



2022 ASOR ANNUAL MEETING IN-PERSON COMPONENT ABSTRACT BOOKLET

Boston, November 16-19, 2022

Sessions, presentations, times, and locations are subject to change.

Please check the Program Addendum posted at the ASOR help desk or view the online program for the latest schedule: <https://www.asor.org/am/2022/schedules-2022>.



PROGRAM-AT-A-GLANCE IN-PERSON (BOSTON)

This schedule is current as of November 9, 2022.

WEDNESDAY, NOVEMBER 16, 2022

- 12:00–8:30pm** ASOR Registration Tables and Help Desk Open (Mezzanine Foyer, 2nd Floor)
(EST) The ASOR registration tables and help desk will be open for longer hours on Wednesday to avoid a rush and crowding before the Plenary Address. Please stop by to pick up your name badge any time between 12:00pm to 8:30pm.
- 7:00–8:30pm** Welcome to the Annual Meeting and Plenary Address (Grand Ballroom A, 2nd Floor)
(EST) **Women of the Sacred South: Nubian Women in the Temple and Upon the Throne**
Solange Ashby | University of California, Los Angeles
- 8:30–9:30pm** Welcome Reception (Grand Ballroom B)
(EST)

THURSDAY, NOVEMBER 17, 2022

- 8:20–10:25am** 1A. Archaeology of the Near East: Bronze and Iron Ages (Grand Ballroom A, 2nd Floor)
(EST) 1B. Digging Up Data: A Showcase of Ongoing Digital Scholarship Projects (Workshop) (Grand Ballroom B, 2nd Floor)
1C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the Bronze Age to Medieval Periods I (Georgian, 2nd Floor)
1D. Archaeologies of Memory I (Arlington, 2nd Floor)
1E. Approaches to Dress and the Body (Berkeley/Clarendon, 2nd Floor)
1F. Archaeology of Petra and Nabataea (Avenue 34/Studio 1, Lobby Level)
1G. Protecting Libyan Cultural Heritage I (Avenue 34/Studio 2, Lobby Level)
1H. Archaeology of Syria (Avenue 34/The Loft, Lobby Level)
1I. Methodological and Theoretical Advances in the Study of Pastoral Mobilities in the Ancient Near East (Whittier, 2nd Floor)
- 10:25–10:40am** Coffee Break (Mezzanine Foyer, 2nd Floor)
(EST) Sponsored by The University of Chicago Press
- 10:40am–12:45pm** 2A. Archaeology of Cyprus I (Grand Ballroom A, 2nd Floor)
(EST) 2B. Archaeology of Mesopotamia (Grand Ballroom B, 2nd Floor)
2C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the Bronze Age to Medieval Periods II (Georgian, 2nd Floor)
2D. Archaeologies of Memory II (Arlington, 2nd Floor)
2E. Archaeology of Islamic Society I (Berkeley/Clarendon, 2nd Floor)
2F. Technology in Archaeology: Recent Work in the Archaeological Sciences I (Avenue 34/Studio 1, Lobby Level)
2G. The Journey to Document Minorities' Heritage in the Maghreb (Avenue 34/Studio 2, Lobby Level)
2H. Complexity Without Monumentality: Rethinking Nomads of the Biblical Period (Avenue 34/The Loft, Lobby Level)
2I. Activating "Mummy Portraits" in Museums (Workshop) (Whittier, 2nd Floor)
- 1:00–2:00pm** Early Career Scholars Brown Bag Lunch - Speed Networking: Alt-Ac & Ac-Adjacent Careers (Georgian Room, 2nd Floor)
(EST)

2:00–4:05pm
(EST)

- 3A. Archaeology of Cyprus II (Grand Ballroom A, 2nd Floor)
- 3B. Museums and Social Justice I (Grand Ballroom B, 2nd Floor)
- 3C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the Bronze Age to Medieval Periods III (Georgian, 2nd Floor)
- 3D. Archaeologies of Memory III (Arlington, 2nd Floor)
- 3E. Archaeology of Islamic Society II (Berkeley/Clarendon, 2nd Floor)
- 3F. Technology in Archaeology: Recent Work in the Archaeological Sciences II (Avenue 34/Studio I, Lobby Level)
- 3G. Archaeology of the Near East: The Classical Periods (Avenue 34/Studio 2, Lobby Level)
- 3H. Over the Mountains and through the Grass: Collaborative Archaeology in the Southern Caucasus and Central Asia, Papers in Honor of Karen S. Rubinson (Avenue 34/The Loft, Lobby Level)
- 3I. History of Archaeology: Archaeology, Nation, Race and Us (Book Workshop) (Whittier, 2nd Floor)

4:20–6:25pm
(EST)

- 4A. Archaeology of Jordan I (Grand Ballroom A, 2nd Floor)
- 4B. Museums and Social Justice II (Grand Ballroom B, 2nd Floor)
- 4C. Archaeology and History of Feasting and Foodways (Georgian, 2nd Floor)
- 4D. Ancient Inscriptions I (Arlington, 2nd Floor)
- 4E. Archaeology of Islamic Society III (Berkeley/Clarendon, 2nd Floor)
- 4F. Cultural Heritage: Before, During, and After Crisis (Workshop) (Avenue 34/Studio I, Lobby Level)
- 4G. Archaeology and Biblical Studies (Avenue 34/Studio 2, Lobby Level)
- 4H. The Early Iron Age in Canaan, Israel, Judah, and Philistia (Avenue 34/The Loft, Lobby Level)
- 4I. Prehistoric Archaeology (Whittier, 2nd Floor)

FRIDAY, NOVEMBER 18, 2022

8:20–10:25am
(EST)

- 5A. Archaeology of Jordan II (Grand Ballroom A, 2nd Floor)
- 5B. Biblical Texts in Cultural Context I (Grand Ballroom B, 2nd Floor)
- 5C. Digital Archaeology and History I (Georgian, 2nd Floor)
- 5D. Ancient Inscriptions II (Arlington, 2nd Floor)
- 5E. Archaeology of Israel I (Berkeley/Clarendon, 2nd Floor)
- 5F. Maritime Archaeology (Avenue 34/Studio I, Lobby Level)
- 5G. Reintegrating Africa in the Ancient World (Workshop) (Avenue 34/Studio 2, Lobby Level)
- 5H. The Transition from the Neo-Assyrian to the Neo-Babylonian Periods I (Avenue 34/The Loft, Lobby Level)
- 5I. The Royal Gardens of the Mediterranean and the Ancient Near East – A New Perspective I (Whittier, 2nd Floor)

10:25–10:40am
(EST)

Coffee Break (Mezzanine Foyer, 2nd Floor)

10:40am–12:45pm
(EST)

- 6A. Archaeology of Jordan III (Grand Ballroom A, 2nd Floor)
- 6B. Biblical Texts in Cultural Context II (Grand Ballroom B, 2nd Floor)
- 6C. Digital Archaeology and History II (Georgian, 2nd Floor)
- 6D. Ancient Inscriptions III (Arlington, 2nd Floor)
- 6E. Archaeology of Israel II (Berkeley/Clarendon, 2nd Floor)
- 6F. Cultures of Mobility and Borders in the Ancient Near East (Avenue 34/Studio I, Lobby Level)
- 6G. Career Options for ASOR Members: The Academy and Beyond (Avenue 34/Studio 2, Lobby Level)
- 6H. The Transition from the Neo-Assyrian to the Neo-Babylonian Periods II (Avenue 34/The Loft, Lobby Level)
- 6I. The Royal Gardens of the Mediterranean and the Ancient Near East – A New Perspective II (Whittier, 2nd Floor)

12:50–1:55pm
(EST)

ASOR Members' Meeting, Sharon Herbert, Presiding (Georgian, 2nd Floor)

2:00–4:05pm
(EST)

- 7A. Cultural Heritage: Preservation, Presentation, and Management (Grand Ballroom A, 2nd Floor)
- 7B. Digital Archaeology and History III (Grand Ballroom B, 2nd Floor)
- 7C. The Archaeology of the Kurdistan Region of Iraq I (Georgian, 2nd Floor)
- 7D. Archaeology of Egypt I (Arlington, 2nd Floor)
- 7E. Gender in the Ancient Near East (Berkeley/Clarendon, 2nd Floor)
- 7F. Interdisciplinary Approaches to Seals, Sealing Practices, and Administration I (Avenue 34/Studio I, Lobby Level)
- 7G. The Debate over the Identification of Bethsaida-Julias (Avenue 34/Studio 2, Lobby Level)
- 7H. Palace-Clan Relations in Ancient Israel: A View from the Jezreel Valley (Avenue 34/The Loft, Lobby Level)
- 7I. Let Me Tell You a Story: Reflections on Archaeological Story-Telling (Workshop) (Whittier, 2nd Floor)

4:20–6:25pm
(EST)

- 8A. So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy (Grand Ballroom A, 2nd Floor)
- 8B. Archaeology of the Southern Levant: A Festschrift in Honor of Jodi Magness (Grand Ballroom B, 2nd Floor)
- 8C. The Archaeology of the Kurdistan Region of Iraq II (Georgian, 2nd Floor)
- 8D. Archaeology of Egypt II (Arlington, 2nd Floor)
- 8E. Empires of the Broader Ancient Near Eastern World: Settlement Strategies and Infrastructure (Berkeley/Clarendon, 2nd Floor)
- 8F. Interdisciplinary Approaches to Seals, Sealing Practices, and Administration II (Avenue 34/Studio I, Lobby Level)
- 8G. CRANE 2.0: Large-Scale Data Analysis and the Reconstruction of Human-Environment Interaction in the Ancient Near East (Avenue 34/Studio 2, Lobby Level)
- 8H. Bioarchaeology in the Near East (Avenue 34/The Loft, Lobby Level)
- 8I. Network Thinking and Methods in Near Eastern Research (Workshop) (Whittier, 2nd Floor)

SATURDAY, NOVEMBER 19, 2022

8:20–10:25am
(EST)

- 9A. Art Historical Approaches to the Near East I (Grand Ballroom A, 2nd Floor)
- 9B. Manners, Etiquette, and Protocols in the Ancient Near East I (Grand Ballroom B, 2nd Floor)
- 9C. Trade, Entanglement, and Cultural Interconnections in the Greater Hesi Region: Interdisciplinary Approaches (Georgian, 2nd Floor)
- 9D. Archaeology of Egypt III (Arlington, 2nd Floor)
- 9E. Archaeology of Anatolia I (Berkeley/Clarendon, 2nd Floor)
- 9F. Scribal Hands and Habits in Cuneiform Texts (Avenue 34/Studio I, Lobby Level)
- 9G. Archaeology of the Near East and Video Games (Avenue 34/Studio 2, Lobby Level)
- 9H. Working with Law Enforcement and the Military to Combat Trafficking and Preserve Cultural Heritage (Workshop) (Avenue 34/The Loft, Lobby Level)
- 9I. Grand Challenges for Digital Research in Archaeology and Philology (Workshop) (Whittier, 2nd Floor)

