500-600 m above sea level, surrounded by chains of low mountains ranges. Today there are almost no settlements in the area since it is largely devoid of water resources. However, recent data collected using remote sensing and archaeological investigations delivered evidences of a continuous early human inhabitation of this area, starting from the Paleolithic period and abruptly ending during the Bronze - Early Iron Ages. Furthermore, recent archaeological excavations gave even evidence of early state formation under favorable paleoenvironmental conditions.

Complex geo-archaeological surveys involving remote sensing, geomorphology and hydro-modelling aim at reconstruction of late Holocene paleoenvironmental conditions and prehistoric settlement patterns in the Shiraki region, in order to shed light on significant environmental changes during the last millennia, identify possible natural and/or anthropogenic drivers of these changes and identify the response of human societies to these changes.

Multi-Level Archaeological Survey at the Shiraki Plateau

Giorgi Kirkitadze

Ilia State University, Tbilisi, Georgia

Presented research is the first documented attempt to create an archaeological map of the Didi Shiraki plain, featuring archaeological sites, but also showing the actual distribution of field archaeological materials in selected areas. This is the first map covering the whole Didi Shiraki plain (app. 400 sq. km.), located in eastern Georgia between the rivers Iori and Alazani. It provides new evidence of archaeological sites from the air, using a special, Multi-Level Survey methodology which combines remote sensing and field survey. This approach was implemented on large-scale as reconnaissance for understanding past landscapes of the Didi Shiraki plain. The Multi-Level Survey is based on processing large scale satellite imagery and identification of sites of interest, which are further downscaled using the close-range aerial photogrammetry conducted at site. Obtained high resolution ortho photos and surface elevation models let us clearly delineate possible archaeological objects and their basic shapes. Last level of survey is conducted in the field by means of conducting pedestrian archaeological survey, field gathered archaeological material let us characterize archaeological sites, narrow down its type and age/period. Based on recently conducted archaeological excavations on Shiraki Plain, most archaeological sites date back to the Late Bronze- Early Iron Ages, therefore these results

are especially valuable to researchers of the South Caucasus early history.

STEM Education and Outreach at the Shiraki Plateau, Georgia

Jennifer Aizenman¹, Nana Dikhaminjia², Nicole Glen¹, Polina Sabinin¹
¹Bridgewater State University, Bridgewater, Massachusetts, USA. ²Ilia State University, Tbilisi, Georgia

SIMuR - Shiraki International Multidisciplinary undergraduate Research Project is funded by the National Science Foundation. Bridgewater State University is a large public university in southeastern Massachusetts that serves a diverse student population. SIMuR Undergraduate Fellows participate in a year-long research program including an 8-week fieldwork experience in Shiraki, Georgia. Throughout the year, SIMuR Fellows participate in service learning intended to develop leadership skills in STEM fields and to promote STEM engagement and scientific literacy in underserved communities in rural Georgia and USA. STEM service learning is a high-impact practice that leads to enhanced motivation, understanding of scientific concepts, confidence in sharing scientific knowledge and leadership, and improvement in communication, teamwork and organization skills. In the US, SIMuR Fellows led community and after-school programs for high-needs students, and developed virtual activities for online STEM outreach events. In Georgia's underserved regions, they facilitated STEM workshops and participated in community-building events. Researchers used fellows' surveys, written reflections and focus groups to assess the impact on attitudes and beliefs towards science and the impact on skills, such as communicating verbally, managing time, and taking responsibility as a scientist. Surveys asked respondents to rate their level of agreement with statements related to their ability to achieve specific goals connected to STEM communication and outreach (self-efficacy); their belief that their STEM outreach work would achieve the intended outcomes (outcome expectations); and statements related to attitudes and beliefs towards science, and skills development. Preliminary research indicates that participation in STEM service-learning leads to improvements in self-efficacy and outcome expectation.

Visual Exploration and Analysis of Archaeological Samples from the Shiraki Plateau Bronze Age Settlements: Methodology and Initial Results

Christine Brandon¹, Ilya Zaslavsky², Benjamin Howe¹

¹Bridgewater State University, Bridgewater, MA, USA. ²University of California, San Diego, San Diego, CA, USA

The NSF-supported SiMUR (Shiraki International Multidisciplinary Undergraduate Research) project explores the Shiraki Plateau in eastern Georgia in the Caucasus, the site of recently discovered Bronze age settlements. Undergraduate student researchers are engaged in interdisciplinary analysis of archaeological samples from the area using a variety of approaches: from archaeology, geology/geomorphology, paleoclimate, information management, and data science.

To understand and explain spatial and temporal patterns of the settlements with respect to the underlying geological structures, paleoclimate model estimates, and soil characteristics, faculty researchers and students collected a large number of samples from archaeological sites on the Plateau. Photographs of soil samples and sample metadata were organized in an online analysis system named SuAVE (Survey Analysis via Visual Exploration, <http://suave.sdsc.edu>.) SuAVE is a free open-source visual

analysis platform that allows users to explore, annotate and share images and image collections. The images are explored through multiple interactive animated views, while SuAVE's integration with Jupyter notebooks enables application of a range of data science techniques including image processing and deep learning.

The collected soil images were described using a variety of characteristics, including mineral composition, geomorphological characterization, color and texture, and archaeological descriptions. Visual analysis with SuAVE allowed us to sort and group sample images by any combination of factors, and observe similarities in sample characteristics and spatial patterns.

The presentation will demonstrate SuAVE capabilities for analysis of archeological images and present the initial findings from the analysis of image collections assembled for the Shiraki Plateau during the 2016 field season.

WORKSHOP: Preserving the Cultural Heritage of the Madaba Region of Jordan

Douglas Clark | La Sierra University
Suzanne Richard | Gannon University
Andrea Polcaro | University of Perugia
Marta D'Andrea | Sapienza Università di Roma
Basem Mahamid | Department of Antiquities of Jordan

Virtual Tours of Historic Downtown Madaba (Online Training in 3D Documentation and Storytelling)

Kacey Hadick, Elizabeth Lee
CyArk, Oakland, CA, USA

Community-constructed virtual tour experiences that promote greater appreciation for and protection of cultural heritage can be produced through targeted online training in 3D documentation and storytelling. In late 2020, CyArk, StoryCenter, and the English Language Program in the US Embassy in Amman, in partnership with the Madaba Regional Archaeological Museum Project, provided online workshops to local stakeholders in Madaba, Jordan. The virtual workshops exposed participants to a number of hard and soft skills including digital photography, photogrammetry, 3D data management, project planning, storytelling and English language communication. Following the virtual instruction, participants were able immediately to apply what they learned by documenting three sites in historic downtown Madaba and developing companion video and audio stories. The resulting materials were combined to produce an online, community-built tour, available in English and Arabic. The experience features multiple perspectives and is freely available to the public, providing virtual access to homebound travelers and others who may never have the chance to visit Madaba in person. The 3D data used to construct the virtual tours also serves as an inventory of the documented resources, available for research and education via the open-access repository OpenHeritage3D. This project demonstrates the ability of virtual instruction to empower communities with new skills, support the conservation of cultural heritage, and provide a platform for community members to share their perspective through interactive web-based experiences.

Architectural Planning of the Madaba Regional Archaeological Museum: The Latest Updates

Valeria Gaspari, Guido Battacchioni, Laura Romagnoli
Studio Strati, Rome, n/a, Italy

The architects of Studio Strati in Rome became engaged with the Madaba Regional Archaeological Museum Project (MRAMP) early on in

the project's history. After consulting for several years with the whole team on the general concept and goals, the design team has recently moved to its next stages of in-depth planning. The most recent analysis examined traffic flow and the itinerary intended for the exhibition; the plan for layouts, volumes and spaces, displays and furniture; and communication of narrative themes of the proposed museum through a comprehensive 3D model exploration tour, which builds on an earlier and briefer 3D video tour of the general concept design.

Preserving Cultural Heritage through the New MRAM Website Douglas R. Clark¹, Lina Madadha²

¹La Sierra University, Riverside, CA, USA. ²Imagine Technologies, Amman, Jordan

The history of the Madaba Regional Archaeological Museum Project's quest to establish and maintain an online presence via formal websites covers several years and two website URLs. Set up initially as an unofficial website, mramp.org was created by the MRAMP team, primarily by Andrea Polcaro at Perugia University. It was designed in minimal fashion and was always intended to be limited in its scope but serve as a communication vehicle among scholars and partners; it now only serves as a proxy URL for the new museum website. The official website, on the other hand, was developed in English and Arabic over four years with Imagine Technologies in Amman: madabamuseum.org. While it has also focused on MRAMP, its major purpose is to function as a vibrant, robust, accessible, and relevant online presence for MRAM, the Madaba Regional Archaeological Museum. As such, it not only records major components of the MRAMP project, but also features interactive regional archaeological timelines and site maps, educational initiatives, virtual tours of Madaba (anticipating the inclusion of regional archaeological sites as well) and of the museum itself with interactive exhibits, even before the museum has been constructed. In addition, it illustrates renovations in and repurposing of the current Madaba museum into a first-class storage and research facility.

General Progress Report: Updates and Projections **(SCHEP/MRAMP)**

Douglas R. Clark

La Sierra University, Riverside, CA, USA

This presentation will serve to introduce the 2021 workshop on preserving the cultural heritage of the Madaba region of Jordan and provide a general progress report on developments in the work of the Madaba Regional Archaeological Museum Project (MRAMP) over the past several months and the Madaba region in general. Global encounters with COVID for more than one-and-one-half years have reshaped everything archaeologists have attempted in the Middle East, forcing a reallocation of time and resources to remotely supervised interventions from afar. In the case of MRAMP, progress in some aspects was surprisingly significant, in others progress slowed significantly. Building on a comprehensive presentation on the history and ethos of MRAMP for the ACOR lecture series on 19 January 2021 (see below for the YouTube recording), this brief introductory lecture will lay the groundwork and create the backdrop for the presentations and discussion to follow. Included are references to the ongoing work onsite at the Madaba Archaeological Park West, home to the proposed new regional archaeological museum and locus of excavations and renovations to several structures in the park; continued developments in the current Madaba Archaeological

Museum; and numerous virtual enhancements to the MRAM (Madaba Regional Archaeological Museum) website.

ACOR Lecture URL -

<https://www.youtube.com/watch?v=6wX5wF3rJIs&t=27s>

Renovations in the Madaba Archaeological Park West (Italian International Support)

Andrea Polcaro¹, Marta D'Andrea²

¹University of Perugia, Italy. ²Rome Sapienza University, Italy

The paper will present the contributions of Italian institutions to the renovation of the Madaba Archaeological Park West within the general framework of the MRAMP project. In particular, thanks to the participation of Italian researchers, architects and students from Perugia University and from Sapienza University of Rome, a broad range of activities related to the planning, study, renovation, and valorization of the Cultural Heritage of Madaba were accomplished during the past years. The paper will summarize the value of the interdisciplinary approach and of the international collaboration between Jordanian American and Italian institutions that still represent the main strong point of the Madaba Regional Archaeological Museum Project.

Repurposing the Current Madaba Museum (AFCP/CATF - US Ambassador's Fund)

Suzanne Richard

Gannon University, Erie, PA, USA

This presentation will focus on the progress and accomplishments in the repurposing of the current Museum housed in the Department of Antiquities Regional office in Madaba, Jordan. The work reported on occurred despite the travel restrictions due to the Covid-19 Pandemic. The purpose of the project, funded by a two-year Ambassador's grant (AFCP/CATF), was to transform the current facility into a modernized storage center that will house some 14,000 artifacts and serve as a conservation lab and study center in support of a new regional archaeological museum for the Governorate of Madaba. The renovated rooms, complete with HVAC and modern shelving and conservation equipment, have enabled the relocation of endangered artifacts from crowded, unsafe conditions to a state-of-the-art storage facility. The on-going work is focused on establishing a well-organized, inventoried, databased, and conserved artifact collection.

A More Inclusive Past for Levantine Lands: A Project Proposal and Case Study from the Greater Madaba Region in Jordan

Oystein S. LaBianca

Andrews University, Berrien Springs, MI, USA

I provide a brief overview of a recent proposal to the NEH Collaborative Program that seeks funding to initiate collaboration on interpretive scholarship and dissemination by the Hisban Cultural Heritage Project (HCHP) in collaboration with the Madaba Regional Archaeological Museum Project (MRAMP). A key argument of the proposal is that protection and development of the archaeological heritage of the Levantine lands requires far more than ramped up restoration of key heritage sites and digital wizardry. It requires that a significant measure of agency and a sense of ownership of the past be experienced by the peoples who live on and around cultural and environmental sites. To this end, the proposed project posits as a solution engaging the perspective of global history—the study of humans and their interactions with other living organisms from

prehistoric times to the present. This lens on the past situates particular historical moments, peoples and places within a larger, more inclusive narrative about the human project on our planet, making the past less contentious. While the lead partners will work together on formulating this new narrative, three supporting organizations will help with obtaining host community feedback and dissemination results. The three are StoryCenter, which will assist with development of storylines and obtaining host community feedback; CyArk, which will assist with 3-D digital narration and on-line publication of key storylines; and Sela for Training and Protection of Heritage which will assist with translation of stories into Arabic and outreach to local schools and host communities.

U.S. Department of State's Support for Heritage Preservation in Madaba, Jordan

Catherine P. Foster

U.S. Department of State, Washington, DC, USA
Panelist

Panelist

Fatma A.M Marii

University of Jordan, Amman, Amman, Jordan
Panelist.

Panelist

Debra Foran

Wilfrid Laurier University, Waterloo, ON, Canada
Panelist.

Panelist

Susanne Kerner

University of Copenhagen, Copenhagen, Denmark
Panelist.

WORKSHOP: Navigating the "In Between": Identifying a Career Trajectory in Academia for the Early Career Scholar

Vanessa Workman | Bar-Ilan University
Owen Chesnut | North Central Michigan College

Navigating Academic, Political, and Physical Boundaries

Steve Renette

University of British Columbia, Vancouver, BC, Canada

My academic trajectory as a first-generation student has been very international: starting at Ghent University in Belgium, then a Master's degree at Leiden University in the Netherlands, to a PhD at the University of Pennsylvania in the USA, and now a postdoctoral position in Canada, with archaeological fieldwork throughout Europe, North Africa and the Middle East. In recent years, I have been on the academic job market as a graduate student nearing graduation, an adjunct lecturer, and a postdoctoral researcher, all the while navigating the challenges of a changing immigrant status. This uncertain path has come with its share of rejections, but maintaining an interdisciplinary approach, a broad range of intellectual interests, and conceptualizing how my research and teaching connects to the present-day world have opened some doors along the way. In this panel, I will keep a focus on the harsh realities of the current academic job market while discussing how networking and making highly specialized research relevant to others can help create opportunities and a diverse social network.

A Biblical Studies Perspective on Postdoctoral Positions

Madadh Richey

Princeton University, Princeton, NJ, USA

Early career scholars in Hebrew Bible and ancient Middle Eastern studies can take advantage of both field-specific postdoctoral fellowships and opportunities in the broader Humanities. Aspects of the postdoc search and experience covered will include: (1) setting and maintaining reasonable presentation, publication, and research expectations during the graduate student and postdoc phases; (2) articulating the content and relevance of one's work to a broad academic audience; and (3) finding and profiting from postdoc positions with teaching components. Comments will be based on my recent personal experience in two postdoctoral fellow positions at the University of Chicago (2019-20) and Princeton University (2020-21), the former a teaching-focused Humanities position and the latter a research-focused Hebrew Bible position. Reflections on navigating the postdoc and academic job market as an out LGBTQ+ academic will also be included.

There and Back Again - Readjusting to America

Zachary C. Dunseth

Joukowsky Institute for Archaeology and the Ancient World, Brown University, Providence, RI, USA

After seven years in Israel as an MA and PhD student, I returned to the US as a postdoc. I will discuss some practical things I wish I'd known at the start of the process, including what to expect, how to generalize and specialize yourself, as well as some of the challenges particular to those coming from very different international academic cultures.

Postdoctoral Opportunities in Europe

Shana Zaia

University of Vienna, Austria

Dr. Shana Zaia is an Assyriologist working in the Department of Near Eastern Studies at the University of Vienna, Austria as a Universitätsassistentin (a position roughly equivalent to a non-Tenure Track Assistant Professor). She previously held a Marie Skłodowska-Curie Individual Fellowship in the same department. Before moving to Austria, she was a postdoctoral researcher in the Center of Excellence: Changes in Sacred Texts and Traditions, based in the Faculty of Theology at the University of Helsinki, Finland. Prior to that, she worked as an Adjunct Professor at Fairfield University while finishing a PhD at Yale University. She is happy to discuss topics relating to European grants and funding schemes, challenges with understanding the European academic systems as an outsider, life on limited-term contracts, the logistics of moving between countries, the transition from graduate student to having independence in research/teaching/administration, and other similar subjects.

Always on the Market: International and Domestic Postdoc Experiences

Max Price

Massachusetts Institute of Technology: MIT, Cambridge, MA, USA

Receiving a PhD in the post-2008 world is a bit like jumping out of the frying pan, tumbling through the fire, and landing among the white-hot coals, where you must navigate through a disorienting landscape defined by hyper-competition, increasingly laborious job applications, and the imperative to "be flexible."

I discuss my own experiences “on the market.” Having graduated from the Department of Anthropology at Harvard University in 2016, I spent six months at an “internal” postdoc at the Peabody Museum at Harvard, before landing a postdoc at the University of Kiel in Germany. My work in Kiel allowed me to pursue research in new and exciting ways, but the need to stay active on the job market dragged on intellectual activity. Receiving a Humboldt fellowship and a lectureship at MIT in the summer of 2017 added a measure of stability that allowed me to spend more time on intellectual projects and less time on job applications.

In discussing my experiences, I will touch on a number of topics: the application process; life during the postdoc; and how an “always on the market” lifestyle propagates self-doubt, anxiety, and alienation (from friends, colleagues, and one’s work). In ways that will doubtless exacerbate existing inequalities in academia, the current job market privileges certain economic backgrounds and situations: early career scholars with access to family support and/or a partner who works in a geographically-flexible job outside of academia are better able to navigate the postdoc labyrinth and play the “waiting game.”

WORKSHOP: Working with Law Enforcement and the Military to Combat Trafficking and Preserve Cultural Heritage

Catherine P. Foster | U.S. Department of State

Cultural Heritage Policies, Anti-Trafficking Efforts, and International Relations

Catherine P. Foster

U.S. Department of State, Washington, DC, USA

Over the last three decades, the State Department’s Cultural Heritage Center and its federal partners have developed and implemented policies and programs that combat the theft, looting, and trafficking of cultural property. These range from law enforcement coordination and training to preservation grants and implementation of international conventions and bilateral treaties. The results have been the interruption of organized criminal networks, increased capacity for heritage managers and police to protect sites and enforce laws, heightened awareness of the vulnerability of heritage to destruction and pillage, and recognition by the international community of the vital importance of cultural property protection. Efforts to engage in cultural property diplomacy have also bolstered our bilateral relationships and facilitated activities of mutual interest, such as archaeological excavations, exhibition and research loans, educational training and professionalization, and preservation of archaeological and historical sites. Despite these positive and impactful outcomes, there remains much work to be done and the skills of anthropologists, archaeologists, and art historians are especially effective in shaping cultural policies.

The Penn Cultural Heritage Center – Working Cooperatively to Preserve Heritage

Richard M. Leventhal

University of Pennsylvania, Philadelphia, PA, USA

The Penn Cultural Heritage Center is focused upon the preservation of heritage sites and objects throughout the world. We work with a bottom-up model of heritage identification and preservation, prioritizing communities and their view of the heritage landscape and material. We have worked extensively with the US Department of State and law enforcement to help stop the illegal trade of antiquities and other heritage objects from coming into the US. This paper will discuss

the development of these common programs and present information about the current work that the center does to help stop the illegal movement of objects. This engagement leads directly to concerns about policy and the preservation of heritage.

Developing a Cultural Heritage Case

Paul Jarrett, Mary E. Cook

Homeland Security Investigations, Washington, DC, USA

This presentation will cover how law enforcement initiates cultural heritage investigations, the legal authorities, challenges pertaining to these cases, and working with academics and the private sector in developing an investigation.

The FBI Art Crime Team’s Use of Technology to Help Stem the Flow of Illicit Cultural Property

Jake Archer

Federal Bureau of Investigation, Philadelphia, PA, USA

This workshop presentation will center on the use and need of technology by the FBI’s Art Crime Team to help combat illicit trafficking of cultural property to and from the United States. Most technology in use by law enforcement was not created to address cultural property crime. The Art Crime Team has reconceptualized and reconfigured existing FBI technology, from simple to complex, in the attempt to increase investigative efficiencies and results. Moreover, the FBI, as a member of the United States Cultural Heritage Coordinating Committee (CHCC), continues to work through the CHCC’s Technology Working Group with its partner agencies to help pivot existing executive branch technologies toward cultural heritage preservation and enforcement goals. The Art Crime Team’s technological efforts will be placed in the greater federal and international law enforcement context as it regards combatting illicit cultural property trafficking and will include a discussion on the incorporation of subject matter experts in such investigations by and through the CHCC’s newly implemented Cultural Property Expert On-Call program.

FRIDAY, DECEMBER 10, 2021
10:00–11:00am (EST)

SESSION: Structures of Power in Southern Babylonia in the Second and First Millennia B.C.E.: From Local Rule to Provincial Existence I

Odette Boivin | University of Münster
Baptiste Fiette | Collège de France

Priestly Power and Political Pressure: The Ups and Downs of the Clergy of the Ekur in the Course of the First Half of the Second Millennium B.C.

Anne Goddeeris

Ghent University, Ghent, Belgium

Forming the core of the traditional Babylonian urban centers, the temples remain the focal point of urban identity throughout Babylonian history. Weak central political authorities will be challenged by the temples and their clergy, strong political authorities will attempt to control them. Especially the Ekur in Nippur, the temple of Enlil, head of the Sumerian pantheon, represents a challenge to the political authorities attempting to centralize their expanding territories.

On the basis of the administrative files concerning the temple management, we can retrace the relations between the political authorities and the clergy of the Ekur in the course of first half of the second millennium B.C.

Four administrative dossiers illustrate different phases in the temple management: the *sattukku* lists from the Isin-Larsa period and the file of the “central redistributive authority” from the reign of Rim-Sîn illustrate how temples of Nippur are managed on city level. A small file illustrates how, after Hammurabi’s conquest of the kingdom of Larsa in his 30th regnal year, the influence of the palace in the temple affairs increases under his successor Samsuiluna. After the loss of the south, Samsuiluna’s successors reinstate the cult of the Ekur reinstated in Dūr-Abiešuh under royal patronage.

The data to analyze these matters has to be extracted from administrative documents such as lists of expenditures and receipts. In order to compare the various files, network analysis tools will be used to visualize the participants in the management, and the weight of their contributions to the temple.

Dur-Abi-ešuh and the Difficult Control of Central Babylonia during the Late Old Babylonian Period

Marine Béranger

Freie Universität Berlin, Berlin, Germany

Recent publications have brought to light a group of texts from Dur-Abi-ešuh, a fortress built by King Abi-ešuh in the vicinity of Nippur, in Central Babylonia. These texts provide us with information on military activities, the management of agricultural resources, and religious life in central Babylonia during the Late Old Babylonian period. They are a valuable source to understand how Babylonian kings maintained their power in Central Babylonia at that time as well as the different threats they had to face.

Recent Shallow Marine Archaeology and Geophysical Surveys in the Methoni Bay Area, Greece

Thibaud Nicolas

The School for Advanced Studies in the Social Sciences (EHESS), Paris, France

This paper examines the cult of Marduk in Southern Babylonia during the Old Babylonian period as a Babylonian political and cultural

marker in a conquered land. In 1763 B.C.E., Hammu-rabi, king of Babylon (1792-1750 B.C.E.) conquered the kingdom of Larsa. Some manifestations of the cult of Babylonian god Marduk in this region appeared soon after, such as the presence of *nadītum*-nuns devoted to that god, marks of devotion to Marduk, or the use of a “measure of Marduk” in some transactions. The first part of the paper argues for the cult of Marduk as a type of Babylonian “soft power” used notably in Southern Babylonia. After Hammu-rabi’s reign, his successors also promoted the cult of Marduk at the Babylonian kingdom’s borders. The recent publication of a group of texts from Dur-Abi-ešuh has illustrated a vivid devotion to Marduk in that fortress. The second part of this paper investigates the profound connection between Babylonian authority and the cult of Marduk in the southernmost region of the Babylonian kingdom, where its power was jeopardized.

Pīḫātu: What Constitutes a Province during the Kassite Period?

Susanna Paulus

University of Chicago, Chicago, IL, USA

The division of Babylonia into several provinces (*pīḫātu*) is a novelty of the Late Bronze Age (around 1500-1155 B.C.E.). While several of those provinces are oriented around traditional cultic centers others are clearly new political units. Our knowledge of what constitutes a province as a political and administrative unit is still mostly informed by the province of Nippur. Nippur played a special role as the seat of the mayor deity and its governor was divergently called a *šandabakku*. It is therefore important to ask are the structures we reconstruct for Nippur the norm or an anomaly? To address this question, I will examine texts from the private archives in Babylon and Ur as well as the *kudurru*-inscriptions in the light of the evidence from Nippur, to highlight similarities and differences. Aspects discussed will include officials, jurisdiction, temple-palace-relationships, and taxation.

Somewhere between Divine and Sacred Kingships: The Babylonian Problem Revisited in Light of Recent Ethnographic Studies of Monarchy

Joshua L. Jones

The University of Texas, Austin, TX, USA

Babylon’s reaction to Neo-Assyrian rule was constant defiance. It is often referred to as the “Babylonian problem.” Extensive research to date proposes various factors that would account for Babylon’s persistent refusal of Assyrian overlordship. However, recent ethnographic studies offer important theoretical models which should be applied to both Neo-Assyrian kingship as well as Babylonian vassalhood. While the ethnographic studies mainly theorize and propose how kingship originated in its most archaic and rudimentary form, they, at the same time, maintain that many of its fundamental characteristics have survived the test of time. Neo-Assyrian kingship is no exception, and its totalitarian ideology rests in the royal station and derives from the divine intention to subdue all things and bring them into obedience and obeisance. However, what is odd about the Babylonian problem has as much to do with the ruler as it does the ruled. On the spectrum of kingship which measures to what degree a king or his people have control of the sovereignty that resides in his royal person, there is always a matter of fact that is not questioned, which is that the king is a necessary evil. Babylon during the eighth to seventh centuries did not see any such necessity or legitimacy in Assyrian rule, which suggests both a skepticism and mortal refusal of divine will. Such skepticism and refusal defy predominant concepts of

theodicy in the ancient Near East, which perceived success of the enemy as not only divinely approved but intended.

SESSION: Archaeology, Community, and Mentorship: Celebrating the Legacy of Bert and Sally de Vries

Elizabeth Osinga | Umm el-Jimal Project
Darrell J. Rohl | Calvin University

Impact of Enhanced Tourism at the Umm el-Jimal Archaeological Site on the Socio-Economic Development of the Local Community Dana Soud ELFarraj

Umm el-Jimal Archaeological Project, Umm el-Jimal, Al-Mafraq, Jordan

Since 2014, Umm el-Jimal, the new 2021 Jordanian World Heritage List candidate, has undergone tourism enhancement and site development projects, led by Dr. Bert DeVries and the Umm el-Jimal Archaeological Project. An important example is the Water Project that continues work to preserve and reactivate the site's ancient water delivery and storage system.

This research, derived from the author's MA thesis and initiated to support community archaeology initiatives, documented different types of development projects at Umm el-Jimal and analyzed the residents' responses to these changes over time through a two-stage questionnaire survey in 2017 and 2019. Moreover, it is distinguished from previous studies as it highlights residents' attachment and awareness, and analyzes the socio-economic impacts of the early stages of tourism enhancement and development. This study demonstrates that the reactions and evaluations of residents' attitudes and perceptions must be considered by decision-makers and professionals when moving forward with tourism development. A mixed methodology of quantitative and qualitative methods was used, including a survey taken by Umm el-Jimal residents and field observations over 24 months. Results were analyzed through the Statistical Package for the Social Sciences (SPSS) software version 20 using the paired sample T-test and descriptive analysis. This paper presents these results in detail and shows that tourism enhancement has benefited Umm el-Jimal's residents in both social and economic dimensions. However, it is vital to track tourism enhancement, development, residents' responses, and needs over time in order to maximize benefits and minimize negative outcomes on the local community.

A Paradigm for Local Ecclesiastical Architecture in Jordan: Comparative Study of Three Churches at Umm el-Jimal Mais Fahmi Haddad

Umm el-Jimal Archaeological Project, Umm el-Jimal, Al-Mafraq, Jordan

This paper presents the results of the author's MA thesis, which explored the architecture of churches at Umm el-Jimal by focusing in detail on three case-studies: the West Church, a freestanding building, and the Julianos and Southwest Churches—both built into existing domestic complexes, though only the latter is accessible from the public streets. This research, part of a larger Churches Project directed by Bert de Vries and the Umm el-Jimal Project team, aims to study the site's sixteen churches archaeologically, architecturally, liturgically, and, perhaps most importantly, through a social lens.

After extensive literary and archaeological review, including personal site visits to measure and document the churches, detailed architectural content was presented for each church—with architectural drawings of walls, floors, and other details, such as lintels and inscriptions. New, accurate plans of the churches were also produced, along with three-dimensional drawings of the current state

of the churches in 2019, which can be used to assess changes over time. A key research interest was to explore the original state of the churches, particularly the roofing methods, as these were not preserved. Taking into account regional parallels and archaeological evidence, three-dimensional renderings were produced to show the methods and materials that would have been used to roof the structures. Detailed renderings of the original state of the churches show the architectural details lost to time.

This research produced an integrated comprehensive architectural framework that may be used in future studies as the Churches Project expands.

Mapping Umm al-Jimal, from the Princeton Expedition to the Present

Darrell J. Rohl

Calvin University, Grand Rapids, MI, USA

In 1905, Howard Crosby Butler and the Princeton University Archaeological Expedition to Syria visited Umm al-Jimal, producing the first substantial plan of this ancient town's surviving ruins. More than 60 years later, Bert de Vries established the Umm el-Jimal Archaeological Project and began a systematic survey and targeted stratigraphic excavation, adding more than 110 buildings to the known plan for the main site and expanding knowledge of Nabataean and Early Roman use of areas outside the Late Antique town walls. The basic plan has, thus, been known since the 1970s, with incremental changes deriving from subsequent periodic fieldwork. This paper presents a narrative of how the site's plan has developed over the past 120 years, focusing on particular researchers and their methods, the knowledge acquired via these methods, and new insights being gained from current digital mapping efforts and remote sensing data analysis.

Umm al-Jimal Chancel Screens in Early Byzantine Context

Neil P. Sutherland, Darrell J. Rohl

Calvin University, Grand Rapids, Michigan, USA

Umm al-Jimal, an ancient rural town in the north of Jordan, is remarkable for its high concentration of Byzantine period churches. Much like other towns in the same region, Umm al-Jimal was affected by architectural, cultural, and religious influences spread throughout the Late Antique Byzantine Empire. This paper will examine the relationship between Umm al-Jimal and the wider empire throughout the Late Antique period, particularly focusing on the social and liturgical development of the chancel barrier in churches. Comparisons will be made between the churches of Umm al-Jimal, others across the Southern Levant, and at the imperial capital of Constantinople in order to evaluate Umm al-Jimal's churches within a bi-directional knowledge creation framework.

SESSION: Thinking, Speaking, and Representing Animals in the Ancient Near East: New Perspectives from Texts and Images I

Laura Battini | French National Center for Scientific Research (CNRS); Collège de France

Mesopotamian Lions in Captivity

Chikako E. Watanabe

Osaka Gakuin University, Osaka, Japan

Tamed lions and a lioness appear inside an Assyrian royal garden together with courtiers and musicians standing nearby (reliefs from Room E, North Palace, Nineveh). These animals were likely bred and brought up closely with humans. There are also scenes in which the animal is shown being released from a cage to be hunted by the king.

These depictions serve as an iconographical evidence for the lions and lionesses having been kept systematically in captivity. Textual references provide further information about various circumstances in which lions were captured, exhibited to the public, and bred. This paper examines the nature of the lions in captivity and the purpose of keeping them in ancient Mesopotamia.

Pet Lions at the Assyrian Court

Paul Collins

University of Oxford, Oxford, United Kingdom

The famous wall reliefs depicting the lion hunts of King Ashurbanipal (668-c.630 B.C.E.) from the so-called North Palace at Nineveh, Iraq, have been the subject of much admiration and discussion since their excavation and removal to London in the 1850s. Their meaning has been explored in relation to royal ideology and ritual as well as investigated as superlative works of narrative art. The carved images focus on the ability of the monarch to confront and master powerful wild animals, either in the countryside or as caged beasts released into an arena, but the king's ultimate triumph is represented by their slaughter. Within the sequence of palace rooms devoted to this theme is one (Room E) which presents a very different encounter. Here lions and lionesses are shown relaxing among luxuriant vegetation and walking peaceably among humans. This has been interpreted as evidence for the animals as royal pets; perhaps another way of depicting the king's mastery over them, and one that came with the benefit of producing offspring for the hunting arena. In this talk I will consider the symbolism of these images to suggest that they reflect (and make real) an aspiration of Assyrian kingship to establish a domesticated, tamed world - one that might find a parallel in the Peaceable Kingdom of Isaiah.

Big Babylonian Dogs: Guards, Status Symbols or Pets?

Trudy S. Kawami

Independent scholar, Brooklyn, NY, USA

Dogs in the Ancient Near East have been seen as working domesticates, valued for their hunting, herding or guarding functions. Representations of huge, mastiff-type dogs from the Ur III and Old Babylonian periods (21st-18th cent B.C.E.) have been identified as guard dogs or stock herders. Traditionally herding and stock guarding dogs have a medium build and are heavily coated as they are out in all types of weather. The heavy-bodied, smooth-coated canines shown in the small sculptures and on the clay plaques would have no speed to counter an attacking wolf or jackal, nor would their smooth short hair offer any protection from heat, cold or wet. They were the product of controlled breeding for appearance, and would have required far more food and care than lighter built dogs. This presentation will look at the various other roles these special dogs could have filled in Old Babylonian culture.

A Gender Bias in Representing the Chase of the Big Cats in Ancient Near Eastern Art: The Case of the Lion and the Lioness

Tallay Ornan

The Hebrew University, Jerusalem, Israel

While in nature it is usually the lioness who makes the hunt, she is the one that pursues the prey and overwhelms it, in ancient Near Eastern visuals it is more than often the lion represented chasing the prey and devouring it. This departure from natural reality will be dealt with by attempting to offer an explanation(s) through examining the role of the lion in the imagery of the ancient Near East.

SESSION: Maritime Archaeology I

Caroline Sauvage | Loyola Marymount University

Douglas Inglis | University of Chicago

The *mnš* Ship: A Millennium Old Levantine Tradition

Tzveta Manolova

Université Libre de Bruxelles, Brussels, Belgium

Given the highly fragmentary nature of the evidence, it is rarely possible to combine archaeological, iconographic and textual sources to provide a comprehensive picture of a specific type of ancient ship. The paper examines the morphology, impact, and long-term historical trajectory of a Levantine merchantman known from Egyptian sources as the *mnš*. Combining new finds with older unasccribed material, it charts the endurance and evolution of an indigenous vessel with locally attested use for over a millennium, from the Middle Bronze Age to the end of the Early Iron Age. The wider significance and implications of this remarkably long-lived specialized commercial ship are considered, along with its impact on the neighbouring Egyptian and Cypriot nautical traditions.

New Methods for Examining Maritime Mobility in Antiquity

David Gal¹, Hadas Saaroni², Deborah Cvikel¹

¹Department of Maritime Civilizations and the Leon Recanati Institute for Maritime Studies, University of Haifa, Haifa, Israel. ²Department of Geography and the Human Environment, Porter School of the Environment and Earth Sciences, Tel Aviv University, Tel Aviv, Israel

New methods have been developed for examining and quantifying maritime mobility of Mediterranean merchant ships in Antiquity, with the initial objective of mapping return sailing routes from the Levant to Europe contrary to the prevailing winds. These methods are applicable to direct open water sailing passages and to coastal-breeze driven sailing. Previous quantitative works have evaluated sailing passages using climatological averages as input, losing information on the intra- and inter-diurnal variability of the winds in the Mediterranean. Moreover, these studies have not considered the human factors impacting mobility.

The study uses meteorological resources at high spatial and temporal resolutions, exposing the recurring wind variabilities and patterns, which are the key to mobility, as the basis for sailing simulations. Large sets of thousands of simulated sailing outcomes for each route segment were derived, enabling a reliable statistical analysis. Inclusion of criteria-based human factors, e.g., the preferences and limitation of the mariners of the period, provides measures of mobility, representing not only sailing speed, but also waiting time and the probability of conducting feasible passages at given times of the year. Sailings of the replica ship *Ma'agan Mikhael II* supported the development of the methods with valuable input of ship performance. The replica also enabled verification of the outputs, through sailing from Israel to Cyprus and back.

The results based on the new methodology provide deeper insight into maritime mobility and to understanding of seafaring in the Mediterranean, and are applicable to numerous scenarios, providing practical and improved measures of maritime mobility.

The Late Antique Economy and the Maritime Recycling Trade

Ehud Arkin Shalev, Roey Nickelsberg, Assaf Yasur-Landau

The Leon Recanati Institute for Maritime Studies (RIMS) and the Dept. of Maritime Civilizations, University of Haifa, Haifa, Israel

Maritime trade is oft times described as dealing with either raw materials or finished goods, obscuring the role played by the trade in

recycled goods. When documented in shipwrecks, re-used and recycled goods are generally depicted as secondary cargo, or assumed to have been brought along to augment the income of ships' crews. In contrast, we bring evidence suggesting that recycled materials were at times transported as the main cargo. A shipwrecked cargo surveyed during 2018 and 2019 near *Dora* in *Palestina Prima*, modern day Tel Dor northern Israel, consists of previously used marble slabs and other architectural elements. The data from this unique, constituting the first physical evidence for the marine transport of *spolia* (re-used architectural material) in the eastern Mediterranean that we are aware of, is further enhanced by plethora of dismantled Roman period architectural elements from the nearby basin of the northern anchorage of *Dora*. Together these sites testify to an intense and complex maritime trade in recycled materials. A comparison with additional sites across the Mediterranean, both of shipwrecked cargos and other Roman-period cities, suggests that the maritime trade in recycled materials, particularly (but not solely) stone, may have played a larger part than previously understood in the region's economy during Late Antiquity.

Trust in Allah, But Tie Up Your Writing Tablet: Literacy at Sea in the Early Islamic Period

Sierra A. Harding, Nimrod Marom, Deborah Cvikel
University of Haifa, Haifa, Israel

An artifact made from a camel scapula bone was found among the cargo of the Ma'agan Mikhael B shipwreck (7th-8th centuries C.E.) resting on the Carmel Coast of modern-day Israel. This bone was fashioned into a writing tablet whose style straddles both the Oriental and Occidental traditions of this uniquely Arab implement of learning and record keeping. The study of this artifact was a component of the zooarchaeological analysis of the Ma'agan Mikhael B's faunal assemblage, and involved a comparison with previously published examples of writing tablets made from large mammal scapulae in the pre-Islamic Near East, the Umayyad Caliphate in al-Andalus, and Abbasid Caliphate's expansion into Central Asia. Being the first of its kind to be recovered from a shipwreck context, this artifact presented an opportunity to explore possible ethnic and cultural associations of the crew, as well as to discuss the concept of literacy among sailors in the Early Islamic eastern Mediterranean. The results of the study suggested possible ink formulas and writing implements used, as well as the specific use of the tablet on a ship conducting *cabotage* trade on the Levantine coast during the protracted sea battles between Byzantine and Islamic naval forces. Its presence implies that at least one of the mariners was literate, and that mercantile ships in this period potentially had crews of mixed ethnicities, despite ongoing maritime military conflicts in the region.

SESSION: Archaeology of Arabia I

Charlotte Marie Cable | Michigan State University
Lesley Gregorick | University of South Alabama

At the Fringe of the Desert: The Wadi Suq and Late Islamic Campsite Tawi Said in Central Oman

Stephanie Döppler¹, Irini Biezeveld², Maria Pia Maiorano², Jonas Kluge¹, Katharina Koch¹, Tamara Schneider¹

¹Johann Wolfgang Goethe University, Frankfurt am Main, Germany.

²University of Naples "L'Orientale", Naples, Italy

Until now, the only known Wadi Suq period (2000-1600 B.C.) settlement site in inner Oman is Tawi Said. The site was first discovered by Beatrice de Cardi in 1976, and in 2018, a team from

Goethe University Frankfurt, Germany returned to conduct an archaeological survey. The large number of finds not only confirmed de Cardi's dating of the site to both the Wadi Suq and Late Islamic periods, but also testified to the far-reaching connections of the people using the site, such as a Dilmun-affiliated-style stamp seal, pottery sherds of Indus black slipped jars, and large quantities of seashells. Other finds include chipped stone tools, copper production waste, pieces of jewelry, and three fragments of soft-stone vessels. The location of Tawi Said at the fringe of the Sharqiyah desert, as well as some of the evidence of metal processing found there, is something the site has in common with the important metalworking sites of Saruq al-Hadid and 'Uqdat al-Bakrah. We suggest that this might hint at a similar function of Tawi Said during the Wadi Suq period, albeit at a smaller scale. The lack of any visible architectural remains on the surface argue in favor of a temporal campsite in both periods. Döppler, S., and Schmidt, C. 2020 Two Stamp Seals from Tawi Said, Sultanate of Oman. *The Journal of Oman Studies* 21: 144-151. Döppler, S. 2020 Der Wadi Suq-zeitlicher Siedlungsplatz von Tawi Said im Zentraloman: Bericht über den Survey 2018. *Mitteilungen der Deutschen Orient-Gesellschaft* 152: 5-27.

Stone Bead Production and Trade in Oman during the 4th to 2nd Millennia B.C.E.

Jonathan Mark Kenoyer¹, Dennys Frenez², Randall W. Law¹

¹University of Wisconsin, Madison, Madison, WI, USA. ²University of Bologna, Bologna, Italy

Stone beads found at habitation sites and burials throughout Oman, dating from the 4th to the 2nd millennia B.C.E., provide important insight into the local developments of technology as well as social and economic networks. Soft stone beads made from steatite, chlorite, and other locally available raw materials demonstrate the widespread presence of domestic craft production, which was used to create distinctive ornaments and decorative elements used in daily life and for deposition as burial goods. Hard stone beads, primarily made from carnelian, provide evidence for long-distance networks of exchange that linked coastal and inland sites in Oman with more distant resource areas in Iran and the Indus Valley region. Morphological analysis of bead shapes and sizes, as well as detailed studies of the technology of production, provide indicators of regional styles of soft stone bead production in Oman. Some local steatite beads were fired and hardened, but there is also possible import of fired steatite beads from other regions. Carnelian beads show more variability in shape and production due to the multiple source areas from which they derive. Scanning Electron Microscope (SEM) studies of perforations indicate changing patterns of perforation and drill use over time. Provenience studies of carnelian, using Laser Ablation-Inductively Coupled Mass Spectrometry (LA-ICP-MS), provide important evidence for possible source areas in Iran and Western India. These new data indicate the complex nature of Late Neolithic and Early Bronze Age technological developments in Oman, as well as both regional and extra-regional interaction.

Stone Tool Production and Use during the 3rd millennium B.C.E. at HD1, Ras al Hadd, Sultanate of Oman

Gregg Jamison¹, Jonathan Mark Kenoyer²

¹University of Wisconsin-Milwaukee, Waukesha, WI, USA. ²University of Wisconsin-Madison, Madison, WI, USA

The coastal seasonal settlement of HD1, Ras al-Hadd, provides a unique perspective on the diverse array of stone tools that were made

and used in the course of everyday subsistence activities. Excavations from 2016 to 2020 provide a diverse assemblage of lithics collected from both primary activity areas as well as secondary refuse deposits. The major source areas for the flint can be identified in the nearby Hajar Range, though some raw materials may come from more distance sources. Stone tools were produced at the site but some finished tools may have been brought to the site after being shaped near the raw material source areas. Stone tools include borers, perçoirs, drills and a variety of flake tools that were used as scrapers. Analysis of stone tool edges under low and high-power microscopy as well as Scanning Electron Microscope (SEM) Energy Dispersive Spectroscopy (EDS) provide insight into the types of materials that were worked. A unique form of a three-pointed, retouched stone tool has also been identified, which may represent a specialized technology linked to marine subsistence activities. Preliminary comparisons with coastal and inland sites provide new insights into the variability of lithic technology during the mid-3rd millennium B.C.E. in Oman.

South Arabian Imitations of Athenian Owls: A Numismatic Approach to Cross-Cultural Contact

Anna Accettola

University of California, Los Angeles, USA

In this paper, I present a die study of South Arabian coins which imitate the Athenian “New Style” Owls. These coins provide evidence for a complex network of interactions between Athens and Yemen in the first centuries B.C.E. and C.E., because no Athenian “New Style” Owl has ever been found on the Arabian Peninsula. As such, we must ask not only how did this iconographic style come to Southern Arabia, but also for what purpose? I will review the iconographic choices and changes to the original Athenian style, the possible trade connections which brought “New Style” Owls to southern Arabia, and propose a possible chronological organization for the otherwise unattested monogram system on the reverse of the coins.

The Mustatils: Cult and Monumentality in the Neolithic of Northwest Arabia

Melissa A. Kennedy, Hugh P.M. Thomas

The University of Western Australia, Perth, WA, Australia

North-west Saudi Arabia is marked by hundreds of thousands of diverse prehistoric stone structures, known collectively as the ‘Works of the Old Men.’ Of these, the monumental rectilinear ‘mustatils’ have received limited attention, and until recently was based solely on remote sensing data. New fieldwork in the counties of AlUla and Khaybar, Saudi Arabia, demonstrates that these enigmatic features are more architecturally complex than previously supposed, with chambers, entranceways and orthostats. These structures can now be interpreted as monumental ritual installations dating back to the late Neolithic period, late sixth millennium cal. B.C. As such, the *mustatils* are amongst the earliest stone monuments of Arabia and one of the oldest and most widespread monumental building traditions known to date.

FRIDAY, DECEMBER 10, 2021
11:30am–12:30pm (EST)

SESSION: Structures of Power in Southern Babylonia in the Second and First Millennia B.C.E.: From Local Rule to Provincial Existence II

Odette Boivin | University of Münster
Baptiste Fiette | Collège de France

Babylon's Domination over Southern Babylonia during the 18th Century B.C.E.

Baptiste Fiette

UMR 7192 (Collège de France), Paris, France

In 1763 B.C.E., the troops of Hammu-rabi, king of Babylon (1792-1750 B.C.E.) conquered the kingdom of Larsa in southern Mesopotamia. A new provincial administration has been established in this land, henceforth called Yamutbal, with Babylonian dignitaries among high officials. The provincial administrative structure is well documented by the letters written by Hammu-rabi and his ministers to Sin-iddinam, the governor of the province, and to Šamaš-hazir, the manager of the crown lands in the Larsa area. These documents demonstrate the total control exercised by the Palace of Babylon with regards to the management of the human and natural resources of the Yamutbal province.