10:25–10:40am
(EST)

Coffee Break (Mezzanine Foyer, 2nd Floor)

10:40am–12:45pm
(EST)

- 10A. Art Historical Approaches to the Near East II (Grand Ballroom A, 2nd Floor)
- 10B. Manners, Etiquette, and Protocols in the Ancient Near East II (Grand Ballroom B, 2nd Floor)
- 10C. Archaeology of Arabia (Georgian, 2nd Floor)
- 10D. Environmental Archaeology of the Ancient Near East (Arlington, 2nd Floor)
- 10E. Archaeology of Anatolia II (Berkeley/Clarendon, 2nd Floor)
- 10F. Dialogues Across Landscapes: New Challenges to Practicing Landscape Archaeology in Western Asia (Avenue 34/Studio I, Lobby Level)
- 10G. Understanding Power in the Ancient World: Approaches, Manifestations, and Responses (Avenue 34/Studio 2, Lobby Level)
- 10H. Archaeology of Lebanon (Avenue 34/The Loft, Lobby Level)
- 10I. Interdisciplinarity at SiMUR - the Shiraki International Multidisciplinary Undergraduate Research Project (Workshop) (Whittier, 2nd Floor)

12:45–2:00pm
(EST)

Poster Session, Sarah Wenner, Presiding (Statler Room, 2nd Floor)

12:45–2:00pm
(EST)

Initiative on the Status of Women in ASOR: Mentoring Lunch (Boylston Room, 2nd Floor)

2:00–4:05pm
(EST)

- 11A. The Amorites: Culture, History, and Archaeology (Grand Ballroom A, 2nd Floor)
- 11B. Style and Identity in Ancient Near Eastern Art I (Grand Ballroom B, 2nd Floor)
- 11C. Protecting Libyan Cultural Heritage II (Georgian, 2nd Floor)
- 11D. History of Archaeology (Arlington, 2nd Floor)
- 11E. Landscapes of Settlement in the Ancient Near East (Berkeley/Clarendon, 2nd Floor)
- 11F. Investigating Ancient Societies: Challenging Assumptions, Exploring Approaches I (Avenue 34/Studio I, Lobby Level)
- 11G. Fostering Dialogue Using Educational and Occupational Datasets (Workshop) (Avenue 34/Studio 2, Lobby Level)
- 11H. Defining Provenance (Workshop) (Avenue 34/The Loft, Lobby Level)

4:20–6:25pm
(EST)

- 12A. Perspectives on Chalcolithic Surezha (Kurdistan, Iraq) from the 2013-2019 Field Seasons (Grand Ballroom A, 2nd Floor)
- 12B. Style and Identity in Ancient Near Eastern Art II (Grand Ballroom B, 2nd Floor)
- 12C. Meaningful Copies: Virtues beyond Originality (Georgian, 2nd Floor)
- 12D. Preserving the Cultural Heritage of the Madaba Region of Jordan (Workshop) (Arlington, 2nd Floor)
- 12E. Tracing Transformations in the Southern Levant – New Research in the Chronology and Archaeology of the Middle and Late Bronze Age (Berkeley/Clarendon, 2nd Floor)
- 12F. Investigating Ancient Societies: Challenging Assumptions, Exploring Approaches II (Avenue 34/Studio I, Lobby Level)
- 12G. Secure Your Data! Security and Data Management in the Ancient Near East (Avenue 34/Studio 2, Lobby Level)



IN-PERSON ABSTRACTS

Schedule current as of November 9, 2022.

WEDNESDAY, NOVEMBER 16, 2022 | 12:00pm–8:30pm (EST)

ASOR Registration Tables and Help Desk Open (Mezzanine Foyer, 2nd Floor)

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WEDNESDAY, NOVEMBER 16, 2022 | 7:00pm–8:30pm (EST)

Plenary Address

Women of the Sacred South: Nubian Women in the Temple and Upon the Throne

Solange Ashby

University of California, Los Angeles

Based in the concept of the Sacred South – in which Nubia and points south are regarded as the source for Egyptian ritual items, ritual specialists who knew the god's dances, and even as the home of the gods themselves – this lecture will explore the ritual and political roles held by women in the Kushite kingdoms of Nubia (Napata and Meroe). The high status of women in these ancient African societies along the Nile is reflected in the prominence of powerful goddesses, the reverence awarded to the queen mothers of Kush, and a series of sole-ruling queens of the kingdom of Meroe (1st century BCE–1st century CE). The women of Nubia present a potent example of female power in the ancient world.

Focusing on four specific Nubian women, I will explore how ancient Africans of the Nile Valley understood female power and presence to be an essential enlivening element in maintaining Maat, the balance of male and female energies, in order to cultivate “divine right order” in the world and in the cosmos. This lecture will examine more closely the queens, priestesses, and goddesses who were exceptionally prominent in ancient Nubia.

The framework for this study of Nubian women is based in the ancient Egyptian Myth of The Sun's Eye in which Hathor-Tefnut, daughter of the supreme sun god Ra is tasked with defending her father from his enemies. In the myth, the “Distant Goddess” is lured from Nubia into Egypt in order to be reunited with her father. Hathor-Tefnut-Sekhmet is very closely associated with the harsh deserts of Eastern Nubia and with the people who reside there. Many queens and priestesses presented themselves as manifestations of the goddess Hathor-Tefnut through their titles, iconography, and roles within the royal family.

The potent history of ancient Nubian women echoes in Nubia, Egypt, and Sudan today and those connections will be explored as well.

WEDNESDAY, NOVEMBER 16, 2022 | 8:30pm–9:30pm (EST)

Welcome Reception (Grand Ballroom B)

THURSDAY, NOVEMBER 17, 2022 | 8:20am–10:25am (EST)

SESSION: 1A. Archaeology of the Near East: Bronze and Iron Ages

Chairs(s): Pearce Paul Creasman, University of Arizona, ACOR | J. P. Dessel, University of Tennessee

Fenestrated Domed Vessels as Model Silos of the Grain God

David Ilan

Hebrew Union College, Israel

Fenestrated domed vessels have been found in Bronze and Iron Age contexts at number of sites in the eastern Mediterranean and western Asia (e.g. Kition, Ugarit, Tel Dan, Hazor, Kinrot, Rehov and Deir Alla). They have been interpreted as “snake houses” and house models, but more often as model sanctuaries. In this presentation we will examine their attributes and find-spot contexts. I will propose that they represent grain silos, an attribute of the grain god (Dagon in the Levant).

Children in the First Millennium BCE Levantine Phoenician Mortuary Record

Helen Dixon

East Carolina University, USA

For several scholarly generations, the idea that infants and children are largely missing from the Iron Age I-III (ca. 1100 – 300 BCE) Levantine Phoenician mortuary record has been repeated. This omission has been seen as significant, perhaps opaquely connected to the infant cremation or so-called tophet sites associated with Punic culture in Sicily, Sardinia, and North Africa. This paper offers a reexamination of excavated burials associated with Phoenician material culture from coastal Syria, Lebanon, and Israel/Palestine, indicating that there are more preserved subadult burials than has been previously acknowledged. While in some cases these children have been treated quite differently in death, in many other cases their burials represent continuity with or only slight variation from the range of mortuary practices observed for adults. This paper will quantify preserved subadult burials based on published documentation and offer some brief reflections on the social history of children in the first millennium BCE Phoenician Levant based on the newly reassessed data.

Two (+) Atlatls from Ur: Power at a Distance in Ancient Mesopotamia

Frederick A. Winter¹, Irene J. Winter²

¹ American Institute of Architects – Washington Chapter (AIA-DC), USA. ² Harvard University, USA

Two previously unidentified objects from Woolley's excavations in the Royal Cemetery at Ur are clearly recognizable as spear throwers or atlatls. Each of these metal artifacts, U. 11704 and U. 9336 in Woolley's inventory, consists of a socket that could hold a shaft on one end and a hook on the other. This is a configuration for an atlatl, a tool that has been documented as early as the Paleolithic and that has been found in Eurasia and the Americas, although it has not been previously identified in ancient Mesopotamia. An atlatl, essentially an extension of the arm of someone hurling a spear, greatly increases the range and intensity of a thrown projectile. The inclusion of these tools in the elite Early Bronze Age/Early Dynastic IIIA cemetery at Ur suggests that the atlatl could have been reasonably commonplace at the time of their burial, included in the grave as an indicator of a valued piece of life equipment for the deceased and something that might be useful for activities during the afterlife. The question then becomes why this tool is not included in the many depictions of warfare and hunting from early Mesopotamia. Our conclusion is that those depictions are intended to convey status and not simple narrative, and that enhanced spear throwing, similarly to "bow-fighting" in the Homeric epics, was not deemed a sufficiently status-generating activity to warrant public depiction. The new identification adds a dimension to understandings of hunting and warfare practices in early Mesopotamia

An Amulet from Zincirli: A Possible Interpretation

K. Lawson Younger

Trinity International University, USA

This paper will investigate a small triangular amulet (S.3992) discovered by Felix von Luschan during excavations at Zincirli. The front of the amulet depicts an astral scene. There are other drawings and pseudo-inscriptions on the sides. Although published in 1943 by Felix von Luschan and Walter Andrae, only a very brief description was given, without any attempted interpretation. This paper will put forth a possible interpretation of the amulet and describe its possible real-life function.

Light 'Em if you got 'Em: The Archaeological Evidence for Illumination in Late Timnian and Aradian societies.

Benjamin A. Sidel

East Carolina University, USA

Archaeological research in the Negev demonstrates that Aradian and Late Timnian societies were contemporaries, however, they differed in terms of architecture and socio-economic organization. These societies also diverged in terms of the implements that they used to light their houses and huts, respectively. In the town of Arad residents used oil lamps to brighten their dwellings, whereas Timnian pastoralists used hearths to illuminate portions of their habitation sites. I attribute these two different sources of illumination to two factors, limitations on potential fuels and the nature of their dwellings. These two different patterns in lighting domestic space may have behavioral implications, such as the use and/or layout of domestic space.

SESSION: 1B. Digging Up Data: A Showcase of Ongoing Digital Scholarship Projects (Workshop)

Chairs(s): Tiffany Earley-Spadoni, University of Central Florida | Leigh Anne Lieberman, The Alexandria Archive Institute/Open Context

Network Mapping of the Neo-Assyrian Empire

Heidi Fessler

Loyola Marymount University, USA

This paper provides an update on a project I am working on to create accessible maps that present the Neo-Assyrian empire as a network of strategic locations. While it is likely that the Neo-Assyrian military employed a tactical network approach when campaigning in a rebellious region, this strategy is not represented on maps created for undergraduate students and general public learning about the ANE. Most current maps present the empire as a territory with precise boundaries, thus perpetuating inaccurate notions of Assyrian control and strategy. I use Tiglath-pileser III's campaign annals as a test case for this project because they are the beginning of the second, expansion-focused phase of imperial control, and mapping his campaigns out in a visible way will inform our understanding of the trajectory of the empire. The extent of TP III's empire is also a popular map used in classroom settings when students are learning about the Ancient Near East and Biblical history. The paper will present the preliminary results of the project and discuss what the next phases will be.