Has Babylon's control over Southern Babylonia been abusive? Some examples witness the exercise of power through violence or excessive palatial control which may have been the cause of the revolts that broke out during the reign of Samsu-iluna (1749-1712 B.C.E.). In addition, the question arises as to whether intensive exploitation of agricultural land caused salinisation of the soil and disruption of the hydraulic system - and finally the abandonment of the main towns in the region.

Babylon's domination of Southern Babylonia lasted for 25 years, but it may have been the first historical example of excessive control of this region, from which it did not recover for centuries.

The Decline and Fall of the Assyrian Empire in Babylonia: An Organizational Communication Perspective

Christopher W. Jones

Columbia University, New York, NY, USA

This paper investigates the changing nature of Neo-Assyrian power through a social network analysis of 3,858 letters dating from 745-612 B.C. It argues that in their attempts to prevent any official from becoming powerful enough to threaten the throne, late Assyrian kings inadvertently undermined their ability to access reliable information.

The completion of the Assyrian conquest of Babylonia in 707 B.C. coincided with a major re-organization of the empire in which Sargon II reduced the privileges of the 'magnates', formerly powerful high officials who had dominated Assyrian politics during the eighth century, and diluted the power of provincial governors by expanding the number of provinces in order to centralize power in the royal family.

These reforms resulted in hundreds of squabbling officials competing for royal favor. Unable to independently verify much of the information provided to them, kings attempted to overcome this deficit by employing scholars, deploying *qurbūtū*-agents, playing officials off against one another, and favoring certain officials over others. This resulted in the emergence of a system of informal social rank operating alongside formal job titles, and poor communication between the king and his officials.

In consequence, the social networks of Esarhaddon and Ashurbanipal reveal increasingly isolated rulers. This paper concludes that their inability to exercise effective control over their subordinates contributed to repeated rebellions led by Assyrian officials in Babylonia during the seventh century which eventually brought about the collapse of the empire. Paradoxically, by expanding royal power, Assyrian kings rendered themselves less able to effectively exercise it.

Nippur during the Neo and Late Babylonian Periods. Local Powers and Relations with the Capital City: New Textual Evidences

Laura Cousin

UMR 7041, France

During the Neo and Late Babylonian periods (626-484), Nippur is considered as one of the major cities of Babylonia, together with Babylon, Sippar, Ur and Uruk. The fame of Nippur is ancient, but at the end of the second millennium B.C.E., the city lost its status as the religious capital of Babylonia, to the benefit of Babylon, which then cumulated the functions of religious and political center of the country.

Although Nippur is geographically centrally located in Babylonia, it was at that time a secondary urban and economic center, nevertheless surrounded by densely populated rural areas. A lot of 500 cuneiform tablets provides information on the political, religious, economic and social life of Nippur, including three small coherent archive lots, each containing some 30 texts belonging to individuals named Nergal-iddin, Ninurta-mutirri-gimil and Kusu-nasir. They shed light on original data on the connections between the population of Nippur and the central government in place, but also with the communities surrounding the venerable city.

Based on largely unpublished textual data, this contribution proposes to understand the link between the city of Nippur and the capital city, Babylon, as well as the question of the local powers in place in Nippur, whether they come under a local political power, such as that of the governor *šandabakku*, or under a religious power in connection with the temple of the god Enlil.

Uruk and the Sealand – Structures of Power under Neo-Babylonian and Early Achaemenid Rule

Martina Schmidl

University of Vienna, Vienna, Austria

This paper examines the connections between Uruk and the Sealand under Neo-Babylonian and Achaemenid rule and their development over time. To achieve this goal, it mainly draws on epistolographical evidence, supplemented by administrative documentation. The administration of the first years after the Persian conquest of Babylonia is usually characterized as roughly stable, with many officials remaining in office despite the regime change. One major change was the installation of a governor of Babylonia and Transpotamia in the early years of Achaemenid rule, but changes on a smaller scale during this time are more difficult to grasp. For the early Neo-Babylonian period, we are well-informed from both administrative and epistolographical data that the Sealand was an influential player in Uruk. This is especially clear from the extant letter dossier of the Eanna temple from the early years of the Neo-Babylonian Empire. This paper argues that over time, the distribution of power changed. At the latest under Achaemenid rule, we see that the Sealand, as a regional entity within Babylonia, must have undergone some changes as well. Administrative texts show that connections between the Eanna temple and the Sealand still existed after the Persian conquest, but

epistological data suggest that the nature of these connections under Achaemenid rule was different from that of the early Neo-Babylonian period.

Ur from the Kassite Era to the Seleucids: Maintaining Status in a Changing World

Paul-Alain Beaulieu

University of Toronto, Toronto, Ontario, Canada

This contribution explores the changing fortunes of the city of Ur during the last millennium of its existence. Despite its provincial status, the city could still claim cultural and religious importance. During the late Assyrian and Neo-Babylonian periods, local authorities developed various strategies to preserve autonomous status within a checkered political landscape where the kings of Assyria and Babylon, the Chaldean house of Bīt-Yakin, and other tribal states vied with each other to control southern Iraq. The status of Ur was considerably enhanced under the last Babylonian king Nabonidus, a devotee of the moon-god Sîn. Ur retained some importance under the Persian Achaemenid kings but was eventually abandoned under the Seleucids.

SESSION: Digital Archaeology and History I

Tiffany Earley-Spadoni | University of Central Florida

Save Ancient Studies Alliance: A New Digital Platform to Combat the Decline in Ancient Studies

Tine Rassalle

University of North Carolina-Chapel Hill, Chapel Hill, NC, USA

The Save Ancient Studies Alliance (SASA, www.saveancientstudies.org) was founded in March 2020 as a reaction to the decline of the study of the ancient world in universities and high schools. David Danzig and a group of thirty graduate students and early career scholars from leading universities around the world came together to form a non-profit organization and digital platform that wants to increase exposure, inspire engagement, and provide access to the study of the ancient world. Over the past year, we have already organized digital reading groups, live events, social media campaigns, archaeogaming sessions, and more. In this paper, I will give an overview of what SASA is, what it is currently doing, and what it hopes to do in the future. We believe digital humanities are the perfect way to engage with the general public. In this presentation, I will give an overview of our current and future digital projects in the hopes of demonstrating that an organization like SASA is not only useful to us but vital if we want to save Ancient Near Eastern Studies and the field of Ancient Studies in general within academia.

Oxus Elites: A Spatial and Network Analysis of Monumental Buildings of the BMAC

Teagan A. Wolter

University of Chicago, Chicago, IL, USA

Much of what is known about the Bactria-Margiana Archaeological Complex (BMAC) comes from the large-scale excavations of its monumental buildings and from its impressive repertoire of finely made goods that often use exotic materials. These finds point to the presence of elites of some sort in the ancient oases of Central Asia. The role of these elites within the cultural context, however, is not well known. This presentation will begin to answer the questions surrounding the activities of the BMAC elites through a spatial analysis of monumental structures at the sites of Gonur Depe, Dzharkutan, Sapallitepa, and Dashly 3. I will show how we can use relatively simple

programming and free-to-use software to digitally put the artifacts back in their contexts and allow these sites to be directly compared more readily. I will further demonstrate connections between various rooms through a social network analysis. Through this, I hope to create a picture of what it meant to be an elite in the BMAC and flesh out the ways in which political power was produced and reproduced in this time and place.

A Comprehensive Resource for Mesopotamian Civilization: Data Integration and Collaboration in the 4banks Cluster of Websites

Giorgio Buccellati^{1,2,3}, Jonah Lynch^{2,4}

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⁴University of Pavia, Italy

Decades of archeological fieldwork along with the development of a grammar and database structure for the publication of the data (see urkesh.org), combined with reflection upon method and theory (see critique-of-AR.net), will soon culminate in the publication of the “Four Banks” cluster of websites (see 4banks.net).

4banks is a centralized system that integrates data sets pertaining to the primary and secondary sources regarding Mesopotamian language, politics, literature, art, and religion. Each of these websites contains extensive bibliographical coverage and develops themes relating to content and method. Each site is linked to printed volumes which serve as the guiding narrative, and serves at the same time as an independent bibliographical and topical repository and as a forum for scholarly conversation.

The five websites devoted to cultural aspects of Mesopotamia are tightly interlaced. Topics that overarch the scope of the individual subject matter of each website are developed concurrently and are cross-referenced. As such, the websites serve as a comprehensive resource for the study of Mesopotamian civilization. An exposition of the methods applied can be found at <https://4banks.net/4b/sub-4banks.htm>.

In our presentation of the current state of data set integration in 4banks, we will emphasize methods for scholarly collaboration through standardized metadata schemes; DABI, a proprietary program that dynamically generates the websites from constantly updated data; and current and near-future extensions regarding visualization and automated analysis.

Digital Games from the Ancient World: The Digital Ludeme Project

Walter Crist

Maastricht University, Maastricht, Netherlands

The games of the past are an important part of the cultural heritage of humanity. The Digital Ludeme Project seeks to document the knowledge of ancient and traditional games from around the world, to use Artificial Intelligence techniques to reconstruct the rules of play, and to make them playable in an open-access platform, *Ludii*.

Our games database—which documents the artifacts, texts, and artistic representations of games—provides an interface to visualize the geographic and chronological distribution of games, and it is the largest collection of such information in a freely available, online format. While the project itself is focused on games worldwide from 3500 B.C.E. to the present day, the board games of ancient Southwest Asia and North Africa (e.g., senet, mehen, the Royal Game of Ur, and 58 Holes) are some of the most important for research on early gaming heritage and are highlighted in this talk as models for collecting data

on and displaying the heritage of games. The work of the Digital Ludeme Project is situated at the nexus of scholarly research on games, intangible cultural heritage preservation, and public engagement with archaeology. While the database serves as a gateway to the game-playing software, it also serves as a research tool, linking users to previously disparate scholarly material about the relevant games. Issues of misinformation in popular scholarship on games are also addressed, highlighting the need for the data-driven approach of the Digital Ludeme Project.

SESSION: Thinking, Speaking, and Representing Animals in the Ancient Near East: New Perspectives from Texts and Images II

Laura Battini | French National Center for Scientific Research (CNRS); Collège de France

A Hidden Pet? The Cat in the Land of Two Rivers

Laura Battini

CNRS-Collège de France, Paris, Ile de France, France

Unlike Egypt, where the cat played an important role, Mesopotamia offers very limited documentation on cats, both in textual and archaeological data. This communication aims to bring together the different pieces of a puzzle that is difficult to restore and to question the reasons for this limited documentation.

“Mere” Things or Sentient Beings? The Legal Status of Animals in Ancient Egyptian Society

Rozenn Bailleul-LeSuer

SUNY Brockport, Brockport, NY, USA

Because of the development of Animal Law and the increased impact of animal right activists in our society, it has become increasingly appealing to specialists of the animal world in antiquity to establish how the ancients viewed the various kinds of animals in their surroundings—not so much at a symbolic and spiritual level, but at a more mundane and pragmatic level. In ancient Egypt, for instance, what categories of animals can we identify? How were they incorporated into people’s lives? Can we tell if ancient Egyptians shared some emotional bonds with them? Can we ascertain the legal status of these faunal categories? To address these issues, Egyptologists, fortunately, have abundant documentation at their disposal: not only textual and archaeological evidence but also exquisite representations. By relying on this wide range of data and by adopting an interdisciplinary approach, it becomes possible to draw a more realistic picture of the status of animals in ancient Egyptian society. This paper presents the complex relationship, full of nuances, often discordant to our modern eyes, that the ancient Egyptians maintained with the animal world. After introducing the different categories of animals identified in this society, I argue that, while being considered property, as is still the case in most societies today, animals lived alongside Egyptians of every social status and served many crucial roles that allowed human beings to flourish. Some rules of conduct towards these animals existed to spare them pain and distress, thus transforming them into sentient beings.

Dogs in Hammurabi’s Days

Nele Ziegler

SUNY Brockport, Brockport, NY, USA

All kinds of animals are attested in Old Babylonian texts, from the basic, everyday animal sheep on, to rarely mentioned exotic animals like monkeys, cats or birds, or less welcomed guests – insects like locusts or fleas. What kind of information the written documentation

of Hammurabi’s era can give about dogs? The paper wishes to focus on the interrelation between humans and animals. What distinguishes dogs from other animals? Dogs are often used for comparison to human behavior – why? Several topics will be mentioned: dog’s illnesses, like rage ; the breeding of dogs is known ; what can be said about dogs in cultic context.

SESSION: Maritime Archaeology II

Caroline Sauvage | Loyola Marymount University

Douglas Inglis | University of Chicago

The Endeavor of the Red Sea

Douglas Inglis

Institute of Nautical Archaeology, College Station, TX, USA

The Pharaonic-era expeditions in the Red Sea represent an extraordinary human endeavor. They required a massive technological leap in nautical technology, the ability to exploit far-flung resource procurement networks, and significant state organization. Extraordinarily, we have evidence for every stage of the Red Sea expeditions—from timber harvesting to mining, boatbuilding, ship design, overland transport, harbors, voyages, return cargo, ship repair, timber storage, recycling, and ultimately commemoration.

This paper will explore evidence for these stages, and the resulting web of entangled interactions that made seafaring in the Red Sea possible. While it is hard to assess the social impact of these expeditions, it should not be overlooked. Like the space race in the modern period, the Red Sea expeditions required massive investments in infrastructure and manpower, and led to advances in technology, new expressions of power, and contributed to a revised sense of place within the broader world. While these endeavors were categorically different, it is useful to remember how transformations in technology can deeply impact society, whether in the modern or ancient world.

Vicissitudes of the Lake of Galilee Water Levels in Antiquity: Data from the Kursi Beach Excavations

Michal Artzy, Matthieu Giaime, Haim Cohen

University of Haifa, Israel

At Kursi Beach, a site excavated between 2015 to 2018, changes in habitation patterns were demonstrated. Coastal structures excavated include an impressive breakwater, the date of which is debated, as well as installations dated to the Byzantine period, which continued to function. By utilizing archaeological and geomorphological indicators originating from the excavations, we show the importance of the Lake of Galilee’s changes in water levels during the Iron Age and the Byzantine and Early Islamic periods.

We compare and contrast our data with more evidence originating from excavation of other Lake of Galilee sites to better constrain lake level changes during these periods follows. We also provide evidences of lake level fluctuations during the 1st Millennium B.C.E. and the 1st Millennium C.E. The new data would aid in the understanding of ancient lake water level changes, to contextualize archaeological discoveries and to analyze the importance of human adaptation to environmental changes in the region.

The Hull Lines of the First Dynasty Abu Rawash Boat

Traci Lynn Andrews

Texas A&M University, USA

In 2012, a First Dynasty boat was found interred in the Abu Rawash Cemetery M excavations. Archaeological evidence and carbon dating has placed this boat to the reign of the Pharaoh Den. This makes it the

oldest of our extant Egyptian vessels. However, the boat was only found with twelve preserved planks, in their relative position to the boat, forming the central section of the vessel. Using the measurements and position of the planks, along with the dimensions of its pit, a theatrical representation of the boat's dimensions was produced. With the comparisons to other Early Dynastic boat burial evidence from Abydos and Saqqara, a schematic lines drawing was then rendered to represent the curves and structure of the boat. Hull lines provide a graphic description of the shapes of the hull and the changes exhibited by the hull as the boat dimensions change along its length. The lines provide a hypothesis to the reconstruction that can then be extrapolated into 2D and 3D reconstructions. With uniformity in the fundamentals of lines drawings, the Abu Rawash ship lines can then be compared to the lines produced for the Khufu, Dashur, and Punt boats to view the development of the Egyptian boat building tradition over time.

SESSION: Archaeology of Lebanon

Hanan Charaf | Lebanese University

The Assyrian Column Base from Sidon and What it Reveals About the Role of the City within the Neo-Assyrian Empire

Adonice-Ackad Baaklini

Sorbonne University, Paris, France

At the beginning of the 20th century, a group of architectural elements were found when the American Presbyterian mission at Saïda constructed a house. Among the discoveries, a column base, currently at the National Museum (Beirut), sheds light on the history of the ancient Sidon during the Neo-Assyrian period (934-610). While it is coming from a Persian context, it is obviously an Assyrian-style artefact (Albenda 2019). It will be interesting to study that base in the light of the historical records describing the relations between the Assyrian Empire and the city state of Sidon. Indeed, in the 7th century, the city became the siege of an Assyrian province and commercial market of prime importance and, according to the last research (Parpas 2018: 125-126), it could have been the Assyrian maritime base of the Mediterranean. Consequently, the Assyrian column base comes most probably from a building from that period. Its size indicates that it was used in a huge building dedicated to the display of the Assyrian power, and it was probably a far more important construction than most of the known provincial buildings from the region.

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Kharayeb Archaeological Project: Survey and Sites

Ida Oggiano¹, Wissam Khalil²

¹National Research Council of Italy (CNR), Rome, Italy. ²Lebanese University, Sidon, Lebanon

The Kharayeb Archaeological Project, directed by Ida Oggiano of National Research Council of Italy and Wissam Khalil of the Lebanese University, works, under the umbrella of the Direction Générale des Antiquités du Liban, in the area of the municipality of Kharayeb, north of the final part of the Litani River. The "KAP" is a multidisciplinary program of research organized into different branches: the study of the cult place of Kharayeb, the archaeological survey of the Kharayeb territory, and the project entitled, "Costal Survey in El-Kharayeb-Adloun, Southern Lebanon" focusing on the study of coasts, shores

and waters of both the Kharayeb and Adloun municipalities. Among the new important discoveries is a site located at the mouth of the Litani named Tell Qasmiye, dating to both the Iron Age, Persian and Hellenistic periods (7th-4th century B.C.E.) and the site of Jemjim, a calcareous hill controlling a way of passage from the coast to the villages of Kharayeb and Rzay. The site, with traces of human occupation from prehistory to the Persian period was, between the Middle Bronze Age and the Persian period, a rural/productive center with a complex system in large cisterns cut into the rock and covered with plaster.

The North Lebanon Project: Exploration and Revaluation of the Archaeological Heritage of the Region of Koura

May Haider¹, Marco Iamoni²

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The Italian-Lebanese archaeological mission in the region of Koura, north Lebanon, started in 2017 as a joint cooperation between the University of Udine and the Lebanese University, in collaboration with the Directorate General of Antiquities of Lebanon and the Institut français du Proche-Orient (Ifpo)-Beirut. Over the last four years, intensive and extensive surveys covering an area of more than 100 sq km, in addition to specifically aimed research, allowed the North Lebanon Project (NoLeP) team to start to reconstruct the regional settlement patterns from the time of the earliest human presence up to the area's recent history. Though several historical references and sporadic investigations suggested that the region was of the utmost importance for the archaeology of Lebanon—and more generally of the Levant—no systematic investigation had been carried out thus far in the inner area of Koura. The NoLeP mission changed this and managed to build a coherent and a complete picture of the numerous phases of occupation that characterized the region.

This paper presents a first reconstruction of the settlement dynamics characterizing the region—especially during the Bronze Age, Iron Age, and Classical epoch. Furthermore, it provides a first attempt to set the basis for a first definition of the local archaeological heritage as a potential crucial resource for the implementation of plans aimed at stimulating and empowering sustainable heritage strategies in the region.

The Lebanese-Italian Archaeological Project in the Region of Tyre: Research Activities and Cultural Heritage Protection

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In 2019, a new Lebanese-Italian collaboration was established to undertake a survey in the region to the south of the Tyre peninsula, in the areas of Shawakeer and Ras el-Ain. These areas, which are nowadays part of the Tyre Coast Nature Reserve and were, in the past, key to the development of the ancient settlement of Tyre through the ages, are often labelled as Palaeotyre in ancient written sources.

The main research objectives of the Lebanese-Italian Archaeological Project in the region of Tyre are to explore and understand 1) patterns of settlement and land use, 2) water management strategies connected with the availability of fresh water, and 3) the ancient use of the littoral for anchorages and ancient harbors as well as for subsistence through time in this critical area of southern Lebanon.

Notwithstanding the impossibility to carry on fieldwork due to the pandemic, in 2020 the international team carried out research remotely and laid the foundations for a more ambitious research

project to start in 2021—which pivots around an integrated methodological approach, an extension of the survey area, and targeted sondages. In addition, Cultural Heritage Resources management in the Project's areas is a key component of the Lebanese-Italian team's program in the region of Tyre.

This paper will report on new results of the 2020-2021 research activities carried out remotely and on site and present a vision and future steps for archaeological and cultural heritage protection and promotion in the Project's area.

“May You Bless Her!”: Religious Insights from Levantine Phoenician Women's Votive Inscriptions

Helen M. Dixon

East Carolina University, Greenville, NC, USA

The corpus of Phoenician-language votive inscriptions from the 1st millennium B.C.E. Levant encompasses inscribed figurines, statuettes, vessels, buildings, and graffiti (a wide variety of gifts to more than a dozen gods and goddesses). This paper will examine the small subset of this collection written or commissioned by women, as best we can determine. While we can assume socially performed gender and linguistic gender did not always correspond, narrowing the data to those inscriptions that feature relevant feminine pronouns and verbal forms (where present) or personal names ending in feminine morphological markers allows an incomplete but functional grouping. Rather than looking at the theophoric elements of votive dedicants' names as previous studies have done, analysis of other religious and social patterns among these votive objects and the content of their inscriptions will be presented. In particular, the interplay of the purpose of the votive (thanking or requesting), the selection of the offered object, and any explicit genealogical, geographical, or professional information given for the dedicant will be discussed. Given the limits of this incomplete and relatively elite group of individuals, this study will challenge previous characterizations of Phoenician “women's religion” and deepen our understanding of the diverse range of women's religious preferences, choices, and practices along the 1st millennium B.C.E. Levantine coast.

SESSION: Archaeology of Arabia II

Charlotte Marie Cable | Michigan State University

Lesley Gregoricka | University of South Alabama

An Excavation of the Cave Site Mughara al-Kahf, Wādī Tanūf, Oman: Towards Understanding Human Activities of the Wādī Sūq Period

Takehiro Miki¹, Taichi Kuronuma², Hiroyuki Kitagawa³, Yasuhisa Kondo²

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This paper presents results of an excavation conducted between 2019 and 2020 at Mughara al-Kahf, a cave site located in Wādī Tanūf in Ad-Dākhiliyah Governorate, Oman. We found this cave site in 2017 and collected potsherds dated to the Wādī Sūq period (c. 2000-1600 B.C.E.) and a stone vessel sherd in the Umm an-Nar style (c. 2700-2000 B.C.E.). After the trial excavation conducted in 2018-19, we confirmed that the Wādī Sūq pottery was deposited in the sediment of the cave and that there was also a stone vessel sherd in the Wādī Sūq style from the surface. Although the cave usage in the Wādī Sūq period was reported in Shimal, the cave site had not been excavated, and the nature of its usage was almost completely unknown. In order to clarify the cave's usage in the Wādī Sūq period, further excavation was conducted in 2019-20. As a result, we first identified two cultural

layers and obtained 20 radiocarbon dates. The dates range from the first half of the third millennium B.C.E. to the first half of the second millennium B.C.E. Second, analysis of the pottery assemblage of this cave indicates the presence of storage jars, despite the difficulty of the location for carrying large vessels. This result implies usage of the cave as storage. We also mention a preliminary result of petrographic analysis of ceramic sherds. These findings shed new light on the mobile way of life in the Wādī Sūq period.

Ras Al-Hadd HD-1 (Sultanate of Oman): A 3rd-Millennium Coastal Settlement at the Crossroads of Multiple Overland and Seafaring Networks

Dennys Frenez¹, Jonathan Mark Kenoyer², Maurizio Cattani³

¹University of Bologna, Ravenna, Italy. ²University of Wisconsin-Madison, Madison, WI, USA. ³University of Bologna, Bologna, Italy

Four seasons of excavation by the Italian-American Joint Hadd Project (University of Bologna and University of Wisconsin-Madison) at the 3rd millennium B.C.E. coastal site HD-1 in Ras al-Hadd, Sultanate of Oman, have revealed important insights into the complex relationships between south-eastern Arabia and the overseas regions of the Indus Valley and Iran. The site appears to have been a seasonal fishing camp with ephemeral structures, but it provided solid evidence of both intra-regional overland exchanges and long-range seafaring trade, which might have primarily involved a nearby settlement yet to be discovered. There is evidence for copper processing and recycling as well as for the procurement of locally produced stone and shell ornaments along with ceramic containers and beads traded from both the Indus region and Iran. The presence of a locally produced stone weight conforming to the Indus weight system provides a unique perspective about the local participation into external trading strategies. Analysis of fibers preserved on copper objects as well as inside steatite beads provides the first evidence for the use of cotton in the Arabian Peninsula. Seasonality studies of marine fauna and land mammals indicate a complex subsistence strategy that exploited both resource areas.

Ceramic Production and Trade during the 3rd millennium in Eastern Arabia and the Indus Valley: A Multifaceted Approach to a Complex Problem

Sophie Méry^{1,2}, Law W. Randall³, Mark J. Kenoyer³

¹Centre National de la Recherche Scientifique, Rennes, France.

²University of Paris 1 Panthéon-Sorbonne, Paris, France. ³University of Madison-Wisconsin, Madison, Wisconsin, USA

Pottery production and trade during the 3rd millennium in Oman and different regions of the Indus reflect a combination of local production using local processes and materials as well as the introduction of non-local processes to replicate trade vessels brought from other regions. The analysis of clay composition using ceramic petrographic analysis provides one perspective on the ways in which clays were used and processed in each region. The analyses of vessel shape and the *chaîne opératoire* of production provide additional perspectives on the ways in which technologies from different regions were adopted and adapted to local needs. The chemical analysis of the clays using Instrumental Neutron Activation Analysis provides an additional technique for tracing the movement of pottery from one geologically distinct region to another. Finally, experimental replication of pottery and processing of local clays allows for added insight into the potential for different types of ceramic production in a specific region. Preliminary results of these different studies will be presented,

along with suggestions for new data sets that need to be collected to better understand the complex interactions between potters and the people who used different types of pottery in Oman and the Indus Valley.

Mortuary Landscape and Social Mobility in Wādī Tanūf (Oman) during the 2nd and 1st Millennia B.C.E.

Taichi Kuronuma¹, Takehiro Miki², Yasuhisa Kondo¹

¹Research Institute for Humanity and Nature, Kyoto, Kyoto, Japan.

²Free University of Berlin, Berlin, Berlin, Germany

This paper discusses the mortuary landscape in Wādī Tanūf, Oman, through the lens of mobility and its social context in a geographically limited canyon based on the results of preliminary surveys in a cemetery presumably dating to the 2nd and 1st millennia B.C.E. The society of the Wādī Sūq period (ca. 2000–1600 B.C.E.) shifted to a nomadic lifestyle due to aridification, but the details of their mobility are still unexplained. Earlier research of this period supports mobility in the U.A.E., though few such examples have been evinced in Oman. A newly discovered multi-period cemetery in Wādī Tanūf, named WTN13, can potentially illuminate such a nomadic lifestyle. The cemetery is located on the high terrace of the *wādī*, and the intensive survey therein during the 2019–20 season revealed 40 tombs, classified into four types based on the well-preserved superstructure. Most seem to have originated in the Wādī Sūq period, and the others may stem from the Early Iron Age (ca. 1300–300 B.C.E.). This discovery supports a millennial-scale recurrent visitation to the canyon, but the societal contexts for the use of these limited spaces are still a matter of scientific inquiry. We tentatively assume that Wādī Tanūf was a destination for nomadic sojourns due to the absence of major occupations nearby and the limited number of tombs despite the long cemetery usage. Thus, the cemetery might have been formed during occasional nomadic visits. Such recurrent usage may indicate an ideological mortuary significance of this cemetery for prehistoric nomads.

FRIDAY, DECEMBER 10, 2021
1:00–2:00pm (EST)

SESSION: Archaeology and History of Feasting and Foodways I

Elizabeth Arnold | Grand Valley State University

Jacob Damm | University of California

Feasting and Its Remains in Late Bronze Age Cyprus

Teresa Bürge

Austrian Academy of Sciences, Vienna, Austria. University of Gothenburg, Sweden

The consumption of food and drinks as part of rituals and feasting certainly played an integral role in the social and religious practice of Late Bronze Age Cyprus (c. 1650–1150 B.C.E.). However, in contrast to other regions in the eastern Mediterranean and the Near East, the evidence on the island seems to be less clear, based mainly on material remains, while iconographical depictions are often ambiguous and written records missing.

The discussion will address the question on how remains of feasting can be recognized in archaeological contexts and how such remains may be distinguished from common household waste. In addition, it will present preliminary thoughts on foodways and the consumption of specific food and drink, which are based on the evaluation of pottery, as well as organic, faunal, and botanical remains. The geographic position of Cyprus in the center of the eastern Mediterranean and its key role as major trade hub is clearly visible in the material culture. Therefore, it will also be discussed to what extent and how “foreign” objects were integrated in and adapted to local feasting rituals, and how these rituals may have been transformed in the light of multi-cultural influences.

Case studies from different parts of the island will contribute towards a deeper understanding of how to interpret archaeological remains pointing at ritual feasting, and of feasting as part of the ritual sphere in Late Bronze Age Cyprus.

Feeding EB II-III Walled Communities: Daily Food Practices at EB III Numayra and Tall al-Handaqq South

Hanna Erftenbeck, Meredith S. Chesson

University of Notre Dame, Notre Dame, IN, USA

During the Early Bronze Age II-III (ca. 3000–2500 B.C.E.) in the southern Levant people built and created the first proto- and early urban communities in the region. One of the most important challenges for people in the EBA would have been how to feed their growing communities. Daily food practices were an integral part of Early Bronze Age people's lives and played a key role in building and maintaining their community. How did Early Bronze Age people store and serve their food? Did these practices differ between sites or were they part of an emerging, shared, and urban habitus? To answer these questions, we utilize the pottery assemblages from the EB III fortified sites of Numayra and Tall al-Handaqq South in Jordan—analyzing vessel preference, storage and serving vessel volume, and decoration trends. Our paper demonstrates that an analysis of storage and serving vessels and their contexts for use can provide insight into Early Bronze Age urban foodways and help us understand how people fed and maintained these two urban communities.

Further Results of the Muller Investigation: Phytoliths and Pollen as Evidence for Ubaid Tool Use

Thomas C. Hart¹, Samuel Harris², Gil Stein²

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One of the distinctive pieces of the 5th-millennium Ubaid and early Late Chalcolithic material cultural assemblage is the baked clay “muller.” Mullers have been found across greater Mesopotamia, but their function has been disputed. This paper presents the results of phytolith and palynological analysis of 15 Ubaid and Late Chalcolithic mullers from Tell Surezha in Northern Iraq, building on our recent analysis of starch grains showing that these were tools used in processing of heated cereal grains.

Diminishing Returns: Foodways and Identity Maintenance at 12th Century B.C.E. Beth Shean

Jacob C. Damm

University of California, Los Angeles, Los Angeles, CA, USA

The presence of Egyptian material culture in the southern Levant during the Late Bronze Age (ca. 1550 – 1125 BCE) is generally interpreted in one of two directions—either it signifies the presence of Egyptian personnel stationed in the region, or it serves as evidence for local Canaanites emulating their Egyptian overlords. Recent scholarship has focused on the substantial quantities of locally produced, low-prestige Egyptian-style ceramics as direct evidence for the former by using the proportion of Egyptian-style and Levantine ceramics as the main index for evaluating the presence of and cultural interaction between the two groups at sites throughout the region. However, these proportions are subject to several caveats that problematize their raw, one-to-one correlation with identity negotiation on the ground. This paper will nuance these figures through the lens of domestic foodways, using cultural practices at the household level as a more constructive means of addressing the quotidian construction and reconstruction of identities. For this purpose, a case study is drawn from the domestic contexts of Beth Shean's Strata S-4 and S-3, as they possess the rare overlap of detailed ceramics and small finds analyses, an archaeobotanical report, and substantial qualitative information about culinary installations. Collectively, this data allows for an extensive discussion of the nature of identity expression during a particularly charged period of Egyptian imperial history, when the disintegration of the New Kingdom empire made the expression of an Egyptian identity or cultural affiliation a significant—and potentially fraught—investment.

SESSION: Digital Archaeology and History II

Tiffany Earley-Spadoni | University of Central Florida

Sharing Syria in 3D: A Collaborative Framework for Archiving and Annotating High Resolution 3D models of At-Risk Cultural Heritage Sites

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3D models have become common-place, but are rarely shared or hosted in a way which preserves their complexity or enables collaborative use. File size, arcane formats, and ever-shifting proprietary software dependencies present significant barriers to the use of 3D data outside of the creator's computing ecosystem. We build upon recent virtual reconstruction projects in Palmyra, Syria. Using new reconstructions of the Temple of Bel, Baalshamin, and Tower of Elahbel—all of which were destroyed by the Islamic State of Iraq and Levant (ISIL) in 2015—we employ versatile, multiresolution

web-viewers to present 3D data in an open, streamable, and interoperable framework which promises to make these important datasets accessible across devices and borders.

The International Image Interoperability Framework (IIIF) has provided a foundation on which we can view, share, and annotate images. Files are reduced to small component tiles, which can be streamed and embedded in custom interfaces living on external servers. These same capabilities are extended to 3D data using the WebGL based Three.js viewer and powerful multiresolution asset loaders like Potree and Nexus. The OpenTopography and OpenDroneMap projects have employed these technologies to great effect but have fallen short of providing accessible options. Through collaboration with the Collart-Palmyre Project, University of California, San Diego, University of Applied Sciences and Arts Northwestern Switzerland, and OpenHeritage3D, we present a system by which we can extend this new cooperative model to 3D data and media. This new method allows for close collaboration over great distances and promises to innovate the field of archaeological research in Syria and beyond.

Reconstructing the Urban Space of Nea Paphos through Comparison with Regularly Planned Mediterranean Cities Using 3D Procedural Modelling and Network Analysis

Anna M. Kubicka¹, Anna Fijałkowska¹, Paulina Konarzewska¹, Wojciech Ostrowski¹, Artur Nowicki¹, Łukasz Misk², Ewdoksia Papuci-Władyka^{2,3}
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The main goal of this paper is to show the first results of analytical modelling of ancient urban planning in the cities established on Hippodamian grid streets, performed within the project, *MA-P Maloutena and Agora in the Layout of Paphos: Modeling the Cityscape of the Hellenistic and Roman Capital of Cyprus*.

The possible results of procedural modeling can offer insights into the so-far undiscovered parts of Paphos, the allocation of streets, and the determination of the function of individual areas. Those rules could be based on urban layouts and functions of similar regular Mediterranean (model) cities of the Hellenistic period.

For model cities, such as Olynthus and Priene, vector street networks were obtained from published city plans (Cahill 2013; Dietrich 2016). These networks were subject to spatial analysis using the Space Syntax and Network Service Area Analysis methodologies. Numerous reconstructions (in several variants) of the city street network for Paphos were made by applying procedural modeling in the CityEngine environment.

The comparison of values of the space syntax attributes of street sections and the results of network analysis allow for the probability assessment of the hypotheses of urban assumptions obtained with the use of procedural modeling rules and indication of the most probable of them.

Cahill, N. 2013 Household and City Organization at Olynthus. Yale University Press Scholarship Online.

<https://doi.org/10.12987/yale/9780300084955.001.0001>

Dietrich, N. 2016 Exposed Bedrock in Miletus and Priene: An Overlooked Aspect of Hellenistic and Imperial-Era Urbanism. *Revue archéologique* 2: 303–328.

The Fate of Kerkenes: Using 3D Modeling and Simulation to Reconstruct the Intentional Destruction by Fire of an Anatolian Iron Age City

Dominique Langis-Barsetti

University of Toronto, Toronto, Ontario, Canada

This paper will present ongoing research focused on reconstructing the destruction by fire of the Iron Age city of Kerkenes, in central Anatolia. While decades of excavations and remote sensing have confirmed that the city was burned down and abandoned in the mid-6th century B.C.E., many questions about this cataclysmic event remain unanswered. Using excavation results, various geophysical survey datasets, detailed topographic maps, and environmental data as the basis for 3D models and simulations, this project aims to shed some light on the conditions in place when the city was destroyed. The ultimate goal is to gain a better understanding of the mechanics of the fire – the points of ignition, the sources of fuel within the city's structures, and the ways in which the urban layout facilitated or inhibited the spread of the fire – and thus further our knowledge not only of Kerkenes itself, but also of the people that devastated it. Given the tumultuous nature of the Middle Iron Age in the Near East and the nebulous place occupied by the region within the bend of the Kızılırmak in these events, much is to be gained by unraveling the circumstances that led to the destruction of the then largest city in Anatolia.

(Re)worked and (Re)inscribed: The Utilization of SfM and RTI to Study Ancient Egyptian Statuary Reuse

Kylie M. Thomsen

University of California, Los Angeles, Los Angeles, CA, USA

Statuary reuse was not an uncommon practice in the ancient world. However, depending on the extent to which the object was reused and the overall preservation of the piece, it remains difficult to systematically study. As art historians have identified practices associated with statuary reuse and modification, my research aims to employ digital methods such as Structure from Motion (SfM) and Reflectance Transformation Imaging (RTI) to further systematize the degree of reuse. This will allow us to better represent and characterize the art historical observations with testable hypotheses describing the processes of reworking and reinscribing ancient Egyptian stone statuary.

The present study uses a well-known, red granite statue of Amenhotep II reused by Ramesses II housed at the Kimbell Art Museum. This piece serves as the model through which traditional art historical observation will be synthesized with the results of my digital studies in order to better assess the ancient stone reworking. The methods employed in this specific study were intentionally selected to complement the current discussions of statuary reuse. By accurately recording the surface of the statue—to a degree of accuracy of less than 0.001 m error—I identify and differentiate surface marks which are key in describing the processes and decision-making of the individual(s) who reworked the object.

SESSION: Gender in the Ancient Near East I

Stephanie Lynn Budin | Near Eastern Archaeology

Mesopotamian Songs to Soothe a Child's Crying: An Approach from the Perspectives of Gender Studies and Sensory Studies

Agnès Garcia-Ventura¹, Mireia López-Bertran²

¹Universitat Autònoma de Barcelona, Barcelona, Spain. ²Universitat de València, València, Spain

In this communication we analyze two Mesopotamian songs to soothe a child's crying, namely the *Lullaby for a Son of Šulgi* and *To Calm a Baby* (as they are known in current studies) from the perspectives of gender studies and sensory studies.

Our first aim is to discuss the suitability of the label “lullaby” to name these texts. On the one hand there is a debate in scholarly literature on the origin and classification of these texts viewed either as lullabies, and thus coming from an oral tradition, or as incantations more linked to a written tradition. Moreover, we propose that it would be fruitful to consider these texts as work songs to avoid naturalizing and thus not considering work activities carried out exclusively or mainly by women in most cultures, such as child rearing.

Our second aim is to discuss who sang these songs. These songs may have been sung by mothers, wet-nurses, or experts on incantations and divination. We aim to reflect on the implications our choice among these diverse possibilities has from the point of view of gender studies.

Finally, these songs were performed to stop a sound described as distressing, that is, a baby's crying, through a sound perceived as pleasant, that is, the song and its lyrics. Taking this scenario into account, our third aim is to identify the elements that comprise the so-called sensescape at work, emphasizing the interaction between soundscapes and taskscapes in these sources.

Divas, Dancers, or Just Audience? The Role of Levantine Women in Public Performances on Middle Bronze Age Wall Paintings

Samar Shammās

Ludwig Maximilian University of Munich, Munich, Germany

Wall paintings found in Levantine palaces are marvelous pathways to explore how landscape, people and rituals were perceived in ancient societies. In contrast to the Aegean and Egyptian worlds, depictions of women seemed to be completely absent from Levantine wall paintings of the second millennium B.C.E.

However, in the palace of Tell Sakka (Damascus Oasis), where one of the richest repertoires of wall paintings of the Levant has been preserved, a unique, still unpublished painting of women has been discovered. It represents a row of five women with long hair and colorful clothes. The courtyard from which this painting originates also featured scene of dancing or fighting men, suggesting that the space was decorated with scenes full of movements.

This paper focusses on interpreting the role performed by the women in this scene by describing their appearance, postures and analyzing the context of this scene. Moreover, the paintings from Tell Sakka are compared to other the depictions of Amorites on the Beni Hasan wall paintings, and the representations of non-divine women in the corpus of Levantine glyptic of the second millennium B.C.E. The paper discusses the possible roles and value of women in these pictorial contexts as well as in public life and ceremonies.

Assumptions About the *Assinnu*

Kelsie Ehalt

Brandeis University, Waltham, MA, USA

Members of the ancient Mesopotamian cult of Ištar have been subjected to various interpretations by scholars despite only a small number of textual references to them. This paper will discuss attestations of *assinnu* in ancient textual sources, which have been deployed for various interpretations and translations. It will then provide a systemic discussion of the issues of sex assignment at birth, castration, sexuality, prostitution, and transvestism—all while adding modern gender scholarship into the discussion. The incorporation of modern gender theories—from Judith Butler's framing of gender as performative and socially reified to Jack Halberstam's investigation of gender performance at the margins of normative binary categories—will aid with the deconstruction of long-held interpretive traditions within Ancient Near Eastern scholarship and provide a new analysis of the gender performance of the *assinnu*. I reject the interpretation of *assinnu* as being males who perform a feminine gender and instead will show that there is no specific evidence that the *assinnu* must have been assigned male at birth. I similarly reject assumptions of castration, homosexuality, prostitution, and transvestism and instead posit that *assinnu* performed a gender that eludes easy categorization into a masculine/feminine binary and that, perhaps, a more specific discussion is impossible given the limited textual attestations.

King Hatshepsut: Academic Approaches to a Female King

Jacquelyn Williamson

George Mason University, USA

This paper analyzes how scholars approach issues of gender and power in Ancient Egypt through a case study of Hatshepsut, the “woman king” of Ancient Egypt. Today, Hatshepsut is understood as an icon of female empowerment or derided as a usurper: categories created by Western imperatives. This examination aims to demonstrate how Western agendas, often unconscious and/or well-meaning, can prioritize one line of inquiry over another. National, social, and historic identities inform our scholarship and this can in turn impose our own agendas upon the past.

Different social and historic frames inspire not only different questions, but different answers. To demonstrate this assertion, I will apply the current work of Dr. Lihi Ben Shitrit on non-Western, nationalist religious movements with specific gender roles to Hatshepsut's kingship. In the nationalist movements described by Dr. Ben Shitrit, women will often choose to take action in defense of the religious nation-state in a manner inconsistent with traditional gender roles, but since these women are motivated by a concern for the survival of their nation, their actions are legitimated. When viewed through this different perspective, Hatshepsut was neither a usurper nor a feminist, but a patriot who worked to protect orthodox male kingship.

The Reliefs of the Lion Hunt: An Image of the Powerful Masculinity of the Neo-Assyrian King?

Margaux Spruyt

Orient et Méditerranée, Paris, Ile-de-France, France

Neo-Assyrian lion hunt reliefs have been studied as a coherent whole in a large number of publications among which the notable works by Pauline Albenda and Elena Cassin. However, following Daniel Arasse's method focusing on the importance of detail and the works of Omar N'Shea on masculinity, new questions concerning the gender

of the hunters and of the hunted arise. Indeed, when observed closely, the lion hunt reliefs dating from Ashurbanipal's reign show lions and lionesses, however, the latter are only depicted already fallen, wounded or dead, not one is actually – as it is the case for the male lions – jumping on the king's chariot or facing his horses. Why is the king only represented engaging in physical combat with lions and not lionesses? Does this gender dichotomy have an ideological explanation? What is the symbolic value attached to each of the two sexes of lions - male and female?

The lion hunting scenes from the reliefs of Ashurbanipal's reign held in the British Museum offer a precise corpus. Put into perspective with my previous research on the king's horses and the royal ideology in view of the gender studies allows bringing new light to the Neo-Assyrian empire's conception of masculinity whilst better understanding the role played by animals in the reliefs. The king, first among men, has to face those who can help reinforce his legitimacy to rule by highlighting his royal and virile abilities: male lions, ferocious and muscular, symbols of unalterable masculine power.

SESSION: Interdisciplinary Approaches to Resilience, Resistance, and Collapse in the Near East and Neighboring Regions

Nancy Highcock | University of Cambridge
Tobin Hartnell | American University of Iraq
Lorenzo d'Alfonso | New York University

Collapse, Continuity and Complexity: A Multi-Proxy Analysis of Population and Urban Trends in the Near East from the Chalcolithic to the Iron Age

Dan Lawrence¹, Michelle W. de Gruchy¹, Alessio Palmisano²
¹Durham University, Durham, United Kingdom. ²Ludwig-Maximilian University of Munich, Munich, Germany

Population decline has been used as an indicator of periods of 'collapse' in past societies. In the Near East, the most common proxies used to estimate past populations are counts and settled areas of sites recovered through archaeological survey. These datasets, though useful, present challenges in relation to precision and scale. The ceramic chronologies generally used to date sites are insufficiently precise to identify short term changes, while the spatial scales of many surveys are too small to identify regional trends. This paper makes use of three different population proxy datasets to investigate patterns in continuity and abandonment across Mesopotamia and the Levant from the Chalcolithic to the Iron Age. The temporal coverage of the study takes in three rapid climate change (RCC) events, at 5.2, 4.2 and 3.2k, all of which have been implicated in some form of societal collapse, but also allows us to identify longer term trends. Our three population proxy datasets include several thousand settlement sites derived from traditional archaeological surveys, over 11,000 radiocarbon dates modelled using summed probability distribution methods, and all known urban sites from the study region, including both surveyed and excavated sites. Using these datasets we show that periods of rapid climate change do not result in uniform population collapse, but rather a range of responses at a variety of local and regional scales. By comparing between our population and urban datasets, we can also make statements about the role of social complexity in mitigating risk and promoting resilience.

Copper, Culture, and Collapse: Applying the Adaptive Cycle to Iron Age Society and Copper Production in Faynan, Jordan

Brady Liss, Thomas E. Levy
University of California, San Diego, La Jolla, CA, USA

The Faynan region is located in the Saharo-Arabian desert of modern Jordan. Despite this harsh and dry environment, society in Iron Age Faynan (ca. 1200-800 B.C.E.) developed a significant metallurgical industry to exploit locally available copper ores. Faynan became an industrial landscape characterized by large smelting centers and mining camps to support intensive metal production (~33,000 tons of metal were produced during the Iron Age, Ben-Yosef 2010). The combination of a difficult environment and a substantial industry concentrated on copper smelting raises important questions about societal organization, sustainability, rigidity, and resilience. What was the role of copper production in the sociocultural organization and development of Faynan during the Iron Age? How did copper production impact the rigidity and resilience of the socio-ecological system? Did the concentration on copper smelting weaken the system to potential collapse "triggering agents"? In turn, should the industry abandonment in the 9th century B.C.E. be characterized as a societal "collapse"? To examine these questions, this paper presents the adaptive cycle from Resilience Theory as a meaningful theoretical approach for modelling the trajectory of society and copper production in Iron Age Faynan. In doing so, it contributes to scholarly conversations about the intersections of technology, society, environment, and sustainability by providing a new case study for applying the adaptive cycle to the archaeological record. Ben-Yosef, Erez 2010 *Technology and Social Process: Oscillations in Iron Age Copper Production and Power in Southern Jordan*. Ph.D. dissertation, Department of Anthropology, University of California, San Diego.

The Complexities of Collapse: Zooarchaeological Perspectives on the Dissolution of the Hittite Empire

Sarah E. Adcock
New York University, New York, NY, USA

This paper places zooarchaeological evidence from the Late Bronze Age collapse of the Hittite empire in central Turkey (ca. 1200 B.C.E.) in dialogue with broader discussions of societal collapse and its aftermath. In particular, the author uses animal remains from the Hittite capital, Hattuşa, and from a nearby rural center, Çadır Höyük, to reconstruct day-to-day economic life in the Hittite heartland and to analyze local responses to the disintegration of the Hittite political superstructure. This work allows for the assessment of two common collapse narratives. The first assumes that the state is an integrated whole, characterized by massive scale systemic inter-dependence, such that when one aspect of the state's organizational structure (e.g., its political system) fails, its other organizational structures (e.g., its economic systems) must follow. The second assumes that rural settlements tend to be considerably less affected by societal collapse than major centers. Drawing on several lines of zooarchaeological evidence, the results of this analysis show that, while changes in central Anatolian lifeways did occur following the collapse of the Hittite empire, the nature of these changes does not always follow the trajectories assumed in conventional narratives of societal collapse.

Using Social Network Analysis to Model Resilience and Complexity in the Built Environment in Greco-Roman Palaestina

Matthew Winter
University of Arizona, Tucson, AZ, USA

This study explores the built environment in Greco-Roman Palaestina, using social network analyses modeled diachronically to determine the shape, growth, resilience, and complexity of urban

networks over time. This project examines the use of both monumental and vernacular architectural programs to explore both low-signaling and high-signaling expressions of regional identity in the regions of Idumaea, Judaea, and Samaria. To achieve this, this research applies the concept of network transitivity and homophily to create a quantitative-driven model by which we may begin to understand how information moves within interconnected urban networks. I explore how sites with variable sociocultural capital shape urban networks and hint at varying levels of social complexity, and also model network resilience, which serves as a proxy for how we might interpret social metamorphosis for regional populations through both resilience and resistance.

De-Urbanization and Sustainability: New Insights into the Signature Landscapes of the Indus Civilization's Post-Urban Phase in Northwest India

Adam S. Green, Cameron A. Petrie

University of Cambridge, United Kingdom

Sustainability is not dependent on a specific range of environmental conditions, but rather on the social relations that shape the way people interact with their environments. The combined results of the Land, Water and Settlement, *TwoRains*, and TIGR2ESS projects, archaeological and interdisciplinary initiatives that have been carried out in northwest India over the last decade make this abundantly clear. The Indus Civilization emerged across an extensive and varied range of environments around 2600 B.C. It was home to the first cities in South Asia. For over half of a millennium, Indus cities hosted sophisticated craft technologies, striking feats of collective action, and networks of interaction that reached westward across Iran, Arabia and Mesopotamia. The communities that built Indus cities interacted across great distances, creating networks that also included thousands of rural settlements, many of which underwent the same social transformations that archaeologists have detected in the cities. After a period of climate change beginning around 2100 B.C., the Indus Civilization began a process of de-urbanization that, after two centuries, left its cities abandoned. Northwest India was particularly important to this process, because as de-urbanization unfolded, hundreds of new rural settlements appeared in this hydrologically dynamic region. As its cities disaggregated, Indus communities built a new landscape of de-urbanization in dynamic environments, one that intensified the use of a new range of environmental opportunities as those brought by urbanism were lost, by reconfiguring social relations between rural communities.

SESSION: Archaeology of Syria

Caroline Sauvage | Loyola Marymount University

Kathryn Grossman } | North Carolina State University

Patterns of Wood Exploitation in the Ubaid and Late Chalcolithic 1 Periods: Results from Tell Zeidan, Syria

Lucas Proctor^{1,2}, Alexia Smith², Gil J. Stein³

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Wood harvested as timber or burned as fuel was an important resource in the lives of people in the past. In the semi-arid regions of Southwest Asia, the abundance of wood resources would have frequently been limited by low annual precipitation rates, even prior to widespread anthropogenic deforestation. Examining what wood resources were available and how they were utilized is important to

understanding the risk management strategies employed by people living in marginal environments. In this paper, we present the final results from a dendro-anthracological analysis of wood charcoal recovered from the site of Tell Zeidan, located at the confluence of the Balikh and Euphrates in modern Syria. Through a comparison of wood charcoal from domestic and industrial areas of the site, we distinguish differences in fuel preferences for craft production and domestic activities. These data are then considered against previously reported evidence for non-woody fuel resources at Zeidan. The inhabitants of Tell Zeidan utilized locally available riparian vegetation for the majority of their wood fuel needs. However, fuel use does not only derive from what is available in the environment; it also reflects human agency and intentionality. Differences in fuel selection are consistent with functional contrasts in the temperature, intensity, and duration of the heating requirements for cooking versus ceramic production. We argue that the Ubaid/LC I inhabitants of Tell Zeidan employed a variety of fuel sources as a risk reduction strategy in the “zone of uncertainty,” while maintaining specific fuel preferences for individual tasks within these constraints.

The Glyptic Evidence from the Royal Palace G of Ebla, ca. 2300 B.C.

Frances Pinnock

Sapienza University of Rome, Rome, Italy

The excavation of the Royal Palace G of Ebla yielded more than 200 sealings and two cylinder seals. Sealings and seals belong to the last phase of life of the mature Early Syrian Ebla, and they were all in use at the time of the destruction of the town around 2300 B.C. In my paper I will present this evidence, tracing the sources of inspiration of the figurative patterns, attempting some interpretation of the seals and trying to identify their owners and the administrative system implied. I will also deal with the position of the Eblaic glyptic within the frame of the contemporary glyptic evidence from other sites in Early Syrian Syria.

On the Walls of Ebla: New Research and Study on the Ancient Fortification System

Davide Nadali

Sapienza Università di Roma, Roma, Italy

The paper presents the current studies and research on the ancient system of fortifications and city-gates of Ebla: in particular, the research focuses on the reexamination and contextualization of the archaeological evidence. In particular, architectural and morphological aspects will be singled out, with some evaluation on the chronology during the Middle Bronze Age.

The Iron Age Textile Industry at Hama (Syria)

Caroline A. Sauvage

Loyola Marymount University, Los Angeles, CA, USA

This paper presents a study of the Iron Age textile tools and related materials excavated in the settlement and cremation cemetery of Hama. In particular, I will focus on the material preserved in the National Museum of Copenhagen to identify the type(s) of industry(ies) and the production attested at the site. Using data derived from experimental archaeology, and what is known of the textile production chaîne opératoire, this paper will propose a better understanding of the textile producers, places of production, and possible finished products attested at the site— before Hama's production was replaced within the contemporary Syrian textile industry.

Examining Old Collections with New Approaches: A Case-Study Examining Epi-Palaeolithic and Neolithic Dung Spherulites, Archaeobotanical Sample Origin, and Fuel Use at Abu Hureyra, Syria

Alexia Smith¹, Amy Oechsner²

¹University of Connecticut, Storrs, CT, USA. ²University of Tübingen, Tübingen, Baden-Württemberg, Germany

Over the past decade, ongoing conflict has prevented field work in Syria and, more recently, the pandemic has halted many field projects globally. However, some specialized laboratory-studies have remained possible. By (re)examining archived archaeological collections with new approaches, we can ask new questions, revisit unanswered questions, and further our understanding of the past.

Here, we examine dung spherulites within the <1mm fraction of Epi-Palaeolithic and Neolithic archaeobotanical flotation samples from Abu Hureyra to assess their presence and relative abundance, infer depositional processes related to sample origin, and consider fuel use practices. Excavations at Abu Hureyra were conducted in 1972 and 1973 under the direction of Andrew Moore. Detailed archaeobotanical studies were conducted at University College London under the direction of Gordan Hillman. In the late 1990s, following Naomi Miller's observations of dung fuel use at Malyan, Iran, plant remains from Abu Hureyra became the center of an ongoing debate regarding how to best interpret archaeobotanical data. Were remains from Abu Hureyra (and elsewhere across SW Asia) largely deposited via processes related to gathering and preparation of plants intended for human consumption? Or did they typically represent the remnants of spent dung fuel reflecting animal diet? Our results allow us to: 1) refine our understanding of plant-based sample origin on a sample-by-sample basis; 2) provide insights into the Secondary Products Revolution by examining the timing and intensification of dung fuel use at Abu Hureyra; and 3) explore the range of studies that are possible using archived archaeobotanical samples.

SESSION: Archaeology of Arabia III

Charlotte Marie Cable | Michigan State University

Lesley Gregoricka | University of South Alabama

Standing Stone Circles: A New Megalithic Monument Type and Cultural Complexity in the Neolithic of North-West Arabia

Jane McMahon

University of Western Australia, Perth, WA, Australia

Standing Stone Circles are a previously unknown megalithic monument type dating from the Late Neolithic. Whilst recent studies demonstrate a likely mixture of autochthonous technological innovations and the adaptation of imported Neolithic elements, a thus far little understood yet significant shift in social organization is demonstrated by the widespread monumental stone structures. Highly distinct and typologically consistent, Standing Stone Circles are located within sites of ongoing human activity over millennia, providing a focal point for an examination of the cultural transformations that took place in the Alula region during the 6th-4th millennia B.C., thus filling a significant lacuna in the understanding of cultural complexity in the prehistory of this region.

First identified through aerial survey as part of the Aerial Archaeology in the Kingdom of Saudi Arabia project, this paper presents the initial results from ground survey, and preliminary excavation. It defines a regionally specific typology and presents the known distribution with initial chronometric results to inform the

discussion of the emerging picture of cultural change throughout the Neolithic.

Organic Networks and Foodstuffs in SE Arabia in the Bronze Age: Preliminary Results of Lipid Residue Analysis of Local and Imported Vessels

Akshyeta Suryanarayan¹, Michele Degli Esposti^{2,3}, Sophie Méry^{2,4}, Eli Dollarhide⁵, Jennifer Swerida^{6,7}, Charlotte Marie Cable⁸, Arnaud Mazuy¹, Martine Regert¹

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A range of raw materials and finished products, including animals, textiles, copper, tin, semi-precious stones, as well as softstone and ceramic vessels, which may have contained organic products, were moved through exchange networks between the Arabian Peninsula, Iraq, Iran and South Asia during the Bronze Age. However, as organic remains constitute the perishable 'missing majority' of evidence in the archaeological record, we have little understanding of what foodstuffs or organic products were a part of these exchange networks, as well as what was cooked or prepared in ceramic vessels as part of quotidian activities. This paper will present the preliminary results of lipid residue analysis from local and imported vessels from Salut-ST1, Hili 8 and Bat. Absorbed lipids were extracted and analysed via Gas Chromatography-Mass Spectrometry (GC-MS) from a range of vessels, including locally- and regionally-produced pottery, as well as Indus and Mesopotamian pottery. A majority of the lipid profiles are indicative of degraded animal fats, however, plant oils were also detected in some vessels. The preliminary results raise important questions about food production, storage and the exchange and use/re-use of pottery at these sites with broader implications for our understanding of subsistence and exchange networks in the region.

Keywords: ceramics, lipid residues, exchange, Umm an-Nar, Salut-ST1, Hili 8, Bat

Mountains, Towers and Burials: Spatial Analysis of the Early Bronze Age Cultures in the Land of Magan (Oman)

Marco Ramazzotti, Siham Younsi, Guido Antinori

Sapienza University of Rome, Rome, Italy

This paper, inserted within landscape archaeological research, deals with the study of spatial dynamics of settlements during the Early Bronze Age (the Hafit period ca. 3200-2700 B.C. and the Umm an-Nar period ca. 2700-2000 B.C.) in the Oman Peninsula. Following the Hajar mountain range from the east coast of Oman to the Musandam peninsula, the 3rd millennium landscape is still distinguishable today through the presence of a multitude of burial mounds/cairns along the Jebel ridges. While this series of evidence, ascribed to the Hafit period, is easily recognizable in the landscape, the subsequent Umm an-Nar period burial structures are less obviously recognizable. Even so, various Umm an-Nar burial structures are still noticeable — specifically the so-called “towers,” whose purpose is still largely debated, as well as larger and more complex burial mounds. To determine the multi-millennia occupation of the mobile societies that occupied and shaped this territory during this chronological interval, analyses focused on the trends, patterns, and distribution of these funerary features. This was achieved through the application of Geomatic and Geographic Information System (GIS) technologies using archaeological, environmental, and historical data. The information obtained was essential for the investigation of the possible factors for settlement preferences, to gather particularities on these chrono-cultural ensembles, and to help clarify the motivations behind past populations’ decision to settle in this specific geographical sector which had a strong impact across the ancient Near East.

SESSION: Current Directions in Coroplastic Studies

Nancy Serwint | Arizona State University

Casey Gipson | Arizona State University

The Rhythmic Performance Embodied in Female Terracotta Figurines

Régine Hunziker-Rodewald, Andrei Aioanei

Université de Strasbourg, France

On Amman Citadel three molded female figurine fragments excavated in 2000-2001 (Mansour 2002.2005) and one isolated surface find from 1968 present identical details: a large, decorated frame drum, supported from underneath by the left hand, covers the figurine’s left breast while the right hand is shown as if beating the drum. The figurine is shown half-dressed in a decorated skirt reaching the calf and exposing alternating lines of dots and rows of triangles. The imagined female wears multiple armlets and anklets. About 120 km linear distance north-west of Amman Citadel, at a multiple burial site at Megiddo (Schumacher 1908), a mold-link is attested: a body preserved from shoulders to feet showing identical dimensions, proportions and features as the four figurines from Amman. In the present paper we show, for the first time, photos of the Megiddo figurine, which is kept in the Vorderasiatische Museum in Berlin, together with RTIs and the excavator’s photos of the Amman fragments which can typologically be dated to the 9th-8th c. B.C. We also discuss the relation between material and craft, the effect of miniaturization and the figurines’ efficacy as to the goals of the user. Keywords: Amman Citadel, drum, dressed figurine, Megiddo, miniaturization.

Cypriot Figurines from Non-Cypriot Contexts: A Tale of Style and Dedication

Giorgos Bourogiannis

National Hellenic Research Foundation, Athens, Greece

Figurines of Cypriot origin or Cypriot style are among the most popular votive offerings in Greek sanctuaries during the archaic period. East Greeks in particular, developed a strong taste for Cypriot limestone and terracotta figurines of a broad iconography, which they dedicated to sanctuaries of primarily, albeit not exclusively, female deities. These statuettes display a broad iconography and an interesting votive biography, further enhanced by the fact that many of them bear votive inscriptions. Looking at votive contexts from islands of the Aegean, mostly of Rhodes, and the Greek sanctuaries of Naukratis in Egypt, the paper aims at presenting an overview of Cypriot and Cypriot-style figurines from these areas, and to explore their votive significance on the basis of their dedicatory inscriptions. The latter are a valid source of information for the identity of the dedicants.

The Art of the Coroplast: Technical Strategies for Large-Scale Sculpture

Nancy Serwint

Arizona State University, Tempe, Arizona, USA

Traditionally, the focus on coroplastic sculpture has been on small-scale works. Terracotta figurines are the nearly ubiquitous products of coroplasts’ workshops, and their recovery from a variety of contexts attests to the numerous roles they played in the ancient world. Study of the methods employed in their manufacture suggests a limited technical repertoire that was not only efficient but also expedient for the production of the considerable quantity of objects which the market demanded. Large-scale terracotta sculpture was also produced but to a more limited extent. Size required quite different strategies in crafting works that were stable, strong, and durable, and the methods used for the production of figurine-size objects were ineffective. This paper focuses on the various manufacturing techniques that were developed for the creation of larger sculptural works made from clay. Consideration is given to the existence of a more specialized group of artisans working in clay who were certainly different from potters and perhaps unique within certain coroplastic workshops.

FRIDAY, DECEMBER 10, 2021
2:30–3:30pm (EST)

SESSION: Archaeology and History of Feasting and Foodways II

Elizabeth Arnold | Grand Valley State University

Jacob Damm | University of California

The Pig Taboo in the Iron Age: A Critical Appraisal

Max Price

Massachusetts Institute of Technology, Cambridge, MA, USA

The pig taboo has long served as a point of demarcation between Christianity, Judaism, and Islam. All too often, it has also been mobilized (and in so doing intensified) in acts of intolerance both within and between all three religions. Investigating the origins of this taboo, scholarship in the past few decades has focused attention on the Iron Age Levant. The general academic interest in pig bones has rightly drawn attention to faunal analysis as a powerful tool for understanding the past. However, I wish point out two methodological and theoretical problems with some of the existing scholarship and popular portrayals. First, uncritical usage of zooarchaeological data by non-specialists in the era of “big data” has engendered careless interpretations. Second, because markers of cultural difference can be expected to intensify the more they are mobilized, Iron Age archaeologists must be wary of anachronistically “colonizing” the past with more recent cultural attitudes towards pork. Critical examination of the zooarchaeological evidence for the pig taboo in the Iron Age I and II period does reveal some evidence to support pork avoidance among the Israelites and potentially other Levantine peoples. However, it is necessary to approach the pig taboo as something that evolved over time, perhaps beginning in the context of political consolidation in the Kingdom of Judah. The pig taboo of the Iron Age was fundamentally different from that of today. We should strive to understand it in its own context.

The Language of Cooking in the Hebrew Bible

Kurtis Peters

University of British Columbia, Vancouver, BC, Canada

The present paper will explore the terminology of cooking and foodways as found in the Hebrew Bible. According to modern linguistic methods, it is essential to consider the lives of language users in order to understand their usage of the language. Therefore, in the exploration of food and cooking language, this paper will correlate food terms with lived reality of cooking scenarios in the ancient southern Levant. Further, the paper will employ a simplified form of Ronald Langacker’s Cognitive Grammar methodology to the study of verbs of cooking in Biblical Hebrew.

Food in Canaanite Myth

Joseph Lam

University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

This paper considers the role of food within Canaanite myth as primarily represented in literary texts from Ugarit. Food is prominent within these texts because the deities are understood as royal figures who regularly convene over shared meals. As anthropomorphic beings, the gods eat and drink; as royalty, the meals in which they participate tend not to be ordinary affairs, but “feasts” in the sense of having communal or ritual significance. Among the topics to be explored are: the language and practicalities of feasting, the social dynamics of

feasting, and the implications of these patterns for our reading of the Hebrew Bible.

Ingrained in the Landscape: Utilization of Agricultural Goods in the Late Third Millennium B.C.E.

Amy B. Karoll

Independent Scholar, USA

The Early Bronze IV (c. 2500-2000 B.C.E.) in the ancient Near East is a period of rapid and systemic change. Towards the end of the third millennium B.C.E., much of the population abandoned villages and cities across the Levant. Although often characterized as a period of “collapse,” the reality of this period is inherently more nuanced. Geographic Information Systems (GIS) is used to show that settlement locations in the Levant were strongly influenced by environmental factors including a flooding of the coastal plain and an aridification of inland valleys, in addition to shifts in subsistence patterns. This study examines how local populations adapted to changes in food production and procurement practices. First, it will look at environmental reconstruction in order to determine the areas that were viable for agricultural and horticultural production during the Early Bronze IV. Second, it will analyze the changes in agricultural technologies and procurement methods. This will demonstrate that, rather than a sudden collapse of the previous social structure due to catastrophic climatic change disrupting agricultural production, the Early Bronze IV transition was the logical consequence of individuals actively responding to their steadily changing environment. In addition, by incorporating environmental reconstructions, this paper will illustrate that there was a shift in agriculture from centralized locations around tells to a more ruralized economy.

SESSION: Archaeology of Anatolia

James Osborne | Oriental Institute, University of Chicago

Sacred Trash: Ritual Deposits of the 1st Millennium B.C.E. at Kink Höyük-Niğde, Turkey

Nathan Lovejoy

ISAW - NYU, USA

Kink Höyük-Niğde is a multi-period mounded site with occupation phases ranging from the Early Bronze Age to Late Antiquity. Excavations on the north side of the acropolis have produced substantial remains dating from the Late Achaemenid to Late Hellenistic periods (ca. 4th-1st centuries B.C.E.), including a building complex in the northwest—interpreted as a sanctuary due to the discovery of significant deposits of votive objects within the structure and stone and ceramic statuary buried in the adjacent stone-paved plaza. While an earlier sacred space has not yet been discovered, several objects with archaic characteristics found within the sanctuary suggest an Iron Age predecessor at the site. The excavated Iron Age remains further support this hypothesis. A structure in the northeast of the acropolis has produced a Late Iron Age (ca. 7th-6th centuries B.C.E.) midden heap with a rich painted ceramic assemblage and a peculiar faunal assemblage, which is characterized by a disproportionate number of caprine scapulae, nearly all from the right side. While appearing at first glance as a typical domestic refuse pile, albeit rich in materials, the specific characteristics of this context suggest, instead, a deposition of cult offering remains—a claim also supported by ongoing excavations in an adjacent room. This paper will draw on regional comparanda to argue for the ritual/cultic nature of this Late Iron Age deposit and demonstrate a continuity of cult space

and sacred activity at Kınık Höyük-Niğde during the 1st millennium B.C.E.

Burial Customs of the South-Eastern Anatolia in the 3rd and 2nd Millennium

Latif Oksuz

Durham University, Durham, United Kingdom

Funerary practices of south-eastern Anatolia are exemplified in 84 sites, which consist of both intramural and extramural burials throughout the Bronze Age (3rd and 2nd millennium B.C.E.). A total of 2,406 graves have been recorded from a great variety of geographical locations; Ataturk, Carchemish, and the Birecik Dam Basins (where a huge amount of archaeological survey research and rescue excavations have been undertaken). Grave types in the region are mostly the same as the other regions, however, there are a few differences that have been noted—the most common grave types are cist graves and simple graves, but vessel container (pithos, jar, pot), chamber, dolmen, shaft, and rock-cut graves have also been reported. The number of grave sites and graves reached a peak in the Early Bronze Age, but was followed by a striking decrease during the Middle and Late Bronze Ages. Inhumation tradition was subsequently applied in a large proportion of burials and cremation practice also appeared in a few sites. Cultural materials in the graves at several sites—such as Carchemish, Birecik Cemetery, Gedikli Höyük, etc.—in the region demonstrate the connections between Anatolia, Mesopotamia, and even the Caucasus.

What's in a Face? An Anthropomorphic Pictorial Sherd from Tell Tayinat, Turkey

Brian Janeway

University of Toronto, Toronto, ON, Canada

This analysis examines a pictorial krater sherd from Early Iron Age Tell Tayinat. The fragmentary scene features an individual performing an unknown action. The most salient aspect of the figure is the peculiar headdress or crested helmet he wears, consisting of projecting spikes or spines. The visage is compared to similar anthropomorphic depictions found on a variety of artifacts across the region, most of which are associated with the “Sea Peoples” engaged in combat—usually of a maritime nature. It is suggested that the scene comprises a “self-portrait” and represents the identity of the Iron Age I inhabitants of the capital of the Kingdom of Palestine.

The Late Chalcolithic and Early Bronze Age Ceramics of the Ilgin Region of Anatolia

Shannon Martino

Morton College, Cicero, IL, USA

2021 was the last field season of the Yalbur Yaylası Archaeological Landscape Research Project, which has aimed to provide a diachronic examination of the richness of habitation and history in the Ilgin region of Central Anatolia. This goal has been somewhat elusive when it comes to prehistory, as little is known about even the whole of Konya between the Middle Chalcolithic and the Middle Bronze Age. Initial results from the Neolithic and Early to Middle Chalcolithic ceramic studies were presented earlier this year, given the relative ease of comparison with the already well-known site of Çatalhöyük. These results showed that the settlement history of the Ilgin region was tied to the mineral components of the earliest ceramics, particularly in the large volcanic inclusions of so-called gritty wares. After this year's field season, similar results can be observed in the material from the Late

Chalcolithic to Early Bronze Age—though the use of clays with large volcanic inclusions notably decreases. This paper will present preliminary results and offer comparison with excavated material from elsewhere in central Anatolia, particularly the nearby sites of Canhasan and Sızma Höyük, illustrating the long and continuous occupation of the Ilgin region as well as its tendency to follow the general ceramic trends of Central Anatolia.

SESSION: Gender in the Ancient Near East II

Stephanie Lynn Budin | Near Eastern Archaeology

Reassessing Representations of Women and Battle Imagery in the Funerary Landscape of Roman Near East

Sarah Madole Lewis

CUNY, Borough of Manhattan Community College, New York, NY, USA

Traditional readings of Roman sarcophagi depicting Trojan War imagery have focused on constructions of masculine identity, despite the prominent presence of women routinely depicted on the lid. Rather than restate superficial connections between martial imagery and masculinities, this paper uses the same funerary monuments to consider the presentation and commemoration of women on two third-century case studies from the Roman provinces of Syria and Pamphylia. An Attic-style sarcophagus found in Tyre depicts a scene of manly courage, a battle with muscled, nude warriors on the sarcophagus chest, but equally prominent to this sepulcher is the depiction of the wife reclining beside her husband as statues in the round on the couch-shaped lid. The embodied object, the mortuary container, was clearly intended to hold the remains of both husband and wife, thus her visual presence merits examination in light of the “heroic,” “male” narrative depicted on the sarcophagus. Elsewhere, in the necropolis of Perge, the Dokimeian sarcophagus of Aurelia Botanie Demetria proudly displays her portrait in the reclining kline figure, yet the male figure beside her remains in a roughed quarry state, and the inscription does not mention a husband. A battle scene fills the frieze on the rear panel of the chest. Instead of dismissing or subordinating the female presence in its juxtaposition with “masculine” visual narratives, I argue that these images facilitated the construction of female elite identities that transcended traditional gender roles. Additional examples from Ephesos and Tyre provide critical leverage.

The Yauna Revisited: Re-Conceptualizing Gender and its Terminologies at Persepolis

Neville McFerrin

University of North Texas, Denton, Texas, USA

In reliefs across the site of Persepolis, men and displays of idealized masculinity are iteratively present. From royal heroes grappling with lions to the delegates depicted upon the Apadana, nearly all depicted figures within the site are men—with the lioness, who appears amidst the Elamite delegation, serving as the site's sole depicted female. Such a visual program may seem to generate and support both the gendered hierarchies and gender binaries. Yet, throughout these reliefs, similar apparent binaries, ranging from distinctions between king and subject to differentiations between architecture and bodies, are consistently deconstructed—often through the lens of dress.

To explore the ways in which depictions of dress at Persepolis help to highlight entanglements between gendered categories, conceptualizing gender as a mutually constituting system functioning in parallel to Achaemenid conceptualizations of empire, this paper focuses upon a single delegation upon the Apadana, that of the Ionian

Greeks—the Yauna. Building upon the work of Margaret Cool Root, this paper explores the ways in which Greek notions of normative gendered dress are deliberately confronted in this depiction to highlight, not tensions between gendered categories, but slippages. Juxtaposing the depicted dress of the Yauna with the contemporary normative dress of Greek men, with dress depicted elsewhere upon the Apadana, and with extant Achaemenid adornments, the paper argues that, within this context, gendered distinctions are of less interest than sensorial substantiation—suggesting that the use of modern gendered terminologies in discussions of the site may obscure, rather than clarify the site’s visual program.

Staging the Body in Late Bronze Age Cyprus

Louise Steel

University of Wales Trinity Saint David, Lampeter, Ceredigion, United Kingdom

The nature of society in Late Bronze Age Cyprus remains relatively obscure despite more than a century of research into the rich archaeological record: the emphasis has largely been on metanarratives such as state formation and settlement hierarchies, or otherwise detailed observations of the material culture, in particular pottery. The people whose actions created the material world explored by archaeologists remain veiled in the background and, as a consequence, gender relations are surprisingly difficult to discern. Here I argue that thinking about the *staged body* might reveal interesting perspectives of the lived experience of Late Cypriots and hopefully reveal some understanding of their gender relations. This paper recognizes the materiality of the human body investigating how it is in relationship with other materials and so co-produces material and social worlds. It draws upon Csordas’ understanding that the body is “as much a *cultural phenomenon* as it is a biological entity” (1994, 4), Butler’s performativity, and in particular Turner’s notion of the *social skin*: “the surface of the body...becomes the symbolic stage upon which the drama of socialization is enacted” (1980, 112). Using funerary evidence, grave goods and rare representations of the body, this paper examines the diverse material interactions with the human body (artificial cranial modification), cosmetics, hairstyle, clothing and adornment to throw light upon how the Late Cypriot body was staged in a “a performing self of appearance, display, and impression management” (Csordas 1994, 2).

The House Beyond its Walls: Gender and Practice at the Amarna Workmen’s Village

Thais Rocha da Silva

University of São Paulo, São Paulo, São Paulo, Brazil. University of Oxford, Oxford, Oxfordshire, United Kingdom

The investigation of houses in Egyptology privileged typologies and the division of internal spaces. Artefact distribution and architectural features were the main sources of information to address questions about gender, kinship, and economic activities in the domestic sphere. Egyptologists privileged the house unity and framed domestic life in a 19th-century Victorian fashion, ignoring other elements of the archaeological context. This attitude projected notions of domestic life from a Western and European experience, reinforcing the house as the realm of comfort, privacy, and family. In this paper, I question previous studies by providing a new framework for the Workmen’s Village of Amarna—a special-purpose settlement from the New Kingdom (ca. 1550-1069 B.C.E.). This perspective integrates a large dataset from houses (artefacts and architectural

features), facilities located outside the enclosure wall (piggens, the quarry, and chapels), and official buildings spatially distributed around the settlement. This presentation highlights a holistic approach that benefits from new developments from Household Archaeology, Material Culture, and Sensory Archaeology. I explore new models to understand houses through material culture, which offer an updated perception about the domestic boundaries in Ancient Egypt. With a new understanding of the ancient Egyptian house, I hope to shed light on a new dynamic of social relations in which gender emerges.

SESSION: Isotopic Investigations in the Ancient Near East and Caucasus

G. Bike Yazicioğlu-Santamaria | University of Chicago

Maureen E. Marshall | University of Illinois at Urbana-Champaign

Humidity and Environment: Analysis of $\delta^{13}\text{C}$ data from Neolithic to Byzantine Period, Western Anatolia

Benjamin Irvine¹, Ceren Çilingir¹, Christina Luke², Rana Özbal², Felix Pirson³, Chris Roosevelt²

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This talk presents the preliminary results of the $\delta^{13}\text{C}$ data from seeds and wood charcoals to reconstruct environmental and climatic conditions and examine arable agriculture in Neolithic to Byzantine period western Anatolia. The data presented here is part of the joint DAI and ANAMED project, “Humidity and Society: 8,500 Years of Climate History in Western Anatolia.” The analysed samples come from Neolithic Barcın Höyük, Bronze Age Kaymakçı, and Roman to Byzantine period Pergamon (Kleopatra Hamamı). The dataset is the first of its kind, in terms of diachronic scale, for Anatolia. Furthermore, it will provide a significant contribution to quantifiable scientific approaches to Turkish archaeobotanical research, something which is currently underrepresented.

The results from the stable isotope analyses on the seeds demonstrate that there were differing approaches to crop and field management between the Neolithic and Bronze Ages, particularly the effects of anthropogenic factors such as irrigation/field location choices. The $\delta^{13}\text{C}$ data, in combination with ^{14}C dates, for the wood charcoals have allowed for a diachronic examination of available humidity and growing conditions for trees, and thereby, an indication of environmental and climatic conditions. Whilst work continues on this aspect of the project, preliminary observations suggest that there was greater variability in humidity in the Neolithic and that the (Late) Bronze Age appears generally to be more humid than earlier and later periods. At an intra-site level some periods of lower humidity have been noted, with one particularly noticeable drier period at Kaymakçı at around 1700–1600 cal. B.C.E.

Southern Levantine Ivories Exchange and Trade during the Late Bronze and Iron Ages – the Isotopic Perspective

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Extensive excavations in the southern Levant have yielded thousands of artifacts made of the highly valued and prestigious material of ivory. Most were found as caches in temples or palaces, but they are also routinely recovered from other public/administrative, cultic, industrial, and domestic contexts. To date, scholarly interest has focused almost exclusively on art historical analyses, but the animal origins of these

ivories and their provenance remain unknown. The Levantine Ivory Research Project (LIRA) investigates how ivory artifacts and their meanings were embedded in Canaanite and other Levantine societies.

Focusing on the raw material, we integrate the archaeological chronological, typological, contextual, and quantitative practices and analytical methods, including microscopy, spectroscopy, stable isotopes, and proteomics - aiming to document molecular information embedded in the ivory objects, thus tracing the artifact's taxonomic origin and geographic provenance.

Here we demonstrate the successful application of light stable isotopic approaches to isolating the geospatial origins of these ivory-made artifacts. We present the selection procedure of artifacts for the isotopic analysis (based on the artifact's contextual profile), compare the Late Bronze Age, Iron Age I, and Iron Age II in light of the raw material geographic provenance, and illustrate the possible ivory trading routes.

BiolSoANE: A Repository of Bioarchaeological Isotopic Analysis in the Greater Ancient Near East

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Isotopic analyses of bioarchaeological remains in the Greater Near East has become a research field onto itself over the last decade, as we have witnessed since the first 'Isotopic Investigations' Session (2015) at the ASORs. Datasets have rapidly grown and diversified just like research agendas, moving beyond the 'diet and mobility' construct. Precision of instruments and accuracy of interpretations improved; new sampling strategies, sample preparation protocols, and 'mixing formulas' developed; and publication strategies moved towards rigorous and transparent data-reporting standards. But are we all on the same page? What does the current state of research look like in subregions of the Greater Near East? How comparable are sample sets, methods, and results in bioarchaeological isotopic analyses across this connected landscape? What do we do with legacy data in a rapidly advancing field? What would it look like if we brought together all published data from our research region from the Balkans to the Caucasus on one website with these questions in mind?

Here, we introduce a new open-access research tool, *BiolSoANE: A Repository of Bioarchaeological Isotopic Analysis in the Greater Ancient Near East*, which has recently begun its life as a website. We present a brief overview of *BiolSoANE*'s main modules and currently available contents, including a bibliographic database of 200+ published reports and a GIS-based searchable database of all published datasets in four main sample categories (human, animal, plant, organic residue). In closing, we discuss near-future and long-term goals for *BiolSoANE* to develop into an interactive, collaborative research platform.

Agricultural Resilience and the Collapse of Bronze Age Citadels in Western Anatolia: New Insights from Stable Isotope Analysis

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Reckonings with agricultural resilience during periods of environmental instability were potentially power drivers of socio-

cultural change in the past. Studies attempting to link these two phenomena are, however, often hindered by the chronological resolution of climate data and a limited understanding of how global trends were experienced within particular regions. Stable isotope analysis of archaeobotanical remains may bridge this gap through evidence for the growing conditions of crops during their lifetime. In this paper, we utilize this approach to assess how farming practices employed in western Anatolia during the third and second millennia B.C. may have contributed to the susceptibility of arable economies to the rapid climatic drying of the 4.2ka and 3.2ka events. Our results indicate a decrease in resilience between the Late Chalcolithic and Early Bronze Age due to both a loss of drought tolerance attributes and the expansion of cereal cultivation by citadel elites. We suggest that this increased the impacts of the 4.2ka event and contributed to the collapse of the citadel as a corporate entity. Middle Bronze Age farmers responded by shifting to a reduced range of drought tolerant crops that became the focus of large-scale monocultures within Late Bronze Age elite agro-economies. We suggest that this 'overinvestment' in drought tolerance at the expense of crop diversity increased the vulnerability of elite agriculture to the 3.2ka event and contributed to the 'Late Bronze Age collapse'. Our study thus demonstrates the value of integrating stable isotopes with archaeobotanical analysis for modelling agricultural resilience in the past.

SESSION: Cultural Heritage: Preservation, Presentation, and Management

Glenn Corbett | Editor, Biblical Archaeology Review

Suzanne Davis | Kelsey Museum of Archaeology, University of Michigan

The Tell Mozan/Urkesh Project: A Bottom-Up Approach to Combining Heritage and International Relations

Federico Buccellati

International Institute for Mesopotamian Area Studies (IIMAS), Los Angeles, CA, USA. Freie Universität Berlin, Berlin, Germany

What is the link between Heritage and International Relations?

Tell Mozan/ancient Urkesh occupies a prominent place in the cultural history of NE Syria. The conservation and presentation programs (active since the 1990s) at the site have encouraged local communities to interact with their cultural heritage, strengthening stakeholder ties to the site. Conservation and presentation combine to communicate a sense of both the archaeological record and ancient life. Because the material is presented at the site with photographs and text (in several languages and including young audience sections), a range of visitors can visit the site anytime – there is a constant flow, even during the war.

Our outreach initiatives are not limited to visits to the site – two programs, the Urkesh Schools Project and Urkesh One-on-One, draw on the ancient city to begin a dialog between children from the region of Tell Mozan and from abroad. These encounters, which the students prepare for ahead of time with teachers or their parents, are held virtually, with an archaeologist who facilitates the discussion and translates where necessary.

These initiatives show how heritage is a fundamental element of cohesion, on local, regional and international levels. The initiatives are firmly rooted in the archaeological project, drawing on the results but also the relationships formed over years working at the site – as such, the project is clearly a 'bottom-up' approach.

The paper will give a brief history of these initiatives, show how we overcame challenges in implementation, and describe future plans.

The Temple of the Winged Lions Cultural Resource Management (TWLCRM) Initiative: Lessons in sustainable preservation, accessibility, and community engagement from Petra, Jordan

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¹American Center of Research (ACOR), Amman, Jordan. ²Biblical Archaeology Society, Clinton, MD, USA

From 2009, the American Center of Research (ACOR), in cooperation with the Department of Antiquities (DOA) and the Petra Development and Tourism Region Authority (PDTRA), implemented an innovative cultural heritage preservation, site accessibility, and community engagement project within Petra. The Temple of the Winged Lions Cultural Resource Management (TWLCRM) Initiative has aimed to stabilize, conserve, and restore one of Petra's most prominent, yet threatened, monuments—the Temple of the Winged Lions. Excavated between 1974-2005 by the American Expedition to Petra, the Nabataean temple's fragile sandstone architecture has suffered from deterioration over the years from natural and human elements.

The TWLCRM Initiative assembled foreign and local professionals and technicians to document, conserve, and bring new life to the site. With support provided by the US Ambassadors Fund for Cultural Preservation, the United States Agency for International Development (USAID) Sustainable Cultural Heritage Through Engagement of Local Communities Project (SCHEP), corporate and private donors, and ACOR's Cultural Heritage Fund, the project aimed to document the site architecture; evaluate and implement conservation interventions; recycle spoil heaps and rubble piles, as well as document artifacts; and increase visitor access through paths, signage, and education programs.

TWLCRM's innovative social engagement strategy involved members of Petra's local communities in preservation efforts through employment, training, and education. This created hundreds of opportunities in documentation, conservation, excavation, and landscape rehabilitation. With physical interventions completed in 2018, attention shifted to evaluation and publication. This presentation reviews key sustainable preservation, accessibility, and community engagement goals, and reflects on lessons learned which can help benefit other projects.

A Web GIS for Archaeological Artifact Recovery

Karen F. Adkins

Pennsylvania State University, USA

Archaeological sites and collections have long been targets for treasure hunters and looters seeking valuable artifacts to collect and sell. The objective of this presentation is to demonstrate a prototype web-based geographic information system (GIS) that presents a spatial solution to the problem of reporting and tracking lost artifacts. This solution uses Esri's cloud-hosted technology, ArcGIS Online with ArcGIS Enterprise, for creating a GIS database and configuring web applications to be used by the public and archaeology site and collection managers in contributing information about stolen artifacts and sightings.

Heritage Conservation and Urban Development: A Supporting Management Model for the Effective Incorporation of Archaeological Sites in the Planning Process

Shatha Mubaideen

CBRL-British Institute Amman, Jordan

Jordan is a country blessed with valuable archaeological assets that date back to several significant decades. The uncontrolled rapid urban sprawl due to different political, social and economic reasons and the absence of a well-articulated conservation plan that ensures the effective integration of archaeological treasure in the planning process has led to the irreversible deterioration of the harmonized physical fabric leaving a negative impact on the archaeological sites and their surroundings.

This paper aims to formulate a supporting organic management model that guides the conservation of archaeological sites in urban contexts in Jordan, in a harmonious, holistic way that combines heritage conservation and urban development, archaeological site and its surrounding, theory and practice, international attitudes toward local cases based on international ethics and guidelines. The model provides a structure for approaching any situation and designing appropriate solutions intended to conserve the sites cultural significance. Moreover, the model enables moving through different disciplines and can be easily broken into subsystems to tolerate the interdisciplinary nature of the research problem.

SESSION: (Im-)Politeness Research in Ancient Egyptian Texts

M. Victoria Almansa-Villatoro | Brown University

Aurore Motte | von Humboldt Foundation – Johannes Gutenberg University of Mainz

Elements of (Dis)Comparison: How to Equal Unequals in Earlier Egyptian Mortuary Texts

Carlos Gracia Zamacona, Antonio J. Morales

University of Alcalá, Alcalá de Henares, Madrid, Spain

By examining how a number of morphosyntactical and graphemic features are used in the earlier mortuary texts (Pyramid Texts, Coffin Texts, and other related texts), we will narrow down three driving forces that anchor the communication participants within specific situations in which unequal participants are involved, and facework mechanisms are thereby triggered. The said three driving forces are as follows:

- **The ontological distinction of the participants.** We will show how that distinction permeates these texts through the use a morphosyntactic mechanism (specific prepositions after verbs of diction) and a graphemic one (the subtle play of human/divinate/divine determinatives for the deceased and other participants).
- **The hierarchical distinction between characters.** We will tackle the issue by showing cases of equalizing unequals through morphs such as the adposition *is* and the conjunction *mi*, which respectively equal entities (through the concept 'model') and actions. We will also show how the so-called comparison structure (quality + Aperson + *r* + Bperson) may be seen as a resource to unequalize equals, and is related to another unequalizing structure (*r*di + person + *r* + charge 'appoint someone in a superior charge'). We will also interpret the legitimation strategy second tense + subjunctive as an equalizing device in macrosyntax.
- **The readaptation of the communicative strategies by cause of the entextualization processes.** While the edition process did certainly disrupt the original communicative structure of the texts (originally ritual), this process should throw some light on facework strategies through distancing—mainly through person and other deictic marks.

Motion Verbs and Power Balance in Ancient Egyptian Texts

Gaëlle Chantrain

Yale University, New Haven, CT, USA. University of Liege, Liege, Belgium

Repeated motions with shifts in the deictic center (back-and-forth dynamics) have at least two main functions in structuring the narrative: they highlight key-moments of the story and they also make explicit the power balance between the different main protagonists, as well as the evolution of these interactions. Centripetal motion (e.g., *jy.t* “to come”) is usually associated with the position of relative inferiority of the protagonists performing the action in respect to the other(s), while centrifugal motion (e.g., *šm* “to go,” *h3b* “to send”) is a marker of a position of superiority. In texts belonging to the ideological discourse, the power balance is naturally pictured in favor of the Egyptians—receiving respect and submission from the foreign “enemies.” However, several counter examples of inverted dynamics can be shown in fictional literary texts (e.g., Wenamun, Sinuhe) as well as in wisdom texts, letters, and miscellanies. The study of motion verb usage in interpersonal interactions thus offers a good complement to the usage of dialogues in shaping the narrative structure.

NB: this study proposes a complement to the one proposed by Jean Winand. They should ideally be considered as a diptych.

***j.nd-hr=k* ‘Protect your face!’: Examining Politeness in the Pyramid Texts**

Brendan Hainline

University of Chicago, Chicago, IL, USA

The Pyramid Texts are a corpus of Old Egyptian ritual mortuary texts that were inscribed on the walls of the royal burial chambers of the late 5th and 6th Dynasties of the Old Kingdom (ca. 2375–2185 B.C.E.). Many of the ritual spells of this corpus are directly addressed to one or more deity, whose assistance was believed to be required for the deceased to safely and successfully reach the afterlife. Remarkably, these texts also include spells that command or even threaten the gods and other supernatural powers. Expressing this in the framework of Politeness Theory, where ‘face’ refers to the public self-image of an individual, these spells contain face-threatening acts. This talk will demonstrate that, in order to mitigate these face-threatening acts, the spells incorporated a number of politeness strategies to protect the ‘face’ of the gods. Additionally, the politeness of these strategies will be highlighted by comparing spells addressing deities to other spells where there was no concern for the addressee’s face and therefore face-threatening acts did not need to be redressed—specifically, spells warding off snakes and other harmful creatures. This talk will thereby demonstrate ways that Politeness Theory can reveal pragmatic information in ancient texts and help us to understand how ritual utterances were crafted to facilitate positive and productive interactions between the ancient Egyptians and their deities.

(Im-)Politeness Strategies and Formulas in the “Reden und Rufe”

Aurore Motte

JGU-Mainz, Germany

This paper sets out to investigate speech captions in private tombs—the so-called Reden und Rufe as described first by Adolf Erman in 1918. Choices of Positive, Mock, and Negative (Im-)Politeness will be revealed in the captions’ linguistic patterns. Far from being true samples of the vernacular language in ancient Egypt, they are short texts written as if spoken with a deliberate choice of linguistic features. The scribes (or artists) who worked on the tombs’ decorations

consciously chose specific idioms and formulas drawn from a socially imposed set of rules to make these daily-life scenes appear more life-like and real with somehow sound recorded through the captions. This paper will explore which strategies are used to either redress the wants of the addressee’s positive/negative face or to damage the wants of the addressee’s positive/negative face. It will first address interactions between superiors and subordinates (high-to-low and low-to-high). Subsequently, attention will be given to interactions between equals. It is argued that speech captions in private tombs are extremely fruitful research avenues for sociolinguistics and more specifically for (historical) politeness research.

SESSION: Cultures of Mobility and Borders in the Ancient Near East

Eric Trinko | James Madison University

Shane M. Thompson | North Carolina Wesleyan College

There is No one Way to be a Nomad: Ancient Mobile Pastoralisms and the Bedouin Model

Anne Porter

University of Toronto, Toronto, Ontario, Canada

It has become fashionable to deny the existence of mobile pastoralism in the societies and economies of the ancient Near East. A major thread in the argumentation for this position is an appropriate rejection of the “Bedouin model” of pastoralism as known from modern ethnographies. Yet both those who invoke the Bedouin model, and those who reject it, may share similar misapprehensions as to the value of this material in understanding ancient pastoralist strategies and social relations. It is common to collapse all kinds of mobile pastoralisms into a universalist view of the politically and socially independent pastoralism that has come to comprise this Bedouin model. Modern mobile pastoralism is as varied today as it was in the past, and the relations of such groups with sedentary populations and the state – past and present – just as contingent. To demonstrate this contingency, the paper compares modern pastoralist groups from the Southern Levant, the Badia es-Sham, and Iran, with the evidence from the Mari letters. Although dismissed by some as hardly paradigmatic of a long-term integration of mobile populations within the state, the only thing unique about the Mari situation is the nature of our sources. It is rare that we have an ancient archive with thousands of letters that attest to the differing organization of named mobile groups, and their changing circumstances over time.