Archaeological Storytelling as Non-Linear Narrative using 3D Excavation Data

Matthew D. Howland¹, Brady Liss², Mohammad Najjar³, Thomas E. Levy²

¹ Tel Aviv University, Israel. ² University of California San Diego, USA. ³ Edom Lowlands Regional Archaeology Project, Jordan

Three-dimensional datasets are now commonly collected on archaeological excavations. However, these data are underutilized for public archaeology and digital archaeological storytelling despite their inherent suitability for this purpose. Moreover, archaeological narratives are often told in linear form—the traditional excavation report, a conference paper or public lecture, or even a blog post all present a structured, linear story about an archaeological site or context. However, in reality, the archaeological past is open to multiple interpretations. Competing perspectives and overlapping spatial and temporal contexts contribute to the impossibility of framing a single, objective narrative about an archaeological site. As such, non-linear narratives may be more appropriate for archaeological storytelling. 3D datasets from archaeological sites, from interrelated contexts such as sites, excavation areas, contexts, and even artifacts, are well-suited to non-linear, freeform exploration through the use of hypertext embedded in narrative components. These 3D datasets also facilitate interactive engagement and can serve as the basis for the integration of multi-vocal perspectives. This paper examines the use of annotated 3D models posted on the 3D data sharing platform Sketchfab as the basis for the creation of non-linear narratives, allowing users to explore the data and associated, interlinked narrative components according to their own interest. Three-dimensional data derived from excavations at Khirbat al-Jariya, Jordan, provide the foundation of this case study.

A Map is Worth a Twenty Thousand Pictures: Improving Access and Use of Digital Archives through Mapping

Ryder Kouba

The American Center of Research, Jordan

As part of a US Department of Education Title VI grant, the American Center of Research (ACOR) in Amman, Jordan is in the process of providing public access to ~20,000 digitized images depicting locations throughout the Middle East and North Africa. While the metadata for each item should help improve access and findability for individual images, the goal of this project was to use mapping tools to provide new ways (particularly geographical) of accessing and understanding the images and data.

This presentation will discuss the goals of the project, the workflow and challenges faced during the project along with the results, and next steps to further enhance the usability of ACOR's digitized collections.

Digital Storytelling with Immersive 3D Models: A Case Study from Wadi el-Hudi, Egypt

Brooke E. Norton

University of California, Berkeley, USA

When faced with vast quantities of data, how can archaeological projects present their findings to public audiences in an engaging and digestible manner? The Wadi el-Hudi Expedition (dir. Kate Liszka, co-dir. Bryan Kraemer, Dr. Meredith Brand) is developing a narrative framework to accompany a 3D model of the archaeology and environment of the region. This project will allow viewers to discover the archaeology of Wadi el-Hudi and learn how archaeological data is interpreted to reconstruct daily life, administration, and labor. We are building on our previous social media outreach with the aim of developing longer digital storytelling narratives that will incorporate archaeological and archival data together with 3D models. This talk will present the development of our digital project and discuss challenges in creating public-facing narratives from an active excavation.

Located in the Egyptian Eastern Desert, Wadi el-Hudi encompasses numerous mines, settlements, and inscriptions from the Middle Kingdom, Greco-Roman Period, and Arab Period. We are establishing a public-facing project that will communicate the archaeology of Site 9, a Middle Kingdom amethyst mine and settlement, by incorporating two storylines. One focuses on the history and archaeology of Wadi el-Hudi, including architectural development and expansion of the Site 9 structure. The second narrative focuses on how archaeologists interpret archaeological materials. We will encourage visitors to interact with individual 3D objects to illustrate our interpretation of the site and its artifacts. The narratives will employ both archival and born-digital data to introduce various types of archaeological materials to diverse audiences.

SESSION: 1C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the (Bronze Age to Medieval Periods I

Chairs(s): Yuval Gadot, Tel Aviv University | Yiftah Shalev, Israel Antiquities Authority

The Size and Location of Jerusalem: View from the Northwest

Yiftah Shalev

Israel Antiquities Authority, Israel

For more than 150 years archaeological excavations are being conducted in Jerusalem, in the area known today as the 'City of David',

a narrow ridge sloping from Mount Moria toward the south. Remarkably, even after all exploration and study, there are still very basic enigmas regarding the location, size, and nature of the site, especially regarding periods that are earlier to the days of Herod (end of 1st century BCE). As most excavations occurred so far on the top of the ridge or along its eastern slope, their results may have offered a possibly deficient understanding of the changes in the city's layout. This lecture will focus on the northern edge and western slope of the ridge, analyzing the result of the recent as well as past excavation. New evidence regarding the natural topography and building operations along the Western slope will be presented. Its implications for understanding the city's location, size and nature during the first Millennium BCE will be discussed.

The Royal Topography of Jerusalem: Exposing Landscape Modifications and Royal Enterprises

Efrat Bocher

The Ancient Jerusalem Research Center, Israel. Bar-Ilan University, Israel

The southeastern hill of Jerusalem has been identified as the core of the ancient city of Jerusalem. It lies on a narrow hill to the south of the Temple Mount, bound on the east by the Kidron River and on the west by the Central Valley. Its slopes are steep, and the flat area at the summit has limited acreage; it has only one water source and is thus also a poor location for farming. All this makes it an inhospitable environment for settlement. Even so, this hill, especially the sharp slopes, had played a significant role in Jerusalem's settlement history.

The objective of this lecture is to examine the nature, including the date and function, of two royal scaled enterprises that have completely changed Jerusalem's landscape. The first is the construction of a network of walls that has been revealed along the eastern slope and date to the Iron Age IIB. The second is the filling up of a wide valley at the northwestern edge of the ridge by the Hasmoneans kings.

Examining the settlement on the slope will facilitate an understanding of the hill's development and will provide new insights and information regarding many royal projects and controversies that exist regarding the City of David hill and its fortifications.

New Hebrew Bullae from Giv'ati Area 10

Madadh Richey

Brandeis University, USA

Bullae recently discovered in the excavations of Giv'ati Area 10, Jerusalem, directed by Yuval Gadot and Yiftah Shalev, continue to enhance our understanding of administrative and epigraphic praxis in Iron Age Jerusalem. This paper presents ongoing epigraphic work by the author, with collaborators David S. Vanderhooft and Yuval Gadot, on this emerging corpus. Selected new personal bullae will be illustrated and described. Special attention will be given to palaeographic, onomastic, and prosopographic matters, as well as comparison with other corpora of bullae from Jerusalem itself and Judah more broadly.

Provenance Study of Iron Age and Hellenistic Clay Sealings from the City of David, Jerusalem

Anastasia Shapiro

Israel Antiquities Authority, Israel

Two assemblages of clay sealings originally used to seal documents, one assemblage dated to the Iron Age and the other to the Hellenistic

period, were retrieved in the City of David excavation in Jerusalem. The non-destructive micro-mineralogical examination of the clay and the non-plastic inclusions of these unique small sealings provided the lithologic fingerprint of the artifacts. The data obtained enabled determining the plausible geographical location of the senders of the sealed documents. The proposed provenances are based on the results of previous studies of pottery and sealings and correlate to the geology and pedology of the Eastern Mediterranean. The examination of the seals enabled the classification of three lithological groups of local, regional, and imported provenances, leading to the understanding that the burnt and no longer extant Iron Age and Hellenistic documents stored in Jerusalem were of three types: documents sealed in Jerusalem or the Judean Hills, documents dispatched within a 100–200 km radius from Jerusalem, and documents sent from more distant locations. These results enable important insights on the official relations of the Jerusalem recipients with their local and more distant partners.

Jerusalem's Elite: Ivory Items as an Expression of Status and Identity in the Iron IIB-C Material Culture

Reli Avisar

Tel Aviv University, Israel

Scholars of ancient southwest Asia considered ivory a rare and luxurious material used by elites to exhibit their wealth and social superiority. Famous and well-studied ivory assemblages dating to the Iron Age include those found in Assyrian capitals in Samaria, Arslan Tash, and Salamis. Recently, a collection of hundreds of decorated ivory plaques and fragments depicting floral and other motifs was found in Jerusalem. These finds join other published items from previous excavations and together they seem to express ideological and symbolic choices made by the elite living in Jerusalem in its heyday (8th-early 6th century BCE).

This lecture will discuss the contribution of these ivories to our understanding of Judah's elite as part of an imperial network: their consumption practices of luxurious commodities and the appropriation (and possible rejection) of new ideas and motifs.

SESSION: 1D. Archaeologies of Memory I (Arlington, 2nd Floor)

Chairs(s): Janling Fu, Harvard University | Tate Paulette, North Carolina State University

Archaeologies of Memory: Setting the Stage

Janling L. Fu¹, Tate Paulette²

¹ Harvard University, USA. ² North Carolina State University, USA

In this opening paper for the session Archaeologies of Memory, we offer a general introduction to the topic of memory and a more specific introduction to our three annual themes. We begin by considering the diverse ways in which memory has been theorized within archaeology and beyond. These theoretical interventions range across a broad territory, stretching from the phenomenology of individual remembrance to collective acts of intentional remembering/forgetting, from the gradual accumulation of traces to the sudden eruption of the past in the present, from linear notions of time to multiple modes of time and temporality. Having laid the basic groundwork, we introduce a series of concepts that engage more explicitly with memory as it intersects with the following themes: 1) space, place, and the built environment, 2) things, bodies, and assemblages, 3) events, rituals, and routines. Our goal is to open up

room for an extended, trans-disciplinary conversation about memory in its many forms.

Memories of Hunts Past and the Desert Kites

Yorke M. Rowan¹, Austin Chad Hill²

¹ University of Chicago, USA. ² University of Pennsylvania, USA

Many details of the animals traps known as desert kites remain unclear: how they functioned, their chronology, and the connection to other built features. In Jordan, their use as Neolithic traps for hunting gazelle is increasingly accepted, and their connection to nearby Late Neolithic houses seems likely. The very extensive nature of the kites, their typological diversity, and in particular evidence for their modification and rebuilding suggests that these continued in use for generations. Their significant size stretching across thousands of kilometers and connected across multiple chains running roughly north-south, suggests that their construction stretched over many generations. For this reason, the memory not only of successful hunts but also feasts and other social events surrounding these communal efforts would evoke narratives about social memory – how things were in the past. As an active, ongoing process, memory of significant events like this could be used to legitimize authority, however transient, but could also be used for conflicting narratives of different groups involved in annual hunts. These enduring and visible markers on the landscape may have served as memories of control over the landscape. The representation of kites in petroglyphs may depict mythic events on the landscape, underscoring how these places are inscribed with meaning, and operate through time as places to which groups would repeatedly return. In this paper, we explore the potential for viewing desert kites as landscape features that served beyond the level of subsistence to enhance a sense of place and reinforce spatial experience and social relationships.

Landscape and Memory in the Egyptian Eastern Desert

Laurel D. Hackley

The French National Centre for Scientific Research (CNRS), France. University of North Carolina at Chapel Hill, USA

This paper examines how the desert landscapes of Egypt act as exceptional spaces of memory and myth-making. Arid landscapes in general are often regarded as culturally sterile, and this is especially true in Egypt where they have been eclipsed by the archaeologically rich Nile Valley. However, the Egyptian deserts are heavily inscribed, modified, and built upon, attesting to millennia of human activity. Furthermore, the desert is frequently alluded to in the literature and material culture of the Nile Valley, in ways that suggest that it is an important location for ancient Egyptian thinking about deep time, encounters with the dead and the foreign, and interactions with mythological worlds. I will discuss how elements of liminality and ambiguity affect senses of time in the desert environment, and how this facilitates emotional engagements with the past.

I incorporate several diachronic, landscape-scale datasets to demonstrate the palimpsestic nature of the cultural landscape in the desert, and the ways in which evidence of earlier human activity provoked people to interact with the landscape, and leave their own marks, in particular ways. Specifically, I will discuss multi-period inscriptional galleries, waymarks and cairns, and the repeated reuse of infrastructure such as fortresses, cult places, and campsites in the Eastern Desert. I will focus on how placemaking activities in this marginal environment are responsive to traces of the past and how this continually reiterates the physical fabric of the landscape as a

medium for memory and the transmission of information in many different registers.

Early Bronze IV Landscapes of Meaning

Amy B. Karoll

New York University, Abu Dhabi, UAE

Landscapes are embedded with social memories and cannot exist outside of human experiences. During flashpoints of change in a society, memory is manipulated and maintained to create a sense of stability and normalcy. These memories may be preserved through several different mechanisms, including ascribing meaning to paths and ways to transverse the landscape. The Early Bronze IV (EB IV, c. 2500-2000 BCE) represents a period of change in the southern Levant. Towards the end of the third millennium BCE, much of the previously established cities and villages across the southern Levant were either abandoned or downsized. Numerous earlier theories point towards the discontinuities in the settlement locations and patterns from the Early Bronze II-III (EB II-III). However, there are multiple similarities that tie the Early Bronze Age together. Many of the smaller settlements were still occupied and newer sites were established along previously established and utilized communication and trade corridors. This study looks at how people ascribe meaning to the landscape through continuously traversing the same routes and how a cultural memory of important places during the EB II-III influenced the location of new settlements during the EB IV. I utilize Geographic Information Systems (GIS) to demonstrate that, rather than an abrupt change and sudden collapse of previous systems, the EB IV is part of the memoryscape of the Early Bronze Age.

The Social Catchment of Kurgans: Viewsheds and Memory in the Lower Dnipro Region

Ruth Portes¹, Erin Brantmayer²

¹ Cornell University, USA. ² University of Texas at Austin, USA

In archaeological and historical studies, social memory has been a critical tool for exploring the importance of ruins to the landscape and later occupants. This approach is often limited to the extensive, durable built environments of sedentary groups and to spaces of long-term settlement. Tumuli located in what has been typically understood as 'nomadic' space, however, have not often been examined using these theoretical frameworks, although relating tumuli to ruins and spaces of human reuse has been a line of inquiry for decades, and several regional surveys in Eurasia have posited correlation between habitation and burial sites of mobile groups. In addition, the use of GIS in the Black Sea region has been slower to take hold beyond estimating site distribution. To help remedy this, we build upon these lines of inquiry by applying viewshed analysis and theoretical approaches to Iron Age tumuli in the Lower Dnipro region in modern Ukraine to explore questions of social memory. As a region in which several cultural groups of varying mobilities interacted in antiquity, applying GIS and theoretical frameworks allow us to explore the diachronic function of these tumuli within the social memory of groups moving through the region, and further problematizes the dichotomy between mobile and sedentary spaces. In doing so, we hope to create a model that can be used throughout the Black Sea region both for spaces in which tumuli have been destroyed and for those where they remain intact.

SESSION: 1E. Approaches to Dress and the Body

Chairs(s): Neville McFerrin, Ohio University | Josephine Verduci, University of Melbourne

Minoan "Warrior Graves": Military Identity, Cultural Interactions, and the Art of Personal Adornment

Josephine A. Verduci

University of Melbourne, Australia

Within Late Minoan and Subminoan burials on Crete, the association of jewellery with weaponry, tools, and other metal artefacts supports evidence for 'Warrior Graves' with links to the Greek mainland and neighbouring regions. Burials containing weapons and other paraphernalia that might be used in warfare or combat include an array of adornment items that offer clear indications of the deceased individual's personal, social, and cultural identity, in addition to what might be determined about their military status. This discussion aims to explore fundamental issues regarding how items of adornment might indicate personal identity, social status and environment, and the interconnections between Crete and other areas of the Mediterranean.

'Figuring' Out What to Wear: Dressing the Gods in the Southern Levant

Deborah Cassuto

Bar Ilan University, Israel. W.F. Albright Institute of Archaeological Research (AIAR), USA

Ceremonies in which divine images were adorned with special garments for religious festivals have been documented throughout the Ancient Near East. Administrative texts detail the preparations for such ceremonies and the requisitioning of specified garments for the different deities to be 'dressed-in'. In some cases, specialized workshops were commissioned to produce the garments, whereas in other cases, 'in-house' textile workshops were established as one of several temple industries within temple complexes. Such temple industries have been attested in Iron Age strata in the southern Levant, where evidence for weaving has been found within cultic contexts. In the Hebrew Bible we find a reference to women weaving batim (houses) for Asherah in the Temple compound (2Kings 23:7). Combining archaeological evidence for temple textile industries with written evidence for textiles in religious contexts, I hope to offer support for interpreting the above biblical reference within the broader Ancient Near Eastern traditions of 'dressing the gods'.

Fashion Icons: The Dressed Bodies of Early Dynastic Sculpture as Ideal Worshipers

Elizabeth H. Clancy

Institute of Fine Arts, USA

Since their discovery, scholarship on Early Dynastic temple sculptures has focused on their agency as body-doubles, capable of reciprocal gaze with the gods, made of materials understood as inherently holy. Their dress and hairstyling has been shown to be part of a performance of status, gender, and regional affiliation. This paper will argue that in concert with their abstracted, gendered bodies, the dress of votive statues is also deliberately used and manipulated to increase their religious efficacy. Male and female figures from the Metropolitan Museum serve as canonical examples from the mid-third millennium. A formal analysis of a male figure from Eshnunna reveals messages of the fecundity of sheep in the hanging loops of his skirt and tail-like belt, as well as the leonine power implied by the furrowed waves of his wig and beard. The triple folds at the edge of the draped

garment of a female figure from the temple of Inanna at Nippur is connected to devotional and anatomical images of the goddess herself. As the folds spill from behind her clasped hands, they blur the line between body and garment and can be read as vulvate, nested doorways into the temple, and a never-ending performance of libation. The paper shows that the sculptors of temple sculptures are fully cognizant of the semiotics of clothing. These likenesses of men and women are embodied in stone as ideal worshipers teeming with devotion and fertility, a powerful stimulus for divine beneficence.

Clothe them with Garments for One Day: Dress and Figurines in Mesopotamian Incantations

Gina Konstantopoulos

University of California, Los Angeles, USA

The production and manipulation of figurines was an essential aspect of many Mesopotamian incantations. These texts, which could protect against existing or future threats, fundamentally relied upon the principles of sympathetic or analogical reasoning: figurines were created and manipulated to effect what they represented. These manipulations were most often described in long ritual passages found within the text of the incantation, and the figurines themselves could represent a wide range of beings, from positive and protective spirits to negative and thus decidedly antagonistic ones. My paper is focused on one particular aspect of these figurines and their use in Sumerian and Akkadian incantations; namely, the clothing and accessories that they are described as wearing. Ritual passages include clear instructions to provide protective or divine figurines with rich clothes, golden jewelry, and even weapons of precious metals; antagonistic or demonic figurines are described in similar detail, as painted in specific colors and given provisions, but notably are provided with garments “for one day” (*ūmakka*). Other, more “permanent” garments are described in a range of colors, with different accessories. This paper considers the different representations of dress for the manipulated figurines of incantation texts, pairing textual sources with artistic and material evidence, both large-scale relief depictions and foundation deposits of the figurines themselves. In doing so, I evaluate the overall role of dress as a key function of the identity and use of the various figurines manipulated in Mesopotamian incantation texts.

Fashioning Sensecapes through Ancient Egyptian Dance

Robyn Price, Jordan Galczynski

University of California, Los Angeles, USA

One of the most important functions of dance in ancient Egypt was its ideological role in mortuary and cultic rituals. Dancers and musicians were employed during funerary processions and as khener-troupes working for a specific deity or the mortuary cult of a king. Integral to these process was the dress of the participants. In this context, dress was both practical and performative. Though costumes can incorporate a variety of sensory stimuli, previous discussions on ancient dress have focused largely on the visual realm, namely the material and the aesthetic. In this paper presentation, however, we suggest it is the entire sensecape produced by dress-in-motion that makes ancient Egyptian dance effective.

Ancient Egyptian dance functioned within a system that connected sensory stimulation with the experience of life. Dance was not restricted to a pleasurable, visual display, rather it incorporated a variety of sensory experiences that not only defined the extent of a ritual space, but established a shared identity among participants, whether alive or dead, mortal or divine. It was the totality of the

sensory attributes of dress in dance that made it effective as a transformative ritual.

SESSION: 1F. Archaeology of Petra and Nabataea

Chairs(s): Cynthia Finlayson, Brigham Young University | David F. Graf, University of Miami (Florida)

A Possible Ritual Feast at Eastern Cistern B on the Ad-Deir Plateau

Jake Hubbert

Brigham Young University, USA

Water was critical to ancient Nabataean life, so much so that there are hundreds of betyls strategically placed throughout Petra, Jordan to bless important water sources, routes, and cisterns. This paper discusses new evidence from Eastern Cistern B (ECB) on the Ad-Deir Plateau that demonstrates possible religious functions of cisterns in Nabataean society. Specifically, there is an inscription above a rock-cut room associated with ECB that references a group of Nabataeans who dedicated their meal to the deified Nabataean King Obodas. Additionally, the pottery that the Ad-Deir Monument and Plateau Project (AMPP) has recovered from the ECB represents a wide range of cooking and serving vessels that were found alongside fine dining plates and cups. Such an assemblage of pottery supports the inscription that a ritual feast occurred at or near ECB. The ancient Nabataeans may have recognized that having a water source nearby their feasting location may have served a symbolic and utilitarian function. For example, the water might have symbolized health, life, and rejuvenation. Thus, the analysis of elements surrounding the ritual meal that may have occurred at ECB may provide new insights into ancient Nabataean views towards water and its relation to their religious practices.