Ideology vs Reality: Social Class in Egyptian-Nubian Relations from the Middle Kingdom through the Second Intermediate Period

Charlotte Rose

Independent Researcher, USA

A longstanding assumption in the field is Egypt’s largely xenophobic relations to its neighbors, particularly with Nubians to the south. Whereas scholarship has discussed royal Egyptian written sources about Nubia and the integration of certain Nubian individuals in the Egyptian official bureaucracy, the interactions of non-elite Egyptians and Nubians has received less attention. This work examines Middle Kingdom and Second Intermediate Period Egyptian-Nubian relations among different social classes, using both textual and archaeological data. Some central questions include—how everyday interactions compared or contrasted with royal ideology and why, and what were the dynamics between immigrants, military, and colonizers and the local populations. Notably, some of the material culture of fertility and birth, such as beds and nude female figurines, exhibited a cultural connection between non-elite Egyptians and Nubians. The data thus

indicate more co-equal cultural interaction and mixture among regular Egyptians and Nubians than the official ideology would suggest.

Borders and Bodies: Towards a Mobilities-Centered Approach

Eric M. Trink

James Madison University, Harrisonburg, VA, USA

Studies of movement, mobility, and migration in the ancient world are becoming more numerous. Despite recent growth in some important research areas, a key methodological component remains absent from archaeological and textual studies: few, if any, present works on mobility or movement in the ancient world integrate findings from modern mobility studies. This paper provides a set of theoretical moorings to begin our discussion of the processes of borders and bodies in contexts of mobility in the ancient Near East.

Religious Space and Public Identity at Tell el Dab'a

Danielle Candelora

SUNY Cortland, Cortland, NY, USA

This paper focuses on the materiality and physicality of temple architecture as a means to better understand the communication and enactment of identity in contexts of ancient immigration. The case study centers on the site of Tell el Dab'a in the eastern Delta of Egypt, which became home to a hybrid community of local Egyptians and Southwest Asian immigrants around 1850 B.C.E. The paper investigates not only monumental and smaller-scale temple constructions at the site but also how the open space, cemeteries, and houses around such sacred architecture became loci of public religious practice. I argue that—in circumstances of immigration—architecture and its attendant practices play a major role in reifying, broadcasting, and blending not only the religious traditions but the cultural and political identities of these entangled communities. From the archaeological perspective, they can also clarify the accommodation strategies that were utilized by immigrants and locals alike to adapt to new cultural contexts. Indeed, the dichotomy of public vs. private religion was not nearly as rigid as we assume; these built spaces not only frame culturally specific or hybrid religious practices but are themselves physical, public advertisements of identity.

SATURDAY, DECEMBER 11, 2021

10:00–11:00am (EST)

SESSION: Geophysics and Archaeology in Coastal and Shallow Marine Settings

Beverly N. Goodman Tchernov | University of Haifa

Michael Lazar | Department of Marine Geosciences, University of Haifa

Changing Environments and Human Interaction during the Pleistocene- Early Holocene from the Shallow Coastal Area of Dor, Israel

Gilad Shtienberg¹, Omri Gado², Thomas E. Levy¹, Richard D. Norris¹, Tammy M. Rittenour³, Assaf Yasur-Landau², Anthony Tamberino¹, Michael Lazar²

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The Tel-Dor embayment located along the Carmel coast provides a valuable opportunity to study environmental and human interaction due to its protecting geomorphic properties that are unique for the generally linear Israeli coast. Interpretations of seismic profiles collected from transects across the bay show five seismic units that have been correlated to dated and well-analyzed sediment units in coastal cores, enabling a detailed deep time reconstruction of the coastal system over the last ~77 ka. The earliest borehole deposits are low-stand aeolian followed by terrestrial sediments including wetland remains that were subsequently flooded by the mid-Holocene transgression. Evidence of the earliest human settlement is submerged Pottery-Neolithic (8.25-7 ka) remains, found immediately above the wetland deposits landward of a submerged aeolianite ridge at the mouth of the bay. The wetland deposits and Pottery-Neolithic settlement remains are at present buried by coastal sand recording middle Holocene sea-level rise and thus, suggesting that these coastal communities were displaced by sea-level transgression ca. 7.6–6.5 ka. The sedimentological and archaeological evidence identified in the stratigraphical sequence of the sheltered bay is a good example of better understanding the essential environmental changes on the shallow shelf and the coastline migration especially in bays and the human settlement adaptations to these changes. This high-resolution reconstruction based on seismic methods in the shallow water and core analysis on land combined with detailed archaeological data from the studied area provides an important addition to the puzzle of the Mediterranean story, the cradle of Western Civilizations.

Towards an Understanding of Ancient Coastal Construction Practices: The Hippo-Stadium at Caesarea, Israel

Michael Lazar, Beverly Goodman-Tchernov

Department of Marine Geosciences, University of Haifa, Haifa, Israel

Constructed along the central Israeli Mediterranean coast by Herod the Great over 2000 years ago, the hippo-stadium of Caesarea was an impressive structure—some 300 m long and over 50 m wide and able to seat 10,000 spectators. It has been speculated that the construction of the large artificial harbor to the north interrupted the natural sedimentary regime in the area. Blockage of sand-carrying, longshore currents from south to north by the harbor's southern breakwater, which may have extended seawards by as much as 500 meters, led to the accumulation of sand and to the expansion of the beach to the south. According to this theory, this newly formed sandy area provided “reclaimed” land, which in combination with nearby exposed aeolianite bedrock, provided a foundation for the hippo-

stadium. At the time of its discovery and excavation, the structure was significantly eroded, leaving only partial remains from which to extrapolate its original dimensions. To examine these claims, a frequency domain electromagnetic (FDEM) survey was carried out within the boundaries of the hippo-stadium and combined with other data collected in the field, as well as aerial photographic records pre-dating modern renovations. Results are informative with regard to the usefulness of this method, while shedding light on the sub-surface structure of the area, thus contributing new data from which to consider these earlier claims.

Geophysics and Geoarchaeology: Reconstructing the Past Coastline and Related Municipal Infrastructure of Northern Caesarea Maritima

Adellina Cini¹, Roi Jaijeli¹, Mor Kanari², Ofra Barkai¹, Dror Planer³, Jacob Sharvit³, Beverly Goodman-Tchernov¹

¹The Dr. Moses Strauss Department of Marine Geosciences, Leon H. Charney School of Marine Sciences, Haifa, Israel. ²Israel Oceanographic & Limnological Research Ltd., Haifa, Israel. ³Israel Antiquities Authority, Marine Archaeology Unit, Israel

Caesarea's coastline north of the ancient harbor contains many significant municipal monumental architectural features such as aqueducts, major sewage channels (*cloaca maxima*), anchorages, towers, and walls. Many of these features are partially eroded due to a changed coastline. In this multidisciplinary effort, a coastal seismic survey was performed—in tandem with sediment coring—and compared to underwater and coastal archaeological data. The geophysical data successfully highlighted a shallow-water sediment trap, from which 4 meters of core—covering a period of more than 2,000 years—was retrieved from only a 4-meter water depth. Underwater finds were assessed regarding their original position, whether marine or terrestrial. For example, in 2010, a patch of fine silty mud (suspected to be related to the ancient sewage effluent) was identified ~600 meters offshore of the cloaca, a distance beyond what would be expected. Also, rubble layers—without any clear maritime purpose—blanket portions of the coast. Using these markers, in combination with the sedimentological coring sequence and geophysical survey, we present a revised estimate of past coastline positions at Caesarea. This study will help to gain a more comprehensive understanding of Caesarea and its surrounding coastal geomorphological history before it may be lost forever.

Modeling the Acoustic Signatures of Lithic Debitage

Margaret A. Morris, Isabel Rivera-Collazo, John A. Hildebrand, Petr Krysl

Scripps Center for Marine Archaeology, University of California, San Diego, La Jolla, California, USA

Acoustic methods to search for submerged sites have shown that concentrations of knapped flint produce a visible acoustic response in chirp sonar profiles in a variety of geographical settings. Field tests and simulations have suggested that the submerged lithic signal is due to resonances of the flaked stone, excited at frequencies from 2-20 kHz. We further characterize the acoustic signatures of lithic debitage, relating individual lithic resonance and backscatter to its dimensional and material properties, allowing for significant improvements in submerged lithic detection. We employ a spatial finite element method to model the natural vibrations of lithic debitage in both air and water, and we model the acoustic scattering return of individual lithics in water to a plane wave, displayed as acoustic color

(backscatter as a function of frequency and incidence angle), using a combined finite element and boundary integral method. For chert debitage 5-9 cm in length, we find the strongest resonant signal between 8-16 kHz. Results indicate that the lithic resonance signal is highly directional, with backscattered target strength up to -20dB when excited at the optimal angle. For any flat-laying lithic, target strength at normal incidence is nearly 10 dB lower than the strongest signal, found 45-60 degrees from normal incidence. We suggest that the best way to detect submerged lithics may not be through standard mono-static sub-bottom profiling with a direct downward pulse. Further work will include modeling for obsidian and metavolcanic lithic debitage as well as laboratory measurements.

Geophysical Investigation of Clazomenae's Submerged Archaic (ca. 7th c. B.C.E.) Harbour Basin, Western Anatolia, Turkey

Nicholas L. Riddick¹, Joseph I. Boyce¹, Vasif Şahoğlu², İrfan Tuğcu³, Yeşim Alkan³

¹McMaster University, Hamilton, ON, Canada. ²Ankara University, Ankara, Turkey. ³Osmaniye Korkut Ata University, Osmaniye, Turkey

Located in the southern Bay of İzmir, Clazomenae was an important olive-producing centre and trading port. Clazomenae's mainland harbour (>5 ha) was enclosed by two broad (>35 m) man-made breakwaters that are now submerged ~2-3 m below present sea level. Archaeological excavations indicate that the harbour was in use during the Archaic and Classical periods (7-6th c. B.C.E. and 4th c. B.C.E.), and was Clazomenae's principal Iron Age commercial port. Geophysical investigations (bathymetry, side-scan, magnetic surveys; >60-line km) were conducted in the Archaic harbour to map the harbour layout and to investigate the internal architecture of well-preserved harbour breakwater structures. Bathymetry and side-scan mapping delineated two broad rubble-constructed moles and a submerged headland that divided the harbour into two separate basins. Linear magnetic anomalies within the eastern breakwater indicate a possible Late Bronze buried pier structure and augmentation of a natural 'proto-harbour' embayment. Sonar images revealed linear wall features on the mole surface, recording the foundations of architectural features (possible ship sheds, warehouses). Outside the harbour, seabed mapping discovered drowned paleoshorelines and relict paleochannels recording Late Neolithic coastal and floodplain environments.

SESSION: Scribal Hands and Habits in Cuneiform Texts

Nicholas Reid | Reformed Theological Seminary (Orlando); ISAW, New York University

Klaus Wagensonner | Yale University

Beds, Chairs, and Lyres: Scribal Hands and Habits in the Isin Craft Archive

Klaus Wagensonner

Yale University, New Haven, CT, USA

The Yale Babylonian Collection holds the lion share of an institutional archive referred to in literature as Isin Craft Archive. This archive highlights the different tasks in the production of furniture and other implements such as the accounting for incoming raw materials, assigning the materials to workshops, producing items, and delivering these items to the final customer. It represents one of the major textual sources for the early phase of Isin's hegemony in southern Mesopotamia at the demise of the Ur III empire. While the archive has been thoroughly treated in the past, the diplomatic aspects of these texts such as their paleography, text layout and orthography have not been discussed systematically. Based on the digital capture of the

archive's texts at Yale the present paper seeks to analyze these aspects and establish a methodological framework.

Tracing Damage: Looking at Patterns of Paratextual Marking in Cuneiform Scholarship

M. Willis Monroe

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Cuneiform scribes were remarkably honest about the status of their primary sources. With textual glosses, often written in smaller sign, they noted when previous versions of the text they were copying or composing from were damaged or "broken." Despite a lack of contemporary evidence from neighboring text cultures, the mechanism of these glosses is relatively clear; elsewhere I have also written about their benefit for understanding the material dimensions of editorial transmission. However, as of yet there has been no systematic survey of these glosses. They are almost entirely confined to texts written in the 1st millennium B.C.E. The glosses are most common on traditional forms of scholarship (including the wide range of divinatory texts).

This paper will survey the temporal and literary context for these glosses throughout cuneiform texts of the 1st millennium B.C.E., focusing primarily on the 7th c. material from Assyrian Nineveh and the archives and corpora of Late Babylonian scribal culture. Additionally, the paper will attempt to answer the following questions: What aspects of the scribal context might influence the presence or absence of these marks? What genres of knowledge were more likely to have glosses added to their texts and what justification might scholars use to record damage? A survey of paratextual marks will do much to elucidate the copying and editorial practices of cuneiform scribes in 1st millennium Mesopotamia.

The DeepScribe Research Project: Using Computer Vision to Read Elamite Cuneiform Tablets from the Persepolis Fortification Archive

Sanjay Krishnan¹, Miller C. Prosser^{1,2}, Susanne Paulus¹, Eddie Williams³, Sandra R. Schloen^{1,2}, Grace Su⁴

¹University of Chicago, USA. ²OCHRE Data Service, USA. ³Independent researcher, USA. ⁴Columbia University, USA

The DeepScribe project explores how artificial intelligence can assist researchers by automatically identifying cuneiform signs in images of Elamite clay tablets studied by the Persepolis Fortification Archive (PFA) project. While the idea of using computer vision algorithms for cuneiform sign identification has been explored before, no other study exists at this scale and richness of annotation. Such scale matters because deep neural networks require large amounts of diverse "training data" to construct predictive models.

The PFA project has produced digital text editions and digital photographs of thousands of Elamite cuneiform tablets recorded in the Online Cultural and Historical Research Environment (OCHRE). Sign-by-sign cuneiform transliterations have been integrated with digital photographs using manually generated polygon hotspots. With over 100,000 signs manually annotated, this highly atomized and integrated data serves as valuable training data for algorithms. In the project's next phase, we will leverage the extensive digital glossary and text editions documented in OCHRE to create a language model, which will allow the algorithm to compare attested orthographies when deciding between potential sign readings.

Preliminary results suggest that the computer vision segment can detect lines and signs in the digital image, even without manually

generated hotspots. Signs in digital photographs are identified correctly 64% of the time, with the top-5 most confident predictions containing the correct sign 89% of the time. Qualitative results suggest that the predictive models learn internal representations that match scholarly intuition on similarly constructed signs, which may be useful for distinguishing between different scribal hands.

SESSION: Archaeology of Cyprus I

Kevin Fisher | University of British Columbia

Catherine Kearns | University of Chicago

Playing the Imitation Game: Cypriot Ceramics and their Transpositions in the Levant and Egypt during the Second Millennium B.C.E.

Sarah Vilain

Université Paris Nanterre, France

The beginning of the Late Cypriot Period is marked by a dramatic increase of interactions between Cyprus and the continent. Cypriot ceramics were broadly circulating throughout the neighboring regions, especially the Levant and Egypt, where imitations as well as innovative productions inspired by Cypriot shapes and motifs emerged. However, while the presence of Cypriot vessels informs us about the nature of traded goods, imitations offer a much more complex and multi-faceted picture.

Distinct patterns can be observed, as the choice of the imitated features seems to have been conditioned by the specific tastes of the societies that produced them. Levantine potters were inspired by a variety of Cypriot wares, whereas in Egypt transpositions are limited to Base-Ring I jugs and juglets that occur in a variety of raw materials such as faience, glass, calcite or travertine. Far from being substitutes for imports, these artefacts were soon valued for themselves, triggering a completely new production of “entangled objects.”

Questioning the concept of imitation and its traditionally held theories, this paper will investigate where, when, and why imitations and various types of productions inspired by Cypriot wares developed, and how foreign motifs and techniques were differently adopted and adapted into the Levantine and Egyptian traditions. Ultimately, this presentation will assess how the imitation process is linked to trading patterns and how both evolved during the second half of the Second Millennium B.C.E.

Nuragic Vessels in Ritual and Offering Practices: A Comparison between Cyprus and Sardinia

Laura Pisanu

University of Melbourne, Melbourne, Victoria, Australia

The connections and mutual exchanges between Sardinian and Cypriot communities over the Bronze Age (17th – 10th century B.C.) engaged with different artefacts such as pottery and ox-hide ingots that were found at sites in these two islands. Recently, six hand-made and black burnished vessels, which have been identified as Nuragic production through comparative petrographic analyses, have been uncovered in offering pit dated to the late 13th century B.C. at Hala Sultan Tekke's suburban area close to burials.

This paper compares ritual activities and offerings that involved Nuragic vessels found both at Hala Sultan Tekke and at Nuragic tombs in Sardinia with the aim of better understanding the possible presence of Nuragic people in Cyprus as hinted by some scholars. Indeed, considering the pottery offered at Sardinian tombs built in a dry-stone technique construction, it could be better defined if the types of pottery found in the offering pit at Hala Sultan Tekke were clearly part

of ritual patterns shared among Nuragic communities. As a consequence, although architecture and organization of Hala Sultan Tekke and Sardinian tombs seem to reflect the cultural and social background of each respective island's inhabitants, the findings of Nuragic pottery integrated in Cypriot cultic practices might highlight a direct engagement of Nuragic people who could have shared and carried not only metal and ceramic artefacts but also their funeral habits in one of the major trade cities settled in the East Mediterranean Sea.

Stabilisation and Refurbishment of a Chalcolithic Roundhouse Reconstruction at the Archaeological Site of Kissonerga-Mosphilia Lindy Crewe

Cyprus American Archaeological Research Institute (CAARI), Cyprus

In January 2021, CAARI was awarded a Shepard Urgent Action grant from ASOR to undertake repairs to a Late Chalcolithic (c. 2800 B.C.) roundhouse replica at the archaeological site of Kissonerga-Mosphilia near Paphos. Originally built in 2010, heavy winter rains over the past few years had caused extensive damage. The project is a collaboration between CAARI, the Department of Antiquities, Cyprus, and the Kissonerga Community Council. The replica is modelled on Building 3, known as the Pithos House due to the rich material repertoire preserved when the building was destroyed by fire. It is designed to serve as a visitor center with bilingual posters on the interior describing the archaeological context. This paper reports on the results, outlining the traditional building materials and techniques used and discussing how a replica and digital reconstruction can serve to bring to life the scant remains generally visible at prehistoric archaeological sites.

Tree-Rings and ‘Holistic’ Heritage Science Building Biographies for the Troodos Byzantine-Medieval Painted Churches in Cyprus

Brita Lorentzen¹, Sturt W. Manning^{1,2}, Nikolas Bakirtzis², Dante Abate², Svetlana Gasanova²

¹Cornell University, Ithaca, New York, USA. ²Cyprus Institute, Nicosia, Cyprus

The Troodos Painted Churches in Cyprus are monuments of global significance and a key reference for Byzantine-Medieval art and architectural history. However, exact timelines for their building biographies are only approximately known, based on subjective stylistic and typological criteria and a few inscriptions that are not always directly related to the buildings or their associated artwork. Knowledge of the full *chaîne opératoire* related to the construction, furnishing, and renovation of these monuments also remains incomplete—including processes involving the ample wood materials used in church architectural elements, liturgical objects, decorations, and the sociopolitical relationships involved and cultivated therein.

We report on the latest results of a multi-year initiative, in which our team from Cornell University and the Cyprus Institute is using dendrochronology to date and source wooden cultural heritage from a key group of Cypriot painted churches and monuments. This datum is being used to create the first high-precision timeline for Byzantine to post-Byzantine art and architecture in Cyprus and to better illuminate the processes involved in their building histories. The dendrochronological investigations are part of a ‘holistic’ heritage science analytical framework, incorporating (among other methods) digital mapping of the structures and FTIR/XRF analysis of their painted wall frescos to further record and characterize building materials and processes. We concentrate on our work in the Solea and Marathasa

Valleys, and especially the churches Ayios Sozomenos and the Virgin Podithou, in which we have identified multiple construction and renovation phases spanning the early 16th-early 20th centuries A.D. that used wood resources from local Troodos pine forests.

SESSION: Protecting Libyan Cultural Heritage I

Will Raynolds | Co-Director of ASOR CHI

Ahmad Emrage | University of Benghazi; ASOR CHI

Cyrene- Alquba Archaeological Survey—Summary and Recommendations for Cultural Property Projection

Ahmad S. M. Emrage

University of Benghazi, Benghazi, Libya

This presentation summarizes a risk assessment survey in the area of Cyrene carried out during the Spring and Summer of 2021 by the Libya Department of Antiquities (DoA) in partnership with ASOR and with funding from the U. S. State Department Ambassador's Fund for Cultural Preservation (AFCP).

The survey area (5km x 30km between Cyrene and al Gubbah / Lamluda) lies within the larger area of ancient Cyrene, located within the modern town of Shahat in northeast Libya. Called the "Athens of Africa," Cyrene is considered one of the most important Classical Greek sites outside of Greece itself. The area has important remains from Greek, Roman, and Byzantine times. Hundreds, if not thousands, of archaeological features and artifacts are under threat from urban encroachment, housing development, farming, highway construction, and looting. Because of a lack of awareness and because of economic pressures, it is common for homeowners and developers to utilize the sale of ancient artifacts originating from the development area to help finance construction costs.

Building on preliminary satellite analysis and GIS mapping conducted by ASOR and Libyan partners, the DoA survey team carried out a damage and risk assessment survey of areas that the satellite imagery identified as possibly being damaged by urban encroachment and/or looting. The team ground-checked preliminary damage assessments identified by satellite, and completed further documentation using drone imagery and photogrammetry recordings to build out a GIS dataset that can be used for future monitoring.

Because the survey team consisted of 10 people from the Department of Antiquities, the Tourist Police, and the Antiquities Protection Authority, the survey and ground-proofing not only yielded a rich dataset, conducting the project itself resulted in greater awareness among and cooperation between several governmental bureaus tasked with protecting Libyan cultural heritage. This presentation will summarize the survey findings that will serve as the basis documentation and a possible action plans that can advance the goals outlined in the bilateral cultural property agreement signed between the U.S. and Libya.

The Hidden Idea Behind the Design of the Red Castle Tunnel During the Italian Colonization of Libya

Aida M. Ejroushi

Texas Tech University, USA

The Red Castle (Al- Saray al-Hamra), an ancient monument that lies at the heart of Tripoli overlooking the sea, might be viewed as a symbolic representation of the city's long and tumultuous history. Because of its geographical importance as a port city along Africa's northern coast, Tripoli represents a strategic stronghold for outside forces seeking control of the region. As the city's dominant political powers (colonization and dictatorship) changed, so did the city's

cultural fabric and its structures' overall esthetics. In particular, the Italian colonization of Libya between 1911 and 1943 brought about significant changes to the city and, specifically, the Red Castle. During this period, the Italians restored the castle and created a tunnel that joined two portions of the coastal road. Until its destruction in the 1970s due to redevelopment projects, the castle and tunnel were characterized by the functionality and unique design. However, the inspiration and intent behind these alterations have remained mostly obscured, with very little evidence to support assertions made regarding the motivations behind these transformative projects. This study examines the two alterations made to the Red Castle during the 1920s and the 1930s. Using existing research and a new visual analysis of the structures, this study provides evidence that the two Italian restorations were based on replicating a professionally hidden mixture of architectural elements from Roman ruins located in Italy. In addition, this study also explores the implications of these interventions within the context of historic preservation and colonialism.

Post-Pandemic Opportunities for Libyan Cultural Heritage Protection

Will Raynolds¹, Ahmed Hussein², Naser Al Hrar²

¹ASOR Cultural Heritage Initiatives, USA. ²Department of Antiquities, Libya.

The global pandemic compounded many existing challenges in Libya, resulting in a prolonged period of reduced connectivity combined with sustained or increased pressure on archaeological sites and other heritage resources. This lecture presents an overview of ASOR CHI's recent work with Libyan partners to counter and prevent illicit trafficking, foster education and stewardship of cultural heritage, and document and monitor changing conditions. With an eye towards expanding the horizons of collaboration as the threat of the pandemic recedes and the process of political reconciliation unfolds, CHI's work points towards new avenues of partnership between civil society organizations and governmental heritage authorities.

Friend or Foe?: Navigating the Return of "Found" Objects in Libya

Intisar Elarebi

Libyan Department of Antiquities, Tripoli, Libya

As a result of prevailing insecurity since the 2011 Revolution, cultural heritage collections in Libya have been exposed to theft, illicit trade and smuggling. Despite these challenges, there has been a credible response on the part of many members of civil society to protect these resources. Members of the Department of Antiquities have been frequently approached by both good actors and bad: citizens making good-faith efforts to return archaeological material discovered in the course of new construction, as well as looters seeking the advice of experts on how best to value and sell the antiquities they found through illegal excavation. This lecture explores the ethically fraught landscape of these conversations and describes ways in which further education and awareness might enlarge the community of support for cultural protection.

Video Outreach for Heritage Protection

Ramadan Elshibani

Libyan Department of Antiquities, Tripoli, Libya

After the events of the 2011 Revolution in Libya, museums and stores were plundered, archaeological lands were bulldozed under the pretext of private ownership, and archaeological sites and settlements

were destroyed. Ultimately, all of this loss stems from ignorance. It was due to the lack of knowledge of many segments of society about the importance of this heritage in terms of identity and connection to the past with the aim of orienting the future. The existing primary and secondary school curriculum have a limited focus on the ancient history of the country. While improving this deficiency must be a priority, it will take time. Nevertheless, there is a demonstrated audience for short videos highlighting sites and important collections around the country. This presentation describes how we better disseminate existing video content to meet a wider audience as well as develop new video content to better tailored to the Libyan audience to promote engagement around cultural protection.

SESSION: Transcending Borders: Geo-Political and Cultural Developments of the Jordan Valley in the Iron Age

Robert A. Mullins | Azusa Pacific University
Carroll M. Kobs | Trinity Southwest University

The Jordan Valley in Geo-Historical Perspective: A Long-Durée View

Ido Wachtel

The Hebrew University of Jerusalem, Israel

This paper addresses the Jordan Valley's historical geography and suggests a long-durée approach to understanding its local history and impact. By using data from two well-documented pre-modern periods (the early Ottoman period and the British Mandate period), I will discuss the valley's dual nature as a natural border and buffer zone, in tandem with its status as a hub of regional movement and interaction between adjacent areas and political units. This interaction played out on both a north-south and an east-west transect. Various natural and ecological factors which influence movement, cultural interaction and settlement patterns will be discussed, including the road networks throughout time, central sites' location, and the changing administrative boundaries. This data set will enable an insightful examination of the role and significance of the Jordan Valley through history as a major player in micro and macro-historical processes.

Tel Rehov in the Iron Age: Aspects of Continuity and Change

Nava Panitz-Cohen, Amihai Mazar

Institute of Archaeology, Hebrew University of Jerusalem, Israel

The publication of the final report of the Tel Rehov excavations affords an opportunity to examine various aspects of the Iron Age in the Jordan Valley, the main period excavated at this major site. The excavations revealed a continuous stratigraphic sequence from Iron Age I until the final phase of Iron IIA, when the city suffered total destruction, probably at the hands of Aramean Hazael circa. 830 B.C.E. Rehov was one of the few cities where the Iron I to IIA occupation was uninterrupted. The three main strata dated to the 10th and 9th centuries B.C.E. comprise a rich corpus that informs on issues of chronology, regionality and economy, manifested both within the site and in relation to surrounding polities, in particular, Beth-Shean, as well as sites in the Jezreel Valley, east of the Jordan River, and south in the Jordan Valley.

The indigenous Canaanite population that inhabited the city from the Late Bronze I when it was first established continued during the Iron Age, underwent a gradual shift in political allegiance and cultural affinity with the establishment of the northern Israelite kingdom, while at the same time cultivating unique local features, such as the industrial apiary. This lecture will examine aspects of continuity alongside change in the material culture of Rehov during the Iron Age

sequence, placing these processes in a geo-political, regional and historical perspective, emphasizing the significance of the city's location at the crossroads between the Jordan Valley and the inner region of the Israelite kingdom.

Tall al-Hammam: A Fortified Iron IIA-B Store City in the Southern Jordan Valley (Transjordan)

Steven Collins

Veritas International University, Santa Ana, CA, USA

Tall al-Hammam's long history began during the Pottery Neolithic Period, with continuing occupation through most of the Middle Bronze Age. A site-wide, violent c. 1700+/-50 B.C.E. destruction was followed by a seven-century occupational hiatus. Whatever the cause of the settlement gap, a revival of robust agricultural activity dictated the building of hundreds of stone-lined silos on the top and slopes of the upper tell about the beginning of the 10th c. B.C.E. The initial Iron IIA builders fortified the upper tier of their new 'store city' with walls, towers, and a gateway. However, they did not enclose dozens of silos dug into the tell's slopes. The volume of agricultural production necessitating the construction of so many silos at one site may indicate not only the stowage of localized harvests, but perhaps its function as a regional storage complex (could this have been a Transjordan store city for the Israelite United Monarchy?). Ensuing from the late 11th/early 10 c. B.C.E., four Iron II phases are now identified: early Iron IIA ('silo' phase; Stratum IX); late Iron IIA ('administrative' phase; Stratum VIII); early Iron IIB ('cobble' phase; Stratum VII); and late Iron IIB ('warehouse' phase; Stratum VI). The final evolution of the Iron II 'store city' at Tall al-Hammam culminated with substantial fortifications enclosing residences, administrative buildings, a large-capacity warehouse, and a 'governor's' residence. Ceramics tend to place its final destruction in the late 8th c. B.C.E. (multiple 14C test results are pending at the writing of this abstract).

Tell Abu al-Kharaz, Jordan: Regionality and Interconnections in a Longue Durée Approach

Peter M. Fischer¹, Teresa Bürge^{2,1}

¹University of Gothenburg, Sweden. ²Austrian Academy of Sciences, Vienna, Austria

Tell Abu al-Kharaz is a 12h large tell in the Transjordanian Jordan Valley, where traces of human activity are attested from the Early Bronze Age to the early Islamic period. An identification of the site with the biblical Jabesh-Gilead has been suggested. However, at present no definitive answer can be given. The Iron Age is represented by seven phases of occupation, Phases IX to XV, covering the period from the Iron Age IB to the Iron Age IIC, with minor and larger destructions separating the occupational phases. A radiocarbon-based chronological sequence based on 40 samples (and additional 19 from Pella) has been established by the Swedish expedition which can contribute to a synchronisation of the site with other settlements in the region, the Southern Levant and beyond.

In addition to close relations with nearby sites in the Jordan Valley, e.g. Pella, Tell Deir 'Alla, Tell es-Sa'idiyeh, Tell Rehov and Beth-Shean, which can be observed throughout the entire Iron Age, the Iron Age I is characterised by similarities to material from sites in the Jezreel Valley. Imports from the Phoenician and Cypriot spheres of culture appear occasionally in the Iron Age IB becoming more frequent towards the end of the Iron Age IIB. The aim of the paper is therefore to take a closer look at the diachronic development of regional and

inter-regional relations, mainly based on pottery studies, and to discuss possible geo-political and cultural implications.

Pella in Jordan during the Iron I-II: Culture, Chronology and Jordan Valley Context

Pru F. Sheaves, Stephen Bourke

Sydney University, Sydney, NSW, Australia

Pella is occupied in the first half of the Iron Age. An enigmatic but apparently full-span Iron I sequence is followed without obvious interruption by a more or less complete 'long' Iron IIA sequence. The Iron II occupation is brought to an abrupt end by a site-wide destruction occurring in the first half of the Ninth Century B.C.E. Scrappy 'squatter' horizons follow, for no more than 50 years before Iron Age occupation ceases.

No further occupation is detected until the Early Hellenistic period of the mid-3rd century B.C.E., representing a half millennium gap in occupation, which may (in part) explain why Pella does not feature in the Biblical record.

For much of the Iron I period, occupation is characterized by horizons of intense pitting, spread across much of the ruin-field. Such dwellings that do exist are flimsy efforts, built among the ruins of the far-more monumental Late Bronze Age civic (Palatial) and religious (Pillared Temple) structures. It is only towards the end of the period (in the late 11th Century B.C.E.) that revival begins, and more monumental structures once again appear.

This presentation will summarize the material-cultural (secular, sacred and funerary assemblages) and parallel radiometric datasets, of the Iron I and IIA, before seeking to place Pella in its North Jordan Valley cultural and chronological context.

Tell es-Sultan/Jericho in the Iron Age

Lorenzo Nigro

Sapienza University, Rome, Italy

The Italian-Palestinian Expedition (MoTA-DACH Sapienza University of Rome) in the last decades has resumed the excavation of Tell es-Sultan/ancient Jericho also uncovering Iron age strata, which have given the opportunity of a full re-appraisal of this period at the site. The urban layout and main monuments have been reconstructed to understand the role of this city in Iron I and II. Material culture analyses have, moreover, suggested important developments of the Jericho economy during this crucial era and illustrated its interregional connections and inner organization.

SESSION: The Archaeology of the Kurdistan Region of Iraq I

Jason Ur | Harvard University

Drowned Landscapes: A Multidisciplinary Approach to the Archaeological Heritage of the Mosul Dam Reservoir

Paola Sconzo¹, Francesca Simi²

¹University of Tuebingen, Tuebingen, Germany. ²University of Udine, Udine, Italy

In the summer of 2018, an unprecedented drought occurred in the valley of the Tigris, stretching from its headwaters in the Taurus mountains of south-eastern Turkey to the gates of Baghdad in Iraq, it turned the half-arch of the Fertile Crescent into a region of sand and dust.

One of the territories particularly affected by this phenomenon was the Upper Tigris valley in Iraq. Part of this area was submerged for a long time by the waters of the Mosul Dam basin, but abruptly

resurfaced when the lake's water level dropped by several meters, exposing the spolia of several villages and archaeological sites once located along the River banks. This extraordinary event triggered a wave of new archaeological enterprises along the east bank of the lake (Governorate of Duhok in the Kurdistan Region of Iraq), stirring up a renewed interest by the scientific community into an area that had been barely investigated in the last forty years.

Using a holistic strategy that merges new and legacy data, and includes different levels of analyses (remote sensing; pedestrian and UAV photogrammetric surveys; excavation), this paper presents an ongoing project focused on the drowned heritage of the Mosul Dam reservoir.

Specific issues will be addressed, such as the management of legacy and new data for the reconstruction of settlement dynamics, the unforeseen discovery of a monumental site, and the damage assessment and monitoring of the resurfacing archaeological landscapes.

Charting Changes in Pottery Production at Tell Helawa from the Halaf to the Late Chalcolithic 1 Period

Agnese Vacca, Luca Peyronel, Michael Campeggi

University of Milan, Milan, Italy, Italy

Recent excavations carried out by the MAIPE project of the University of Milan at Tell Helawa, Iraqi Kurdistan, are providing useful data to define the Halaf, Ubaid and Late Chalcolithic 1 periods in the Erbil Plain, as well as charting changes in pottery production from one phase to the next, relying on a good sample of materials from stratified contexts, anchored to C14 dating. Data from Step Trench B encompass well-preserved structures with domestic and productive function, including a pottery workshop dating to the Ubaid- Late Chalcolithic 1 period.

Initial examination of the 6th and first half of the 5th millennium B.C.E. from Helawa suggests the existence of common trends shared with other Northern and Central Mesopotamian sites, in addition to a noticeable sub-regional variation as evidenced by the close parallels of Helawa pottery with that from other sites in the Erbil plain (Qalinj Agha, Surezha and Tell Nader).

This paper aims at presenting the Halaf to Late Chalcolithic 1 pottery sequence of Tell Helawa, discussing morphological types and technological aspects related to pottery production in a diachronic perspective, with the double aim of refining the regional dataset and tracing routs of connections of the Erbil plain with the adjacent and far-off lands.

Neo-Assyrian Hydraulic Engineering and the Paleohydrology of the Bastora Chai

Jordan F. Brown¹, Nader Babakr², Jason A. Ur³, Lisa Maher¹

¹University of California, Berkeley, USA. ²Erbil Antiquities Directorate, Kurdistan Region, Iraq. ³Harvard University, USA

The diverse water resources of the Erbil Plain have inspired various water management strategies, of which the earliest known major hydraulic engineering schemes were enacted under the Neo-Assyrian Empire. During the period of Neo-Assyrian florescence, regional paleoclimate archives indicate centennial-scale shifts in hydroclimate, which likely affected water availability on the Plain. The timing, direction, and magnitude of these effects would have differed across components of the hydrologic system, and it is probable that Neo-Assyrian hydraulic works interacted with these hydrologic changes in various ways. The aims and outcomes of these hydraulic engineering

projects thus offer a glimpse into how Neo-Assyrian administrators understood and weighed environmental factors among a suite of sociopolitical and economic conditions when making land-planning decisions. This paper takes the recently-discovered diversion dam on the Bastora Chai as a case study by which to examine these dynamics. The paleohydrology of the Bastora Chai is discussed in relation to that of the Erbil Plain itself, with particular reference to possible changes under reconstructed Iron Age paleoclimate scenarios. The plausible aims and apparent outcomes of the Neo-Assyrian dam and canal project are considered and compared with available scholarship treating other major Neo-Assyrian hydraulic works. Preliminary conclusions and next steps for modeling and field research are presented.

Public and Private on the Threshold of Social Complexity: On the Use of Space in 6th-5th Millennium Tell Surezha on the Erbil Plain
Samuel L. Harris

University of Chicago, Chicago, IL, USA

This paper offers an analysis of domestic and nondomestic spaces in the Late Chalcolithic I settlement of Tell Surezha in the Erbil Plain of Iraqi Kurdistan. I use architectural, microarchaeological, and macroartifactual data to describe patterns of activity and access at a small village site, describe one of the few large public building complexes known from Late Chalcolithic I northern Mesopotamia, and argue that the emergence of new kinds of spaces, “public” in one sense, but tightly controlled in terms of access and use, is an important technology of elite consolidation of political power.

SATURDAY, DECEMBER 11, 2021

11:30am–12:30pm (EST)

SESSION: Art Historical Approaches to the Near East

Stephanie Langin-Hooper | Southern Methodist University

Articulating Mortals and Deities in Hittite Art

Müge Durusu-Tanrıover

Bilkent University, Ankara, Turkey

Hittite artistic production has often been categorized according to function and medium, such as seals (and their impressions), landscape monuments, metal vessels, decorated pottery, sculptures in the round, and architectural gate sculptures. While these categories have broad relevance for Anatolian and larger ancient Near Eastern studies, they discourage cross-comparison between corpora, compartmentalizing Hittite visual products to small niches. A comparative look, however, demonstrates remarkable consistency across different media in Hittite art. In its entirety, Hittite art is dominated by scenes of deities and/or rituals performed to them. Furthermore, the figural depictions of mortals and deities follow similar conventions on landscape monuments, seals, metal objects, reliefs and decorated pottery, albeit in different scales.

In this paper, I demonstrate the potential of thematic and cross-medium approaches to Hittite art through a case study questioning the relationship between humans and deities. Starting with the observation that depictions of the divine in Hittite art outnumber those of the mortals, I move on to presenting the various types of scenes with humans and/or deities that recur across media, such as a deity (or a group of gods/goddesses) represented in action, a mortal libating to a divine figure or a human under the embrace of a god. I suggest that in each scene, the mortal and the divine realms are clearly marked, articulating the relationship between them, as well as the limits of their interaction. I conclude by advocating for theme-driven approaches to Hittite art that look beyond divisions of function and media.

The Earliest Dynastic Portrait: An Ivory Dwarf in the Ashmolean (AN 1896-1908.E.298)

Paul Dambowicz

Pratt Institute, Brooklyn, NY, USA

The history of Egyptian art includes a lineage of portraiture beginning in the Early Dynastic period and continuing until the Roman period with its hundreds of surviving mummy portraits from Fayum. This study of a female dwarf in ivory, in the Ashmolean Museum, yields evidence that this small figurine may indeed be the oldest surviving representation of an individual portrait from Egypt. The figure itself displays an elite status (despite its bowed legs and stunted growth)—with coiffure, skirt, poise, and stance that demands respect. It is in the details of the face, however, that the attempt at individual portraiture is apparent. The modeling of the visage shows deep-set eyes below heavy brows, and high cheekbones framing nostrils and a mouth in the course of inhalation. One side of the lower lip turns down, and none of the pairs of facial features (eyes, nostrils, brows, cheeks, cheekbones, lips) is exactly symmetrical. This is a living, breathing portrait of an elite woman, who may have commissioned her own portrait. The early development of portraiture five thousand years ago was dependent on a consideration of the anatomical and medical details of this subject. The fact that she was a dwarf was not coincidental, but an essential theme in the history of Egyptian archaeology. This study connects this

and other Early Dynastic examples with later instances of the depiction of anatomical, medical, and surgical details in the development of the art of Egyptian portraiture.

Who's that Girl?: An Investigation into the Woman in Pahery's Winemaking Scene

Morgan E. Moroney

Johns Hopkins University, USA

In the tomb of Pahery at el-Kab an unlabeled woman stands beneath an arbor collecting grapes from the vines. Two men kneel on either side, also harvesting. Winemaking is not an infrequent theme in Egyptian elite tomb scenes—there are about 96 known examples dating from the Old Kingdom through the Late Period. However, this portrayal of a woman participating in the manufacturing of wine is unusual. She might simply be a fellow worker or a remarkable artistic choice, but her singular place suggests something further. We might credit her presence as an expression of the matrilineal ties emphasized in Pahery's tomb. Within this tomb's context, and moving beyond, she might also highlight mythical and ritual significance subtly expressed, but not yet fully explored, in early New Kingdom winemaking scenes. Wine offering and winemaking scenes have been connected with Osiris, Hathor, Renenutet, Shezmu, and the concepts of abundance and rebirth. This paper examines how associations between Hathor, other deities, and winemaking scenes in the early 18th Dynasty are expressed through iconographic and stylistic changes in winemaking scene types. By comparing Pahery's winemaking depiction with earlier and contemporary scenes and other wine-related imagery, particularly marsh bowls, the meaning of these scenes is expanded to incorporate associations with Hathoric myths and festivals and funerary rituals. The development and changes in the style and iconography of winemaking scenes are, too, connected with the increase in Hathoric worship and festivals, and greater political and religious changes in the early 18th Dynasty.

Cross, Menorah, or Caliph? Local Demands for Mold-Blown Glass Vessels in Late Antique Palestine

Rangar H. Cline

University of Oklahoma, USA

Hexagonal mold-blown glass vessels dating from the 5th–7th centuries A.D. feature menorahs, crosses, vegetal decorations, and (possibly) standing caliphs (Barag 1970; Raby 1999). Some examples with divergent religious symbols likely come from a single workshop. The objects are often assumed to have been produced in Jerusalem and to have been collected as souvenirs by pilgrims visiting the city. This paper challenges both of these assumptions. The existence of a mold for making such objects in Samaria and the concentration of glass production centers in the northern and coastal regions of present-day Israel make Jerusalem an unlikely center for the production of such objects in late antiquity. The excavation contexts of such vessels, as well as their patterns of distribution, suggest that they were produced in present-day northern Israel and were not acquired by pilgrims visiting Jerusalem as part of the expansion of pilgrimage to the city during late antiquity. While local sancta objects produced in Asia Minor, Syria, and Egypt have regional and trans-regional patterns of distribution, hexagonal glass vessels have a much more limited area of distribution—primarily in modern-day northern Israel, Jordan, and Syria. In addition, most provenanced examples were discovered in funerary contexts, similar to Roman unguentaria found in graves and often assumed to have held perfumes used for the dead.

These circumstances indicate that the objects were produced for local populations of Jews, Christians, Muslims, and others to satisfy the demand for utilitarian and funerary glass vessels with ritually potent symbols.

SESSION: Technology in Archaeology: Recent Work in the Archaeological Sciences

A New Collation and Translation of the Khirbet Qeiyafa Ostrakon Based on the Multispectral Images

Brian Donnelly-Lewis

University of California, Los Angeles, Los Angeles, CA, USA

This paper will be a brief presentation of the author's new collation of the Khirbet Qeiyafa ostrakon based on the multispectral images produced by Gregory Bearman and William Christens-Barry in 2009. In this new collation, I propose fifty-nine letters in total, including twelve new readings, some of which are reconstructed on the basis of vestigial ink revealed in the images. This new collation leads to an attempt at a full translation of the ostrakon. This translation presents the text as the response of a defendant in a legal dispute to a prior summons to testify. In the course of analysis, I discuss the language of the inscription, presenting evidence that it should be understood as an archaic, dialectal form of Hebrew.

Controlling your Temper: A Preliminary Study of Pottery Production in the Vedi River Valley of Armenia

Jessie Jiafang Liang, Peter J. Cobb

University of Hong Kong, Hong Kong, China

This paper presents our preliminary investigation of the technological foundations of pottery production in the Vedi river valley of Armenia across multiple time periods. Our goal is to better understand the social and learning contexts of production by tracing the decisions of craftspeople. This provisional study foregrounds raw material selection as reflected in the temper and clay matrix of each sample, together with traditional analyses that consider vessel morphology and color. We also hope to examine a broad dataset by including the majority of body sherds uncovered during excavation in our study. Located on the southeastern edge of the Ararat Plain, the Vedi river valley was one of the routes connecting the Plain to the Lake Sevan basin and other areas farther to the east and south. These local interconnections may have impacted transmission of technical knowledge about pottery production here and in nearby areas. Our dataset currently covers both the Bronze Age and Medieval period, thus opening the possibility to compare diachronic changes and continuity in local resource exploitation. Furthermore, given the limitations of working with original materials due to recent world travel restrictions, we have also been experimenting with analyzing raw materials remotely via digital surrogates of pottery excavated during an initial 2019 field season. Thus, this paper presents our very preliminary thoughts on local pottery production and our experience of working with materials remotely.

SESSION: Archaeology of Cyprus II

Kevin Fisher | University of British Columbia

Catherine Kearns | University of Chicago

The Filling in of Parts Wanting: Cypriot Sculpture, Cesnola, and Misleading Restorations

Ann-Marie Knoblauch

Virginia Tech University, Blacksburg, VA, USA

For twelve weeks from 1883 to 1884, New Yorkers were treated to a sensational civil trial in their city. The case was to determine whether Luigi Palma di Cesnola, director of the Metropolitan Museum of Art, had authorized intentionally misleading restorations of certain ancient Cypriot sculptures he had sold to the museum. While the long-awaited trial received daily updates in the local newspapers, New Yorkers soon seemed to grow bored with the endless archaeological details of the case. The trial was lasting much longer than anyone expected. Two witnesses, however, attracted a lot of attention: Theodore Gehlen, hired by Cesnola to be a restorer in 1873, and H.D. Hutchings, the assistant superintendent of the museum at the time. Their testimony described in detail the methods—said to be approved by Cesnola—for “making new limbs and members and filling in of parts wanting so that the whole may appear perfect.”

As far back as August 1880, when the accusations against Cesnola were first levied, New Yorkers had latched on to this claim of false repairs, and Cesnola's Cypriot statues became (an often humorous) metaphor for anything sloppily or inappropriately crammed together. This paper explores and unpacks how New Yorkers adopted and adapted the well-publicized sloppy restoration charges against Cesnola and the ancient Cypriot sculpture as well as the impact that the court case had on contemporary popular culture in 1880s New York.

Cypriots Abroad: Cypriot Ceramics and Other Exotica as an Indicator for Mediterranean Connectivity in the Middle and Late Bronze Age Levant

Brigid Clark

University of Haifa, Haifa, Israel

The earliest occurrences of Cypriot ceramics in the southern Levant, contemporary with the Middle Cypriot II, represent the first examples of Cypriot exportation and seem to predate the integration of Cypriot trading systems. Cypriot imports were quickly integrated into Levantine littoral systems, which suggests the rise of maritime trade as an adaptive behavior both in Cyprus and within the emerging Levantine urban systems. Trade is further expanded in the transition from the Middle to Late Bronze Age, with an increase in the amount as well as the types of Cypriot ceramic imports to the southern Levant. The gradual development of Cypriot ceramic trade be analyzed via case studies at relevant sites including Kabri, Achziv, Jaffa, and Megiddo. However, the movement of Cypriot pottery into the Levant during the Bronze Age represents only one facet of maritime trade. There are other indications for the activity of Cypriots abroad such as Cypro-Minoan signs and other marks on pottery, wall brackets, seals metal objects, ingots, and even anchors. It is the aim of this paper to reevaluate the depth of interaction between Cyprus and the Levant during the 16th through 13th centuries B.C.E. and the mechanisms of trade that allowed this relationship to flourish. Does the appearance of Cypriot assemblages call for a reexamination of the role of the Levant as a consumer of Cypriot exotica?

SESSION: Protecting Libyan Cultural Heritage II

Will Reynolds | Co-Director of ASOR CHI

Ahmad Emrage | University of Benghazi; ASOR CHI

Building Trust and International Collaboration through Joint Cultural Heritage Projects

Abdulmotaleb S. Abosalem

Libyan Ministry of Culture, Libyan ISESCO Delegation, Libya

Compared to its neighbors in the MENA region, Libya has had a more limited experience of international partnership. Despite the ongoing

efforts of many foreign archaeological missions, this trend holds true even in the cultural heritage space. Recognizing that trust is the key to building and sustaining lasting partnerships, this paper discusses ways in which Libyan organizations and international partners should devise projects where one of the core project objectives is trust building. Organizations in Libya working in the heritage domain and international organizations with similar ambitions share much in common, yet there is a frequent disconnect between the constraints currently facing Libyan professionals and the project objectives of their international partners. This paper advocates for greater professional exchange in the hope that it will offer solutions to mutual problems through a lasting network.

Regaining the Past: The Evolution of the Judiciary as a Force for Cultural Protection in Libya

Naima Al Kilani

Tripoli Prosecutors Office, Libya

Over the past century, Libyan judicial authorities, have played a disproportionate role in heritage protection under a series of authorities governing the territory that is now Libya. They have long played a fundamental role in prosecuting crimes and hearing cases of antiquities law violations. This paper adopts an historical approach, outlining the evolution of the Libyan judiciary with regards to antiquities law and describing the jurisprudence which will inform the prosecution of future cases. It focuses on the past ten years, a period of prolonged instability during which the authority of these controlling and judicial authorities has been significantly undermined. As the destruction and disappearance of Libyan cultural heritage continued, these authorities have been constrained in their ability to prosecute cases and impose penalties for violations. This paper presents practical ways in which this situation might improve as greater political stability prevails.

Leveraging Local Values for Heritage Protection

Talal Bariun

ASOR CHI, Libya

Libyan cultural heritage is a mosaic of many parts. Currently, some of these elements are held in greater local esteem than others, resulting in differential preservation. Vernacular architecture often receives direct support from local communities, whereas archaeological site preservation generally relies on international funding. ASOR's recent outreach activities in Libya have succeeded in mobilizing volunteer assistance towards a wide range of resources, including both vernacular architecture in the Nafusa Mountains as well as a wide range of archaeological sites around the country. The long-term sustainability of such an approach will depend on forging consensus with local communities and directing volunteer efforts towards sites perceived to be community assets.

On the Relationship between Ancient Civilizations and the Contemporary History of the Libyan Identity

Mofeda Mohammed Kreidigh

Sabratha University, Libya

The Importance of Social Cooperation in the Protection of Cultural Heritage

Soufyan Abdallah Al-Dbib

ASOR Cultural Heritage Initiatives

SESSION: Archaeology of the Near East: The Classical Periods I

Michael Zimmerman | Bridgewater State University

Imported Innovation and Indigenous Influence: The Construction of Bath Vaults in the Roman Near East

Craig A. Harvey

University of Western Ontario, Canada

The introduction of the Roman-style bath to the Near East brought with it several engineering challenges that local builders had to overcome, one of which was the construction of the vaults and domes that characterized these bathing facilities. While some regions imported innovative vaulting techniques from the West, others took advantage of deeply rooted indigenous building practices to develop their own solutions. Using the wide range of vaulting techniques employed in baths throughout the Roman East (Cilicia through to the Levant), this paper will reveal how separate communities undertook the challenge of constructing Roman-style baths by developing innovative ways of adapting local materials and building practices to the construction of these vaults—some of which remain standing to this day. For example, the strength of local stone-cutting industries in the Decapolis and the southern Levant contributed to a preference for ashlar vaulting, which had largely been replaced elsewhere in the Roman world by brick and concrete. A well-developed ceramic building material industry in Flat Cilicia similarly led to a preference for brick vaulting. Meanwhile, other regions employed western vaulting techniques. In the Hauran, for example, vaults were built of lightweight volcanic stones imbedded in mortar, and at Dura Europos vaulting tubes were used. Through a discussion of these examples and others, this paper will demonstrate that—beyond being symbols of Roman cultural dominance—these baths also reflect the diversity of the region and the ingenuity and agency of its communities as they negotiated their place within the wider Roman world.

Hellenistic Antiochia Hippos in the Decapolis Context

Arleta Kowalewska¹, Michael Eisenberg²

¹University of Haifa, Israel. ²Hippos Excavations Project, Israel

This presentation introduces the latest finds that pertain to the Hellenistic period made by the Hippos Excavations Project at the polis of Antiochia Hippos, located on Mt. Sussita next to the eastern shore of the Sea of Galilee. The finds attest to the urban character of the site in the Hellenistic period, which until now was only known through literary sources. Moreover, they allow for the first partial reconstruction of the Hellenistic Hippos layout. The excavation results are briefly considered in the context of other Decapolis cities.

Excavations conducted at Hippos, in the last few years, in various areas, produced a significant amount of new information on the Hellenistic period narrative of the site—including probable traces of the Hellenistic agora, evidence of a pre-Roman unpaved thoroughfare, remains of a previously unknown Late Hellenistic–Early Roman neighborhood, and remnants of the Hellenistic-period pressure pipe water supply system. Moreover, additional dating material was recovered in the Hellenistic temenos, and traces of Hellenistic-period activity were found under the Roman basilica—among them silos, water cisterns, and architectural fragments.

The comparative material from the Decapolis has grown in the recent years, now including not only Hellenistic living quarters of Pella and fortifications of Gadara, but also a preliminary summary from Nysa and review of Gerasa's Hellenistic architecture and pottery. This

recent work narrows the disparity between the evidence of the literary sources and the physical remains of the regional Hellenistic poleis.

A Hellenistic Glass Pendant of Harpokrates from Tel Dor, Israel

Jessica Nitschke

Stellenbosch University, Stellenbosch, South Africa

A dark-blue glass pendant in the form of Harpokrates (Egyptian Harpa-khered, or “Horus the Child”) was found in a Late Hellenistic context from Area D4 at Tel Dor during the course of the 2009 excavation season. It belongs to a category of mold-made glass pendants that were mass-produced in the Late Hellenistic period. Similar glass pendants in the shape of Harpokrates have been recovered from Late Hellenistic contexts during excavations at Yavneh Yam and Delos, and numerous more examples without provenance can be found in museum collections world-wide. Images of the Egyptian child deity are known from the Levant and Phoenician world since at least the early Iron Age—becoming widely popular across the Mediterranean in the Hellenistic and Roman periods. Yet, the glass pendants have not traditionally figured much in discussions of Harpokrates imagery. This paper attempts to rectify this, situating the glass pendants, and specifically the Dor example, within the history of Harpokrates objects in the Phoenician world more broadly and the Hellenistic eastern Mediterranean specifically. The Harpokrates glass pendants are relevant to a variety of topics of current interest in research on the Hellenistic Levant, including cross-cultural exchange, glass production and consumerism, Phoenician personal religious practices, and the localization of Mediterranean-wide styles and trends.

SESSION: The Archaeology of the Kurdistan Region of Iraq II

Jason Ur | Harvard University

Social Transformations and Modes of Ceramic Manufacture during the 4th-early 3rd Millennium B.C.E.: The Uruk Phenomenon in South-Eastern Iraqi Kurdistan

Michael P. Lewis

University of Cambridge, Cambridge, United Kingdom

The Uruk Phenomenon of the latter fourth millennium B.C.E. (LC3-5 in northern Mesopotamia or Middle Uruk Period in southern Mesopotamia) coincides with the world's first urban societies in northern and southern Mesopotamia. This phenomenon includes the extension of long-distance trade and exchange, and the spread of material culture (including pottery) across huge swathes of Mesopotamia. Nevertheless, the reasons for the spread of this material culture are still a major point of contention in archaeological debate.

This presentation will analyze pottery from three sites in south-eastern Iraqi Kurdistan that have shown evidence of occupation before, during, and immediately following the Uruk Phenomenon. In applying a combined methodology using archaeometric analysis, ceramic petrography as well as morphological observations, the intention is to reconstruct the *chaîne opératoire* of this pottery. By employing such a high-resolution approach, a more detailed narrative is revealed regarding the mechanisms behind the transmission of the Uruk Phenomenon into the region may be understood and presented.

Late Chalcolithic Evidence from the Plain of Navkur: New Data from the Asingeran Excavation Project

Marco Iamoni¹, Hassan Ahmed Qasim², Riccardo Valente¹, Maddalena Scattini³

¹University of Udine, Udine, Italy. ²Directorate of Antiquities of Dohuk, Dohuk, Iraq. ³Cà Foscari University, Venice, Italy

This paper has two aims: the first is to propose the result of an intensive survey carried out in the area of Asingeran. Data obtained from satellite and multispectral images will be analyzed together with information collected directly on the field in order to obtain a more precise picture of the development of the settlement at Asingeran itself and in area of 5sq km around the site.

The second scope is to discuss the preliminary results of the chronological and typological analysis of the Late Chalcolithic pottery assemblage collected during the 2019 and hopefully 2021 archaeological season. The currently available data reveal an uninterrupted ceramic sequence from the Ubaid period to the Late Chalcolithic 4, which shows many parallels with Tepe Gawra's assemblage. Moreover, it is now possible to highlight the presence of many contacts with the Upper Tigris area in the north, the Iraqi Jezirah region in the west and the Zagros area in the east, as far as the Urmia Lake.

Both analyses support the hypothesis that Asingeran might be considered as a new fundamental key site in the Plain of Navkur for the study of the early socio-economic complexity in northern Mesopotamia.

Gods on the Water: The Assyrian Rock Reliefs of Faida

Hasan Ahmed Qasim¹, Daniele Morandi Bonacossi²

¹Kurdish Archaeological Organization, Iraq. ²University of Udine, Italy

The Faida reliefs are recorded in the Official Journal under no. 2269 (14 August 1983). In 1972, a British archaeologist of the British Museum, Julian E. Reade, discovered three rock reliefs along the canal. In August 2012, during archaeological survey work in the Duhok region, the Italian Archaeological Mission to the Kurdistan Region of Iraq of the Udine University, directed by Daniele Morandi Bonacossi, was able to identify six new rock reliefs. Assyrian rock reliefs are extremely rare monuments, which in the Duhok region are known only at Halamata, Khinis and Bandawai. Only the upper parts of the Faida reliefs emerged from the canal fill. The crowns and heads of a series of deities depicted in profile facing left (and thus pointing in the direction in which the channel's current flowed) were visible.

The joint “Kurdish-Italian Faida Archaeological Project”, co-directed by Dr. Hasan Ahmed Qasim (Directorate of Antiquities of Duhok) and Prof. Daniele Morandi Bonacossi (University of Udine – Italy), has made an extraordinary discovery in the archaeological site of Faida (Duhok). Ten unique Assyrian rock reliefs of the eighth-seventh century B.C. were identified on the left side of an approximately 6.5 km long canal near Faida, south of Duhok. The Faida canal, which rounds the western spur of the Chiya-i Dekan mountain, was dug into the limestone of the hill and was fed by a series of karst springs – in part still active today – situated in several small wadis along the northern flank of the mountain. The canal has an average width of 4 m and is almost everywhere buried under deposits eroded from the hill. From the primary canal, several offtakes diverted water into secondary canals to irrigate the neighbouring fields.

This paper will shed light on the sculpture in fine detail, its dimensions, figures, images, and symbols, in addition to a detailed explanation of the carved images.

Struggling to Survive: Last Historical Layers of Koya Old Town

Sahar B. Al-Qaisi

Koya University, Iraq

Koya (also known as Koysanjaq) is one of Erbil's districts located in the eastern part of the Iraqi Kurdistan Region, it enjoys a strategic location that links the three big cities of Erbil, Sulaymaniyah, and Kirkuk, which enables it to take part in the regional trade especially during the Ottomans reign. Its current old town holds examples from the late Ottoman epoch along the allies of its old neighborhoods: Baizagha, Bafra-Qandi, Qalat and what once was Hawaw.

Though, the date of the initiation of the current old town is still vague, the available few texts about it suggest that it might have been initiated in or earlier than the 17th century. Today, it is hard to find what is older than the 19th century buildings.

This paper highlights the challenges which face the last remaining architectural historical layers in Koya old town and may lead to their entire loss shortly.

Trajectories of Urbanization from Assyria to Parthia: A Comparative Analysis between the Erbil Plain and the Upper Sirwan Basin

Rocco Palermo¹, Jesse Casana², Jason Ur³

¹University of Pisa, Italy. ²Dartmouth College, USA. ³Harvard University, USA

This talk discusses the evolution of settlement patterns and land use from the First Millennium B.C.E. to the end of the Parthian rule in the Kurdistan Region of Iraq through the data collected by the Erbil Plain Archaeological Survey (EPAS) and the Sirwan Regional Project (SRP). Located respectively in the central and southern part of the Kurdistan region of Iraq, these areas have developed partly divergent cycles of demographic expansion and contraction, often in relation to supra-regional decision-making processes of large-scale territorial empires. Through a GIS-based approach, we aim at demonstrating the possible correlation between proximity of power, colonization phenomena, top-down (or bottom-up) intervention, and the structural transformation of the landscape of settlements in the greater area between the Tigris and the western Zagros.

SATURDAY, DECEMBER 11, 2021
1:00–2:00pm (EST)

SESSION: Archaeology of the Southern Levant

Owen Chesnut | North Central Michigan College
Josh Walton | Capital University

“God is Great”: A Discovery of an Artist’s West-Semitic Inscription on the Megiddo ‘Banquet Inlay’ and the Question of Dating Liat Naeh¹, Anat Mendel Geberovich²

¹University of Toronto, Toronto, Ontario, Canada. ²Center for the Study of Ancient Jerusalem, Jerusalem, Israel

The so-called “Banquet Inlay” from Megiddo is one of the most iconic pictorial depictions from the Bronze Age Levant, featuring a multi-temporal narrative culminating with the enthroned ruler celebrating his return from battle. Today, about 80 years since its publication by Loud, the plaque’s origins and function remain ambiguous; it was eventually collected with some 380 fragments of eclectic ivory artifacts, during the end of the Late Bronze Age, or even the beginning of the Iron Age, in Stratum VIIA, supposedly around the 12th or 11th centuries B.C.E.

Now, for the first time, new information about the biography of the plaque may be revealed, as we suggest that it was being prepared for additional re-cutting that was not followed through. During these additional steps towards repurposing, it seems that a hidden, West-Semitic inscription was added to the original scene – remaining unnoticed for nearly a century of scholarship. The inscription may read as either a single word, possibly a personal name (רַב־אֱלֹהִים), or as two words (רַב־אֱלֹהִים), meaning ‘god is great’ or, more specifically, ‘El is great’. While the plaque must have been made during the Bronze Age, the style of the script seems much later, possibly from as late as the 10th or 9th centuries B.C.E. – therefore complicating our understanding of the Megiddo context. This untold chapter in the lifecycle of the Banquet Inlay invites us to reexamine local artistic, literary, and religious practices in the Levant during the Bronze and Iron Ages.

The Tel Kabri Wall and Floor Paintings: Microcosms of Mediterranean Middle Bronze Age Trade and Interconnection of Canaanite Palatial Economies

Christine M. Weber

The College of Wooster, Wooster, OH, USA. The University of Cincinnati, Cincinnati, OH, USA

The Tel Kabri wall and floor paintings offer a unique opportunity for the investigation of Middle Bronze Age exchange and interconnectedness. Their previous identification as Aegean in style by multiple authors demands the elucidation of the systems of elite, palatial trade and interconnection which created the paintings. More than just beautiful pieces of art, the wall paintings of Kabri are representative of inter- and extra-regional trade and interaction between the Eastern Mediterranean and Aegean during the Middle Bronze Age and advocate for a complex society administered from Kabri. Such suggestions allow for the investigation of other administrative elements at Kabri, which will allow the reconstruction one system of Canaanite palatial economics. The present research identifies main elements of Middle Bronze Age palatial economies across space—including trade, animal husbandry, ceramic and textile production, architectural storage, and literacy—in order to reconstruct a possible form of administration and economy at Kabri.

Furthermore, the identification of a Canaanite economical system benefits from regional comparisons, such as with Syrian Hazor. An identified difference between palatial economy, administration, and possible social agency engenders many questions in relation to the presence of the apparently cosmopolitan Kabri wall paintings; the present research suggests theoretical models, including peer-polity interaction and distance-parity, to account for these differences. Nevertheless, this new interpretation of the Kabri paintings as manifestations of Canaanite palatial economics allows for a nuanced understanding of Middle Bronze Age trade, interaction, and administration.

Tel Yaqush Excavations – An Early Bronze Age Village in the Central Jordan Valley, Israel

Yael Rotem¹, Mark Iserlis², Mitchell S. Rothman³

¹The Hebrew University of Jerusalem, Tel Aviv, Israel. ²German Archaeological Institute, Berlin, Germany. ³Weidner College and the Penn Museum, Philadelphia, Pennsylvania, USA

Tel Yaqush Research and Excavation Project was launched in June 2018 with aim to conduct a systematic, high-resolution investigation of the Early Bronze Age (~3600-2550 B.C.E.) village, located in the Central Jordan Valley, Israel. Three seasons on behalf of the Penn Museum and the German Archaeological Institute in Berlin was conducted in 2018, 2019 and 2021, supported by the Penn Museum, the Gerda Henkel Foundation, Brennan Foundation, and private donors. The occupation at the site is dated to the entire Early Bronze Age, one of the most dynamic millennia in world history. It includes several phases of the Early Bronze Age I (EB I), at least one Early Bronze II phase and several Early Bronze III phases. The site was abandoned at the end of Early Bronze III or perhaps early in Early Bronze IV (IB).

This paper is aimed to present our research questions, field methods and preliminary results.

The excellent preservation of Yaqush village and its occupation throughout the entire Early Bronze Age offer an opportunity to explore the major social and political changes taking place in this region over time, particularly relating to urbanization processes and migration of population bearing the Kura Araxes culture of the South Caucasus.

The Potential and Perils of Non-Destructive Organic Residue Analysis in the Field. Development of Solvent-Based Protocol Yields Data in Field Lab Experiments Consistent with Institutional Lab Testing on Cosmetic and Other Artifacts

Betty Adams¹, Mario Zimmerman²

¹La Sierra University, USA. ²Washington State University, USA

The Archeochem group of ASOR developed a recommended protocol for a best practice in organic residue analysis in 2017, replicable in an institutional lab setting. We are attempting to track compound presence on cosmetic artifacts through time (Late Bronze Age to Persian periods) without destroying the existing artifacts. We tested the viability of data collection with non-destructive analysis by executing a series of institutional lab tests on cosmetic artifacts stored in museums and various fragmented artifacts excavated in the field (cosmetic or otherwise). The tests demonstrate field residue analysis’s ability to yield complementary results for solvent extractions processed by LCMS and simultaneously showed separation of artifacts based on chemical signatures like those obtained in a controlled lab environment.

We tested the sequential solvent protocol developed by the Ancient Residue lab at Washington State University in the field at Khirbat al-Balu'a during excavations in 2019. The results demonstrated that certain solvents yielded better data overall—both in the field and the lab—and that results are comparable across excavation sites. The data sets collected allow us to diagnose based on chromatograms, principal component analysis, and partial least squares discriminant analysis. The results linked artifacts with chemical signatures and similar typology and show chemical continuity by time period.

SESSION: Understanding Power in the Ancient World: Approaches, Manifestations, and Responses I

Jessica Tomkins | Wofford College

Shane M. Thompson | North Carolina Wesleyan College

I Have the Power: Reflections on the Role of Individual Capability in Modalities of Power in the Ancient Near East

Jason R. Kennedy

Central Michigan University, Mt. Pleasant, MI, USA

In *Envisioning Power*, anthropologist Eric Wolf broadly outlined four modalities of power and the ways they operate to elucidate the reach and importance structural power. He viewed all power as originating in the 'power of potency' or individual capability (referred to more broadly in the archaeological literature as agency). This 'power to,' or agency, is the cornerstone of any analysis of the cascading complexities of Wolf's modalities of power. Consideration of the realm of possible actions available to people in the past (and more elusively their internalizations) is necessary to conceptualize the expansion of the power over another individual, the institutionalization of that arrangement (that is the permanent subjugation of individuals and the resulting subjectivities) and the ways those institutions then operate to limit or facilitate future applications of specific capabilities. In this paper I will briefly outline the philosophical underpinnings of Wolf's understanding of the 'power to.' I will provide a critique of the applications of agency-based approaches by scholars in the Ancient Near East who largely restricted its use to studies of the creation, maintenance, and expansion of the 'power over' by elites and rulers. To conclude I will briefly explore an alternative approach to envisioning individual power and agency in the institutionalization of political power in the 5th and 4th millennium B.C.E. in greater Mesopotamia.

From the Monumental to the Mundane: Power and Motivated Social Cognition in the Iron Age Levant

Timothy S. Hogue

University of Tsukuba, Tsukuba, Ibaraki, Japan

In this paper, I hypothesize that power is primarily propagated in asymmetrical social interactions and the embodied practices that constitute them. If power is a possessable quality, then it is the potential to motivate such interactions by prompting people to attach value to them. In short, power emerges when interactions are made to matter. Social psychologists label this process motivated social cognition. I apply this theory to the ancient Levant in two case studies: the Kerak Inscription and Lachish Letter 3. There is no direct relationship between these inscriptions, but they serve as a test of whether this theory of power can be applied to both spectacular and everyday contexts. The Kerak Inscription was set up as a southern companion to the Mesha Stele in Dibon. Interactions with the Kerak Inscription performed an ideology of a territorial Moab and a collective identity subject to the prescriptions of Dibon. Power was

put on display in this case. In the Lachish letter, a low-rank soldier assures his commanding officer that he is capable of reading and writing without the assistance of a scribe. In so doing, he reifies norms ultimately prescribed by the royal court at Jerusalem, and thus accommodates the Judahite ideology implicit in the standardized written language. In this case, power is hidden behind an everyday interaction. In both cases, social interactions are made to matter in order to discipline participants' beliefs and actions. Power emerged from these motivated social engagements.

Gendered Power in Ancient Egypt: How a Female Wielded Power in a Patriarchal System

Kathlyn M. Cooney

University of California Los Angeles, Los Angeles, CA, USA

Social historian Michael Mann separates social power into four overlapping types—ideological, economic, military, and political. He doesn't include sexual and/or gendered power, but notes that identity as female or otherwise non-binary was a game changer when fitting into patriarchal systems. This paper will examine how patriarchal and authoritarian family dynasties utilized female power to prop up or extend their power by adding a sexual and/or gender component to the Michael Mann system of social power. I will argue that the modern reception of ancient female power is so positivist—imposing pacific ruling strategies or overemphasizing a particular individual woman's ability to change the system—that we overlook how even the powerful female kings of ancient Egypt were pawns in a larger system of patriarchal authoritarianism.

Power, Authority, and Legitimacy: Defining the Triangle of Effective Statehood

John Rogers

Swansea University, Swansea, United Kingdom

Following Weber's definition of a state as a 'human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory' (1921, 29), this paper presents working definitions for power, authority, and legitimacy in the ancient Near East for discussion. In examining these concepts, particular attention is paid towards the relationships between them. Firstly, power is defined as a relationship between actors predicated on the physical ability to enforce and/or coerce others into acting or behaving in a desired manner. Authority, however, is given by those affected by power, and displayed through such things as authorizing space (e.g. 'window of appearances') and authorizing symbols (e.g. crowns). In an ancient setting authority is given by gods, through priesthoods, oracles, or miracles, and by populations through subservience and deference. Finally, theorists have struggled to adequately distinguish between authority and legitimacy (see Friedrich 1972, 89-98). However, this paper proposes that legitimacy is the reflexive acceptance of authority by those who give authority. For example, in giving authority to a king a population gives that king 'moral rights' that no-other agent can possess, with certain expectations which change between cultures, as to the correct use of those rights. If those expectations could be shown as being met at least, this would show the king as a legitimate receiver of authority.

Friedrich C.J. (1972) "Authority and Legitimacy". In *Tradition and Authority. Key Concepts in Political Science*. London: Palgrave.
Weber, M. *Wirtschaft und Gesellschaft* (1921).

SESSION: Interdisciplinary Approaches to Seals, Sealing Practices, and Administration

Sarah Scott | Wagner College
Oya Topçuoğlu | Northwestern University

The Iconography of Sassanian Priestly Seals

JoAnn Scurlock
Elmhurst, Elmhurst, Illinois, USA

This paper is inspired by the work of Delphine Poinot on Sassanian animal seals and, in particular, four animal seal types that are identified by inscription as belonging to mogh (Magi). It is the thesis of this paper that these seals were used to seal jars, chests, and storerooms dedicated to supplies needed for the four occasions in the year in which there was feasting activity associated with folkloric pre-Sassanian Iranian calendric festivals that were picked up and incorporated into the Zoroastrian cultic calendar. These are Nouruz, Tirigan, Mihragan, and Yalda. Nouruz and Mihragan, in particular, will have required vast quantities of wine, and Yalda needed melons that must have been saved over from Summer. Nouruz and Mihragan were also points at which very expensive “gifts” of gold and silver were expected to flow in. Additionally, as is usual with tribute, counter-gifts—in the form of the famous Sassanian silver plates and ewers—would have been made ready and kept somewhere out of harm’s way. In this context, it would have been helpful from an administrative point of view to have seals that, at a glance, made it clear for which particular festival various stored items were intended. With the help of the counter-gifts and Sassanian sculptures, it may even be possible to say which seal belongs with which festival.

Revisiting the Cypriot Elaborate Style

Alexander Donald
La Trobe University, Melbourne, VIC, Australia

The terminology and classificatory system commonly used to describe the cylinder seals of Late Bronze Age Cyprus was almost single handedly created by Edith Porada. From her seminal 1948 paper establishing a distinct Cypriot glyptic tradition, to her subsequent publication of secure finds from excavated contexts, Porada shaped the lens through which seals on the island continue to be viewed. However, the body of glyptic evidence from secure archaeological sources has grown exponentially since Porada’s initial publication, and the accuracy or utility of this typological system may be questioned.

A close examination of those seals identified as Cypriot Elaborate Style hints at a far more complex image with implications for our understanding of the relationship between the glyptic of Cyprus and that of the broader region. Rather than a being a uniquely Cypriot phenomenon, Elaborate Style seals have been found in secure contexts over a large geographic area with iconography which may now be more comfortably situated within broader Near Eastern trends.

This case study has relevance for our understanding of Late Bronze Age Cypriot society and broader implications for glyptic studies generally. Within Cyprus, it is further evidence that those who possessed Elaborate Style seals were likely enmeshed within larger regional networks exchanging both goods and ideas. Generally, it is reminder of the contingent course of archaeological excavation and publication, and the profound impact that such modern narratives may have on our understanding of the past.

“This is the Mark of Mitrata:” Inscribed Seals and Local Identity in Achaemenid-era Sardis.

Sam Butler
Brown University, Providence, Rhode Island, USA

In this paper, I will discuss a small but important group of seals from Achaemenid-era Anatolia, the thirteen seals bearing Lydian inscriptions most likely originating in Sardis. The presence of inscriptions in a local script makes these seals almost unique for this time period. However, previous work on the main corpora of Achaemenid-era seals from Anatolia has not dealt directly with these seals. Moreover, these studies have focused mostly on stylistic and iconographic analysis (Kaptan 2002; Dusingberre 2005; 2010). Meanwhile, works that do focus on the inscribed seals have treated them only as material for the linguistic analysis of Lydian (Gusmani 1972).

Therefore, I will synthesize these approaches in order to integrate these seals within the discussion of language, writing and identity in Achaemenid Anatolia. In particular, I will argue that these inscribed seals give us a better understanding of the way their users sought to express both adherence to the ruling Achaemenids and retain their local identity as Lydians.

Dusingberre, Elspeth. 2005. *Gordian Seals and Sealings: Individuals and Society*. Gordian Special Studies III. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.

———. 2010. “Lydo-Persian Seals from Sardis.” In *Lidyalılar ve Dünyaları / The Lydians and Their World*, edited by N. D. Cahill, 177–90. Istanbul: Yapı Kredi Yayınları.

Gusmani, Roberto. 1972. “Lydische Siegelaschriften und Verbum Substantivum.” *Kadmos* 11 (1): 47–54.

Kaptan, Deniz. 2002. *The Daskyleion Bullae: Seal Images from the Western Achaemenid Empire*. Achaemenid History 12. Leiden: Nederlands Instituut voor het Nabije Oosten.

New Perspectives on Kassite Seals and Sealing Practices

Elena Devecchi
University of Turin, Turin, Italy

In recent years, the corpus of archival records from Kassite Babylonia was significantly increased through the publication of ca. 800 cuneiform tablets that date between the end of the 14th and the end of the 13th centuries B.C.E. and originate from the Nippur area (see van Soldt 2015, Levavi 2017, and Devecchi 2020). Many of them are sealed, either with a cylinder seal or with seal substitutes such as the impression of a fingernail. The paper will provide an overview of the seals and sealing practices attested by these documents and will discuss different sets of data that can contribute towards defining and understanding the role of the persons who sealed the tablets within the administrative system they worked for.

W. H. van Soldt. *Middle Babylonian Texts in the Cornell University Collections I. The Later Kings* (CUSAS 30). Bethesda 2015.

Y. Levavi. *Four Middle-Babylonian Legal Documents Concerning Prison*. *Revue d'Assyriologie* 111 (2017), 87-108.

E. Devecchi. *Middle Babylonian Texts in the Cornell University Collections II. The Earlier Kings* (CUSAS 37). University Park 2020.

Seals and Sealings at Tell al Hiba/Lagash during the Early Dynastic I: Context, Imagery and Function

Holly Pittman
University of Pennsylvania, Philadelphia, PA, USA

Excavations at the site of Tell al Hiba (ancient Lagash), under the direction of Donald Hansen, produced a large and interesting corpus

of sealings from the ED I complex of Area G. New excavations at the site in 2019 produced additional sealings from the period in a trash context of the ED III period. This paper will present the combined bodies of ED I glyptics, integrating them into a discussion developed by Giacomo Benati, which proposes to view sealings of this period as part of a process that commodified goods—contributing to the efficiency of the emerging administration. The discussion will expand upon Benati's consideration of City Sealings to include an examination of all of the imagery within such an explanatory paradigm.

SESSION: Archaeology of the Near East and Video Games I

Tine Rassalle | University of North-Carolina at Chapel Hill

Building Cities, Building Games: Developers' Inspirations and Intentions

Briana Jackson

New York University, New York, NY, USA

In 2012, MoMA curator Paola Antonelli unveiled a bold exhibition of fourteen classic video games in the Applied Design gallery of the museum. This was the first time that video games had been displayed as art, and the first time that they were broadly received in academia. Since then, video games have seen a rise in academic attention, and only recently, academic interest in them exploded with the trend termed "archaeogaming."

Archaeologists "academicizing" video games set in antiquity—certain of which have been around for 30 years—have mostly concentrated on the accuracy of the representation of antiquity (up to and including how any inauthenticity in its representation in pop culture damages the field). Such interpretations ignore probably the most important component of games: the developers themselves. These interpretations presuppose both that the mainstream audience is absorbing games (or movies & tv shows) as documentary, and that the game developers intend to present their creative projects as fact rather than as inspired by antiquity.

My talk is based on interviews with the developers of the city building games *Pharaoh*, *Nebuchadnezzar*, *Builders of Egypt*, and *Sumerians*, chosen particularly because they focus on the development of civilizations over time and therefore required more in-depth examinations of the anthropological aspects of Egypt or Mesopotamia. I discuss the developers' inspirations, intentions for the games' receptions, and views on the academic topic of and approaches to archaeogaming, as well as consider how the topic may be better served in academia by acknowledging developers' roles.

The Unplayable Past: On the Absence of Videogames Representing the Ancient Near East

Benjamin Hanussek

University of Klagenfurt, Austria

The ancient Near East has been a relatively unimportant footnote among other historical video games of the past decades. Why is that so? Is it the lack of factual data compared to different historical/archaeological epochs? Does the ancient Near East defy contemporary expectations of players that wish to encounter a western or Eurocentric past? Does the lack of a local videogame industry in the Near East affect the absence of playable Persian, Assyrian, Phoenician, Babylonian or Sumerian myths and stories? My talk will try to address these questions to offer an analytical assessment for the absence of video games that represent the ancient Near East and show possible steps that could be pursued to foster a

greater chance of coverage for the ancient Near East within the cultural production of the video game industry. Therefore, I intend to present an overview of selected video games that made thematical use of the ancient Near East, which shall be compared to other video games' scope and success that represented different epochs. Further, I will turn to audience expectations using Altmann's functional theory of genres (1999) to explain why Roman, Greek, or Egyptian antiquity remains the preferred past video game audiences seek. Moreover, I intend to briefly address the current Near Eastern video game industry's state, which plays an important factor in the local cultural production of digital heritage for a global audience. Based on these aspects, a conclusion and suggestions on how to close the gap will be proposed.

Epic Palace: Knossos, Science-based Gaming from an Archaeological, Economic and Gamer's Perspective

Hanna Radek¹, Philipp W. Stockhammer^{2,3}, Tzvetia Manolova⁴

¹Milkroom Studios, Munich, Bavaria, Germany. ²Ludwig Maximilian University, Munich, Bavaria, Germany. ³Max Planck Institute for Evolutionary Anthropology, Leipzig, Saxony, Germany. ⁴Université libre de Bruxelles, Brussels, Belgium

Computer games with archaeology-inspired content have long found a broad public interest – with games like *Civilization* and *Assassins Creed Origins* attracting an enormous audience. However, most of these games are inspired by, rather than based on current archaeological research. In order to bridge this gap, Philipp Stockhammer and Milkroom Studios have developed the science-based computer game "Epic Palace: Knossos", where the player has the chance to build and furnish the palace of Knossos and to learn about society and economy of the Minoan Bronze Age. The player can even move through the 3D reconstructed throne room of the palace. In order to do justice to the complexity of archaeology-based gaming, our talk will be threefold: we will present the archaeological thinking and scientific background, which inspired the game, the economic and strategic perspective of the gaming company and an experienced gamer's perspective.

Fostering Critical Discussions of Archaeology with Digital Games

Caroline Arbuckle MacLeod

University of British Columbia, Vancouver, BC, Canada

Abstract

Instructors have been using a variety of media to engage and inspire their students for decades; however, the use of digital games is not currently considered a valid tool for promoting critical discussions. In this presentation, the author explores how unmodified conceptual and realist simulation digital games can be used in undergraduate archaeology courses to foster critical discussions of anthropological theory, site reconstructions, and how best to communicate research to different audiences. The author will explore her own experience of using *Assassin's Creed: Origins* to teach ancient Egyptian archaeology courses. Practical guidelines for activities and projects that take these approaches into account will be provided.

SESSION: Islamic Seas and Shores: Connecting the Medieval Maritime World I

Veronica Morris | University of Chicago

Asa Eger | University of North Carolina at Greensboro

An Archaeological Examination of Islamization at Kingany, Northwest Madagascar

Nathan Joel Anderson

University of Exeter, Exeter, United Kingdom

This presentation summarizes findings from the author's PhD research, which examined a relatively neglected area of archaeological inquiry, that being the Islamic past of the Mozambique Channel, focusing on Kingany in northwestern Madagascar.

Located 50 kilometers west of Mahajanga, Kingany was a mid-second millennium C.E. urban settlement active in Indian Ocean mercantile networks. Tangible markers of past Islamic practice, detectable as mosques, tombs, Arabic epigraphy, and as specific portable material culture, were identified at Kingany. When these markers were contextualized with trade ceramics recovered from the site, e.g. types from East and Southeast Asia, the Hadhramaut, and the Persian Gulf, and positioned chronologically using absolute dating techniques, local responses to Islamization became apparent. The principal mechanisms of change at Kingany appeared to have been instigated in part by *longue durée* engagement with Indian Ocean networks with secondary Islamization events likely linked to southward trending population dispersion phenomena of Islamic Africans beginning in the early second millennium C.E.

Findings were extrapolated to the larger Mozambique Channel where manifestations of socially embedded Islam appear earliest in the Comorian Archipelago, followed a century later by the coastal cities of Madagascar, located predominately in the north. Archaeological evidence for analogous Muslim communities in Mozambique is absent until the 13th century C.E., with but few exceptions. Potential geographic and social limiting factors might explain these differential chronologies. As at Kingany, the archaeology of the Mozambique Channel indicates that exposure to Islam was initially a byproduct of localized interactions with western Indian Ocean cultural spheres.

Mining in the Hinterland of the Early Islamic Port of Ayla: The Southern Wadi 'Araba as a Red Sea Frontier

Ian W. N. Jones

University of California, San Diego, La Jolla, CA, USA

This paper reviews the archaeological evidence concerning the Early Islamic period settlement in southern Wadi 'Araba (in the south of modern Israel and Jordan), focusing on a series of copper smelting camps and associated villages. While quite minor compared to the large Early Islamic industrial sites of the Arabian Peninsula, these camps represent one of the most intensive episodes of copper production in the history of southern Wadi 'Araba. Due to the difficulties of dating these sites, archaeologists have often assumed that they formed part of a hinterland economic system whose chronology essentially matches Ayla's. More recent archaeological research, however, suggests a much narrower chronology, perhaps spanning only the late 8th and early 9th centuries A.D. Drawing on the comparative anthropological, archaeological, and historical literature on resource frontiers, this paper argues that, rather than being an integral component of the economic life of Early Islamic Ayla, the hinterland copper production sites in southern Wadi 'Araba should be understood as a specific, short-lived, and rather early phase in the city's development as an Early Islamic port.

Shaping the Early Islamic Red Sea: The Impact of Agricultural Shipping

Veronica Morris

University of Chicago, USA

Scholarship on the Red Sea in the Post-Classical periods has traditionally focused on Indian trade, which was revitalized under the Fatimids and Ayyubids beginning in the 11th and 12th centuries A.D. By the 13th century, the Red Sea was the hub of a widespread international network, leading scholars to propose the beginnings of a World System economy. This thriving economic system, however, represents the expansion of earlier trading networks in the region.

This paper will push back the timeline for maritime intensification in the Red Sea, proposing that the roots of these later mercantile networks were developed under the Rashidun and Umayyad caliphates. The importance of the 7th and 8th centuries has largely been overlooked due to the paucity of literary and archaeological data. However, a close survey of the available material reveals evidence for expanding connectivity and resource development, including the rise of state-sponsored grain export, the intensification of agriculture and mining around the Red Sea periphery, and the establishment of new ports. Drawing on parallels with the Roman *annona* (state-sponsored grain trade) in the Mediterranean, this paper argues that the movement of 'non-luxury' goods in the Red Sea during the first centuries of Islam stimulated economic exchange and the development of maritime infrastructure and created persistent maritime pathways for trade. These early phenomena ultimately laid the groundwork for an integrated commercial network in the Red Sea basin.

Aqaba: A Port and Its Hinterland

Tasha Vorderstrasse

University of Chicago, Chicago, IL, USA

At the north of the Red Sea, the port of Aqaba occupied an important role, not only in the Red Sea and Indian Ocean trade but also in the overland trade in the southern Levant. There are certain diagnostic material culture types that point to the connectivity of Aqaba with other maritime, as well as inland, sites. This presentation will look at how the material culture of Aqaba—such as the Chinese ceramics—compares to other sites along the Red Sea and inland. This will help us better understand how Aqaba played a role in the transshipment of materials into the southern Levant. This paper will also examine the distribution exports from Aqaba—most importantly that of Ayla-Aksum amphora—along the Red Sea as well as in the Indian Ocean and the Mediterranean, which shows the interconnections that Aqaba had within its region and transregionally. The paper will, however, go beyond charting the archaeological finds of different types of material culture and also look at different categories of material culture and the way in which these were being used at Aqaba and beyond. Such a detailed analysis will provide us with more information about mobility and interconnectivity between different regions and populations and the role of Aqaba.

The Reoccupation of Southern Phoenicia in the Persian Period: Rethinking the Evidence

Becky Martin¹, Yiftah Shalev²

¹Boston University, Boston, MA, USA. ²Israel Antiquities Authority, Israel

In this paper, we reexamine the archaeological evidence used to explain the reoccupation of the region that we refer to in the Persian period as “southern Phoenicia.” We argue that: 1) the reoccupation of most of southern Phoenicia happened only in ca. 500 B.C.E., 2) the widespread discovery of material dating to ca. 500 B.C.E. indicates the reoccupation was rather sudden (with most larger coastal cities being established nearly simultaneously), 3) the early appearance of a variety of Mediterranean imported pottery indicates trade and reoccupation went hand-in-hand and motivated the new settlements, and 4) the reoccupation of the Sharon Plain was made possible by its annexation under the Sidonian king Eshmunazar (but probably occurred only during the reign of his successor Bodaštar). We conclude by considering briefly what can be learned in the future by the improved understanding of trade networks.

On the Use of Carrier Pigeons in Ancient Near East

Laura B. Mazow

East Carolina University, Greenville, NC, USA

The large-scale construction of dove-cotes (*columbaria*) reflects significant emphasis on pigeon breeding. Pigeon breeding has been demonstrated as an economic resource for food and fertilizer. In this paper, I suggest that pigeons were also intentionally bred to transport messages—an ability that historically has been adopted for military use in long-distance communication.

Characteristics that make pigeons exceptional for communication include that they can fly at altitudes up to 6000 feet, at average speeds of up to 77.6 mph, between 600–700 miles a day, over many consecutive days, and have few natural enemies. Carrier pigeons operate by being transported to far distance and then flying home.

Early allusions indicate that the releasing or arrival of a pigeon itself symbolized the message (e.g., Mesopotamian and biblical flood stories, Egyptian oracles, Akkadian royal messengers, and stranded Phoenician sailors). Additionally, more concrete references to pigeons relaying written messages can also be found—possibly in reference to the Persian Kings Cyrus and Darius, and more definitively in Frontinus’s and Pliny’s descriptions of the siege of Mutina (43 B.C.E.), when pigeons carried messages out from the besieged city.

While not excluding food and fertilizer production as an important motivation for pigeon breeding, the large-scale construction of dove-cotes—which appears to have occurred during the southern Levant’s entanglement in the Persian and Hellenistic Wars—suggests pigeon breeding was primarily practiced to promote faster, more wide-spread communication. This practice continued with Roman investment in military infrastructure). However, a southern shift in dove-cote location in the Byzantine period may reflect a change towards more agricultural uses.

Ancient Egyptian Influences and Poly-Interpretable Characters within Hellenistic and Roman Deities of Ancient Judea and Palestine

Vivian A. Laughlin

Hebrew University, Institute of Archaeology, Jerusalem, Israel

The Hellenistic era created aesthetically Graecized objects that were fusions of the Greek and Egyptian religion then coupled them with agency (power) (Arnaoutoglou 2018: 248). The Hellenistic religious and political applications were emulated by the Romans, and in some instances implemented measures of erasure to promote Roman religion. The use of structuration, empirical, qualitative, and historical-theory practice methods within this study showcase the Hellenized and Romanized aesthetics derived from Ancient Egyptian religion. The methodological framework aids in demonstrating if the objects were either isolated: identifying if the objects were “received and taken elsewhere”—introduced without indication of an existing similar religious form (Motte and Pierenne-Delforge 1994: 13); or, assimilated: identifying if outside elements were implemented within already existing traditions—cultures typically assimilate other elements into their own but do not cohesively mix everything, this instead, creates a “poly-interpretable” syncretic character that shares an interpretation (Drijvers 1980: 17). This study is a necessary under-researched area that will fill the lacunae because it illuminates the rulers and their representatives (who held power) applied usage of agency to cultic objects, and how this generated poly-interpretability within ancient deities.

Arnaoutoglou, I. 2018. Isiaistai Sarapiastai: Isiac Cult Associations in the Eastern Mediterranean. Pp. 248—280 in *Individuals and Materials in the Greco-Roman Cults of Isis: Agents, Images, and Practices*, eds.

Valentino Gasparini and Richard Veymiers. Leiden: Brill.

Drijvers, H.J.W. 1980. *Cults and Beliefs at Edessa*. Leiden: Brill.

Motte, A. and Pirenne-Delforge, V. 1994. Du <<bon usage>> de la notion de syncrétisme. *Kernos* 7: 11–27.

SESSION: Network Approaches to Near Eastern Archaeology and History I

Steven Edwards | University of Toronto

Ioana Dumitru | Johns Hopkins University

Christine Johnston | Western Washington University

The Multimodal Trade Networks of New Kingdom Egypt: The Circulation of Aegean and Cypriot Ceramic Imports

Christine L. Johnston

Western Washington University, Bellingham, WA, USA

In this paper, I examine exchange in New Kingdom Egypt—to assess the role of extra-palatial agents in the distribution of imported goods along the Nile Valley, as well as the integration of Egypt into broader Late Bronze Age Mediterranean trade networks. The role of centralized institutions in the economy of the Egyptian state has traditionally been over-emphasized, in part due to the exaggerated role played by state actors in the textual record. This textual evidence presents the economy of Egypt as almost exclusively redistributive, with the state assuming a veritable royal monopoly on production, product circulation, and long-distance trade. Yet personal transaction records and depictions of marketplace exchange in tomb paintings reveal an alternative system in which import goods were mobilized through non-centralized systems incorporating extra-palatial agents. This multimodal structure of the New Kingdom economy will be demonstrated through a network analysis of Cypriot (LC I–IIC) and Aegean (LH I–IIIB) pottery throughout Egypt. The results of this

analysis confirm that two quasi-independent circulation systems were in operation, with palatial centers supplied by institutional state-sponsored networks of exchange—including tribute, reciprocal gifting, and commercial trade—while remaining sites throughout Egypt were likely supplied through a more independent exchange network, dealing predominantly in the more common—and perhaps more affordable—imported wares. Diachronic variation in object circulation is also tied to fluctuations in Egyptian imperial expansion in both the Levant and Nubia, supporting the hypothesized role of the military in importing foreign goods during the Late Bronze Age.