Who Are You Calling a Foreigner? Aligning Isotopes with Nabataean Identity at Petra, Jordan

Megan A. Perry

East Carolina University, USA

The utilization of isotopic analysis to understand diet, mobility, and climate in the ancient Near East has grown dramatically over the past 20 years. As this region has been at the crossroads of economic and social networks, understanding patterns of human migration through oxygen and strontium isotope ratios has formed an essential role in this expansion. However, the geological and climatic variation and cultural practices in the region present many restrictions to using these isotopes in the southern Levant. The paper explores these limitations and emphasizes the importance of proper cultural and historical context in interpreting the results of isotope investigations through the lens of the Nabataean capital of Petra. Eighty molars and premolars representing 9 non-adult and 53 adult individuals excavated from the 2nd century BC to late 1st century AD tombs on Petra's North Ridge were subjected to oxygen isotope analysis to assess migration into the ancient city. Of these, 30 molars or premolars representing 8 of the non-adult and 22 of the adult individuals also were sampled for strontium isotope analysis for the same purpose. three statistical outliers were identified in the oxygen isotope data and one outlier in the strontium data. Mortuary behavior did not materially differ in the treatment of these individuals regardless of their isotopic status. The isotopic data combined with epigraphic and archaeological evidence may indicate the cosmopolitan nature of Petra meant an

isotopically-distant origin may not have fundamentally resulted in a “foreign” identity in the community.

Who Is the Limestone Goddess of Ad-Deir? A New Statue from the Ad-Deir Plateau in Petra, Jordan

Cynthia Finlayson

Brigham Young University, USA

In the Winter of 2017, a partial limestone statue of a goddess was saved from its attempted theft by looters on the Ad-Deir Plateau in Petra, Jordan. The statue originated from the Ad-Deir Monument & Plateau Project excavations of Eastern Cistern B, one of seven massive Nabataean cisterns constructed anciently to control seasonal flash flooding damage to the Ad-Deir Monument. While the upper torso and head of the statue were never found, even after the entire cistern was cleared in the Summer of 2021, this work of art and its associated attributes and symbolism are extremely important in adding to the ongoing scholarly debate concerning the identities and relationships between two of the Nabataean’s most important female deities, i.e., Al-Uzzah and Allat. In addition to the archaeological evidences for this statue’s original contexts, this paper will address how the statue itself relates to Greek, Roman, and Islamic epigraphic evidences related to the the identities of Al-Uzzah and Allat within Nabataean society, as well as the depth of Hellenization in the processes of the evolution of Nabataean religion.

Aspects of Zoroastrian Traditions in Nabataean Petra

Jennifer Ramsay¹, Andrew Smith², Bjorn Anderson³

¹ State University of New York College at Brockport, USA. ² The George Washington University, USA. ³ University of Iowa, USA

What do we know about Zoroastrianism at Petra, Nabataea, Roman Arabia? Very little, it seems, which begs the second question: why? It would be wrong to conclude that there is no evidence of Zoroastrian traditions in the archaeological record at Petra. Instead, it seems, scholars have tended to overlook or dismiss the topic without giving the idea much credence. This seems to be the natural response to the fact that no ancient source specifically references Zoroastrians in Petra. However, our sources (textual, art historical and archaeological) can provide inferences. For example, was “Conway’s Tower” at Petra a platform for ritual exposure of the dead? This enigmatic circular structure on Petra’s North Ridge resembles Zoroastrian exposure platforms in Iran, later known as Towers of Silence. In this paper we examine evidence to support this interpretation, and further argue that Zoroastrian cult practices may have been widespread at Petra. Achaemenid records document the presence of highly-placed Arabians who “went to the King”, at Persepolis, where rituals linking the king to Ahura Mazda were regularly performed. We argue that Zoroastrian practices became rooted in aspects of elite Arabian culture through centuries of interaction with Iran, an imprinted memory that persisted into the Nabataean kingdom. It is doubtful, however, that the Nabataeans of Petra were conscious of this Zoroastrian heritage, as no surviving dedicatory inscriptions in Nabataean name Ahura Mazda. Rather, these rituals became part of the broader constellation of Nabataean religious activity.

The Nabataean New Year Festival

David F. Graf

University of Miami, USA

In a rather puzzling unpublished laconic Nabataean Aramaic inscription at Humayma, reference is made to the 22nd of Nisan. It is

interesting that Nisan is the most attested month in Nabataean Aramaic texts. These texts suggest the month must be associated with the Nabataean calendar in some special sense. The obvious explanation is that it is an indication of a common spring New Year’s festival. It is well known that the standard Mesopotamian calendar was adopted by the various Aramaic cultures (Jews, Nabataeans, Palmyrenes). In Mesopotamian culture, the first eleven days of the month were the occasion of the Akitu Festival in which the enthronement and elevation of the king took place. For the Jews, the feast of Passover was celebrated at the full moon in the month of Nisan (14th or 15th) that ended on the 22. It has been surmised that the years of the reign of the Nabataean kings began with the month of Nisan and were associated thereafter with the renewal of his reign. Involved with this celebration, it also may be proposed that there was a pilgrimage of Nabataeans to the capital to pay homage to the new or reigning king.

SESSION: 1G. Protecting Libyan Cultural Heritage I

Chairs(s): Ahmad Emrage, University of Benghazi, ASOR Cultural Heritage Initiatives | Aida Ejroushi, Texas Tech University, ASOR Cultural Heritage Initiatives

Update on Documentation and Outreach Activities in Cyrenaica Funded by a 2021 AFCP Grant

Ahmad Emrage

University of Benghazi, Libya

During the Spring and Summer of 2021, 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) conducted a risk assessment survey and outreach activities in the area Between Cyrene and AL-Qubba in Cyrenaica/ Libya. The results of this work have already been summarized and presented in ASOR’s 2021 Virtual Annual Meeting. However, Since November 2021 further documentation work and outreach activities have been conducted in Cyrenaica as part of this project.

Creating a GIS dataset for those archaeological sites that the Department of Antiquities can use for future monitoring has been one of the main aims of the project. This paper will present some examples of the GIS mapping that have been produced and shed the light on their importance in site documentation and future monitoring. The paper will also discuss the possible intervention plans that may be conducted by local responsible authorities to mitigate the issues and protect those sites.

A summary of the outreach activities that targeted local communities and some responsible authorities will be emphasized. These activities include the objectives and recommendations of the two awareness workshops that were held in the city of Benghazi during December 2021. The paper will also discuss the importance of the outreach materials (leaflets, outreach booklets, and site guides) that were printed and freely distributed among the local communities during the outreach events.

Registration of Libyan Cultural Heritage Sites in International Organizations (ISESCO as a Model)

Abdulmotaleb Abousalem

Cultural Heritage expert- Ministry of Culture, Libya

Libya is a country located in the heart of the world, and its geographical location makes it a link between East and West and a meeting point for Mediterranean civilizations during centuries.

Countries of the world are competing to register their tangible heritage in international organizations, especially the mother organization UNESCO, which was the last Libyan site included in its list, the city of Ghadames in 1986 AD. International organizations are interested in cultural heritage, the most important of which is ICESCO, which is a specialized organization operating within the framework of the Organization of Islamic Cooperation (OIC), with 57 member states.

In my capacity as a consultant for heritage affairs at the Libyan Ministry of Culture, I submitted a proposal to form a committee to register sites in ISESCO in the year 2018, which included several experts from various Libyan cities. Once in the history of Libya, a natural site is registered. After the success of the committee's work in 2018, a committee was formed again in the year 2020 and included experts from all institutions concerned with cultural heritage in Libya. Within months, we presented 16 other files for sites in various Libyan cities, and in the year 2021 after the meeting of the Heritage Committee in the Islamic World The number became 22, and Libya topped the list of tangible heritage in that year. The next step will be to nominate some of these sites for the global list of UNESCOs, in cooperation with ISESCO.

Protecting Heritage During Conflict: The Case Study of The Archaeological Cartographic Archive of Tripoli

Susan Abugrara

Department of Antiquities of Libya, Libya

Following the 2011 uprising in Libya, social and political upheaval posed an immediate threat to the country's heritage. During the 2014 conflict, the Department of Antiquities ordered the closure of all museums and archives to the public and transferred the archaeological collections to safe storage rooms. The fragile nature of historical archives, however, made necessary the implementation of a protocol to safeguard the documentary heritage in their original location.

This paper presents the case study of the Cartographic Archive of Tripoli as an example of safeguarding documentary heritage during an armed conflict. The archive is an essential starting point for any archaeological research in Libya. It holds more than 10000 maps and drawings covering archaeological activity throughout the country, from the establishment of the Italian archaeological superintendency in 1912 to nowadays. Through a digitisation project, the Department of Antiquities was able to protect large numbers of documents and at the same time improve their accessibility to local and international researchers. It will also argue how this model can be applied to other Libyan archives in danger offering a tangible solution to protect their collections.

The Effect of Replicating the Design of San Mark's Square in Shaping Tripoli's Main Square on Creating the Red Castle Tunnel During the Italian Colonization of Libya

Aida Mohamed Ejroushi

Texas Tech University, USA. ASOR Cultural Heritage Initiatives, USA

This paper builds upon the idea behind designing the Red Castle (Al-Saray al-Hamra) tunnel (roadway) that was presented in another research (Ejroushi 2021). Creating the tunnel to link the two sections of the coastal road (Lungo Mare Conte Volpi boulevard, entailed cutting a substantial part of the Red Castle mass and interior buildings. The design of the tunnel was primarily a replica from the Stadium and Domus Augustana of the Palace of Domitian, located on the Palatine Hill, in Rome, Italy. However, this research argues that during the

Italian colonization period of Libya (1911- 1943), creating the tunnel through the Red Castle was also inspired by the design of Tripoli square, in which the Italians replicated the arrangement and design of San Mark's square, in Venice, Italy. Accordingly, it links this argument with a previous study about the idea behind designing the main square of Tripoli, Libya (Ejroushi 2019). Based on the two existing studies, and a thorough visual analysis of these Italian precedents, this research reveals that creating a void within the Red Castle was based on replicating the arrangement and form of a prominent Roman building located in San Mark's Plaza. Theoretically, this research contributes to the existing literature related to colonial architecture and the history of historic preservation planning in Libya. Specifically, it adds information to the history of the Red Castle tunnel that has lasted as a lost landmark.