Power and Cooperation in Decentralized Regional Economies: A Diachronic Perspective on the Development of Obsidian Supply Networks in Northern Ethiopia (ca. 800 B.C.E. – 825 C.E.)

Ioana A. Dumitru¹, Lucas R. Martindale Johnson², Steven A. Brandt³, Elizabeth Peterson⁴, Michael J. Harrower⁵

¹Centre for Urban Network Evolutions (UrbNet), Aarhus University, Denmark. ²Far Western Anthropological Research Group, Inc., USA. ³University of Florida, USA. ⁴Vancouver Police Museum, Canada. ⁵Johns Hopkins University, Baltimore, Baltimore, USA

This paper adopts an archaeological network analysis perspective to the study of cooperation and power in politically decentralized regional economies of obsidian production in the Central Tigrayan Highlands of northern Ethiopia. This research combines geographic information system (GIS), Remote Sensing, and Social Network Analysis (SNA) to map and model the development of economic networks. The subjects of this longitudinal network study are nominalist groups constructed using affiliation data generated through elemental characterization of obsidian debitage using a portable X-Ray Fluorescence instrument. This research uses formal network analysis methods to test a diversity of hypotheses concerning the dynamics between physical and relational space and fluctuations between social relationships across different temporal scales. Multiple centrality and centralization measures were employed in an exploratory manner to reveal that Pre-Aksumite and Aksumite (800 B.C.E. – 825 C.E.) economic networks of obsidian production were decentralized and stable in nature, limiting opportunities for social actors to amass power and influence over time. Combining this quantitative approach with a qualitative adoption of the network paradigm, this paper also considers the mechanisms that engendered the trust necessary for the reproduction of this economic system in the absence of evidence of elite control. Thus, this paper challenges the recurring assumption that state-level political complexity necessarily engenders economic centralization.

Let Him Play the Lyre, the Drum, and the ...? Using SNA to Identify Musical Ensembles in Mesopotamian Texts

Anna Glenn¹, Ioana A. Dumitru²

¹LMU Munich, Munich, Germany. ²Centre for Urban Network Evolutions (UrbNet), Aarhus University, Denmark

Cuneiform texts from the 3rd through 1st millennia B.C.E. attest to a wide variety of musical instruments used in various areas of everyday and ceremonial life. The names of more than forty instruments, including string, percussion, and wind instruments, are preserved. The combinations in which these instrument names are mentioned can provide valuable insights into Mesopotamian musical culture, as recently demonstrated by Theo Krispijn. Certain instrument combinations, for example, are typical of cultic practice in a particular period. More significantly, regularly recurring instrumental ensembles

identified in texts can be compared to the ensembles depicted in the iconographical and archaeological records, potentially aiding in the notoriously difficult task of matching instrument names to instruments.

In this paper, we use social network analysis (SNA) to map relationships among musical instruments attested in Sumerian and Akkadian texts of the early- to mid-1st millennium B.C.E., focusing on lexical, literary/liturgical, and archival texts. The resulting networks reveal significant patterns in the composition of instrumental ensembles for particular musical occasions or among certain groups of musical practitioners. Furthermore, building on Krispijn's work, the use of SNA allows us to quantitatively compare ensembles referenced in the textual record to groups of instruments represented in the visual record. Comparison of the two networks—one text-based, one iconography-based—can help identify the meaning of instrument names: if an instrument name and an iconographically depicted instrument recurrently appear in sub-groups characterized by similar node configurations, they may represent the same instrument.

SATURDAY, DECEMBER 11, 2021
2:30–3:30pm (EST)

SESSION: Approaches to Dress and the Body

Neville McFerrin | Ohio University

Josephine Verduci | University of Melbourne

Earring Practices and Female Identity at Kourion's Amathous Gate Cemetery, Cyprus

Meredith P. Nelson

Scientific Collaborator at the Université Libre de Bruxelles, Belgium

The Amathous Gate Cemetery at Kourion in Cyprus served as a burial site for local inhabitants from the Hellenistic period through the end of the Roman empire. Excavations of the cemetery—undertaken from 1995 to 2000—produced a small assemblage of gold jewelry, including several Late Roman earrings with hoop-shaped clasps. Examination of the technical features of the earrings has revealed that the manner in which the clasps were closed would have made it impossible for these articles to be removed from the ear once attached. This study will examine the implications of this phenomenon, exploring how these sealed clasps may have related to the use of earrings in marking female gender identity and categories of achieved status for women at Kourion, in both the social and funerary landscapes. The broader boundaries of this practice (geographic, temporal, socio-economic) will also be questioned. Additionally, this study demonstrates the importance of technical considerations in reconstructing dress behaviors that may not be as easily traceable in the archaeological, textual, or visual records.

Making Ties: Widening Circles of Affiliation at Neolithic Kfar HaHoresh as Expressed through the Molluscan Assemblage
Daniella E. Bar-Yosef Mayer¹, Heeli C. Schechter², Nigel Goring-Morris²

¹Tel Aviv University, Tel Aviv, Israel. ²Hebrew University, Jerusalem, Israel

The Pre-Pottery Neolithic B site of Kfar HaHoresh served local farming communities as a cultic and mortuary locale, featuring a wide range of often unusual mortuary installations and practices that evolved through time. Burial customs generally change from mostly single, primary, adult burials to multiple secondary burials with bone arrangements, cached or plastered skulls, and an increase in accompanying grave goods. Architectural elements transform from a central monumental walled and lime-plastered podium in the earlier levels to multiple plastered surfaces, cists, installations, post-holes, and combustion features in the later levels.

Over 2,000 marine shells were collected from all levels at the site—dominated by Mediterranean bivalves of the Cardiidæ and Glycymerididae families and accompanied by various Mediterranean gastropods and rare specimens from the Red Sea. 10% of the marine shells exhibit artificial manipulations or discernible use-wear marks. Microscopic examinations found indications for bead manufacture and use with different grinding striations that suggest individual domestic production rather than specialization. Use-wear patterns sometimes indicate stringing, compatible with similar finds from coeval sites, while stylistic choices of bead types reflect both conformity to broad local preferences as well as rare and unique forms.

Viewing adornment as a cultural and social marker provides an opportunity to use Kfar HaHoresh to trace different connections between the population and other communities in the region and

beyond. Adornment choices express aspects of personal and collective identity, including hierarchically widening circles of belonging and different levels of the collective identity of Neolithic people in Galilee.

Dress and Adornment among a Cattle Pastoralist People of Nubia
Solange Ashby

University of California, Los Angeles, USA

This paper will discuss the traditions of body adornment and dress among a migratory cattle pastoralist people in Nubia referred to as the C-Group people (for lack of a better name). As the C-Group did not engage in writing, we do not know their name for themselves. This population inhabited Lower Nubia (now southern Egypt) from approximately 2650-1550 B.C.E. Funerary objects such as worked and dyed leather skirts, cowrie shell girdles, bead jewelry and amulets as well as scarification and tattooing preserved on mummified bodies served as markers of identity for this small scale, largely egalitarian population caught between strong neighbors—Egypt to the north and the Kushite kingdom of Kerma to the south.

I will assess the primarily funerary artifacts of this Nubian population through two lenses: that of the “primary pastoral community,” as elucidated by David Wengrow in his 2014 *Antiquity* article, and newly emergent theories of gender in Africa, as described in Nwando Achebe's *Female Monarchs and Merchant Queens of Africa* (2020) and Oyèrónké Oyewùmi's *The Invention of Women* (1997). I hope to offer an interpretation of C-Group populations that pushes back against narratives of the centrality of writing, social hierarchy, patriarchy, and the development of military dominance as central tenets of “civilizations.”

Silver Acorn Earrings from Tall al-'Umayri

Josephine A. Verduci

University of Melbourne, Melbourne, Victoria, Australia

Amongst the large jewelry assemblage discovered at Tall al-'Umayri, uncovered over the course of 14 seasons of excavation and survey, are a pair of unique silver earrings (B945120). The granulated acorn-shaped pendant earrings were discovered within occupational debris, which dates from Iron Age I to Late Iron Age II. This type of earring is rarely seen before 7th century B.C.E. examples, which circulated across the Mediterranean during the period of Phoenician expansion. The rarity of the find is due to the use of silver (which was uncommon at Tall al-'Umayri and across the southern Levant), the complexity of the design, the fact that these earrings were found as a pair, and the reality that no exact parallel can be found despite the frequent use of acorn symbology in jewelry and decorative motifs from the Late Iron Age as well as the significance of the oak tree in the Hebrew Bible.

Oak trees were a characteristic species of Mediterranean woodlands and a significant biofactor in the ancient landscape of the Southern Levant. The seasonal availability of acorns in the Near East as a component of alternate subsistence strategies suggests that acorns were a symbol not only of fertility but also of nourishment and as an economic resource. The role of gender may affect our interpretation of the motif—if we accept the hypothesis that activities such as acorn gathering and processing can be attributed to women. Thus, acorns were not only an important food source but should be regarded as an important factor in gendered community life.

Dressing the Part: Concepts of Masculinity in New Kingdom Elite Tombs

Jordan A. Galczynski

University of California, Los Angeles, Los Angeles, CA, USA

This paper seeks to explore the relationship between New Kingdom Egyptian masculine ideals and the types of dress used to express said ideals in the funerary context. Within Egyptology, Masculinity Studies is a relatively recent approach, with a small number of scholars working on the topic. One method to assess and better understand the Egyptian concept of masculinity is through the dress of the individuals. Dress has long been understood as a key expression of identity, especially gender norms. This is especially true since dress is often the first layer of an individual's identity experienced in social interactions—be it between two individuals meeting for the first time or a modern viewer of a tomb scene.

First, I will argue for the maintenance of two masculine ideals using both visual and textual evidence; 1) the active, virile male-youth, and 2) the wise, ministerial older-male. Then, through an investigation of a series of New Kingdom high elite tomb scenes, I will propose that these masculine ideals are immediately conveyed through the depiction of dress of the tomb's owner. As I will show, the contexts in which the tomb owner either dons a kilt or is enrobed in a tunic differs depending on scene type and, more importantly, the type of masculinity wishing to be expressed. This presentation will explore the juxtaposition of both of these iterations of masculinity and their function in elite male identity formation and negotiation.

SESSION: Understanding Power in the Ancient World: Approaches, Manifestations, and Responses II

Jessica Tomkins | Wofford College

Shane M. Thompson | North Carolina Wesleyan College

Queenship, Power, and the Politics of Identity in Ancient Kush

Katherine E. Rose

Harvard University, Cambridge, MA, USA

This paper explores relationships of power, identity, and agency through a diachronic spatial study of Kushite royal cemeteries in Northern Sudan. Elite women of ancient Kush inhabited significant roles and high social status as evidenced by the prominence of goddesses in art and ideology, regnant queens known as *Kandakes*, and the practice of matrilineal succession. From the mid-8th century B.C.E. on, changing spatial patterns in cemeteries suggest that queens exercised greater agency over time in determining the location and design of their tombs. Spatial patterns of tombs and landscape features are analyzed through drone (UAV) mapping and 3D modeling data collected at the cemeteries of El-Kurru, Nuri, and Jebel Barkal. The rulers of Kush operated within power structures entrenched in complex negotiations of identities and power relations. Determining how and where they would be buried was a political act for Kushite kings and queens that left behind distinct spatial signatures in the mortuary landscapes. This analysis of Kushite queenship is situated within the context of the current political climate of Sudan. During recent anti-government protests in Sudan (2018-2019), many women led rallies and deliberately evoked the memory, authority, and identity of *Kandakes* through diverse rhetoric and imagery. Campaigns on social media asserted Kushite queens as anti-dictatorship and pro-democracy symbols, embedding the past into the active call for revolution. The impact and power of Kushite queenship transcends the boundaries of time as this aspect of Sudan's archaeological

heritage continues to serve a prominent role in contemporary social movements.

Feel like a King: Theorizing the Emotions of Ancient Power

Tara Prakash

College of Charleston, Charleston, SC, USA

There is a complex relationship between power and emotion. Social hierarchies influence the construction of emotions and individuals' emotional experiences, and expressions are reflective of their identity and status. As such, those in power feel differently than those they rule, and particular emotions are associated with these contrasting social roles. At the same time, emotions are culturally and historically specific. Thus, a powerful person in ancient Egypt did not necessarily feel and manifest the same emotions as a person in power today. A significant way of understanding the meaning and role of power in a society is through the study of its emotions.

This paper will draw on historical and sociological approaches to emotion in order to investigate power in the ancient Near East. Power is fluid and dependent on the interpersonal and group dynamics of a given situation. In other words, there are multiple types of power. Here I will focus on royal power and use the ruler in ancient Egypt as a case study. What emotions were his prerogatives and what emotional displays or responses were symbolic of him? Building upon studies of power and emotion in ancient Greece and other cultures, this paper will demonstrate how theories of emotion contribute to understanding and defining power, as a broad conceptual category with numerous iterations, in the ancient world.

Finding a Good Fit Model: Re-Examining Ancient Egyptian Power Dynamics

J.J. Shirley

Journal of Egyptian History, Netherlands. Journal of the American Research Center, USA

Rational bureaucracy, patriarchal patrimonialism, patrimonial household model, complex adaptive system, circles of power. Each of these theories has been used to describe the structure of ancient Egyptian administration. But how accurate are they? How well do they reflect the push and pull of power between the king and the elite, or between different elite families? And how useful is it to take modern concepts and try to apply them to ancient civilizations? This paper will explore where each of these models falls short and suggest new ways of thinking about power dynamics in ancient Egypt. The aim is to not try to fit ancient Egypt into a pre-existing model of power, but to take what is useful from various theories in order to create a new means of examining ancient Egyptian power. While the focus will be largely on New Kingdom Egypt, as this is the period on which I have researched and written, the goal is for the discussion to be instructive for scholars of other periods of ancient Egyptian history as well as of the ancient world generally.

The Power of Apocalypse: The Social Dynamics of Judgment in the *Parables of Enoch* and the *Animal Apocalypse*

Joshua Scott

University of Michigan - Ann Arbor, Ann Arbor, MI, USA

Since John Gager and Adela Yarbro Collins' respective studies of apocalypticism, scholars of ancient Jewish literature have struggled to frame the relationship between genre and social dynamics. Were ancient apocalyptic authors, who call the abusive elite to judgment, responding to Greek and Roman economic exploitations? Does this

framework explain the broad dynamics of power exemplified in these texts? Recent research on apocalypticism (Keddie 2018; Portier Young 2014) complicate the theory that these texts represent the position of the poor, but instead they embody the interests of the retainers of the elite who use the same linguistic and rhetorical methods as their usurpers. In this sense, the genre of apocalypse in some instances “reinscribes, replicates, validates, and even consecrates aspects of imperial power and oppression” (Keddie 2018, 25).

This paper builds upon these theoretical conclusions to argue that ancient Jewish authors localized social power by creating divine barriers through apocalyptic metaphor. The authors of 1 Enoch objectified a crisis that may or may not have been recognized by its members and offered catharsis through judgment that polemized its opponents. The *Animal Apocalypse* (e.g., 1 En. 89:59-90:92) describes the succession of one group over others through the metaphor of animals. Similarly, the Parables of Enoch (e.g., 1 Enoch 50) organizes the world into three social groups (the righteous, the sinners, and the repentant), which diverges from a strict apocalyptic dualism. These test cases illuminate the struggle to express cultural domination over certain social fields by constructing identity.

SESSION: Archaeology of the Near East and Video Games II

Tine Rassalle | University of North-Carolina at Chapel Hill

Gotta Dig ‘Em All: Archaeology in Pokémon

Eduardo García-Molina

University of Chicago, Chicago, IL, USA

This year the Pokémon series celebrated its 25th anniversary after making over 120 games, a testament to the lasting impact the series has had across multiple generations of players. One of the most prominent themes that is featured throughout various games is the relationship that the world of Pokémon has with archaeology. This presentation explores the depiction of archaeology in the Pokémon series and the interplay present between gameplay mechanics, the underlying lore of the games, and popular notions of what constitutes archaeology. Particular emphasis is placed on the portrayal of academic institutions and professional archeology. In the games, archeologists conduct fieldwork alongside research in labs and museum curation to find, catalogue, display, and preserve artifacts which reveal more about the lore of the world. The player interacts with these professionals but also participates in the private selling or displacement of relics and fossils to earn money or attain new monsters. Pokémon thus surprisingly presents a nuanced picture of archaeology that differentiates, to some degree, between professional and amateur archaeologists with the player actively interacting with both. This presentation ends by examining the ways that future games could be crafted to help shed light on the real ethical problems in the movement, selling, and curating of ancient objects and how such discussions could be incorporated into classroom discussions.

Civilization, Gaming and the Emergence of Cities

Michael Zimmerman

Bridgewater State University, Bridgewater, MA, USA

Carefully managing your resources; planning strategies for success; negotiating with those around you; observing and responding to your environment - these are all key elements of gaming. These are also key elements in the subsistence and success of emerging cultures in the Ancient Near East, from the Neolithic Revolution to the Bronze Age, Iron Age, and beyond. In this presentation, I will review ANTH-311: The

Emergence of Cities, a course at Bridgewater State University which uses games and gameplay to instruct students on how early civilizations managed their resources, the rise of agriculture, state formation, how urban centers first emerged in the ancient Near East, and what past civilizations can teach us about living more sustainably in the present. Board games such as *Stone Age* and *300 Cities* will be addressed, as well as video games such as *Civilization* and *Eco*, and their roles in exploring the themes of urbanism and sustainability in the archaeology classroom.

Upside-down Cuneiform and the Re-Use of Ancient Near-Eastern Artifacts in Paradise Killer

E.L. Meszaros

Brown University, Providence, Rhode Island, USA

Paradise Killer, a psychedelic, open-world adventure game from Kaizen Game Works, takes place in an alien world yet litters its vibrant settings with ancient Near Eastern writing and art. No attempt is made to contextualize these artifacts, providing any information of their history or the cultures where they originated, and no effort is made to blend them seamlessly into the new world. Instead, pixelated images of cuneiform tablets are hung upside-down on walls and color-saturated photos of ceramic panels are framed as art. *Paradise Killer*’s use of characteristic items of the ancient Near East showcases a profound disengagement from the communities it seeks to reference. However, the game replicates ways that these archaeological items have been recycled and put to other, non-intended purposes over time, even on our non-fictional planet.

This paper discusses *Paradise Killer*’s use of ancient Near Eastern artifacts through the lens of the recycling, re-appropriation, and reuse of ancient structures and ideas. It will argue that for a setting as removed from our world as *Paradise Killer* is, the separation of these artifacts from their history works to highlight the alien-ness of the world and to create a new relationship between this fantastical land and our very real one that does not fully erase the histories of these objects but rather adds to them. Even though Kaizen admitted to displaying cuneiform upside-down accidentally, this mistake reflects a series of conscious choices to disengage from and reinterpret the ancient Near East.

The Potential of an Adventure RPG as a Teaching and Educational Tool. The Case of the “Broken Compass” Game

Sara E. Zaia

Harvard University, Cambridge, MA, USA

Role-Playing Games (RPGs) have become ubiquitous among the gaming community and have increased in popularity even among children in secondary school. This is in part because of their versatility. RPGs can be set in any time, era, and universe, with participants acting as creators of their own story—according to the guidance of the group’s Master. The players are free to impersonate any character they choose to develop and there is no limit to the story’s development.

I will present the RPG, *Broken Compass*, as a case study in illustrating the vast potential of RPGs as pedagogical tools for not only high school students, but for a range of ages in secondary education. *Broken Compass* is an Adventure RPG developed by Two Little Mice (created by Riccardo Sirignano and Simone Formicola, illustrated by Daniela Giubellini, and funded through a Kickstarter campaign). The same game has also been translated into Italian and, hopefully, will soon be available in other languages making the game more widely accessible.

SESSION: Islamic Seas and Shores: Connecting the Medieval Maritime World II

Veronica Morris | University of Chicago

Asa Eger | University of North Carolina at Greensboro

Architectural Norms in the Islamic Red Sea

Katherine S. Burke

University of California, Los Angeles, Los Angeles, CA, USA

This paper seeks to expand upon the idea of a common material culture of the Red Sea littoral raised in Burke 2007 and Burke (In press 2021). Evidence from Quseir al-Qadim, 'Aydhah, and al-Tur on the Egyptian coast and Athar on the Tihama coast of Yemen illustrates two parallel architectural styles that were employed simultaneously during the tenth to fourteenth centuries. The first is a tradition of courtyard buildings, simple two-room houses, and other structures of mud brick, limestone, and coral block without foundations and having wooden planks used for stair treads and doorsills. This technique seems to be common in pre-Islamic and Islamic Egypt and can be observed at inland Egyptian sites such as Karanis, Alexandria, and Fustat. These buildings may have been roofed in the fashion observed in early modern houses preserved at al-Qasr in the Dakhlah Oasis of wooden beams covered with matting and topped with a layer of mud brick. The second tradition is that of temporary structures composed of wooden poles and matting, such as those excavated at Athar and described by Arab geographers at 'Aydhah. Excavations and medieval descriptions of port towns indicate both types of structures were in use simultaneously. This paper seeks to understand the distribution and origin of these architectural styles in and beyond the Red Sea during the medieval periods, as well as what they say about the connectivity of coastal communities.

Islamic Glass Bangles: Investigating their Origins, Circulation and Cultural Impact across the Middle East (13th–18th centuries C.E.)

Charlotte K. Nash

The British Museum, London, London, United Kingdom. University of Kent, Canterbury, Kent, United Kingdom

Despite increasing dissemination of glass bangles, these objects of personal adornment remain woefully understudied. Yet, this distinctive category of Islamic material culture comprises of a wide range of styles and colors that may reflect regional tastes of producers, consumers, individuals or represent universal meanings. Their ubiquitous presence offers tantalizing opportunities to gain better understanding of regional, personal and gender identities.

Most scholars agree that the wide variety of techniques, patterning, colors and finishes are indicative of differences in manufacturing periods and places. However, what is lacking is a master typology to catalogue and verify whether there is an overarching correlation between styles, periods and places. Scientific analysis is also necessary to provenance the primary production of the glass.

This study begins with a detailed analysis of a core collection from the famous maritime trade center of Siraf, in the Gulf Region. Employing a detailed typology alongside scientific analysis of chemical glass signatures and a new color-coding reference system, this study aims to establish a methodological approach to all glass bangles of the Islamic period Middle East and reference catalogue for future studies.

Although an ambitious project in its infancy, it has already shown correlations between regional productions areas and manufacturing processes, with preliminary chemical analysis suggesting the Siraf collection is comprised of glasses from at least three regions of production. Additionally, evidence browns and black were purposely

produced (rather than the assumed result of recycling glass) may be indicative of the importance of these colors in Islamic culture.

Mass Production of Qulal and Other Water Jars in the Ottoman Red Sea: The Case of the 18th Century Umm Lajj Shipwreck Cargo

Chiara Zazzaro¹, Luisa Terminiello²

¹Università di Napoli "L'Orientale", Italy. ²Independent Scholar, Italy

In 2016, a team of the Saudi Commission for Tourism and National Heritage (SCTH) and the Università di Napoli 'L'Orientale' started an underwater survey in the Red Sea, offshore Umm Lajj (Saudi Arabia). The aim of the ongoing project is to investigate a merchantman that shipwrecked with its cargo in the first half of the 18th century at a reef. The shipwreck dates to a Red Sea historical period that is still inadequately investigated, and it represents the final pieces of evidence for the Egyptian-Arabian trade circuit before the European expansion.

The stern of the Umm Lajj shipwreck is occupied by a well-preserved mound of around 1000 *qulal* and other earthenware water jars varying in shape, dimensions, and decoration. They have been carefully surveyed, recorded and studied using 3-D photogrammetry methods.

The in-depth study of this part of the cargo revealed the complex interpretation of the social and economic significance of the earthenware water jars from the Red Sea and the Ottoman Empire. This type of water jar was widespread and used daily in the region since the 15th century. Traditional production centers were located in Yemen (Mocha?), East Arabia (Mecca?) and Egypt (Delta?), but their commercial function, production, transportation and distribution is still insufficiently known.

The finding of such a large quantity of water jars on board the Umm Lajj merchantman in its northbound route to Egypt, as well as in other similar shipwrecks, suggests a mass production and a relevant economic function within the Red Sea maritime trade.

SESSION: Career Options for ASOR Members: The Academy and Beyond

Emily Miller Bonney | California State University, Fullerton

Scholarly Publishing as an Archaeological Career

Mitchell Allen

Scholarly Roadside Service, Walnut Creek, California, USA

Should junior scholars and graduate students interested in an alternative career path to the traditional scholarly route consider a career in scholarly publishing? As a long-term publisher, who began as a Syro-Palestinian archaeology student, I point out several advantages to this option: the lack of a need for a PhD, the ability to work with ideas, and the applicability of many types of skills. Disadvantages include the salary, the limited geographical locations, and the frustration of starting all over. Anthropologists and archaeologists are uniquely suited for scholarly publishing because of the similarities of the publishing process to traditional ethnographic and archaeological fieldwork. Job opportunities exist not only in more traditional publishing houses, but in universities, government, and cultural resource management firms. Younger scholars should assess their level of commitment to archaeology, and recognize the limits of working in the business world, before embarking on a career change.

The Archaeologist as Curator

Susan L. Braunstein

The Jewish Museum, New York, NY, USA

At this session, I will share my experiences as an archaeologist in the museum field, where I have worked my entire career, both at the Brooklyn Museum and the Jewish Museum in New York. Being a curator involves the study, maintenance, and development of collections and the presentation of a broad range of subjects to a variety of audience through exhibitions, lectures, and publications. Curatorship combines a number of skills: rigorous scholarship; the art of exhibition presentation through design, text, and interpretive devices; and knowledge of how to safely handle and display objects. At the Jewish Museum, where I have worked for 38 years, my focus has expanded beyond the ancient Near East to include decorative arts through the contemporary period, from all lands where Jews have lived. This has provided a long, fascinating view of the multiple evolutions of a single cultural group that is continually reinventing itself.

Buying In or Selling Out: Adapting to an Administrative Role in Post-Secondary Education

Thaddeus J. Nelson

Stony Brook University, Stony Brook, NY, USA

Changes in the opportunities available in academia are impacting the lives of young scholars. Increasingly, they must look for careers outside the traditional paths of research or teaching. Post-secondary administration remains a potentially attractive career path due to the familiarity and continued connection to the academic community. However, administration requires skills and work experience which young scholars may be unfamiliar with and have few chances to develop.

In this paper, the author presents a personal experience transitioning from a research track to university administration. Focus is given to the social and emotional impact and the differences in expectations from academia. The paper concludes by suggesting ways to prepare young scholars for an administrative career during their time as students.

Thriving and Surviving on the Edge

Sarah W. Kansa, Eric C. Kansa

AAI / Open Context, San Francisco, CA, USA

In 2001, with newly minted doctoral degrees in hand, we set out on alternative career pathways that led to the development of Open Context, an online data publishing platform for archaeology. In this presentation, we discuss the many factors that led to our choosing this path, the challenges we have faced along the way, and the benefits of doing this work through an independent non-profit technology organization. We also discuss how this work is situated both in the academic world and in the ever-growing “alt-ac” community.

SESSION: Network Approaches to Near Eastern Archaeology and History II

Steven Edwards | University of Toronto

Ioana Dumitru | Johns Hopkins University

Christine Johnston | Western Washington University

Determining Social and Economic Inequality Using Networks: The Prehistoric Bronze Age on Cyprus as a Case Study

Laura A. Swantek

Arizona State University, Tempe, Arizona, USA

In 2019 Oxfam estimated that 26 people held as much wealth as the poorest 3.8 billion in the world. How do so few people acquire this much wealth while so many others remain in poverty? Is wealth the outcome of social connections and the networks that people build? Can this be measured in the archaeological past? While individuals and those they are linked to may never be known in prehistory, it is possible using new methods developed by network scientists to reconstruct past social connections and measure wealth inequality from archaeological remains. This paper presents the results from the application of these methods to the Prehistoric Bronze Age (PreBA) on Cyprus (2400-1700 B.C.E.), when some individuals or groups were beginning to amass wealth and gain status in small villages. Using mortuary data this paper explores the patterns that emerge when proxy data for wealth and unequal social and economic connections, such as inter-regionally imported pottery, metal goods and items suggestive of ritual or ideological control are analyzed using these methods. The results indicate that social connections are the conduits through which goods and services flow, however the number of connections that people make, and thus the amount of wealth they can amass is not random or luck. The more connections people have, the more they can make; the rich do, in fact, get richer. It is apparent that in some Pre-Bronze Age communities this occurred, before the emergence of cities and institutionalized inequality.

Sociopolitical Change and Interregional Exchange: A Case Study of Flint in the Iron Age I Southern Levant

Kyle Keimer¹, Yosef Garfinkel²

¹Macquarie University, Australia. ²Hebrew University of Jerusalem, Israel

The Iron Age I (12th–11th centuries B.C.E.) in the southern Levant marks a major transition from the preceding geopolitical and economic structuring of the Late Bronze Age (16th–12th centuries B.C.E.). In particular, Egyptian hegemony over the region disappears and there is a reconfiguration of power relationships amongst native Canaanites and between Canaanites and the newly formulated Philistines and Israelites. This paper will articulate these shifts in power relationships by assessing the change in exchange networks, specifically the exchange of flint in the southern Levant. We interpret a cache of flint sickle blades/blanks—from the 11th century B.C.E. site of Khirbet er-Ra'i, Israel—in light of various theories of exchange, particularly Central Place Theory and Gateway Community models. The Khirbet er-Ra'i cache is contextualized along with other contemporary—though smaller—caches from the nearby site of Gezer, and a model for flint exchange is developed.

Economic Aspects of Ancient Egyptian Religious Imperialism in the Levant

Avigail Ben-Gad

University of Chicago, Chicago, Illinois, USA

In this paper, I examine the intersection of economics and religion in the Egyptian-occupied Levant during the New Kingdom, analyzing ways in which Egypt used religion to integrate its northern territories into the Egyptian economy and to maintain the imperial system. I further investigate the possible locations of Egyptian cultic centers in the Levant and compare their functions with cultic centers in Egypt itself.

I thus demonstrate that New Kingdom Egypt increasingly used religious institutions in the Levant to conduct the economic administration of its imperial territories. Furthermore, as indicated by Ramesside records, such as Papyrus Harris and ostraca found at Tel Sera', the imperial administration of the Levant likely became increasingly self-sufficient over time.

SUNDAY, DECEMBER 12, 2021

10:00–11:00am (EST)

SESSION: Ancient Inscriptions

Jessie DeGrado | University of Michigan

Madadh Richey | University of Chicago

From Scribal Exercise to Poetic Artistry

Aaron Demsky

Bar-Ilan University, Ramat-Gan, Israel

Elementary lessons in learning the letters of the alphabet include practicing their forms and remembering their assigned names, phonetic values, and order. In order to do that, ancient teachers devised exercises like writing abecedaries (e.g., Izbet Sarta and Tel Zayit ostraca) or practicing alphabetic permutations like at-bash (Jer 25:26; 51:1,41), which helped beginners develop their cognitive skills and manual dexterity. Only with these skills in hand could the novice begin to move on to more complex exercises (e.g. Khirbet Qeiyafa ostrakon and Gezer calendar) and ultimately apply writing for professional, personal, or intellectual pursuits, and—for the more gifted—indulge in creative writing.

The object of this paper is to show that these elementary exercises evolved and enabled the composition of literary texts, like the alphabetic acrostic poems written by Prophets and Wisemen in ancient Israel. In particular, I focus on Lamentations chapters 1 and 2, where I find a tightly structured application of both the abecedary and at-bash exercises, which evolved into a sublime literary expression of mourning for national loss.

New Developments in the SCRYPT Software for Hebrew Epigraphy

Eythan Levy¹, Frédéric Pluquet²

¹Tel Aviv University, Israel. ²Haute Ecole Louvain en Hainaut, Belgium

Originally designed as an ad-hoc tool for finding new readings in the Khirbet Qeiyafa ostrakon (Levy and Pluquet 2017), the SCRYPT software has now turned into a general-purpose lexical tool for Hebrew epigraphy. The tool allows users to upload the picture of an inscription on the system, divide it into cells (one per grapheme) with the help of a wizard, and encode all the possible identifications of each grapheme. The software then automates the search for lexemes in the Brown-Driver-Briggs (BDB) Hebrew dictionary by a simple click of the mouse. The tool also allows users to specify the lexical categories of lexemes that are searched for (anthroponyms, toponyms, verbs, adjectives, nouns, etc.). A series of graphical tools are also offered to help examine the inscription in parallel to the lexical searches. Finally, the tool automatically deals with the problem of defective writing in archaic inscriptions by inserting optional *matres lectionis* in the search strings. Hence, a search for *mlk* will yield not only the lexeme *mlk* (« king »), but also *mlkh* (« queen ») and *mlwkh* (« kingship »). We will illustrate the working of SCRYPT with several examples of Proto-Canaanite inscriptions. SCRYPT is a web application written in the Javascript language and based on regular expression algorithms. It is freely available online at www.scryptapp.com.

Reference

Levy, E. and Pluquet, F. 2017 Computer Experiments on the Khirbet Qeiyafa Ostrakon. *Digital Scholarship in the Humanities* 32: 816–836.

A New Nabonidus Inscription

Selim F. Adali¹, Mary Frazer²

¹Social Sciences University of Ankara, Ankara, Turkey. ²Ludwig Maximilian University of Munich, Munich, Germany

This paper presents a previously unpublished royal inscription preserved on a tablet housed in the Sippar Collection of the Istanbul Archaeological Museums. The inscription is notable for its presentation of the king of the inscription as a second Hammurabi, and for its record of a previously unattested grant of tax exemptions to citizens of nine Babylonian cities. The preserved text does not, unfortunately, preserve the name of the royal sponsor, but the two fragments that comprise the tablet, Si.4+5, were identified by Vincent Scheil (Une saison de fouille à Sippar, MIFAO 1, 1902, p. 96) as “vraisemblablement” and “probablement” inscriptions of Nabonidus, the last native king of Babylon (ca. 556–539 B.C.E.). After presenting the text, we will assess the available evidence for the identity of the royal sponsor and argue in support of Scheil’s attribution of the text to Nabonidus. The paper concludes with an evaluation of the inscription’s significance in this historical context. It will be argued that the inscription probably dates to the last years of Nabonidus’s reign, and that the large-scale award of privileges recorded in the inscription may be a response to the perceived threat of Cyrus II of Anshan.

Achaemenid Aramaic Numerals: Scribal Training from Egypt to Bactria

Lisa J. Cleath

George Fox University, Newberg, OR, USA

This study argues that the numerical system used by Achaemenid Aramaic scribes was one element of Aramaic scribal training standardized throughout the Achaemenid Empire in the fifth and fourth centuries B.C.E. Scholars have long understood the particular syntax and epigraphy of this tally system through the Elephantine corpus. However, they have not thoroughly traced the origins of this system, nor tracked its standardization. In the late 6th century B.C.E., Darius I gained a reputation for streamlining bureaucratic procedures throughout the empire, which by the end of his reign spanned from Egypt to the Indus Valley. Inscriptional evidence from 5th century Egypt and 4th century Bactria demonstrates consistent use of the syntax and graphemes of this numerical system, suggesting that scribal training was standardized across the expanse of the Achaemenid empire by the mid-4th century B.C.E. The 4th century Bactrian corpus, including Khalili IA six, 12, and 21, provides an important comparative to the Elephantine papyri due to the presence of the graphemes for numerals in the 100’s, which are not otherwise extant outside of the Elephantine corpus. Ongoing usage of this numeral system in Aramaic and Hebrew inscriptions through the 1st century B.C.E. illustrates the persistent influence of Achaemenid Imperial scribal training in the ancient Near East.

Achaemenid Aramaic in Post-Persian Egypt: Data from the Sheikh Faḍl Tomb Inscription

Tawny Holm

Pennsylvania State University, University Park, Pennsylvania, USA

The script and language of the Aramaic “Inaros” inscription at Sheikh Faḍl should be placed in the context of other Aramaic texts found in Egypt. Recent work at the tomb has uncovered human remains and artifacts, and the cleaning of the walls has revealed more iconography and additional Aramaic inscriptional material (Köhler et al., *Egypt and Levant* 28, 2018). The new evidence suggests that the

tomb was in use at a later date than proposed in earlier publications, and that the Aramaic inscription—a fictional narrative about the 7th century hero Inaros (see Holm, *Aramaic Studies* 5, 2007)—probably dates to the early 4th century B.C.E. This paper will focus on the archaic (or archaizing) script and the unique morphological features of the inscription.

Aramaisms in 1QIsaa: Borrowing or Interference?

Noah D. van Renswoude

New York University, New York, USA

The Aramaisms in 1QIsaa have been labeled as *borrowings*. By using the term *borrowing*, the linguistic situation created is one of elements moving from the L2 (Aramaic) to the L1 (Hebrew). However, many scholars have argued that Hebrew was no longer being spoken at that time and just functioned in specific domains. Therefore, creating a linguistic situation of L1 being Aramaic and L2 being Hebrew—the opposite of how 1QIsaa has been approached. The Aramaisms in chapters 46, 47, and 48 of 1QIsaa show a small number of lexical items, but a much higher number of phonological and morphological items. For example, weakening of gutturals, non-assimilation of the preposition **בְּ**, **בִּ**/f/s/SC forms ending in **-י**, **בִּ**/m/s suffix **וּהִי**, and **בִּ**/m/s forms ending in **וּהִי**. A high degree of phonological and morphological borrowing indicates the most intense language contact situation (Thomason and Kaufman 1991). However, this contact situation is difficult to explain when Hebrew is taken as a dead language.

By approaching Aramaisms through the lens of *interference*, L1 (Aramaic) → L2 (Hebrew), language contact theory provides a framework that explains the quantity of morphological and phonological Aramaisms within these chapters in a simpler way than as regular borrowing or archaic Hebrew long forms. It thus offers insight into the multilingual landscape of the scribe.

Some may say that this is only a matter of terminology, however the terminology we use has a direct impact on how we approach our data and the conclusions we draw.

SESSION: The Tell es-Safi/Gath Project after 25 Years I

Aren M. Maeir | Bar Ilan University

A Great Reset: Tell es-Safi/Gath in the Early Iron Age New World Order

Louise A. Hitchcock

University of Melbourne, Parkville, VIC, Australia

The terms “Great Reset” and “New World Order” are invoked by global elites and by conspiracy theorists alike with varying degrees of enthusiasm and trepidation. Klaus Schwab, the founder of the World Economic Forum, better known as “Davos,” has suggested that the disruptions and shut-downs caused by the Coronavirus pandemic might be seized as an opportunity to re-imagine global economies. On the other side of the coin, conspiracy theorists fear the Great Reset represents a strategy by global elites to use the pandemic as an excuse to enslave the earth’s population in an insidious New World Order. Schwab views the pandemic as having the potential to contribute to population clashes, revolutions, redrawing of cultural boundaries, or to unleash and trigger technological and cultural innovations. Although global disasters are divisive and traumatizing, there is also hope for great optimism. Will things get better, worse, stay the same, or will radical improvements be inspired? This is a question only history can answer, and it has been answered many times, most recently by the 25 years of research and discovery carried

out at Tell es-Safi/Gath. This paper discusses how the changes in Area A, one of the early Philistine sectors on the site, gives us an archaeological instruction booklet of human resilience and ingenuity in overcoming the instability of the preceding era through a period of gradual rebuilding combined with technical innovations that created the context for a Great Iron Age Reset to take place.

Tell es-Safi’s Contributions to Knowledge of Early Philistine Writing and Language

Brent E. Davis

University of Melbourne, Melbourne, Victoria, Australia

With very few exceptions, most Philistine inscriptions date to the Late Iron Age (Seventh c. B.C.E.). Though some of these late inscriptions contain what appear to be non-Semitic words and names, there can be no doubt that by this time, the Philistines were speaking a Semitic language, most likely a dialect of Phoenician, and writing it with a Philistine variety of the Phoenician alphabet.

It also seems certain that when the varied groups of people who were to become the Philistines began arriving in the region some five centuries earlier, they spoke non-Semitic languages. There is some slim evidence that a few of these early groups may have used one or more pre-alphabetic writing systems, though this is by no means certain. Charting the subsequent evolution of Philistine language and writing is an extremely difficult problem, because so few Philistine inscriptions pre-date the Seventh c. B.C.E. However, Tell es-Safi has produced more of these early inscriptions than any other single site, including the oldest known Philistine alphabetic inscription (late Tenth-early Ninth c. B.C.E.), containing two non-Semitic words written in a variant of the Old Canaanite alphabet, the precursor to the national scripts of the 9th c. B.C.E. This inscription, together with the other early (Ninth c.) epigraphic evidence from the site, displays no indication of any specifically Judahite influence.

In this paper, I review and contextualize the Philistine epigraphic evidence from Tell es-Safi and beyond, and discuss the conclusions about Philistine writing and language that this evidence can safely support.

“And He Broke Down the Wall of Gath!” - A Summary Breakdown of Successive City Walls and Gates from the Early Bronze Age to Iron Age II Discovered by the Tell es-Safi/Gath Archaeological Project

Jeffrey R. Chadwick

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In periods from the Early Bronze Age to Iron Age IIA, the ancient city of Gath, located on the eastern edge of Israel’s coastal plain, was one of the largest cities (and sometimes *the* largest city) in the entire region. Beginning already in Early Bronze Age III the site was fortified by a massive city wall. Parts of that wall were rebuilt in Middle Bronze Age II and served the city until Iron Age II, by which time newer fortification walls had also been constructed to protect the extended lower city of the Philistine capital. For 25 years, the Tell es-Safi/Gath Archaeological Project has excavated at this massive site, uncovering remains from the Canaanite and Philistine periods down to the Crusader era. Fifteen-meter and twenty-meter lengths of the Bronze Age city walls have been found in two areas of the upper tell and a shorter piece in a third area. In the lower city, fifteen-meter and twenty-meter lengths of the early Iron Age walls have also been discovered along the south bank of the Elah riverbed, as well as a

shorter segment further east. One gateway in the lower city has been excavated and positively defined, and other gateway areas have been discerned in both the lower and upper cities. In all cases the city walls consisted of thick foundations, constructed of stones, and supported brick superstructures that stood several meters high. All of these finds will be discussed in the Chicago and Virtual 2021 ASOR Annual Meeting.

News on Past: Archaeobotanical Lessons and Perspectives on Diet, Subsistence, Land Use and Human Mobility from Tell es-Safi/Gath Suembikya (Sue) Frumin, Ehud Weiss
Bar-Ilan University, Ramat Gan, Israel

The main focus of archaeology is the reconstruction of the ancient way of life, unraveling idiosyncrasy as well as interconnections in topics such as land-use modes, economy, trade and culture of ancient societies. Southern Levant, lying on the Eastern Mediterranean crossroads, connecting Europe, Asia and Egypt, represents a unique test-case for studying 'sink' and 'source' of historical processes, considering the role of local conditions and traditions vs. regional connections. Here, we present the first overview of the vegetal diet and land use at Tell es-Safi/Gath throughout the Early and Late Bronze Ages and Iron Age. We address here a vegetal part of Canaanite-, Philistine- and Judahite- diets, combining our results from an excavation at Tell es-Safi/Gath with data from other sites in the region. The data enable a quantitative and qualitative analysis of regional diet, which reveals the main intrinsic components of local diet and land-use, and intra- and interregional food connections. These results unravel the integration level within East Mediterranean trade, and mirror southern Levant idiosyncrasy within the contemporaneous Mediterranean crop-basket.

SESSION: Complexity Without Monumentality: Rethinking Nomads of the Biblical Period

Erez Ben-Yosef | Tel Aviv University
Zachary Thomas | Tel Aviv University

The 'Complexity' and 'Evolution' of Nomadic Tribal Societies of the Biblical World: How Fit for Purpose are our Concepts? Zachary Thomas

Tel Aviv University, Israel

'Complexity' and 'Evolution' are both concepts that one frequently finds invoked in the somewhat conservative theorizing of Near Eastern archaeology, whether one is reading about primarily settled or nomadic societies. Though there has been critique, it has yet to really penetrate archaeological scholarship of the southern Levant very much. The discovery of an Early Iron Age nomadic polity in the Aravah (identified with Edom) and the possibility that Israel was still substantially nomadic (even into the Monarchic period) prompts the question of just how fit for purpose these two concepts are in this context—a question taken up in this paper. Both can be traced back to the beginnings of Euro-American anthropology in the late 19th century, its context in colonialism and even orientalism, and the embracement of these concepts in processual archaeology decades later. This paper argues that in investigating the nomadic tribal societies of the biblical world, 'evolution' is philosophically and methodologically problematic enough to be worth simply abandoning, while 'complexity' can remain a useful concept if it is attenuated to the context to which it is applied.

The Role of Animals in the Mobility of Biblical Era Societies

Lidar Sapir-Hen

Department of Archaeology and Ancient Near Eastern Cultures, Tel Aviv University, Tel Aviv, Israel

Donkeys and camels served as work animals in the southern Levant during different phases of the Bronze and Iron Ages. Both species were not primarily exploited for their meat, and both played an important role in humans' social evolution. The lecture reviews evidence for the interaction of humans with these animals, following their domestication, with a special attention to their role in mobility of various populations. Following their domestication as work animals, donkeys were considered of special significance, as reflected in the practice of their deliberate interment, that continued through the Bronze Age and ended at the early Iron Age. Ceasing of the practice coincides with the introduction of another transport animal to the southern Levant—the dromedary camel. It is suggested here that the treatment of donkeys changed as their importance changed and that the ritual practices with both animals may be related to the identity of the populations exploiting them and the different characteristics of mobile and urban societies.

History without Monuments

Sarah Malena

St. Mary's College of Maryland, St. Mary's City, MD, USA

This paper addresses the epistemological challenges historians face when investigating the early Iron Age in the southern Levant. Akin to the architectural bias in biblical archaeology recently critiqued by Ben-Yosef (2019), the historian suffers from bias related both to what is visible in the textual and epigraphic corpus and what appears to be absent. Related issues exacerbate this problem and have resulted in the marginalization of history as a contributing discipline for understanding the southern Levant's early Iron Age. Scholars' assumptions and arguments about the necessity of monumental, epigraphic texts for evaluating social and political complexity drove an important element of the minimalist-maximalist debates in the 1990s and early 2000s. Compared to the Late Bronze and later Iron Age, there are very few inscriptions that date to the early Iron Age and no monumental inscriptions until the 9th century B.C.E. Without the monuments, scholars argued, there was little complexity. Later Iron Age sources, including the Hebrew Bible, contribute to this problem as well. These sources overwhelmingly represent the interests of centralized, sedentary hierarchies, distorting histories of earlier and contemporary societies that either didn't produce written records or whose texts did not survive. This paper examines the emergence of Iron Age polities in light of histories that have and have not been written based on whether their "kings" appear in biblical or epigraphic sources. I argue that historical approaches and aims are essential to this conversation.

You Shall Not Abhor an Edomite, for He is Your Brother...but Who is He?

Laura M. Zucconi

Stockton University, Galloway, NJ, USA

Many misunderstand Edom to be a centralized kingdom because the Bible uses the term "king" which also leads to the assumption Edomites were a distinct ethnicity based on modern notions of ethnic nationalism. This paper investigates the cultural markers of southern Canaanites that are used to define Edomites, such as Qos, in names or the genealogy of Esau/Edom; elite emulation of Egyptian and Assyrian

jewelry, pottery, and architectural styles; and the presence of Qurayyah Painted Ware showing that Edomites coexisted on a continuum with external groups. When analyzed together, they form a “commoditiescape” rather than a distinct ethnicity.

The Edomite kings ruled a diffuse kingdom as local potentates coordinating actions along newly developed trade networks. The paper then proceeds to contextualize the use of “king” as an expression of independent agency during Iron Age I and II, rather than the presumed centralized polity. This parallels the Late Bronze Age situation in Canaan as expressed by the term *ʿapiru*, signaling agency apart from the Egyptian dominated networks. The Iron Age use of “king” highlights the interactions of local peer-polities as well as larger empires functioning in the Levant.

Rethinking the Social Complexity of Early Iron Age Nomads

Erez Ben-Yosef

Tel Aviv University, Israel

Recent evidence from the Arava Valley challenges the prevailing assumption that Bedouin ethnography and inferences from ancient Near Eastern archives can adequately compensate for the archaeological lacuna in the study of biblical-era nomads. The evidence indicates that nomadic social organization at the turn of the 1st millennium B.C.E. could have been—and in at least one case was—far more complex than ever considered before. This paper discusses the implications of the now extended spectrum of possible interpretations of nomads to the “archaeological” discourse on early Iron Age state formation processes in the Southern Levant. Using the case of ancient Edom and Moab, the paper demonstrates that common reconstructions of “emergence” and “collapse” are, in fact, oscillations in the archaeological visibility of nomadic societies—which do not necessarily correlate to an increase or decline in social complexity. Rather, it is more likely that the appearance and disappearance of stone-built remains reflect processes along the sedentary–nomadic continuum (in which “sedentary” does not equal more socially complex), as well as a response to varying economic and geopolitical needs. It is likewise argued that in current biblical archaeology, “archaeology-based” historical reconstructions of ancient Israel and the United Monarchy are inherently flawed and suffer from a bias in favor of interpretations of the more “critical” school, as it gives an unbalanced weight to the sedentary (i.e., the archaeologically visible).

SESSION: History of Archaeology I

Kevin McGeough | University of Lethbridge

Underground – Archaeological Research in the West Bank, 1948–1967: Management, Complexity, and Israeli Involvement

Mordechai Lash

Ariel University, Ariel, Israel

The outcome of the 1948 war in Palestine resulted not only in the country’s partition between the state of Israel and the Kingdom of Jordan but also in the division of its archaeological research. The Jordanian Department of Antiquities, which was responsible for administering archaeological research in the West Bank until 1967, prioritized research in the East Bank over research in the West Bank as a function of broader Jordanian government policy. The bulk of the research in the West Bank during this period was conducted by foreign institutions and researchers, who were forced to choose between researching in Israel and researching in the Arab countries, including the West Bank. Those who chose to research in Israel were

denied the ability to simultaneously research and excavate in the West Bank. In this way, the choice of the foreign researchers divided them, placing them on the two different sides of the ‘Green Line’.

The excavations in the West Bank piqued the curiosity of the Israelis, who never ceased trying to acquire information about them and their findings. These efforts included secret meetings with foreign researchers, attempts to acquire the Qumran scrolls, and the secret transfer to Israel of a few findings for the sake of secret research. For many years, part of their story remained classified in archives. It is shared here for the first time.

Archaeological Entanglements: Negotiating Power in the Archives of Belgium’s Early Archaeologists

Annelies Van de Ven

Université catholique de Louvain, Louvain-la-Neuve, Belgium

When we talk about the diplomatic powers active in the early archaeology of the Ancient Near East, we often think of the big colonial and economic powers of the time. The archives of archaeologists supporting the national agendas of the US, the UK, France and Germany have all been the focus of extensive research. The international fame of the actors involved and the clout of their associated cultural institutions has ensured widespread scholarly interest in these histories. However, the scale of these cases can lead to a one-way writing of history, overlooking some of the complex interplays between science, politics and industry that entangled not just the colonizer and colonized, but also numerous other powers engaging on an international stage.

This presentation will explore these entanglements through the archives of Belgian scholars working on the archaeology of the Ancient Near East in the late 19th and early 20th centuries. Though Belgium certainly enacted a practice of direct extractionism within its own colonies, its relations in the Near East were more heterogeneous. At a time when Belgium was moving from a reliance on the political, cultural and academic structures of neighbouring countries to its own nationalized institutions, the discipline of archaeology became a forum for collaboration as well as competition. By critically considering two case studies – Franz Cumont and Fernand Mayence – within their wider historical context, this paper will examine the role of the archaeologist as a colonial intermediary intricately entangled within networks of political, scientific, cultural and economic power.

Biblical Archaeology—Between Christians and Jews

Hayah Katz

Kinneret College on the Sea of Galilee, Zemarim, Israel

Archaeological research in the Land of Israel was initiated in the late 19th century by religious Christians, some of them officials of the Christian establishment, while others were characterized by a religious worldview. Many of these scholars practiced biblical archaeology, a field of research that combines two disciplines—biblical study and archaeology. One might assume that much like religious Christian scholars, observant Jewish archaeologists too would also be interested in the archaeology of Israel in general, and biblical archaeology in particular. However, up to the 1980s, observant Jewish society typically treated the field with reservation and doubt.

From the last quarter of the 20th century onward, a change in the attitude can be detected in both groups. The lecture will focus on two questions:

1. What are the factors that initially affected the attitudes towards biblical archaeology in each group?

2. What are the changes over time in the attitudes towards biblical archaeology among both believing Christian and observant Jewish scholars, and can a link be detected between the processes occurring separately in each of the groups?

The answers to these questions allow us a deeper analysis of the processes that formed the archeology of the Land of Israel.

The “Incidental Archaeology” of Mary Eliza Rogers: An Early 19th-Century Perspective on Ancient Remains

Rachel Hallote

Purchase College SUNY, Purchase, NY, USA

The British traveler, Mary Eliza Rogers, lived and traveled in Palestine in the 1850's—approximately a decade before the birth of biblical archaeology in England. She traveled as a companion to her brother—who was serving as the British Vice-Consul—and is best-known for the volume she published, *Domestic Life in Palestine*, which modern scholars study as an example of an ethnography written by a 19th-century female traveler. However, *Domestic Life* should also be used as a source for the history of archaeology: Rogers's frequent mentions of antiquities and ancient remains permeate her text, even though writing about archaeology was only incidental to her ethnographic goal. Rogers traveled prior to the advent of organized excavation and survey by Europeans, and yet, she demonstrated particular interest in the smaller-scale ruins not recorded by most travelers, often describing them in detail and sometimes sketching what she saw. Most notably she described how the local residents of Palestine interacted with the antiquities on their land on a daily basis.

SESSION: Archaeology of Mesopotamia

Darren Ashby | University of Pennsylvania

The Archaeological Evidence of the Ekur of Nippur during the Old Akkadian Period

Bernhard Schneider

Independent Researcher, Innsbruck, Austria

Despite the importance of the Ekur (the temple of the main god Enlil—well known from epigraphic material), archaeologically, little is known of the period. Although Hilprecht summarized some of the results in his narrative in 1903, so far, his statements are not connectable with the excavated archaeological evidence. Nowadays, this shortcoming can be overcome with the help of the unpublished documentation stored in the archives of the University of Pennsylvania Museum of Archaeology and Anthropology.

Through this excavation of the archives and in connection with the post-World War II expeditions, it is now possible to understand the results of the earlier expeditions. Several findspots of unwritten and written objects, some already presented by Aage Westenholz (1987, OSP II), can now be connected to the different construction phases of the temple. Additionally, some hints concerning the proper relative position of Lugal-nizu within the historical chronology of the Old Akkadian period can be given.

Non-Written Administrative Technologies in Early Mesopotamia: Accounting Tokens as an Alternative to Text

Lucy E. Bennis-Chapman

Netherlands Institute for the Near East, Leiden University, South Holland, Netherlands

Small, geometric-shaped clay objects are a common find at excavations in West Asia. They were often overlooked in past scholarship, in favor of more enigmatic clay finds such as figurines, sealings and clay tablets. Schmandt-Besserat's seminal work (1992) brought geometric clay objects to the fore, claiming they were mnemonic accounting tokens, which evolved into the characters of cuneiform script, being replaced by writing in the later-fourth millennium B.C.E.

Evidence from excavations across West Asia increasingly demonstrates that the evolutionary narrative of writing replacing prehistoric administrative technologies (i.e. tokens) is too simplistic. It is now clear that even after writing becomes widespread, 'tokens' continue to be used as an administrative tool, along with bullae, seals and written texts into the first millennium B.C.E. Various pathways to complex administration were taken. Often, yet not always, these incorporated tokens.

This paper, incorporating issues of artefact classification and publication bias, considers the complexity of administrative technologies from mid-late fourth millennium B.C.E. sites of the middle Euphrates. Evidence shows there was no single method of record keeping, nor that the advent of writing led to the abandonment of older technologies including tokens. It proves that the theorized trajectory of written texts replacing tokens in accounting is a gross oversimplification of the situation of administration in the early-historic period. Non-literate bureaucratic tools remained useful tools of daily life within at least one element of society.

References:

Schmandt-Besserat, D. 1992 *Before Writing*, Vols. 1 & 2. Austin: University of Texas Press.

In Search of Ur III Housing: Recent Excavations at the Ancient City of Ur

William B. Hafford

University of Pennsylvania, Philadelphia, PA, USA

From 2015 to 2019, three excavation seasons were conducted at the ancient city of Ur (Tell el-Muqayyar) under the direction of Elizabeth Stone of SUNY Stony Brook. This talk discusses, in particular, the deepest of the new trenches, Area 4. This trench reached a maximum depth of 6.5 meters below the modern surface—one of its goals being to expose Ur III housing. Although artifacts of the Ur III period were discovered at this depth, no architecture could be confirmed to be associated. Mud brick walls, laid in a *pisé* technique, above this level appear instead to be associated with Early Isin occupation.

Sir Leonard Woolley, excavating for the University of Pennsylvania Museum and the British Museum from 1922-1934, believed that mud brick walls directly beneath his Isin-Larsa/Old Babylonian housing levels dated to the Ur III period, however, he did not investigate these levels closely. SUNY excavations in Area 1 exposed some of the walls beneath Woolley's Isin-Larsa/Old Babylonian Area AH but could not confirm them as belonging to the Ur III. Furthermore, those found beneath OB walls in Area 4, just south of Woolley's Area AH, do not date to this period. Therefore, the question of Ur III housing remains an intriguing one. Ur was the seat of the Ur III kings, and public buildings from the period are clear at the site, yet no houses of the common city dwellers

from roughly 2100-2000 B.C.E. have yet to be confirmed as located here.

The Nimrud Rescue Project: Collaborative Cultural Heritage Work in Iraq

Katharyn Hanson

Smithsonian Institution, Washington, DC, USA

The ancient city of Nimrud is best known as the lavish capital city of the Neo-Assyrian Empire around 800 B.C. and site has been excavated multiple times since the 1800's. Located just 30 kilometers south of Mosul, Nimrud suffered greatly from intentional destruction by ISIS. First publicized in a 2015 ISIS propaganda video, damage at Nimrud involved sledgehammers, jackhammers, explosives, and earthmoving equipment. After the area was liberated from ISIS in fall 2016, the Iraqi State Board of Antiquities and Heritage requested Smithsonian's assistance in documenting the site, systematic recovery of sculptures, and stabilization of architecture. A series of planning and training missions held in 2017 and 2018 worked with an Iraqi 30-member 'Nimrud Rescue Team' from Nineveh Province to develop their skills to document, recover, and protect the scattered fragments of stone sculpture and architecture that survived. Using these new skills, the Nimrud Rescue Team members are working on the site to pick up fragments, document them, and put them in safe storage. From 2018-2020, the Nimrud Rescue Team carried out over four months of recovery on-site. The Nimrud Rescue Project developed a systematic methodology to document the location of damaged artifacts and plans to continue this successful approach. In early 2021, the Nimrud Rescue Project's work was reaffirmed through a continuation MOU with the Iraqi State Board of Antiquities and Heritage and was a subject in the 2021 US-Iraq governmental strategic dialogue.

Environment of Jebel Bishri in Syria as Dynamics for Early Amorite Mode of Life

Minna A. Silver¹, Markus Törmä², Kenneth K.A. Silver³, Milton Garcia Nunez¹, Jari Okkonen¹

¹University of Oulu, Finland. ²Aalto University, Finland. ³Independent Scholar, Finland

In historical references dating from the third millennium B.C. Eblaïtes, Akkadians and Sumerians locate the early Amorite habitat to the area of Mount Basaar/Basalla hur-sag MAR.TU and MAR.DU-ki. All those areas point to the mountainous region of Jebel Bishri and the Middle Euphrates region in Central Syria. The area of Jebel Bishri between the Syrian Desert and the Euphrates covers ca. 1 million hectares that mainly consist of desert-steppe that has been arena of nomadic pastoralists for millennia and only allows occasional rain-fed agricultural endeavors in wadis. The riverine area of the Middle Euphrates region beneath the mountain is based on irrigated agriculture and small sedentary sites instead. Over 10 years the Finnish project SYGIS archaeologically surveyed and mapped the region finding differences in the habitats and in the archaeological remains of the mountain compared to the bordering Euphrates River. Remote sensing in mapping and ethnoarchaeological approached on the ground were included in the project design. The present paper will present and discuss different modes of life visible in high- and lowland interaction and variety of tribal groups in the early habitat of the Amorites reflected in the archaeological remains and textual sources. The interaction between the habitats, subsistence economies, mobility and sedentism developed to a dynamic life mode of early Amorites.

SESSION: From Paganism to Christianity: Transformation of Sacred Space in Sepphoris, the Galilee, and Beyond

Zeev Weiss | The Hebrew University of Jerusalem

Shulamit Miller | The Hebrew University of Jerusalem

Religious Communities in Sepphoris Contextualized through Space and Time

Zeev Weiss

The Institute of Archaeology, The Hebrew University of Jerusalem, Jerusalem, Israel

The Christianization of the Galilee did not occur overnight but was an evolving process, beginning in the 4th century C.E. (with the Christianization of the Roman Empire), intensifying in the following centuries, and reaching its peak in the 6th century. While the archaeological evidence for growing Christian presence in the Galilee comes from those sites in which Jesus had his ministry and from other rural areas—villages and small towns throughout the Galilee—little attention has been given to date to the changes occurring in the two major Galilean cities, Tiberias and Sepphoris. The paper will concentrate on cult buildings known to date at Sepphoris—a Roman temple, two churches, and a synagogue—and discuss their implications for the study of the architectural development, social structure, and religious behavior in the late antique city.

Temple, Church and Urban Change in Ancient Sepphoris

Shulamit Miller

The Hebrew University of Jerusalem, Israel

Excavations of an *insula* in the heart of the city center of ancient Sepphoris have revealed continuous occupation from the late 1st through mid-8th centuries C.E. The recently concluded stratigraphic analysis of this insula revealed six consecutive building phases including a Roman temple and a Christian church, in addition to private architecture, commercial activity, and an industrial zone.

This paper presents the architecture of the different phases—discussing the plans, characteristics, and dating of each of the phases. The relations between the temple and church are especially highlighted for a better understanding of the process of transformations of sacred space in the urban center. As a result, insights may be gained into the social, religious, and cultural climates of the city over time.

Inside the Church Walls: Examination of the Liturgical Furniture and Interior Design of the Eastern Church in Sepphoris

Rebecca Eisenstadt

The Hebrew university of Jerusalem, Jerusalem, Israel

The eastern church in Sepphoris was built at the end of the 5th/ beginning of the 6th century C.E., upon a Roman temple's ruins. An assemblage of marble fragments was discovered in connection with a lime kiln and robbery trenches that covered the church's ruins. These fragments consist of liturgical furniture, as well as architectural installations such as flooring and wall revetments, constituting the interior décor of the church.

The lecture will present the finds and aims to offer a reconstruction of the liturgical furniture and architectural installations used in the eastern church in Sepphoris. The study analyses the fragments with comparison from other churches in the eastern Mediterranean, highlighting differences or unique characteristics and influences evident in the eastern church at Sepphoris.

The reconstruction of the liturgical furniture and architectural installations allows for examining aspects of the community that it

served. Both the liturgical space, which is the heart of the religious ritual, and the church's décor function as media through which theological ideas are transferred. Hence, the reconstruction of these two categories is of great significance for our understanding of visual expressions used by the local Christian community of Byzantine Galilee.

Cults of Dagon and Men at Tell Abu Shusha in the Roman Period

Avner Ecker¹, Benjamin D. Gordon²

¹Bar Ilan University, Ramat Gan, Israel. ²University of Pittsburgh, Pittsburgh, PA, USA

Sporadic digs around the site of Tell Abu Shusha—a medium-sized tell next to Kibbutz Mishmar Ha'emeq in the Jezreel Valley, Israel—indicate that the site should be identified with the Roman polis called Gaba. That polis was founded in 60 B.C.E. by the Roman governor Lucius Marcius Philippus of Syria and is best known as the site where Herod the Great settled his cavalry veterans (Josephus, *War* 3.35–36; *Ant.* 15.294). In the Byzantine period, the bishops of Gaba appear in the acts of ecumenical councils. Before the Christianization of the region, the site may have been home to two cults of worship of Eastern gods. A Roman-era inscription found at the site mentions a man named Abdagon (servant of Dagon) as the first citizen of the polis. This offers an intriguing indication for the continued worship in the region of Dagon, the old Philistine wheat god. Furthermore, many of the Gaba coins bear the image of the Phrygian lunar god Men, demonstrating that the deity was closely associated with the identity of the city. A new excavation project, directed by Avner Ecker and Benjamin Gordon, was launched at the site in summer 2020 as part of the Jezreel Valley Regional Project. In addition to discussing the significance of the evidence for two cults of worship of Eastern gods at Tell Abu Shusha, we will summarize in this presentation the results of the 2020 season.

Local Cults in Palestina Secunda: The Case of Konon the Galilean Martyr

Jacob Ashkenazi

Kinneret College on the Sea of Galilee, Zemach, Israel

Local veneration of saints in Late Antiquity served as symbols of distinct identity, ethnic pride, and local patriotism. This paper examines the veneration of a certain saint, Konon, who's name appears in a dedicatory inscription located on the mosaic floor of a 6th century A.D. private church, in the outskirts of a remote village in Galilee. Out of three martyrs that bore this name, the most suitable to be the Galilean saint is the one who was martyred in the 3rd century A.D. in the town of Magidos in Pamphylia. According to his martyrology, Konon of Magidos confessed during his investigation that he was born in the town of Nazareth in Galilee and that his family is related to Christ.

In the 5th and even the 6th centuries, Christians were still a minority in the eastern Lower Galilee (a territory that was part of the newly established province of Palaestina Secunda), and they needed to contend with Jewish demographic dominance in the region—a reality that drove them to look for local expressions of identity. By applying the concept of scales on the cult of saints in local communities, I stress that recently Christianized Galileans embraced Konon as a venerated saint and, by doing so, they turned him into a symbol of Galilean identity and a token of their local Galilean patriotism.

SUNDAY, DECEMBER 12, 2021

11:30am–12:30pm (EST)

SESSION: The Tell es-Safi/Gath Project after 25 Years II

Aren M. Maeir | Bar Ilan University

Eat, Sleep, and Meet: A Spatial Approach to Houses and Households at Early Bronze III Tell es-Şâfi/Gath

Sarah J. Richardson¹, Haskel J. Greenfield¹, Aren M. Maeir²

¹University of Manitoba, Winnipeg, Manitoba, Canada. ²Bar Ilan University, Ramat Gan, Israel

In most considerations of houses and households in early urban settlements, either the spatial context of only a few finds or only a few find classes are included in the analysis. As such, they miss the opportunity to bring to bear the wealth of analytical material recovered during excavations. Inclusion of the spatial context of the multiple finds classes lead to better understanding the concept of 'household' during the Early Bronze Age. ArcGIS is employed as a spatial tool to investigate the location of these finds and enhance interpretation.

In this paper, we investigate and expand our understanding of the Early Bronze Age domestic area (Area E) at Tell es-Şâfi/Gath. For the first time, all the find classes from each of the major excavated Early Bronze Age III strata (E5, E6 and E7) are considered. Repetition of artefact classes within and between architectural building units may allow definition of household toolkits, in that each house has similar goods and by implication, tasks. Comparison between structures as well as the generational changes as buildings are constructed and/or renovated affords the possibility for a micro-scale understanding of behavioral dynamics within structures, and possibly the definition of households within phases of occupation and changes over time.

Ancient Environment and Human Interaction: Interdisciplinary Research - Tell es Safi/Gath

Oren Ackermann

Ariel University, Israel

An archaeological site is an integral part of its surrounding landscape. This is one of the main novel interdisciplinary approaches in the long-term environmental geoarchaeological project at Tell es Safi/Gath (1999 - 2017). The site has interacted with its surrounding for more than 6,000 years. In this site, the surrounding landscape units have been studied, providing important information regarding the ancient landscape, and interactions between climate, the environment, and humans.

Among the effects of the environment on the site, it can be seen that the location of the tell, and even its name, were determined by its environmental conditions, topography, and water availability. Human influence in the past also left its mark on the landscape of today, as seen by the vegetation distribution, for example, of *Sarcopoterium spinosum* (thorny burnet).

The results obtained regarding the human impact on erosion processes revealed that when the site was occupied, erosion processes were limited. After the site's destruction, erosion and fill processes increased significantly. It seems, therefore, that the effect of human activity on erosion is higher in the period following site abandonment; when the site is occupied, erosion is minimal, perhaps as a result of human soil preservation activities.

The environs adjacent to the site are an excellent archive of natural and human environmental history. As the environmental records are

the result of complex processes during a long period, interdisciplinary research is essential in order to decipher its sequence, as revealed in the project of Tell es Safi/Gath.

A Decade of Working with "Asses" (*Equus Asinus*) at Tell es-Safi/Gath

Haskel J. Greenfield

University of Manitoba, Canada

In this paper, the results of a decade long research with Early Bronze Age donkeys recovered from our excavations at Tell es-Safi/Gath are summarized and updated with newer data observations. At least four were buried as foundation deposits below the floors of the earliest level of the Early Bronze Age III (E5c) neighborhood before it was substantially rebuilt. An additional four donkey burials (complete and partial) from later Early Bronze Age III (E5a and b) strata from the neighborhood have been recently defined. These appear also to be foundation deposits as the buildings are renovated as the E5 Early Bronze Age III neighborhood at the east end of the site. In addition, there are numerous other donkey bones spread amidst the general faunal assemblage. This paper will present new results on the ritual use, consumption, use, behavior, and other activities associated with the donkeys recovered at Tell es-Safi/Gath and the region in general during the Early Bronze.

Tell es-Sultan/Jericho in the Iron Age

Lorenzo Nigro

Sapienza University, Rome, Italy

The Italian-Palestinian Expedition (MoTA-DACH Sapienza University of Rome) in the last decades has resumed the excavation of Tell es-Sultan/ancient Jericho also uncovering Iron age strata, which have given the opportunity of a full re-appraisal of this period at the site. The urban layout and main monuments have been reconstructed to understand the role of this city in Iron I and II. Material culture analyses have, moreover, suggested important developments of the Jericho economy during this crucial era and illustrated its interregional connections and inner organization.

SESSION: State and Territory in the Ancient Near East: Mapping Relationships and Challenging Paradigms

Julie B. Deluty | St. Joseph's University

Heidi Fessler | Loyola Marymount University

Becoming Israel: Political Formation in the Song of Deborah

Lauren A. S. Monroe

Cornell University, Ithaca, NY, USA

In an American setting, the Song of Deborah (Judges 5) is widely understood as providing a rare window on earliest Israel's socio-political experience. Historical approaches to the text tend to focus on the Song as a literary unity. However, recent scholarship on the literary history of the text identifies an old, Iron I poem in vv. 12-23, to which a 9th-century hymn was appended. In this paper, I treat the old poem on its own, and offer a radical rereading of the socio-political landscape it envisions. I suggest that the named groups that comprise the 'am *Yahweh* unite not to oppose the Kings of Canaan, as scholars universally assume, and as Judges 4 establishes, but rather, to join as an auxiliary force that fights *with* the Kings of Canaan. Together, this coalition of highland and lowland peoples confronts, and decisively defeats a common enemy represented by the figure of Sisera. The idea that groups that later come to be identified as "Israel" would have fought together with the Canaanites against a common foe, is

unprecedented in Biblical texts, where Canaan is instantiated as a paradigmatic enemy. However, the picture that emerges from this re-reading of the old poem is in keeping with what we know of the Late Bronze Age Levant from the Amarna archive, as well as from accounts of the Battle of Megiddo from the temple at Karknak, which shares its geography with the battle in Judges 4 and 5.

The Northern Kingdom of Israel: Questions of State Formation and Centralization

Erin Hall

Tel Aviv University, Tel Aviv, Israel

Although recent studies discuss state formation in the Northern Kingdom of Israel during the early Iron Age, questions regarding the mechanisms of statehood, particularly with regard to centralization, are not often treated. In this paper, I wish to review past approaches to state formation from both an anthropological and archaeological point of view. A definition and theoretical model for understanding centralization is offered, to answer the question as to whether the north was truly a centralized state prior to its fall ca. 721 B.C.E. Whether northern Israel was centralized has implications not only for understanding the nature of socio-politics in this region, but also for archaeological and biblical studies research on cult centralization in the north and south.

Social Dynamics and the Negotiation of Power in Late Iron Age Edom

Andrew J. Danielson

University of California, Los Angeles, Los Angeles, CA, USA

Substantial archaeological research in recent decades has focused on the region of Edom in the southern Levant. These studies have demonstrated intensified periods of activity in the lowland Arabah region early in the Iron Age, and activity focused on the highlands of southern Transjordan during the later Iron Age. The changes in geographic locations of activity are accompanied by significant shifts in social and political organization as reflected in increased sedentary behavior, and in economic activity where the focus on copper production decreases as long-distance trade activity increases. Through an analysis of these social, political, and economic shifts, this paper assembles recent research to theorize toward the ways in which power and authority were constituted within the late Iron Age Kingdom of Edom. In particular, this work highlights a network approach to understanding Edom, in which the city of Busayra holds a central position, arguing for the significance of trade activity in relation to political economy and Edom's influence transregionally. Likewise, the role of ideology as a centralizing form of social cohesion is analyzed.

Stop – Border's Ahead!: Political and Cultural borders in Iron Age Judah

Itzick Shai¹, Aharon Tavger^{1,2}

¹Ariel University, Israel. ²Tel Aviv University, Israel

The political boundaries of the kingdom of Judah are well attested in biblical literature and in historical scholarship. While it is still not clear who was the entity that bordered Judah in the south, the northern and western borders are much more familiar. The Israelite kingdom was located to the north and the Philistines bordered Judah to its west.

This paper seeks to study the nature of these two borders with an archaeological perspective. Recent archaeological works that have been conducted in the last decade at the two sides of these two

borders, allows us to examine the different natures of the material culture. Sites on the western border (on both sides) allow us to gain a better understanding of the people who lived in this region. The northern border of Judah is less distinguished, while many common material culture objects are existent on both sides of the political border. A thorough study of these borders in a *long durée* perspective indicate on the one hand that not all the political borders served as cultural borders, and on the other hand that cultural influences of Judah on its neighbors has occurred prior to the political changes in the region, rather than following them, as has been commonly assumed.

Between Identity and Imaginary: Maps, Ethnicity, and Assyro-Babylonian Worldviews

Nathanael Shelley

Columbia University, New York, NY, USA

The creation of ethnic maps describing ancient populations is a fraught and challenging task, and while its risks and problems are known, their almost ubiquitous appearance in textbooks of all levels demonstrates the utility and importance of such diagrams. In the last decade, Assyriologists have made significant improvements to our awareness of Assyro-Babylonian geographic worldviews (e.g. Michalowski 2010, Highcock 2018, Delnero 2018). These contributions, especially relating to the conception of space and relative distance, encourage new and improved ways to approach the geographic mapping of ancient populations. This paper incorporates these ideas with a social scientific identity-alterity matrix to offer suggested techniques and an alternative way of presenting more accurate ethnic maps. It is a follow-up to my 2019 paper on the tolerance for errors in recent ethnic maps and seeks to provide solutions to the problems inciting such mistakes.

SESSION: History of Archaeology II

Kevin McGeough | University of Lethbridge

The Mesha Stele and the Beginnings of an Industry of Forged Inscriptions in Palestine

Michael Press

University of Agder, Kristiansand, Norway

The importance of the Mesha Stele in the development of Northwest Semitic epigraphy cannot be overstated. It was the first monumental inscription found in the southern Levant and its influence was immediate and enormous. While scholars are generally familiar with the story of its discovery, destruction, and restoration, however, the typical narrative is a narrow one. This paper looks to broaden our understanding of the stele by putting its saga in a more proper historical context. In particular, I will focus on the role, largely forgotten today, of the stele in spurring the large-scale production of epigraphic forgeries, including but not limited to the infamous Moabite pottery of Moses Shapira. Before 1870 forgeries in Palestine had been largely confined to coins, the main artifact trafficked at the time; now there was demand, and a model, for something more monumental, and forgers rose to supply it. The paper will survey some of these forgeries, the methods and motives of the forgers, and how scholars both revealed these forgeries and inspired them in the first place.

Work Unfinished: The Sun-Temple of Afghanistan's Khair Khaneh Ann W. Norton

Providence College, Providence, RI, USA

French archaeologists Marie and Joseph Hackin contributed immensely to the knowledge of Afghanistan's cultural history. In the early 1930s they fully documented Bamiyan's two colossal Buddhas, tragically lost in 2001. In the late 1930s they discovered the famous treasures at Begram, miraculously saved before the Kabul Museum was bombed and looted in the 1990s. But between these two well-known projects fell another discovery, generally overlooked. In 1933, the Hackins found and excavated the extensive remains of a large pre-Islamic sun-temple at Khair Khaneh, not far from Kabul. Its importance in relation to art, religion, and life along the southern Silk Road must not be forgotten. The Hackins were assisted by architect Jean Carl, whose photographs and reconstruction drawings added lasting value to the excavation report. All three of these French professionals died in February, 1941, victims of World War II, whose work remained unfinished.

Much more can be learned concerning Khair Khaneh. The Hackins' important work, only half completed, must continue to be studied and documented. This pre-Islamic site and its artifacts are vital elements of Afghanistan's cultural heritage. Clearing, protecting, and further investigating Khair Khaneh needs timely consideration.

The "Strong-Built" (Prefabricated) Walls of Troy: The Living Quarters of the Cincinnati Troy Expedition

Jeffrey L. Kramer

University of Cincinnati, Cincinnati, OH, USA

Carl W. Blegen, field director of the University of Cincinnati Expedition to the Troad from 1932-1938, and his crew faced a common issue among excavations, both old and new—housing for the team. With no accommodations available near the site, a plan to build a permanent structure—the course that other contemporary large-scale excavations took—proved virtually impossible for a number of reasons. The team then struck upon a unique solution—a portable, prefabricated house. Designed by the architect W. Stuart Thompson, the house was built by the E. F. Hodgson Company in the United States and then shipped to the Turkish port at Çanakkale. Camels and ox-drawn wagons transported the house components to the site where it was assembled.

In this paper, I present the evolution of this crucial feature of the excavation—utilizing a wide array of archival material, which includes not only correspondence but architectural plans and the final blueprints, all of which survive. Moreover, numerous photographs of the house and the surrounding buildings—during their construction and demolition—exist, and we can witness the actual assembly of the house via a brief film clip recorded by William T. Semple.

Modernizing the Land, Exploring the Past: A Comparative Examination of 19th-Century Archaeological Practice in Western Anatolia and Southern Mesopotamia

Elvan Cobb

Hong Kong Baptist University, Hong Kong, Hong Kong

The late Ottoman modernization efforts led to the introduction of new technologies such as railroads, steamboats, and highly bureaucratic processes - developments tightly intertwined with contemporary archaeological exploration of the Ottoman Middle East. Modernization not only acted as a catalyst for new archaeological fieldwork, for example by making sites more accessible

along railways, but the modernization of the region also directly impacted the way archaeology was practiced here. The very idea of a scientific approach to archaeological excavation and recording often reflected the knowledge and skills of the engineers who came to the region to work on modernization projects. The new developments also impacted, of course, multiple publics - from the Ottoman subjects to the emergent tourists - all of whom also interacted with archaeological sites and knowledge. Two regions in particular were affected by modernization projects - western Anatolia with its early railroads and southern Mesopotamia with its steamboats. This presentation explores the nexus of modernization and archaeology in the Ottoman Middle East through a comparative perspective. Utilizing a range of sources, from archaeological reports and tourist guidebooks to correspondence generated by the expanding Ottoman bureaucracy, this paper will also reveal the multiplicity of experiences associated with the archaeological exploration of these lands.

Invisible Excavators: The Quftis of Megiddo, 1925-39

Eric H. Cline

The George Washington University, Washington, DC, USA

From their very first day in mid-September 1925 to their last day in May 1939, the staff members from the Oriental Institute at the University of Chicago who oversaw the excavations at Megiddo relied upon skilled Egyptian workmen (*Quftis*) as well as local laborers. However, while the excavation depended heavily on these men, little direct information about them is available; only a few are mentioned in the preliminary and final publications produced by the project. We are at the mercy of what can be found in various archival sources now, particularly at the Oriental Institute and within the British Mandate papers of the Israel Antiquities Authority, as well as personal items now belonging to the descendants of the original Chicago team members. Data must be gleaned from, for example, requests for half-price railway vouchers for travel between Kantara and Haifa for specific Egyptian workmen once or twice each season; black and white photographs; and occasional mentions in budgets or in passing within letters sent back and forth between Megiddo and Chicago. Still, from this fragmentary information, we can piece together at least a partial picture of these unsung members of the expedition, some of whom were present at Megiddo for more seasons than the ever-rotating members of the Chicago staff themselves.

SESSION: Archaeology of Islamic Society I

Ian W. N. Jones | University of California, San Diego

Tasha Vorderstrasse | University of Chicago

Transforming the Landscape: Settlements and Society in Central Oman from the 17th to the 20th Century

Irini Biezeveld, Stephanie Döppler

Goethe University, Frankfurt am Main, Germany

The Late Islamic landscape of Central Oman is characterized by the foundation of important Islamic centres, some of which are still important towns today. Especially under Ya'ariba rule (1624 - 1742), great investments were made in the economy. Oman became a major maritime power, while in the interior of the country, agricultural produce was greatly expanded through the construction of irrigation systems, urban growth, and the building of forts and castles. Our aim is to study how these transformations affected the rural settlement in the Al-Mudhaybi region of Central Oman, as well as their impact on the social landscape. Based on archaeological surveys conducted in 2020 and 2021, we will present the overall pattern of Late Islamic

settlements within the research area, along with case studies of the villages of Safrat al-Khashbah, Washhi, and al-Buwaytin, in more detail. The archaeological finds that were collected during the surveys provide us with insight into the Islamic society of Central Oman. Ceramics from the area are mainly local wares, but imported wares from the Gulf region and the Far East and Europe indicate regional and international interactions with the wider (Islamic) world. The ceramic chronology of this time period and region will thus be refined, as the result of several trenches will be discussed. Lastly, there is evidence for metal objects and slag concentrations at the site of Washhi, indicating that metal production likely played an important role in the Late Islamic society of Central Oman.

Result of Epigraphic Survey from Petra: Graffiti from Wu'ayra Crusader Castle and the Hermitage

Julia Maczuga

University of Bonn, Bonn, Germany

The aim of this paper is to present the results of the epigraphic survey conducted in the area of Petra in November 2018. During the works of the Italian mission from the University of Florence, the graffiti located on the altar slab found in the Church of Wuayra, which belongs to al-Wuayra Crusader Castle, were recorded and deciphered. It seems that inscriptions were executed by several individuals. The content of the inscriptions indicates that they were executed by Muslims. One of the inscriptions is a citation of a Quranic sura 61:13, "*help from Allah and a victory is nearby.*" The research seeks to find sura 61:13 in other contexts (coins, textile, other graffiti) in order to better understand its social meaning. The preliminary investigation has shown that the sura was used to praise military success. The other graffiti starts with the Basmala (In the name of God, the Most Gracious, the Most Merciful), which is a common phrase both for Quran and other Muslim inscriptions. The paleographic analysis dated the inscription to Ayyubid-Mamluk period.

Additionally, geometrical figures appear on the altar slab from Wuayra, which turned out to be Bedouin signs called *wusum*. The Bedouin signs were used in order to indicate the ownership over animals or to mark the territory. Based on the *wusum*, which Arab tribes inhabited or visited Wuayra after the abandonment of the Crusaders can be determined. The study of the graffiti can aid the reconstruction of the history of the site after the abandonment of the Crusaders.

Ceramic Material Culture as a Proxy for Political Change: Landscape Transformations between the Late Sasanian and the Early Islamic Period in the Upper Tigris Region of Iraq, a Preliminary Assessment of the Results of the Eastern Ĥabur Archaeological Survey

Mustafa Ahmad, Paola Sconzo

University of Tübingen, Tübingen, Baden-Württemberg, Germany

By the beginning of the 7th century A.D., Islam arose as a religious and socio-political force, within a few decades expanding to engulf the whole of the Middle East and much of North Africa and Central Asia. The consequences affected local societies on multiple levels. The impact of the conquest on such a vast area was, however, not uniform, with significant regional differences in both the timing and the nature of this transformation, especially during the initial phase. Many issues relating to the changes that came about in cities, landscapes and material culture remain open to discussion. This holds true especially for peripheral regions that have been under-explored archaeologically

and for which the potential from written sources remains to be methodically exploited. Northern Iraq is one such region.

This paper aims to explore some of the preliminary results of the Eastern Ĥabur Archaeological Survey (EHAS), a large-scale reconnaissance project recently completed by a team from the University of Tübingen, which surveyed an extensive area east of the Tigris in the northernmost part of Iraqi Kurdistan. Settlement dynamics, land use, infrastructure investments and material culture transformations are here discussed for the period of transition from the Late Sasanian period to the Islamic era (600-800 A.D.). These interpretations are then considered within the context of results from neighboring regional studies.

The Production of Middle Islamic Ceramics in Western Asia: A Chaîne Opératoire Approach

Kyra E. Kaercher

University of Cambridge, Cambridge, United Kingdom

This paper addresses the questions surrounding pottery production and regionalization during the Middle Islamic period in Western Asia. The creation of ceramics is a learned technology, and as such embeds social, political, ideological, and economic factors. Ceramics are also created for a specific population, and hence potters produce ceramics that are socially and stylistically acceptable to the wider population. By using the chaîne opératoire we can understand the production methods of these various ceramics. The Middle Islamic period (broadly defined as 1000 – 1500 C.E.), was a time of great change in the political, social, ideological, and economic spheres throughout Western Asia.

Five regions have been selected for this study (northern and southern Iraq, north-western, central, and eastern Iran) and ceramic corpuses from these areas (EPAS Survey, Nippur, Hasanlu, Rayy, and Firuzabad) were studied. Samples were selected from each of these corpuses, and analyzed via portable X-Ray Fluorescence, Fourier-Transformation Infrared Spectroscopy, and Thin Section Petrography. Each of these techniques elucidates parts of the chaîne opératoire including clay selection and preparation, surface treatment and decoration, and firing. By comparing the chaînes opératoires of pottery production on the sites and between the various regions, we can better understand the production traditions in these areas of the Islamic World. This in turn can elucidate various social norms, connections, and changes between these regions during the Middle Islamic period.

SESSION: The True North to the Near East: The Contributions of ASOR in Canada (CASOR) to the Study of the Ancient Near East I

Craig A. Harvey | University of Michigan

Marica Cassis | University of Calgary

Studies of Ancient Mesopotamia in Toronto: The Vibrant 1970s and 80s

Lisa Cooper

University of British Columbia, Vancouver, British Columbia, Canada

No consideration of the valuable contribution of Canadian scholarship to the study of the ancient Near East would be complete without acknowledging the lively decades of the 1970s and 80s, when Toronto was a ferment of interest and research in the field of ancient Greater Mesopotamia. Driving the discipline of Assyriology was A.K. Grayson (University of Toronto), whose ambitious objective was to publish royal inscriptions from all periods of Mesopotamian history. On the archaeological side, field researchers such as T. Cuyler Young

Jr. (Royal Ontario Museum) were shedding new light on the antiquity of important but still-largely unexplored regions like western Iran. While such individuals had been firmly trained in older, more traditional methods of scholarship in their respective disciplines, they were also receptive to new perspectives and employed fresh approaches that greatly advanced the understanding of the peoples, dynasties and material remains of Mesopotamia's rich past. The collaborative spirit and healthy synergy that existed among historians, philologists and archaeologists in Toronto at this time also contributed to a multi-layered, dynamic output of knowledge. This paper will highlight the significant contribution of Toronto scholars some 40-50 years on, and demonstrate its lasting impact to future studies of ancient Greater Mesopotamia.

The Role of the Fort at Haurra (Humayma, Jordan) in Trajan's Occupation of the Nabataean Kingdom

John P. Oleson¹, M. Barbara Reeves²

¹University of Victoria, Victoria, BC, Canada. ²Queen's University, Kingston, ON, Canada

The results of 17 field campaigns directed by two Canadian archaeologists between 1986 and 2014 (13 by J.P. Oleson and four by M.B. Reeves) have made Humayma one of the best-known sites in Southern Jordan. It is argued that the desert site was chosen carefully by Trajan's advisors soon after the conquest of the Nabataean kingdom in AD 106 as a military node for the establishment of Roman rule in the southern part of the Provincia Arabia. Petra, the cultural capital of the region, was only 43km to the north, the Red Sea port of Aila (modern Aqaba) only 57km to the south. Roman forces were present at both locations in the second century, but no forts are documented. The Haurra fort is the second largest principate fort known in the province after that at the provincial capital Bostra, 310km to the north. Haurra, with its significant water supplies and a chokehold on Trajan's North-South road, the Via Nova, probably served as a center for control of the southern region. It was also a transfer point for Roman military forces destined for nearby Aila, the terminus of the Via Nova, and for distant Hegra (Mada'in Saleh) 440 km to the southeast, on the southern border of the province. French excavations at Hegra have revealed a Roman fort with projecting towers, paralleled in the region at this time only at Haurra; both forts housed units of the *Legio III Cyrenaica*, detached from their headquarters at Bostra.

CASOR's Legacy in the Caucasus: A Guinness World Record

Natalia M. Handziuk

University of Toronto, Toronto, Ontario, Canada

The Gadachrili Gora Regional Archaeological Project Expedition (GRAPE) is a joint Canadian-Georgian effort that was initiated as part of the broader "Research and Popularization of Georgian Grape and Wine Culture," project sponsored by the Republic of Georgia. Over the course of our four excavation seasons GRAPE has secured evidence for the world's earliest wine (ca. 6,000-5,800 B.C.E.), recovered at Shulaveri Gora (Georgia). GRAPE's research efforts reach beyond the origins of wine as we aim to build an understanding of Neolithic and Chalcolithic communities in the southern Caucasus. Our ongoing excavation and survey efforts explore prehistory in the Kvermo Kartli Region. Gadachrili Gora, the most intensively excavated site, will be developed into an archaeological heritage park. The site will showcase the centuries of occupation by the "Shulaveri Shomu Culture" and detail Georgia's rich history of wine production. Strong Canadian –

Georgian ties are integral to our project. Our successful ongoing relationships are due in part to support and interest of the local municipal government (Marneuli), as well as ongoing research partnerships between Georgian and Canadian archaeologists.

SUNDAY, DECEMBER 12, 2021

1:00–2:00pm (EST)

SESSION: Environmental Archaeology of the Ancient Near East

Melissa Rosenzweig | Northwestern University

Madelynn von Baeyer | University of Connecticut

Byzantine Plants: An Archaeobotanical Study of the Agricultural Economy of Caesarea Maritima, Israel

Jennifer Ramsay¹, Kathleen Forste²

¹SUNY Brockport, Brockport, NY, USA. ²Boston University, Boston, MA, USA

Abstract

Caesarea Maritima, founded in the 1st century B.C.E. by Herod the Great, was the capital of Greco-Roman Palestine largely due to its major port, which insured Caesarea's economic importance to the region. In the Byzantine period, the city continued to prosper, with a population numbering at least 30,000. This paper presents an analysis of 95 sediment samples, totaling 971.5 liters that were recovered from a variety of contexts during the Combined Caesarea Excavation Project to try to gain a better understanding of the importance of the agricultural economy of Caesarea during the Byzantine period. Once processed, these samples contained 14,976 botanical specimens representing 95 taxa. The most common species—with the highest density per kiloliter—are not surprisingly major economic crops of the region (such as wheat, barley, olive, grape, fig, stone pine, lentil, chickpea, Celtic bean, and bitter vetch), clearly supporting their importance. However, understanding whether taxa were being grown locally or imported is difficult to determine. For example, evidence of the type of agricultural economy can be seen in the ratio of almost 2:1 grain to chaff, as well as high densities of agricultural weeds. These indicators support both local production and importation of cereal crops at Caesarea, likely to support the city's population and for export to the wider region. Other sources of evidence we examine are tree and vine crops, weeds, and ancient literary sources—all of which add to our understanding of what agricultural commodities were being exported from Caesarea and the surrounding region.

Environmental Change and Human Activity in the Carmel Coastal Plain from the Middle Bronze Age to the Roman Period: New Insights from a Multi-Core Sedimentary Sequence at Tel Mevorakh, Israel

Jackson T. Reece¹, Gilad Shtienberg¹, Assaf Yasur-Landau², Dorit Sivan², Thomas E. Levy¹

¹University of California, San Diego, La Jolla, CA, USA. ²University of Haifa, Haifa, Israel

The Carmel coastal plain of central Israel contains a deep record of human-environment interaction, particularly around tel sites that dot the region. The multi-period site of Tel Mevorakh forms a mound at the southern end of this coastal plain – a peninsula of stable ground on the border of the ancient Kebara wetland. Over the last 4000 years, the extent and saturation of the Kebara swamps has fluctuated, likely due to changes in the regional climate that influenced precipitation and the formation and movement of adjacent coastal dune fields. This paper will offer a detailed stratigraphic study of four sediment cores extracted near Tel Mevorakh in 2020 and correlate them with existing archaeological data using ¹⁴C and optical stimulated luminescence dating techniques. The cores consist primarily of cyclical units of dark grey organic silty clay and medium sized coastal sand, indicating a

semi-regular expansion and constriction of the wetland. Preliminary analysis has revealed anthropogenic material (ceramic fragments, charcoal, flint, and organic material) in multiple sand facies, separated and bounded by thick units of the dark grey organic silty clay. These data will be used to test the hypothesis that the depositional cycles correlate to changes in human activity at the site, using absolute dating to identify the cultural material and better understand the interplay between humans and the encroaching wetlands. This contributes to the ongoing UC San Diego – University of Haifa research project investigating cycles of change within the broader Carmel coastal plain and its effect on human activity over time.