Risk Assessment of Gholia Cultural Heritage Site and the Proposed Risk Reduction Interventions

Muftah Ahmed Alhddad

az-Zaytuna University, Libya

Many cultural heritage sites in Libya are facing different natural and anthropogenic hazards. These hazards cause a lot of damage, distortion and tampering on cultural heritage properties. The archaeological site of Gholia (Bu Njem) is considered one of the most important archaeological sites in Libya. It built by the Legio III Augusta during the reign of Emperor Septimius Severus, in the first year of the third century AD as a fort that is containing a regular military cohort and some auxiliary forces. This fort is considered one of the most important Roman forts constructed in the limes Tripolitanus areas. However, this important site has been faced several anthropogenic and natural risks that have caused significant damage and continue to pose strong threats to it. This study aimed, firstly, to remotely monitor and assess the risks to this cultural heritage site, secondly, it followed by fieldwork to evaluate on the ground the remotely assessment of threats and their consequences on the site and thirdly, to raise public awareness of local community about the historic and cultural significance of this site. Results of this study have specified, on one hand, that the sternness of anthropogenic risk on the site is stronger than the natural hazard, especially the risk emerges from the new agricultural project within and around the archaeological site. On the other hand, the lack of awareness between the local community about this cultural heritage site.

SESSION: 1H. Archaeology of Syria

Chairs(s): Kathryn Grossman, North Carolina State University | Caroline Sauvage, Loyola Marymount University

Archaeology of Sefire: Forgotten Excavations of C.-L. Brossé in 1928

Jan Dušek

Charles University, Czech Republic

Sefire, a city in northern Syria, situated approximately 23 km south-east of ancient Aleppo, is a site that yielded epigraphic documents. These are: a cuneiform inscription engraved on a torso of a statue whose date is uncertain, the famous Aramaic adê-treaties engraved on blocks of basalt from the mid-8th century BCE, and probably also an Aramaic tablet with an official document written in 571/70 BCE. The tell in Sefire has been almost completely destroyed during last few centuries by an urban expansion. The scholarly literature reports a single and very brief information on archaeological excavations of

Sefire by a French archaeologist C.-L. Brossé in 1928, whose report has never been published. The only published information comes from a short paragraph in a French touristic guidebook (*Les Guides Bleus, Moyen Orient*, Paris, 1956, p. 322). It has been even suggested that this short notice may not concern Sefire but Brossé's excavations at Tell Beyar in the Jezireh (see *Realexikon der Assyriologie* 12, p. 342). During my work on some epigraphic material in the *Cabinet du Corpus des inscriptions sémitiques* (Paris) in 2019, a file was brought to my attention that actually contains Brossé's unpublished, forgotten, and thus far unknown report on his 1928 excavations in Sefire. My aim is to summarize what Brossé found, and to present what may be the meaning of this material especially in relation to the Aramaic adê-treaties.

Economy, Society and Sealing practices at Tell Jerablus Tahtani, Syria

Andrew P. McCarthy

University of Edinburgh, United Kingdom. College of Southern Nevada, USA

Tell Jerablus Tahtani is a small (1.5 ha) settlement beside the Euphrates River in Syria, located just 5km from the major urban centre of Carchemish. The prehistoric settlement at Jerablus Tahtani dates from the Local Late Chalcolithic and Uruk periods through the Early Bronze Age and exhibits characteristics of urbanization and increasing social complexity during these periods that are familiar at larger sites. While this site must be understood in the context of its larger neighbour, it also provides an interesting perspective on how state level society in this region emerged and suggests that some social and economic change was qualitative rather than quantitative. In particular, the seals and seal impressions from the site show complex and sophisticated economy and trade and the establishment of a state identity associated with Carchemish and its region. For such a small site, it is perhaps surprising that the inhabitants of Jerablus Tahtani seem just as active in affecting the social changes that led to state formation as they were influenced by the changes taking place at larger urban sites in the vicinity.

Tell Jerablus Tahtani was excavated by a team from the University of Edinburgh, and after the untimely death of its Director Prof. Edgar Peltenburg, production of a final report on the main excavation was slowed. Dr. Diane Bolger has taken on the task of producing this final report and work is now underway. This paper provides an update on renewed publication efforts with specific reference to the glyptic from the site.

Dura-Europos and the Domus Ecclesiae: Revisiting the Archaeology of Syria's Oldest House-Church

David Pettegrew

Messiah University, USA

In his final published report on the Christian building at Dura-Europos (1967), Carl Kraeling established the *domus ecclesiae* as a standard fixture in the evolutionary typologies of church architecture. In Kraeling's reading of the stratigraphic, architectural, and decorative evidence, the excavated third-century building represented a type of private domestic structure permanently adapted to communal Christian worship through a unified program of deliberate modifications. Kraeling's thorough discussion of the evidence and airtight interpretation of architectural phases made Dura's building the best example of a modified church before the age of Constantine. My paper revisits the archaeological evidence that proved foundational to Kraeling's interpretation of architectural adaptation. In one respect, I

discuss poorly known documents of the Dura-Europos collections of the Yale University Art Gallery archives to show how and why the building's original excavators at times contested Kraeling's reading of the evidence. In another, I reconsider the phases and function of the building in light of more recent studies of the Roman city of Dura and its domestic architecture. I end by considering the city's Christian building as a privately-owned house used for communal worship. In this respect, my paper highlights the value of thinking critically about influential "legacy ideas" (James 2019, 10) that structure and bind our views of archaeological sites.

James, Simon. *The Roman Military Base at Dura-Europos, Syria: An Archaeological Visualization*. Oxford: Oxford University Press, 2019.

Kraeling, Carl H. *The Christian Building*. New Haven: Dura-Europos Publications, 1967.

Death and the Dead in the Pottery Neolithic Period: New Insights on Body Transformation and Funerary Practices at Tell el-Kerkh, Northwest Syria

Sari Jammo, Akira Tsuneki

University of Tsukuba, Japan

Excavations at the Neolithic settlement of Tell el-Kerkh, located in the south of the Rouj Basin in Idlib Governorate, unearthed the remains of 294 individuals dated to the Late Pre-Pottery Neolithic B (LPPNB) and Late Pottery Neolithic (Late PN) periods. The largest number of burials (244) uncovered during the PN period from an outdoor communal cemetery dated 6400–6200 cal. BC. The deceased at the cemetery were given primary, secondary, cremation, collective, and jar burials using various mortuary practices. Some burials revealed a mixture of two burial types in the same burial context, such as cremated remains in collective burials or detached skulls beside intact burials, which indicates complex patterns of inhumation at the cemetery. The bodies of the dead at the Kerkh cemetery were subjected to both simple and complex treatment. Remarkably, only 34% of the burials have been left intact or untouched after inhumation, whereas, a remarkable number of individuals were subjected to multi-stage treatments and some body parts were retrieved from their original inhumation deposit and subsequently relocated. This suggests that postmortem treatment might be a prevailing custom in Tell el-Kerkh society aimed at enhancing social cooperation and strengthening ties between society members through participation in frequent ritual ceremonies. Further, retrieving body parts from the original inhumation context and relocating them is a prevalent funerary custom aimed to transform the body into a different and meaningful context.

Ubaid and Late Chalcolithic I–II Agriculture and Fuel Use at Tell Zeidan, Syria: An Integrated Approach

Alexia Smith¹, Lucas Proctor²

¹ University of Connecticut, USA. ² J.W. Goethe-Universität, Frankfurt am Main, Germany

Between 2008 and 2010 excavations at Tell Zeidan, Syria, led by the Oriental Institute of the University of Chicago and the Syrian Directorate General of Antiquities and Museums, revealed substantial Halaf, Ubaid, and Late Chalcolithic 1 (LC1) and Late Chalcolithic 2 (LC2) occupations yielding a continuous radiocarbon sequence from ca 5800 to 3800 BC. Surveys suggest that Tell Zeidan was one of the largest Ubaid settlements in northern Mesopotamia, paralleling sites in southern Mesopotamia in size, and questions of how the inhabitants sustained such a large population in a semi-arid zone have been raised.

This paper integrates the finalized macro-botanical dataset from 97 Ubaid–Late Chalcolithic I/II samples with anthracological and dung spherulite analyses to consider the nature of agricultural production, crop processing, and plant and fuel use within both domestic and craft-centered contexts areas.

SESSION: 11. Methodological and Theoretical Advances in the Study of Pastoral Mobilities in the Ancient Near East

Chairs(s): Siavash Samei, The College of Wooster | Laurel A. Poolman, Johns Hopkins University

The Natures of Nomadism: Archaeological Perspectives on Social and Cultural Variability among Mobile Pastoralists in the Near East

Steven A. Rosen

Ben-Gurion University of the Negev, Israel

Archaeological analyses of the remains of ancient nomadic pastoral cultures, to be studies as one studies any preliterate, small-scale society, add dimensions to the study of these societies not available from the examination of historical or ethnographic sources. In 20th century ethnographies, anthropologists documented tremendous variability among herding societies, archaeological research has increased the range of that variability by an order of magnitude, adding the millennia of evolving adaptations to the ethnohistoric record.

If the primary goal of anthropology has been to achieve some understanding of the impact of mobility and herding on human society and culture, among many archaeologists the casual classification of societies as pastoral nomadic, or semi-nomadic, to fit specific research agendas is fundamentally flawed in the assumptions that all pastoral nomadic societies are the same, and that the mere classification will suffice to offer historical explanation.

In the deserts of the Near East, archaeology has documented a large set of types of sites which can be associated with mobile pastoral societies. These include camp sites, ranging from short-term ephemeral camps to more fixed aggregation camps, quarries and workshop sites, cult sites and cemeteries, stabling rock shelters, and pens. Excavation and high-resolution survey allow both dating of these sites and their analysis and integration in the larger pastoral systems. These can be placed into landscapes incorporating features like roads and water sources less easily dated. The general pastoral systems, based on the set of sites and material culture analyses, reflects ever changing pastoral adaptations.

Another Kind of Nomadism: Assemblage Theory and the Archaeology of Pastoralism in SW Asia

Benjamin Arbuckle

University of North Carolina at Chapel Hill, USA

In this paper I address the archaeology of pastoralism in SW Asia from two perspectives. First, I take a reflexive look at the construction of pastoral narratives in the archaeology of the region. Using Callon's sociology of translation as a guide and emphasizing the role of storytelling, I think through how pastoralism has been effectively used to gather together actor networks and craft narratives firmly anchored in the present. Second, using notions borrowed from assemblage theory I explore what an archaeology of pastoralism looks like if homogenous typological categories (e.g., tethered nomadism, transhumant pastoralism, etc) are replaced with unstable heterogeneous entities, multispecies approaches, and notions of becoming (i.e., a process oriented approach). I suggest that a process-oriented approach aligned with archaeological science (theoretical and methodological

innovation) has much to offer an archaeology of pastoralism which 'follows the networks' mapping an unknown past rather than tracing preconceived shapes.

Bannum and Zimri-Lim: Sim'alite Pastoralist Leadership and New Rule from Mari

Daniel E. Fleming

New York University, USA

In the study of ancient "pastoral mobilities," there is a constant danger of assuming a landscape that misconstrues the realities of socially integrated systems. The potential traps must be different for those approaching the problem from archaeology and survey, and from texts. Ideally, ongoing conversation between these disciplines can illuminate the pitfalls that threaten both and can maximize the payoff of evidence from each. In the case of writing, the material tends to view pastoralists as outsiders to the institutions of settled society, and specialists mainly attend to pastoralism when it shouts its presence in explicit references to nomads. Otherwise, large-scale husbandry of small livestock is approached as the administrative concern of kingdoms and their settled institutions.

Perhaps more than any other written finds, the archives of Mari in the early 18th century offer a brief, intense, view of mobile pastoralism deeply integrated into the structures of a large city-based kingdom, under the rule of Zimri-Lim. In his 2019 volume on the first year of Zimri-Lim's rule, Jean-Marie Durand gathers new evidence and analysis that includes letters involving Bannum, his single most important ally at this moment. Bannum's standing was defined by the title *mer'um*, "chief-of-pasture," identified with pastoralist communities, yet he embodies the interwoven roles and activities of pastoralist and settled ways and populations in the regions upstream from Babylon. New evidence for Bannum displays a self-conscious straddling of spheres that he regards as separate but connected.

Revising the 'Grand Narratives' of Pastoralism in the Ancient Near East

Emily Hammer

University of Pennsylvania, USA

The study of pre-modern pastoralism, in the Near East and elsewhere, has relied largely on ethnographic analogies and environmentally deterministic models, often with little or no data on historically-specific pastoralist communities. This approach has yielded a static picture of pastoralism through time that has only recently begun to be challenged. A new suite of laboratory methodologies, fieldwork orientations, and theoretical frameworks have in the last years allowed archaeologists to empirically reconstruct pastoralists' lifeways, herding strategies, mobility practices, and long-term impacts on society and environment in different times and places. In this paper, I sketch the role that pastoralists and pastoralism have historically played in some of the 'grand narratives' of Near Eastern history and briefly review how recent empirical evidence has shifted either the shape of these narratives or our understandings of the role that pastoralists and pastoralism have played. Developments in archaeological theory and interpretation of both older and newer archaeological data in light of revised ethnographic analogies indicate the social, political, and material complexity of supposedly egalitarian, small-scale pastoralist communities; zooarchaeology and paleobotany have complicated our understandings of domestication and the emergence and long-term development of pastoralism; paleobotany and geoarchaeology have reversed earlier assumptions about the

environmental impacts of herding; survey and excavation demonstrate the environmental, demographic, and material impacts of built infrastructure by supposedly 'invisible' pastoralists; genetic and isotope studies suggest that ideas about mobility, migration, and early long-distance trade require modification.

Zooarchaeological Studies of Late Chalcolithic Surezha

Max Price

Massachusetts Institute of Technology, USA

Wealth in livestock was a central feature of developing political economies in the Neolithic and Chalcolithic in northern Mesopotamia. In later historically-attested Mesopotamian societies, livestock not only provided sources of valuable foods and materials (e.g., wool), but also served as a means of production and transportation, which facilitated economic growth. More than that, animals were often living embodiments of wealth — as they are in countless ethnohistorical cases worldwide and, indeed, in the institutional economies of Bronze Age Mesopotamia. In this paper, I present the faunal data from Tell Surezha, focusing on the Ubaid-LC 3 phases at the site and compare it to contemporaneous data from nearby Tell Helawa and Tell Nader. Sample sizes are most robust from the LC 1 and LC 1-2 phases at Surezha and thus allow a more in-depth analysis. Data from those phases potentially indicate cattle traction and experiments in caprine husbandry that might have been connected to fiber exploitation. Other notable characteristics of the Surezha animal economy are the strong reliance on pork (c. 25-30% of the fauna) and the occasional and possibly ritual consumption of dogs and wolves. I conclude by arguing it is imperative that we view animals not only as sources of food and fibers, but also as wealth. Doing so allows us to see the animal economy as a major feature in the evolving socioeconomic relationships between households in the Late Chalcolithic.

THURSDAY, NOVEMBER 17, 2022 | 10:25am–10:40am (EST)

Coffee Break (Mezzanine Foyer, 2nd Floor)

Sponsored by The University of Chicago Press

THURSDAY, NOVEMBER 17, 2022 | 10:40am–12:45pm (EST)

SESSION: 2A. Archaeology of Cyprus I

Chairs(s): Kevin Fisher, University of British Columbia | Catherine Kearns, University of Chicago

Excavations at Makounta-Voules-Mersinoudia: Results from the 2022 Season

Kathryn Grossman¹, Tate Paulette¹, Lisa Graham², Andrew McCarthy²
¹ North Carolina State University, USA. ² College of Southern Nevada, USA

Excavations at the site of Makounta-Voules-Mersinoudia in 2018 and 2019 produced a tantalizing glimpse of life in the Late Chalcolithic period on the island's northwest coast. The onset of the Covid-19 pandemic put excavations on hold in 2020 and 2021. In 2022, the team returned to the field, continuing the work of previous seasons. In this paper, we present the results of the renewed work, which focused on expanding the exposures of an intriguing fire installation, a series of Chalcolithic round buildings, and associated features, as well as exploring new parts of the site. The new excavation areas include a rocky outcrop with a cluster of features cut into bedrock and an area that produced a substantial surface scatter of ceramics and copper slag.

The Kourion Urban Space Project: Preliminary Results of the 2022 Excavation Season at Kourion

Lucas P. Grimsley¹, Laura A. Swantek², Thomas W. Davis¹

¹ Lipscomb University, USA. ² Arizona State University, USA

At the beginning of the 4th century AD, Kourion was a bustling city on the south coast of Cyprus. International trade goods were flowing into the city via docking ships and agricultural goods from the hinterland were supporting the urban population. By the mid-4th century, however, this would come to an abrupt end. Earthquake storms hit the Mediterranean at this time and Kourion, like many cities on Cyprus, suffered catastrophic damage and major disruptions to life. The Kourion Urban Space Project (KUSP) has been investigating this transformative period through excavations at Kourion since 2012. This paper will report on the 2022 excavation season focused on an elaborately decorated building, perhaps an elite house, that was destroyed during the seismic events of this period. Like other structures at Kourion, this building was left in ruins and used as a dumping ground for the cleanup and rebuilding of the city. We will present the preliminary results from this season including the latest finds, and for the first time, describe floor assemblages. We will also report on our understanding of the complicated stratigraphy associated with earthquakes and sum up ten years of work at this site.

The Woke Hippos of Cyprus: How a Species Can be Cancelled

Alan H. Simmons

University of Nevada at Las Vegas, USA. Desert Research Institute, USA

The small Epipaleolithic site of Akrotiri Aetokremnos in Cyprus was excavated over 30 years ago. It immediately became a controversial locality due to both its age, ca. 12,000 years ago, and, more

importantly, its association with over 200,000 endemic pygmy hippopotamus bones. Thus, Aetokremnos established an antiquity for the island that was ca. 3,000 years older than the previously documented Khirokian Neolithic. This represented the oldest site on the island. Since then, other probably contemporary sites have been recorded. The antiquity of Aetokremnos was generally accepted with little fanfare, but our claim of extinct Pleistocene fauna associated with humans immediately became far more controversial. This contributed to the greater global issue of human involvement with Pleistocene extinctions. The site continues to generate controversy, and we wonder why. Were it a mainland site with more conventional animals, such as sheep, few would question the cultural association. We attribute the reluctance of some critics to a pervasive conservative position of many archaeologists who do not wish to consider “out of the envelope” sites. This reluctance is understandable, and rigorous data must support unorthodox claims. But with overwhelming and multiple lines of evidence pointing to an association of human with the extinct pygmy hippos at Aetokremnos, we have to wonder if, in current terms, “wokeness” has extended back to the Epipaleolithic, and if, in fact, the pygmy hippos were cancelled by people or not.

SESSION: 2B. Archaeology of Mesopotamia

Chairs(s): Darren Ashby, University of Pennsylvania

Living Beyond the Wall: 2022 Penn Museum Excavations at Ur **William B. Hafford**

University of Pennsylvania, USA

Penn Museum excavations at the ancient city of Ur (modern Tell al-Muqayyar) will begin in September 2022. Our primary goal is to compare domestic structures outside the city wall with those that have been excavated inside, such as in Areas EM and AH, excavated in 1926 and 1930, and more recently excavated houses of the SUNY Stony Brook expedition from 2015-2019. We will continue to examine houses inside the city wall and explore structures about 200 meters beyond it. Most of this extra-mural area is low-lying and therefore does not promise much stratigraphy. However, Sir Leonard Woolley observed many wall alignments outside the city, and some probable alignments are visible in satellite images. Woolley spent a very brief time investigating the remains of a house southwest of the city wall, but reported it as being too deteriorated to provide any information. Nevertheless, he estimated a high population for the city surroundings based on the many indications of foundations he observed across the area. Although total population may not have been as high as his estimate, Ur certainly consists of much more than the ~65 hectares contained within its city walls. Magnetometry will help better define the density and spread of extra-mural settlement at Ur and ground-truthing will help place it in time. Were these buildings constructed when Ur was becoming overcrowded in the Isin/Larsa and Old Babylonian periods, or had they simply been spread out across the plain throughout various periods?

Recent Investigations at the Shamash Gate, East Nineveh

Tracy L. Spurrier, Khaled Abu Janyab, Stephen D. Batiuk, Timothy P. Harrison

University of Toronto, Canada

A damage mitigation and stabilization effort was undertaken at the Shamash Gate in Nineveh (East Mosul) in 2020 and 2021, in conjunction with the Joint Iraqi-Italian Expedition to East Nineveh. The

Shamash Gate Complex is one of the most complete and well-preserved gate structures in the ancient city. It is one of fifteen gates built into the 12-kilometer city wall by Sennacherib in the early 6th century BCE. The Shamash Gate is the largest gate, and possibly the most significant, given its size and location as the primary eastern entrance to Nineveh. The gate was partially explored by Austen Henry Layard in the 1850s and the Iraqi State Board of Antiquities and Heritage (SBAH) in the 1960s, but otherwise has never been fully documented or excavated. As a strategically important entrance in the eastern fortifications of Nineveh, the Shamash Gate was converted into a defensive position during the ISIS occupation of Mosul (2014-2017). This attention included the construction of a network of tunnels that cut through the foundations and superstructure of the gate complex, and the random destruction of freestanding portions of the gate, resulting in extensive damage and the threat of collapse to this iconic landmark. In addition to high-res 3D documentation of the gate complex, the stabilization effort included a collaboration with the United Nations Development Programme's (UNDP) Mosul Stabilization Team, which reinforced and secured the foundations of the complex. This paper will present the results of the 2020 and 2021 field seasons, and anticipated future plans.

Applied Study on Remodeling and Modernization of Mesopotamia Bags

Yaseen Wami Al-Nasser¹, **Hutham Al-Fawadi**²

¹ University of Basrah, Iraq. ² Al Mustansiriya University, Iraq

Every day of excavations in the Mesopotamia, there are new discoveries and amazing knowledge that not limited to foretells of ancient greatness that the Mesopotamian people added to this account, but also of renewed greatness that can live in more than one time and receive its influence and popularity in more than one culture as proof of talent. Mesopotamia has contributed to humanity achievements.