Tracing Olive Oil in Ancient Cyprus and Beyond Using Organic Residue Analysis: A Reevaluation

Rebecca Gerdes¹, Jillian Goldfarb¹, Alison South², Joe Regenstein¹, Sturt Manning¹

¹Cornell University, Ithaca, NY, USA. ²Independent scholar, Cyprus

Olive oil has been one of the most important products in the eastern Mediterranean economy and socio-politics since at least the Late Bronze Age. The presence of olive oil is primarily inferred from indirect evidence, such as olive pits, stone presses, ceramic storage and transport vessels, or texts. Organic residues preserved in pottery offer a direct means of reconstructing the contents and uses of pottery in the past. A preliminary organic residue analysis study of *pithos* storage vessels hypothesizing olive oil storage at a large facility at the Late Bronze Age urban site of Kalavassos-Ayios Dhimitrios, Cyprus, has been heavily cited (South 1992: 141-46). However, developments in organic residue analysis have shown that olive oil is difficult to securely differentiate from other fats and oils because its primary lipid molecules occur widely in the natural world and also degrade over time. This paper reevaluates whether olive oil can be identified using organic residues in the Mediterranean. Taking Kalavassos-Ayios Dhimitrios as a case study and drawing from laboratory-based degradation experiments, a review of current literature, and assemblage theory, we argue that organic residue analysis in the Mediterranean needs to account for the myriad processes that shape the assemblage of molecules preserved in a pot and can complicate interpretation, including environmental effects. We propose that the way forward for studying olive oil requires integrating archaeological, textual, and biomolecular evidence with careful attention to assemblages.

South, A. 1992. Kalavassos-Ayios Dhimitrios 1991. *Reports of the Department of Antiquities of Cyprus*, 1992: 133-46.

Animals at the Periphery: The Zooarchaeology of Politics and Subsistence at Iron Age Zincirli Höyük

Laurel A. Poolman

Johns Hopkins University, Baltimore, MD, USA

Zooarchaeology, in its investigation of the practices of animal-based subsistence, has a powerful ability to explore the ways that political practice was intermingled with the natural environment in the ancient Near East. During the Iron Age, the Neo-Assyrian Empire had to contend with preexisting landscapes, ecological communities, and their attendant animal-based practices as it expanded its influence across Southern Anatolia. The site of Zincirli Höyük, ancient Sam'al, provides a unique case study in these imperial dynamics as the site transformed from a royal Aramean capital to a provincial center of the growing Neo-Assyrian Empire during the course of the Iron II and Iron III periods (c. 850-600 BCE). By looking at a comparison of Iron Age

zooarchaeological material from the site's Southern Citadel (Area 3) and Northern Lower Town (Areas 5 & 6), we can investigate how practices of animal hunting, husbandry, and product distribution shifted alongside increasing Assyrian influence and in conversation with the Empire's extensive environmental projects. This paper will present analyses of the rich Iron Age II/III faunal assemblages from these three areas, attesting to both stability and change in the strategies of animal-based subsistence under the complex influence of Assyrian imperialism. The discussion of these findings will then emphasize how animal husbandry and utilization were politically potent forces in the complex and evolving relationship between peripheral Sam'al and the Neo-Assyrian Empire.

SESSION: Contemporary Identities and Self-Reflective Approaches in the Study of Ancient Western Asia

Melissa Rosenzweig | Northwestern University
Madelynn von Baeyer } | University of Connecticut

Discussant

Helen Malko

American Center of Research in Jordan, Amman, Jordan

Helen Malko will serve as the respondent for papers in the virtual session, Contemporary Identities and Self-Reflective Approaches in the Study of Ancient Western Asia.

From "Near East" to "Western Asia:" A Brief History of Archaeology and Colonialism

Erhan Tamur

Columbia University, New York, NY, USA. The Morgan Library & Museum, New York, NY, USA

The history of the modern discipline of Western Asian archaeology is deeply intertwined with that of colonialism. The earliest large-scale excavations in the region were carried out in the mid-nineteenth century by European (and later, American) diplomats, military officers, engineers, and missionaries. This colonialist enterprise was accompanied by a system of classification, giving an order to the "unknown" and framing the related production of scientific knowledge. This is when the terms "Near East" and "Middle East" were introduced, partly replacing the older term "Orient," a vague designation covering Asia and northern Africa. The new terms, denoting the proximity of this region to the Western centers, were first used interchangeably. In the course of the twentieth century, however, "Near East" came to be adopted primarily by scholars working on the pre-Islamic past of this region (pre-seventh century A.D.), while "Middle East" gained popular traction to connote its later history, up to the present day. This paper will critically engage with the history of this temporal and terminological incision into the past of the region and argue for breaking with colonial frames of reference, which are as resilient as ever both in the West and the East.

Addressing the State of Dissociative Identities of Post-Colonial Syrian Archaeology

Lubna Omar

Binghamton University, Binghamton, NY, USA

The destruction of Cultural Heritage sites in Syria is a crucial factor in rewriting the region's history through archaeological research. In comparison, national archaeologists' contributions to the discipline seem obscured and merely represented academically or in the media. The prevailing situation is a natural consequence since Syrian Archaeologists struggle to maintain an influential role in investigating

and preserving archaeological sites in their own country. Moreover, after ten years of the Syrian conflict, national archaeological practices' shaky foundation is in a state of dismay reflected in both identity and academic representations.

This presentation aims to assess what national archaeologists managed to accomplish despite their scattered experiences. Besides, it seeks to discuss how academic affiliations influence Syrian archaeologists' cultural identity and to which extent they shaped their work.

The attempt to address these issues would initiate a dialogue on how to bridge the gap that separates Syrian archaeologists from their western peers regarding archaeological practices, school of thought, and the value of published work. Ultimately, the focus on cultural identities through archaeological principles and practices might offer an optimistic vision of the future with more inclusive Syrian Archaeology that would even include narratives and knowledge from beyond the geopolitical borders of what used to be known as Syria.

Storytelling Beyond Displacement: Narratio & Youth Cultural Production

Ahmed M. Badr

Narratio, USA. Harvard University, USA

How do displaced young people engage with, understand, and define their relationship to museum spaces and the objects they hold? How can these processes influence and contribute to scholarly discussions around object curation and community-museum relations? Narratio is a global organization and online platform working to answer these questions by activating, supporting, and highlighting the creative expression of displaced young people through publishing, partnerships, workshops, and fellowships. The Narratio Fellowship's first cohort, made up of 11 resettled refugee youth and children of immigrants, each chose an object from the Met's Ancient Near East Galleries and reimagined its label as a poem, taking into account their own personal memories, histories, and identities. After the poems were drafted, the Fellows held a performance at the Met's Royal Assyrian Court—an intertwined union of objects, spaces, and people, all working together to reclaim the power tragedy once held over them. In this presentation I will outline and trace Narratio's Storytelling Method, which challenges one-dimensional and reductive representations of the "refugee experience" by actively facilitating spaces and programs that invite displaced young people to tell their own stories, on their own terms, vis-a-vis local and national showcases of poetry, photography, film, and art. My presentation will also examine how displaced young people, resettled or otherwise, engage with and connect others to their cultural production, especially as they intersect and collaborate with museums, diplomatic, academic and other institutions of influence.

SESSION: Archaeology of the Near East: Bronze and Iron Ages

Pearce Paul Creasman | ACOR; University of Arizona

J. P. Dessel | University of Tennessee

The Last Four Room House in Israel: Stratum X at Tel Shiqmona in Context

Golan Shalvi, Ayelet Gilboa

University of Haifa, Haifa, Israel

Tel Shiqmona is a small site situated on Israel's Carmel Coast, today on the southern outskirts of the city of Haifa. This presentation is part of an ongoing stratigraphic, contextual, and artifactual analysis of the Bronze and Iron Age occupations at the site—excavated by Joseph

Elgavish in the 1960's and 1970's. We present here one of the Late Iron Age strata at the site—Stratum X (Elgavish's Stratum XI)—which we claim is comprised of only one building, Shiqmona's well known Four Room House (one of the best-preserved structures of this type ever uncovered). We suggest that the building was constructed ca. the mid-8th century B.C.E. (not in the 9th century, as usually asserted) and that it functioned as an oil-production facility as part of a general intensification of this industry in the Kingdom of Israel. However, unlike most economic apparatuses in the Kingdom, we argue—by combining ceramic and historical considerations—that the oil-producing center at Tel Shiqmona was destroyed and ceased to function during Sennacherib's campaign. Thus, it continued to operate as the last Four Room House in Israel, for a few decades after the Assyrian conquest, and serves as a single archaeological testimony for identifying a Sennacherib destruction in northern Israel.

The Middle and Late Bronze Age 'Palace' Sequence at Pella in Jordan: The Radiocarbon Evidence

Lyndelle Webster¹, Holly Winter², Stephen Bourke²

¹Austrian Academy of Sciences, Vienna, Austria. ²University of Sydney, Sydney, NSW, Australia

Recent excavations on the south/central section of the main mound of Pella (Khirbet Fahl) have revealed a major civic complex, rebuilt many times over the course of the Middle and Late Bronze Ages. Constructed immediately west of the imposing Migdol Temple of Middle Bronze-Late Bronze date, the 'Palace' Civic Complex sequence includes several distinct architectural building phases, with the first constructed in the Middle Bronze I, and the last in the Late Bronze II. Major changes in function are evident across the Middle Bronze-Late Bronze life of the complex.

This paper's central concern lies with the occupational sequence and changing use of space west of the temple, documented in the radiocarbon data and interpreted via a new Bayesian model. While we will focus primarily on the 'Palatial' architectural sequence, we will also review how the 'Palace' sequence compares with the nearby Migdol Temple's occupational phasing. Thanks to a separate dataset in the Temple precinct, correlation of the two architectural complexes can be considered via direct comparison of radiocarbon data, independent of the ceramic/historical evidence.

Implications for the history of Pella, and for the wider region will then be explored.

Destruction and Resilience: A Quantitative Approach to Aramean and Assyrian Campaigns in North-Central Israel

Sheila Gyllenberg

Israel College of the Bible, Netanya, Israel

In the 9th and 8th centuries B.C.E. both the Arameans and the Assyrians campaigned throughout the southern Levant. These incursions were often recorded in biblical or extrabiblical texts, or both. The warfare also left a trail of destruction and abandonment in the archaeological record. Focusing on north-central Israel, this paper will present a quantitative analysis of the patterns of settlement destruction/abandonment in the various topographical sub-regions, and discuss the aftermath of the campaigns: settlement abandonment and reduction, or resilience and renewal. Reasons for differences in the long-term effects on settlement trends will be discussed in light of our sources for Assyrian, Aramean, and Israelite history and administration.

Shrewd as Serpents: The Variable Nature of Snake Imagery on Bronze and Iron Age Ceramics of the Southern Levant

Samantha L. Suppes

University of Chicago, Chicago, IL, USA

At the 2019 ASOR Annual Meeting, I presented a paper that explored the contexts and functions of serpent-decorated ceramics from the Bronze and Iron Age levels of Beth She'an. Since then, further research has shown that within the Southern Levant's Bronze and Iron Age ceramic repertoire, there were only several types of objects which featured snake imagery, and they completely disappeared from the region at the dawn of the Iron Age II. By analyzing these objects' decoration styles, forms, contexts, and clustering on the landscape, this presentation will: show that this imagery had several functions connected to deity worship, protection, and medicine; examine their role in exchange networks; and present theories regarding their disappearance.

Achaemenid/Early Zoroastrian Influences on Phoenician Cultic Practices during the Persian Period

Meir Edrey

The Leon Recanati Institute for Maritime Studies, University of Haifa, Israel

It is commonly maintained that the official Achaemenid policy, enacted by Cyrus the Great, was to allow religious freedom to the various peoples under their hegemony. Cyrus specifically was renowned for reinstating deportees to their homelands, permitting them to carry back the stolen treasures of their sacked temples, and reestablish their cults. Yet, when examining the cult practices of the Phoenicians in the eastern Mediterranean during the Persian period, several dramatic changes seem to have occurred, most of which remain unexplained. Some of these changes are consistent with principals of the Zoroastrian religion, the official religion of the Achaemenids from the time of Darius I, as they appear in their late holy scriptures. Although written sources suggest that in certain instances the Achaemenid court did in fact attempt to interfere with the cultic practices of other nations, it seems highly unlikely that the Achaemenids forced their system of beliefs on the Phoenicians, with whom they maintained good relations throughout most of the Persian period. However, it is more than possible that as part of those warm relations, certain Zoroastrian ideas sipped into Phoenician society bringing about changes to their cultic practices.

SESSION: Archaeology of Islamic Society II

Ian W. N. Jones | University of California, San Diego

Tasha Vorderstrasse | University of Chicago

Towards a Better Understanding of the Chronological and Geographical Distribution Patterns of Plain and Painted Handmade Wares in Bilād al-Shām

Piotr Rafał Makowski

Jagiellonian University

Though it has now been more than 90 years since the phenomenon of plain and painted handmade wares first became apparent to field archaeologists working at historical sites on the territory of the Bilād al-Shām, so far relatively little effort has been made to explain it sufficiently. While the general scientific narration concerning their rise and spread is still very inconsistent and full of interpretative misconceptions, the primary goal of this paper is to organize the overall discussion on the following subject. Based on the most recent

data, this paper aims also to provide a reassessment of common assumptions concerning their chronology and geographical distribution.

Initially, the rise of both plain and painted handmade wares was not a uniform process but rather a series of regional 'pulses' and 'waves' spreading from various places. Furthermore, it certainly did not cover the whole area of the Bilād al-Shām but appeared in various separate and often completely unrelated areas. To some extent, most of them seem to represent different sets of characteristics, suggesting that the circumstances surrounding the emergence of the 'new' pottery tradition were motivated by different factors of varying intensity.

For nearly the entire span of the Islamic period, plain and painted handmade wares were immutable components of cultural and communal identity in the Bilād al-Shām. It follows, therefore, that their uninterrupted utilization can be explained not only as a response to the challenging environmental, political, and economic circumstances but also as a crucial element of cultural conservatism.

The Late Petra Project: Settlement in Petra during the Islamic and Crusader Periods

Micaela Sinibaldi

Cardiff University, Cardiff, United Kingdom

The Late Petra Project aims at reconstructing the history of the Petra valley and broader region in their post-urban phase. The project has demonstrated that, contrary to what has been commonly assumed on the basis of a long-held notion, there were no significant chronological gaps in the occupation of Petra after the Byzantine period, and that therefore the region and the valley were never completely abandoned.

At the basis of such results is fieldwork in cooperation with several international archaeological teams working in Petra, and a methodology of work spanning from a micro to a macro scale of analysis: a study of ceramics from both excavations and surveys in combination with a study of Buildings Archaeology and of the documentary sources, in addition to a detailed study of the material culture at the village of Baydha. The Islamic Baydha Project, a key component of the Late Petra Project, investigates a village consisting of the most substantial available evidence of the Islamic period in the Petra region, and including the only two mosques ever excavated in the area. Of specific significance for the results obtained was the study of ceramics from stratified contexts, the identification of the most chronologically diagnostic aspects for handmade pottery in the region and the subsequent creation of a local ceramic chronology for this specific ceramic group. This method has resulted in reconstructing a new image of Petra in its later historical phases.

From Raqqa with Love: Ottoman Archaeological Explorations in Syria

Filiz Tütüncü Çağlar

Forum Transregional Studies, Berlin, Germany. Museum of Islamic Art, Berlin, Germany. Free University, Berlin, Germany

The Ottoman Imperial Museum commissioned two excavation campaigns in Raqqa, Syria, in the first decade of the 20th century. In line with the conventions of the time, both campaigns were primarily aimed at protecting the site and its remains from illicit plundering. Each campaign lasted for approximately two months, at the end of which the museum retrieved a relatively large and eclectic collection of finds. This paper examines the Ottoman archaeological enterprises in Raqqa within a broader historical and disciplinary context to explore

how the Ottoman archaeologists engaged with archaeology in and out of the museum. Furthermore, drawing attention to the archaeological collection brought from Raqqa for the first time, the paper argues that such assemblages can further our knowledge of the history of excavations, collection practices, and knowledge-making processes in the late Ottoman Empire. Studied in the light of archival documents, these artifact collections offer rich insights into the Ottoman archaeologists' approaches to the Islamic material culture of the past, thus enabling us to situate these excavations within the history of archaeology in the Middle East. By demonstrating the potential of utilizing archaeological and art historical sources in complementing text-based histories, the paper calls for a methodological shift in the field for a better understanding of the practice and conceptualization of archaeology in the late Ottoman period and aims to open new avenues of investigation in the history of archaeology.

SESSION: The True North to the Near East: The Contributions of ASOR in Canada (CASOR) to the Study of the Ancient Near East II

Craig A. Harvey | University of Michigan

Marica Cassis | University of Calgary

Pottery Production and Human Interaction with the Landscape: Evidence from the Late Iron Age I Site of Khirbat al-Mudayna al-'Aliya, Jordan

Stanley Klassen¹, Bruce Routledge²

¹University of Toronto, Toronto, ON, Canada. ²University of Liverpool, Liverpool, United Kingdom

Canadian archaeological projects have been instrumental in advancing our understanding of the history and archaeology of Jordan for decades. The Canadian led project at the site of Khirbat al-Mudayna al-'Aliya (KMA), located on the eastern edge of the Karak Plateau in west-central Jordan, is a primary example. Khirbat al-Mudayna al-'Aliya dates from the mid-11th to the early-10th century B.C.E., and is part of a concentration of Iron Age I agrarian settlements situated on the Wadi al-Mujib and its southern tributaries. This fortified agro-pastoral settlement is securely positioned on a promontory in a semi-arid zone overlooking the Wadi al-Mukhayris and the Wadi al-Nukhayla. Analyses of archaeological finds from the site emphasize the close interaction the inhabitants of Khirbat al-Mudayna al-'Aliya had with their local environment, particularly the lush riparian zone below the settlement. The combination of social and technological activities and their interaction with the surrounding landscape, clearly identifiable in the faunal and paleobotanical dataset, is also reflected in the production of pottery. We suggest that the interrelation of multiple quotidian tasks undertaken by the inhabitants of Khirbat al-Mudayna al-'Aliya is a reflection of the concept of 'taskscape'.

In this paper, we present the assessment of pottery production at Khirbat al-Mudayna al-'Aliya based on the results of archaeometric analyses which highlight the use of both local resources, as well as those further afield. Our holistic approach adds to the understanding of how Khirbat al-Mudayna al-'Aliya fits into, and interacts with, the larger settlement system of the Karak Plateau during the Iron I period.

Canadian Pioneers in Near Eastern Archaeology: CASOR and its Founders

Debra Foran

Wilfrid Laurier University, Waterloo, ON, Canada

The American Schools of Oriental Research in Canada (CASOR) was conceived by a small number of dedicated and influential scholars who

were intent on not only providing representation for all individual ASOR members living in Canada but, also to promote the study of the Ancient Near East in the True North. These individuals were intent on supporting ASOR programs in Canada and abroad, including its important overseas institutions.

As a way of celebrating the 30th anniversary of the incorporation of CASOR (the American Schools of Orientation Research in Canada), this paper will present a history of the organization from its inception to its most recent activities. In addition, a retrospective of the careers and contributions of its founding members will also be featured. Canadian scholars and institutions have been an integral part of ASOR's mission since its inception. This paper, and the session in which it will be presented, will hopefully highlight these contributions and raise CASOR's profile at the ASOR Annual Meeting and amongst the membership in general.

Northward from the Negev: The Movement and Exchange of Commodities into the Shephelah during the Early Bronze Age

Jeremy A. Beller¹, Haskel J. Greenfield², Mostafa Fayek², Aren Maeir³

¹Simon Fraser University, Burnaby, BC, Canada. ²University of Manitoba, Winnipeg, Manitoba, Canada. ³Bar-Ilan University, Tel Aviv, Israel

The nature of exchange among complex societies of the southern Levant has been investigated through several means, including faunal isotopes, distance decay models, and artifact provenance. Lithic artifacts, both chipped and ground stone, have been excellent indicators of interaction and commerce between communities of the Early Bronze Age. However, sandstone artifacts have gone understudied and their potential to provide similar insight has been underestimated. Our study presents the first attempt to identify the provenance of sandstone artifacts in the region. In this respect, a petrographic analysis of sandstone sources in the southern Levant and ground stone artifacts recovered from the Early Bronze Age III layers of Area E at Tell es-Safi/Gath, Israel was conducted. The artifacts exhibit the greatest mineralogical and lithostratigraphic consistency with sandstone beds from the Negev Desert. These results are similar to the suggested movement patterns of tabular scrapers, also found at Tell es-Safi/Gath, and sandstone artifacts at other Early Bronze Age sites. Consequently, the Early Bronze Age III occupants of Tell es-Safi/Gath were part of a long-distance exchange network that likely included resource extraction communities (possibly pastoral) operating within the Negev Desert.

SUNDAY, DECEMBER 12, 2021
2:30–4:30pm (EST)

WORKSHOP: ArtiBites – Approaches to Digitizing Seals and Tablets

Agnete Wisti Lassen | Yale University
Klaus Wagensonner | Yale University
Elizabeth Knott | Yale University

**Interoperability of the Cuneiform Digital Library Initiative
Catalogue**

Émilie Pagé-Perron

Wolfson College University of Oxford, United Kingdom

This paper discusses cuneiform artifacts metadata standards, formalization and sharing at the Cuneiform Digital Library Initiative (CDLI*). We will address both the formats and vocabularies employed to store data internally, the formats for data input, but emphasis will be placed on the export and linking of these data.

The CDLI has been offering FileMaker and comma separated value exports of the catalogue for some time but through research projects like the Machine Translation and Automated Analysis of Cuneiform languages (MTAAC), linked data formats and ontologies have been explored. As a result, the new Framework of the CDLI employs existing ontologies to share its metadata. The entities composing the basis of the metadata are now also part of a revised internal vocabulary, curated by CDLI staff and allied experts such as the CDLI Wiki team and the GLoW project team.

In this presentation, I will give an overview of this linked data, the ontologies and vocabularies used and the ways in which the data can be accessed, by humans and machines.

*CDLI is the largest database of cuneiform artifacts whose mission is the collection, preservation and dissemination of visual data, metadata, text and linguistic annotations concerning these artifacts.

**Producing Interactive Relightable Cuneiform Tablets for Study and
Online Publishing with MLR Methods**

Hendrik Hammeuw

Leuven University - Ancient History, Leuven, Belgium

Standard practice for digital archiving of photographic based imaging recommends data management workflows to safeguard an 'archival copy' for long-term preservation and a consultation copy. That gives a .tiff and .jpeg respectively; original raw files can be deleted. For multi-layered, interactive datasets, such as relightable files (i.e. Multi-Light Reflectance or MLR: .rti, .zun, .ptm, ...) the situation gets more complex. Original raw still-images are used to generate the relightable file (making archival and consultation copy the same); and the status of intermediate generated .tiffs, .jpegs or other files remains undefined.

Over the course of the last 15 years several thousands of cuneiform tablets and seals/sealings (in many different collections) have been imaged with various MLR technologies. The manner in which the original data is treated by various applied MLR processing algorithms, determines how accurate particular surface characteristics can be understood. Up till now, vast numbers of virtual artefacts have been processed into the PTM format, providing excellent interactive visual representations. However, it has been demonstrated ZUN and RTI variants deliver much better reconstructions of the local topography, crucial for (automated) sign/feature identification. This paper presents 1. a plea to archive all original MLR data to keep the option intact towards all current and future processing methodologies; 2. to publish

it as open data; and 3. to establish a new standard file format which can contain results of various processing methods. All three stand in support of various pathways of future research with cuneiform tablets and seals/sealings.

**A Little Less Conversation, a Little More Action, Please: How to
Digitize all Cuneiform**

Jacob L. Dahl

University of Oxford, Oxford, United Kingdom

In this talk I will discuss how image quality can be both a driver of new research and an obstacle to research in general. I will not address the question of open access to publicly owned cultural heritage which I consider an unassailable right, other than to highlight how the discussion has been used to diminish the free flow of cultural heritage data, for example by preventing scholars citing unprovenanced tablets from presenting at conferences.

Members of the Cuneiform Digital Library Initiative (CDLI) have been working for close to a quarter of a century on cataloguing and imaging cuneiform collections across the world, both private and public, often encountering objections from local research communities with entrenched views on access to collections and a perception of financial and strategic vulnerability, real or not; research communities who sees control over heritage collections as much as an income generator as a promotion of local research identity. Objections to imaging with standard or low-resolution devices has been used in this context to block open access to cultural heritage collections.

In order to eventually approach close to full coverage of the Mesopotamian cuneiform tradition the CDLI has promoted for some years a multi-track set up for digitization where all collections are imaged initially with either flat-bed scanners or traditional photography and about 20% later imaged using higher quality methods. I will detail how this ensures both completion and quality control.

**'Would You Consider Your Repository to Be Complete?': Metadata
Standards and the Digital Landscape(s) of Cuneiform Studies**

Rune Rattenborg, Carolin Johansson, Seraina Nett, Gustav Ryberg Smidt, Jakob Andersson

Uppsala University, Uppsala, Sweden

Standardizing, integrating, and linking metadata collections for digital text catalogues will be among the most pressing tasks facing students of cuneiform texts in coming decades. Digital research environments now extend into virtually every aspect of scholarly workflows, encompassing not only the rendition of inscriptions in a digital form, but also a wide range of metadata entities spanning artefactual, linguistic, spatial, temporal, and bibliographical aspects of cuneiform texts in their historical, archaeological, and museal setting. Not only the inscriptions, but also considerable parts of our knowledge about them, are rapidly being transformed into digital and extraordinarily dynamic resources. Furthering the integration and interoperability of such resources will be a key prerequisite for unleashing the full potential of the cuneiform corpus – certainly one of the largest bodies of historical documentation ever known – for future research and learning.

Within this sprawling digital landscape, efforts at interconnecting data collections are faced with a vast undergrowth of discrete projects, registers, and collections with only limited reference to centralized, controlled indices and vocabularies for the definition of

basic metadata entities. Introducing *Geomapping Landscapes of Writing* (GLoW), a three-year research project with the Uppsala University Department of Linguistics and Philology and funded by the Riksbankens Jubileumsfond, this paper reviews a program of surveying, querying, and curating metadata collections for cuneiform studies. In so doing, we point to principal lacunae in the overall coverage of current digital catalogues, potential for linking repositories, and suggestions for best practice in the generation and preservation of metadata collections in the field.

WORKSHOP: Death and Burial in the Ancient Near East: Open Educational Resources

Pinar Durgun, Curator | The Alexandria Archive Institute
Tiffany Earley-Spadoni | The University of Central Florida
Petra Creamer | University of Pennsylvania

Navigating the Ethics of Cross-Cultural Death Investigation

Jane Holmstrom

University of Central Florida, Orlando, FL, USA

Governmental institutions have been developing guidelines and laws in recent years for the handling and repatriation of indigenous remains; however, some of these are not as clear cut or developed. Researchers travel across the world to conduct their field work. It would be beneficial to have a universal approach or steps involved when working with various governments/culture groups about how to navigate excavation, storage, and research/analyzation of the remains prior to excavation, in order to work as ethically as possible. This conversation really starts here. I propose to discuss how to ethically work with human remains outside of the United States, whether from an archaeological or forensic context. Communication is the key to gaining trust with local governments and peoples, and working collaboratively with the local culture group, or the culture group that claims the remains. As researchers, we bring students with us to help excavate and further our goals, leading them by example for how to behave and work cross-culturally. This conversation and creation of a basic universal guideline helps ASOR as the organization can increasingly be viewed as public focused.

A Letter to My Grad Student Self – What I Didn't Know Then about Publishing OA Databases

Helen M. Dixon

East Carolina University, Greenville, NC, USA

While working on my University of Michigan dissertation on Iron Age Phoenician mortuary practice, I collected more than 1400 burials in a (first, Microsoft Access and then FileMaker Pro) database. I wanted to figure out how to make this database part of my dissertation submission when I finished in 2013, and to publish and maintain it as an open access resource for others to use. But by then I'd woven in images from published field reports and articles, had housed it in proprietary software, and couldn't get clear guidance about fair use or creative commons licensing. This short presentation offers guidance and solutions for my younger self, exploring my failed project as a case study for those facing similar challenges in the OER and OA publishing worlds.

Death and Data: Legacy Materials in the Employ of Mortuary Studies

Petra M. Creamer

University of Pennsylvania, Philadelphia, PA, USA

Archaeology has always been a field overburdened with legacy data, sometimes left to us from excavations that concluded over a century ago. At best, this data is contained in organized, open access databases online and is contextualized through many related publications. At worst, the data is partial or lost, without publications to elucidate its contexts. Most often, legacy data falls somewhere in the middle: serving as a valuable record to current studies, but with pitfalls when it comes to organization, recording, and preservation. This presentation makes the case for the active employment of legacy data in mortuary studies specifically, including a discussion of how best to address the challenges encountered in combining multiple legacy datasets within one study. In modern-day excavations, where funding and personnel is much more restricted in comparison to the large-scale excavations of the previous centuries, it is especially important to employ legacy data as comparanda for cross-temporal, cross-geographical studies. I discuss what problems I have encountered using legacy data in a comparative project employing nearly 1,200 burials from the Assyrian Empire, and how those were able to be mitigated and reconciled. I will show the solutions I have found to working with partial data at each stage of the process, and how such techniques can contribute to educational ventures on mortuary studies. Ultimately, I illustrate that legacy data is an excellent pedagogical tool for mortuary archaeology, with the additional benefit of gaining experience with data entry, cleaning, and organization.

Open Educational Resources in the Ancient Near East: Moving from Triage to Best Practices

Tiffany Earley-Spadoni

University of Central Florida, Orlando, FL, USA

The COVID-19 pandemic allowed academic faculty to appreciate the challenges and opportunities of online educational models as never before. Suddenly university instructors who had only ever taught face-to-face were confronted with hybrid, virtual and asynchronous teaching modalities. We had to adapt very quickly to unfamiliar platforms and other digital technologies. As the university education world returns to our new normal in the fall, what will our take away be from this unique experience? The need to distribute course materials electronically, ethically and affordably resulted in many of us thinking about Open Educational Resources (OER) with a new sense of urgency and purpose.

In this workshop presentation, I will discuss the current “state of the field” in OER for the ancient Near East, and I will discuss potential paths forward including the development of digitized and born-digital OER publications. While there are certainly challenges such as digital rights and limited time available, faculty incentives include a growing appreciation for efforts to address course affordability within the academy and grant funding available for digital, collaborative research.

Picture This: Photogrammetric Modeling for Digital Osteological Education In and Out of the Classroom

Keri Porter¹, Anna Osterholtz^{2,3}, Susan G. Sheridan¹

¹University of Notre Dame, Indiana, USA. ²Mississippi State University, Mississippi, USA. ³Cobb Institute of Archaeology, Mississippi State, Mississippi, USA

Photogrammetry is portable, user-friendly, and cost effective when compared to other methods for 3D digital modeling. However, current methods for bioarcheological photogrammetric modeling prioritize expensive software as the standard and rarely examine the use of this technology for educational purposes. As an alternative to current methods, the “standard edition” of Agisoft Metashape (\$59 for educators) can allow instructors to produce high-quality models for osteological and pathological education. Open-source software alternatives, like Alicevision Meshroom, can produce slightly lower quality models for visual examination and provide a low-cost method for students to create photogrammetric models. With the help of the Mergecube™, a small foam cube for augmented reality that allows students to view and manipulate digital models in the palm of their hand, digital osteology can become increasingly interactive. Overall, incorporation of photogrammetric 3D modeling for the production of educational materials helps promote accessibility to osteological education, particularly with remote learning, and reduces financial restrictions on underfunded educators and students. An integral element of these educational materials is an engagement with the ethical concerns inherent in the use and display of human remains. Essentially, the desires and/or concerns of the communities of practice and descendant groups must be paramount in the decision to produce and disseminate virtual models of skeletal material for either research or teaching purposes. This can provide a useful teaching moment, enriching the experience of both students, researchers, and stakeholders.

WORKSHOP: Theoretical and Anthropological Approaches to the Near East II - “Levantine Entanglements”

Tobin Hartnell | American University of Iraq, Sulaimani
Darrell J. Rohl | Calvin University

Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Terje Stordalen

University of Oslo, Norway

This is a placeholder for a workshop presentation description that will be updated after the panelists have read the forthcoming volume, *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*, edited by Terje Stordalen and Øystein S. LaBianca.

Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Øystein S. LaBianca

Andrews University, Berrien Springs, MI, USA

This is a placeholder for a workshop presentation description that will be updated after the panelists have read the forthcoming volume, *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*, edited by Terje Stordalen and Øystein S. LaBianca.

Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Ian D. Wilson

University of Alberta, Canada

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Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Melanie Wasmuth

University of Helsinki, Finland

This is a placeholder for a workshop presentation description that will be updated after the panelists have read the forthcoming volume, *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*, edited by Terje Stordalen and Øystein S. LaBianca.

Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Zachary Thomas

Tel Aviv University, Israel

While this volume seeks to move beyond archaeological and historical treatments of the Levant and its polities in specific, encapsulated periods, several of its themes are highly relevant for understanding individual episodes in the social and political history of the region. In particular, the emphases in the volume on the longue durée importance of polycentrism, the persistence of the local in comparison to the translocal and the appreciation of the Levant’s place in global history and archaeology should affect future efforts to understand how the historical and archaeological records are interpreted in relation to specific episodes in the social and political history of the Levant, especially those that saw the rise of translocal powers. The early Iron Age and its portrayal in the biblical text is an excellent example of this.

Workshop Panelist: *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*.

Erez Ben-Yosef

Tel Aviv University, Israel

This is a placeholder for a workshop presentation description that will be updated after the panelists have read the forthcoming volume, *Levantine Entanglements: Cultural Productions, Long-term Changes and Globalizations in the Eastern Mediterranean*, edited by Terje Stordalen and Øystein S. LaBianca.

WORKSHOP: Reintegrating Africa in the Ancient World

Brenda J. Baker | Arizona State University

Geoff Emberling | University of Michigan

The African Meroitic State and Earlier Perspectives

Mohamed Ali

International University of Africa, Sudan

Political complexities in ancient Sudan have been influenced by colonial and external perspectives. In the south, models have been speculated based on colonial theoretical perspectives, Egyptology and archaeological data driven mainly from urban centers as the main source of studying the evolution of ancient political complexity in Sudan. For instance, Adams (1976) argued that the Meroitic polity in lower Nubia may have been secular and the south was sacred while both Török (1997) and Edwards (2004) suggested the temple state model where they argue that the source of the Meroites power followed the preceded Napatan strategy to gain and maintain the source of power, and the control of exchange system. These models have embedded more concepts of external influence rather than self-determination, social identity and local development of political complexities. Therefore, the African Meroitic political complexity and source of power can be addressed through comprehensive archaeological research of regional interconnections and the role of the public as the builder of civilizations throughout the history of Sudanic Africa, with relative impacts of external economic and political situation on the local political development.

Coloniality of Time and Space of Archaeological Sites

Tomomi Fushiya

Polish Centre of Mediterranean Archaeology, University of Warsaw, Warsaw, Poland

An increasing number of archaeological projects in Sudan employ collaborative archaeological methods in recent years. These projects aim to build a relationship with local communities, inform them about the outcomes of research and explore communities' perceptions of archaeology and archaeological sites. These practice-based research have helped archaeologists to be aware of communities' voices and situate their research within the present-day Sudanese society. Some studies also look at archaeology as colonial practice, and examine how the colonial influence could be reduced in Sudanese archaeology through understanding communities' perceptions. To contribute to the efforts of decolonizing archaeology in Sudan, I discuss about time and space of archaeological sites. An archaeological site is often associated with a specific time period and its spatial extent is defined when they are studied and managed. These common practice in archaeology and heritage management appears to be an obstacle to make/feel a connection with the past and the sites that represent the past for local communities and Sudanese population, while, for archaeologists, it may lead to overlook a potential link between the past and the present communities. Instead, turning more to temporal and spatial continuity could facilitate discussions of archaeological sites as a heritage place for the Sudanese peoples. I address this issue with case studies from Amara West and Old Dongola.

Decolonizing Bioarchaeology in Sudan

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Bioarchaeology, as a subdiscipline, has begun confronting its colonial origins and discussing how to incorporate stakeholders and ethically

move forward. This movement has largely been focused on North America, particularly regarding the repatriation and curation of Native Americans and First Nations Peoples. Excavated skeletal remains are not a mere subject of scientific analysis but they are deceased persons. Here, we frame this discussion within the context of Sudan and Ancient Nubia. We argue that first we, as bioarchaeologists and archaeologists, must acknowledge the sordid history of the discipline and then actively take steps to dismantle continuing systems of racism, sexism, and western-centered biases.

We begin by discussing the history of the excavation, analysis, and treatment of human skeletal remains from early excavations through to current projects. This entails an array of approaches, including discarding human remains, salvage excavation, and exportation. We then turn to an examination of how we can further decolonize bioarchaeology in Sudan. This will certainly involve working closely with local communities and the National Corporation for Antiquities and Museums (NCAM), and a reconsideration of decision-making processes. We acknowledge best care practices for human skeletal remains, including the need for climate and humidity control storage facilities, and promote ongoing skeletal education programs in Sudan that are training the next generation of bioarchaeologists.

Scholars, the Media, and Structural Racism in Archaeology: Sudan as a Case Study

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This presentation will discuss two sources of structural racism in archaeology in Sudan from the perspective of a Sudanese archaeologist. The first source is foreign archaeologists, from the first pioneers and continuing until today. Most of the pioneers and recent archaeologists are Egyptologists or worked in Egypt before coming to Sudan and that fundamentally affects their perspective on Sudanese civilization.

The second source is the media, particularly foreign documentary films and social media in Sudan. Foreign documentaries often use terms relating to ancient Sudan that have racist meanings. Sudanese social media can become racist in itself in the argumentation between different Sudanese ethnic groups and their relationship to ancient cultures.

Presenting Prejudice: Museums and the Diminishment of Ancient Africa

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The close links between the Egyptian and Nubian cultures have long been glossed over and minimized by scholars looking towards Asia and the Mediterranean for influences on the development of ancient Egypt. Such deliberate omissions have long been a part of historical discourse that has been truncated to fit into a Eurocentric mold. Indeed, until recently the rich legacy of the Nubian civilizations has often been totally ignored in works on Ancient Egypt and as of yet still has to be seen generally in popular culture and in museum displays in particular. This pretermission to divorce Egyptian civilization from its African roots can be seen in most museum installations that juxtapose ancient Egyptian and Classical art as intimately connected exemplars of the heritage of antiquity. This is compounded by those few institutions with more extensive holdings of Nubian art and

archaeology that sequester it unseen in storage rather than put it on display.

This discussion will review how Nubian and Egyptian art has been displayed in the major collections in America, The University of Pennsylvania Museum, the Museum of Fine Arts, Boston, and the **Oriental Institute Museum of the University of Pennsylvania Museum**, and how that has promoted a false narrative that has separated pharaonic Egypt from its African roots and marginalized the other ancient civilizations of the Nile Valley. It will also detail the realization that museums need to re-frame their approach to this material and embrace a more diverse audience and reflect contemporary scholarship.

"De-othering" Nubia within the Discipline of Egyptology

Aaron M. de Souza

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The ancient Egyptians would have us believe that Nubians were 'wretched' and 'vile', and the European and American men who established Egyptology as a discipline continued that ancient rhetoric. Pharaonic Egypt was placed at the center while Nubians were presented as 'the other,' existing on the fringes and posing a constant threat to Egyptian cosmic order.

It is now clear that Nubians and 'Nubian-ness' were integral parts of the ancient Egyptian world. Since Predynastic times, Nubians lived in Egypt and worked alongside Egyptians, and Nubia was the source of many valuable resources that made Egypt 'Egypt.' Not only that, the first Nubian sites to be excavated are all located within the borders of modern Egypt! Nevertheless, Nubia and Nubians – and even the people who study Nubia today – are often still perceived as outsiders by Egyptology.

This paper considers how ancient Nubia became an 'other' from an academic perspective, why this needs to change, and how that change might happen. If Egyptology as a discipline is to remain relevant and survive as a viable academic pursuit, it must adapt and recognize the value of ancient and modern interconnections. The approach must be balanced and must not continue to impose presumptions of Egyptian dominance onto the Nubian cultural landscape because, to ancient Nubians, Egypt was 'the other.'

Treatment of Human Remains in Egypt between Pioneers and Present

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Human remains in Egypt were used by Egyptology's pioneers, including Petrie and Reisner in the late 1800s and early 1900s, to support racist perspectives, but contributed to preservation of a crucial part of Egypt's biocultural heritage. The presentation will focus on the treatment of human remains in both foreign and Egyptian projects and the problematic issues in both past and present concerning excavation, curation, and interpretations. By the 2000s a series of field schools included bioarchaeology training programs through both foreign missions and the Ministry of Tourism and Antiquities. The latter established a Bioarchaeology Department in 2017 in the Magazines' sector, overseeing all bioarchaeological remains curated in the magazines all over Egypt. The Bioarchaeology Department must confront the lack of any policy or governance of human remains in museums or storage. A project was begun in 2019 for documentation and curation of bioarchaeological remains at the

Egyptian museum basement, is creating an inventory and curation program to make remains from century-old excavations accessible to researchers, while training the curators to handle bioarchaeological materials. Bioarchaeology graduate programs are not yet available in Egypt, hindering continued progress in ensuring Egyptians with this expertise are involved in excavation, recording, and handling human remains

Egyptology: But Not for Egyptians

Okasha El Daly

Qatar University, Qatar

Early founders of Egyptology did not see a place for Egyptians in the development of an indigenous discipline and indeed some like the famous French Egyptologists Pierre Lacau, who served as Director General of Antiquities Service from 1914 until 1936 and Fr.(Abbe) Étienne Drioton, Director General of Antiquities Service from 1936 until shortly after the Egyptian revolution in 1952, who actively sidelined and at times edged out native Egyptians such as Ahmed Kamal Pasha and Selim Hassan. Thus, an impression was created that Egyptians had no interest in the study of their own past. Yet, my research showed that Egyptians had indeed been interested in the study of their own heritage for a long time and many wrote worthy books on it such as Al-Idrisi (d. 1251 C.E.) and even made good progress attempting the decipherment of Egyptian scripts. Furthermore, the common view that Arabs showed no interest in the study of Pre-Islamic cultures, including that of Egypt, has also been shown to be untrue as a quick look at my published book will show.

A King from Somewhere Else: Aspects of 'Stranger Kingship' in Early Egyptian Ritual

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Kingship in ancient Egypt has long been seen through the lens of European monarchy. This is unsurprising given that even to this day, the academic discipline of Egyptology is largely comprised of individuals whose own nations either are currently, or were relatively recently, ruled or colonized by a European monarchy. To this later group, for example, we can count as members my own country, the U.S., but even the Arab Republic of Egypt, whose own memories of British colonization and its overthrow are still within living memory. In this regard, academic perceptions of what it means to be a king, not just in ancient Egypt, but worldwide, have been heavily influenced by European monarchy.

I argue for a reinterpretation of Egyptian kingship, particularly its earliest periods, away from this Eurocentric lens and toward anthropological studies of kingship more closely related to Egypt in time and space. Of particular importance will be the concept of 'Stranger Kingship,' which as Sahlins, Graeber and deHeusch have noted, is ethnographically well-documented in a variety of African cultures, even those of the Nile basin. This paper will argue that many of the central tenants of 'Stranger Kingship' are particularly encapsulated in the performative and ritual functions of the kings of early Egypt, as detailed in contemporary iconographic and textual records. I propose that this conception of kingship pays closer attention to the ideological and oftentimes apolitical sources of a pharaoh's social power like other African examples, and distinct from the institutions of European monarchy.

WORKSHOP: Cultural Heritage: Before, During, and After Crisis

Tashia Dare | University of Kansas

Post-Conflict Heritage Work in Ninawa Governorate, Iraq: Projects, Challenges, and Recommendations

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Since 2018, the Iraq Heritage Stabilization Program (IHSP) has worked with Iraqi partners to protect and preserve built cultural heritage in post-conflict northern Iraq. After initially focusing on the heritage of ethnic and religious minority communities targeted by ISIS, IHSP's work has expanded to 14 projects on archaeological, religious, and vernacular heritage sites across the Ninawa Governorate, which range from condition assessments to complete restorations of damaged properties. Most of these projects originate directly from requests by the local community or managing authority for help with a specific heritage problem, and all are implemented in collaboration with Iraqi heritage professionals, religious authorities, and civil society groups.

In this paper, we provide an overview of IHSP's work in the context of ongoing heritage response efforts, discuss the current challenges and procedures faced by those working in the region, and provide recommendations for future work as well as ways to improve support for Iraqi heritage professionals and the Iraqi heritage sector more generally. In particular, we focus on ways to empower Iraqi heritage professionals through expanding and reinforcing interconnections between existing domestic heritage groups as well as strengthening the infrastructure of the cultural heritage sector.

Artifact vs. Conflict: A Human Narrative in Umm al-Jimal

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Umm al-Jimal Archaeological Project, Jordan. PAX Peace by Peace, USA

At first, it was easy to mistake the sounds of bombs dropping a few kilometers away with the usual celebratory late night/early morning

gunshots at a nearby wedding celebration during the July 2018 field season at Umm al-Jimal. They began at about 3:30 in the morning. After more than three or four explosions, it became clear that the source was Daraa across the border in Syria. This was confirmed by a short drive before sunrise to see the glowing orange flames against the dark sky. That was one year before the opening of the Umm al-Jimal Interpretive and Hospitality Center, the concept for which began in 2014 as refugees streamed across the border into Jordan from Syria. The Umm al-Jimal Archaeological Project initiated the project based on the premise that cultural heritage transcends boundaries and, therefore, can be engaged to promote peace. Preservation of ancient Umm al-Jimal, an outstanding example from the Hauran region (which extends beyond the border), began in direct juxtaposition to site destruction as an act of war in Syria. The goal is to combine site preservation, economic development, and education to mitigate challenges caused by proximity to conflict. Spanning more than 2,000 years, Umm al-Jimal offers a common human narrative—which exists in higher time, grounded in the archaeological record. It is a physical and cultural meeting place. Practically, Umm al-Jimal is a case study for investment in cultural heritage as a prophylactic to conflict (e.g. in UN SDG's or the like).

Legal Framework for the Protection of Cultural Heritage

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This presentation will focus on the international human rights law framework and what that has to offer (and what not) for the protection of cultural heritage. How do the protection of cultural heritage and the protection of human rights interplay and what role could international legal rules, agreed upon by States, contribute to strengthening their interaction? Which human rights are relevant to cultural heritage protection? How can human rights promote cultural heritage while also addressing the possible contentious dimensions of cultural heritage?