The current paper seeks to reproduce and update the handbags that were common in the Mesopotamian community, whether for the public or the gods, through research and investigation of the numerous models prevalent at the time and knowing their design secrets, methods of manufacture, materials from which they are made that adorn them, as well as the expressive symbols that they contained.

The paper works through its important theme to pay attention to the industrial aspect and its exceptional creative value in the Mesopotamian culture and to search for modern practical ways to revive it and direct the craft energies that are on the verge of extinction to inspire the creative heritage that characterizes this pioneering and inspiring civilization.

The paper also contributes, by involving Iraqi women, to empowering the skilled females in Iraq to engage in creative work related to the historical environment of Mesopotamia on the one hand, and the world of modern aesthetic industry on the other.

Animism and Sumerian Myth: Reckoning with the “myth-world” to Consider Local Ontologies in Archaeofaunal Interpretations

Theo Kassebaum

University of North Carolina at Chapel Hill, USA

In this paper I propose to take myths seriously as a means to consider the potential worlds of an archaeological assemblage. Ethnographies of animism and perspectivism have pushed interpretations of faunal remains beyond standard narratives of consumption and provisioning. However, these works are

geographically and temporally disparate from the communities that produced the local archaeological record. Here, I suggest that Sumerian myths provide a means to reflect on the animism of the Mesopotamian more-than-human world. First, I examine how animals are vocal participants in the “myth-world”, engaging in debate and discourse with other actors in the text. Rather than considering this as purely allegorical, animals are taken seriously in their role as participants. Second, I suggest that the physical characteristics as described in the “myth-world”, both in descriptions of daily life and through metaphor, can inform our understanding of the sensorial conceptions of animals in social and physical space. This critical consideration of Sumerian myths diverges from an anthropocentric approach to human-animal interactions of the past, allowing for local Mesopotamian perspectives of animistic relations to emerge.

SESSION: 2C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the Bronze Age to Medieval Periods II

Chairs(s): Yuval Gadot, Tel Aviv University | Yiftah Shalev, Israel Antiquities Authority

Iron Age IIA Jerusalem as seen from the Ophel Excavations

Ariel Winderbaum

Hebrew University, Israel

The archaeological excavations at the Ophel (2009-2013), on the southern slopes of the Temple Mount, headed by Dr. Eilat Mazar, uncovered buildings, some of which are monumental, that were in use throughout the Iron Age IIA. The dating of some of these buildings is however challenged and while E. Mazar claimed they should be dated to the Early Iron Age IIA, others have claimed for Late Iron IIA or even Early Iron IIB dating.

In my talk, I will present new data in regard to the date of these buildings. Based on that I will explore this formative yet elusive period in the history of Jerusalem through the rare archaeological discoveries that were found in the Ophel.

Kenyon-Shiloh Wall in Light of New Discoveries in the City of David

Filip Vukosavovic

Ancient Jerusalem Research Center, Israel

In the 1960s, Kathleen Kenyon uncovered two large walls (Wall 1 and Wall 3) in Area A on the eastern slope of the City of David which she dated to Iron IIB and Middle Bronze Age respectively. According to Kenyon, the two walls were a definite proof that the City of David and Jerusalem were fortified during these time periods.

In the late 1970s and early 1980s, Yigal Shiloh excavated in Area E, some 70 meters south of Area A. The excavations uncovered a 90 m long city wall (W219) that was dated by Shiloh to Iron IIB. In addition, the excavators claimed that W219 was built above the Middle Bronze IIA-B period wall (W285) using the same fortification line.

Shilo's find seemed to corroborate Kenyon's claims and the wall has been popularly known ever since as the Kenyon-Shiloh Wall.

However, a number of excavations conducted between Areas A and E from 1909-2019 were unable to produce additional sections of this wall so much so that their existence and use started to be questioned.

This lecture will present the results of excavations from Areas U and C between 2020-2022 and attempt to give a definitive answer as to the existence of the Iron and Middle Bronze age walls on the eastern slope of the City of David.

No “Myth” Here: The Iron Age II fortifications of the South-Western Hill of Jerusalem Reconsidered

Shimon Gibson

University of North Carolina at Charlotte, USA

In a recent paper co-authored by Dieter Vieweger, Jennifer Zimni and Katja Soenneken, which is entitled “The End of a Myth: The Southwestern Hill of Jerusalem in the Archaeological Discourse,” it was suggested that no Iron Age II city wall surrounded traditional Mount Zion and that the maximal extent of the city in that period has been largely overstated. This is based on their re-dating of one very small segment of wall situated on the south-west slope of Mount Zion, that had originally been uncovered by Pixner, Chen and Margalit and which they thought to be of Iron Age II date.

This is a return to the Kenyonite perspective, with Vieweger et al. relying in their article on the idea that negative evidence that has been adduced for the lack of an Iron Age wall at one very specific location (in this case, the south-west slope of Mount Zion) is sufficient to confirm the lack of an Iron Age fortification wall surrounding the South-Western Hill in its entirety, contrary to an abundance of evidence that has been obtained from previous excavations.

The question is: does their negative evidence support an “end of a myth” in regard to the holistic consensus of opinion as to the western extent of the Iron Age II city of Jerusalem, as Vieweger et al. are now claiming, or is there sufficient grounded archaeological evidence from previous archaeological work to show the contrary is in fact the case?

Looking through the Window: An Iron Age Royal Estate Overlooking the Temple Mount

Ya`akov Billig

Israel Antiquities Authority, Israel

Following the discovery of ancient remains at `Governor`s House` hill in eastern Jerusalem, a salvage excavation was conducted on the upper slope from September 2019 and to March 2020. Several beautifully ornamented Proto-Aeolic capitals were found. One complete medium sized capital was discovered lying on a plastered surface while two others were set in a nearby shallow pit, deposited one on top of the other, in a manner seeming like a purposeful repository. Not far from there, in what seems to have originally been the foundation trench of a monumental building, scores of fragments of ornamented window frames with balustrades were unearthed, resembling those found at the near-by archaeological site of Ramat Rahel, the main difference being the design of their upper portion, in our case portraying miniature Proto-Aeolic capitals. Based mainly on these points, and the prominent location of the site, which sits on a ridge with a magnificent view of ancient Jerusalem, it became decided that the site had most likely been the location of a royal estate dating to 700-600 BCE, the last century of the Judean kingdom.

The lecture will present the findings of the excavation and discuss the importance of the site in the Late Iron Age.

A New Judean Administrative Center Near Jerusalem - The Results of the Excavations at Mordôt Arnona

Neria Sapir, Nathan Ben-Ari

Israel Antiquities Authority, Israel

Numerous sites have been unearthed in the vicinity of Jerusalem, dating to the Iron Age II and culturally belonging to the kingdom of Judah. Most of these can be defined as small villages or farm houses, part of the agricultural hinterland of Jerusalem. Recently, a unique site

was exposed at Mordôt Arnona, where the remains of an administrative center were uncovered.

The site is located about 750 meters north-east of Ramat Raḥel, and on the eastern outskirts of the Arnona neighborhood, Jerusalem. The site presents a stratigraphy and settlement sequence that include nine building and construction phases, dated from the Iron IIA (9th century BCE) until the Late Roman period (4th century CE). However, the prominent uniqueness of Mordôt Arnona is the monumental structures dating to the late 8th and the first half of the 7th century BCE. This structure served as an administrative center and held great significance in the physical and political landscape of the area south of Jerusalem. The importance of this center is emphasized by the many stamp handles that were found there.

In this lecture we will present a preliminary description of the site and the main finds dated to the Iron Age, alongside our initial thoughts regarding the role of this site, together with Ramat Raḥel, in the history of the Kingdom of Judah during the last 150 years of its existence.

SESSION: 2D. Archaeologies of Memory II

Chairs(s): Janling Fu, Harvard University | Tate Paulette, North Carolina State University

Curating the Past: Cities and Ancestral Nostalgia in the Hittite Empire

Müge Durusu-Tanriover¹, N. İlgi Gerçek²

¹Temple University, USA. ²Bilkent University, Turkey

In this paper, we argue that the Hittite Empire projected a carefully curated historical memory onto sites and landscapes in the center of the empire. Drawing from the larger theoretical literature on archaeologies of memory, we start by reaffirming the significance of places and landscapes in the construction and maintenance of collective memories, as well as their erasure. We then turn to the specific case of the Hittite Empire (c. 1650-1180 BCE) and discuss the textual and archaeological evidence to understand how the Hittite state engaged with the past, particularly its material manifestations. We suggest that built and natural places, such as urban centers, monuments, or features of the landscape, were associated with the past at different temporal scales and played different roles in how the Hittite state related to the pre-Hittite period. After highlighting that the Hittite Empire abandoned most sites involved in the struggles of the Middle Bronze Age, we argue that the Hittite state projected ancestral nostalgia onto a variety of uncontested sites in close proximity to the capital city at Boğazköy (Hattusa). In this way, the state surrounded the imperial capital with sites where a carefully curated past could be visited and ancestral nostalgia of a past that never was could be commemorated. We offer Alaca Höyük as a case study, a city with a significant Early Bronze Age heritage coupled with a very modest Middle Bronze Age episode that provided the Hittites with a convenient stage to curate memories of a deep yet uncontested past.

A Scion of Royalty Remote: The Role of Memory in Ethnic Formation

Nathanael Shelley

Columbia University, USA

Memory, or more precisely the narrated motif of memory, plays an essential role in the construction of ethnic identities (ethnogenesis). While expressions of ethnic identity were relatively common in the

first millennium BCE as communities narrated new histories about the monuments and ruins from the Bronze Age, they were surprisingly rare before 900 BCE. The Babylonian texts of the Isin II period (1157-1026), especially those of Nebuchadnezzar I (c. 1110), contain a remarkable number of statements explicitly linking ancestry and place to identity and rule. These expressions emphasize a claim to indigenesness and represent an innovation in traditional Babylonian claims to power in a way that anticipates the ethnic claims of the first millennium. This paper will investigate the reconfiguration of symbols for space and boundaries, both physical and social, in these texts to examine the role of memory in one of the earliest cases of ethnic formation.

“Enduring Perfection”: Memphis in the Cultural Memory of Egypt

Jeffrey Newman

University of California, Los Angeles, USA

Memphis, the preeminent capital city of pharaonic Egypt, is better known today through its impact on the cultural memory of the ancient Egyptians than from its poorly preserved remains near the village of Mit Rahina, some 15km south of modern Cairo. Memphis, as an idea, was so impactful that even in its later history, after it had been ravaged by Assyrian and Persian invasions of the 7th-6th Centuries BCE., Greek travelers to Egypt like Herodotus were enamored by tales of the city’s mythic foundation and sacred importance. This paper will trace the impact of the foundations of Memphis back in time from the accounts of the Greek authors to Egyptian sources on the foundations of the city, such as the “Memphite Theology” of the 25th Dynasty. It will finish at the beginning, with an exposé of the city in the Early Dynastic period, highlighting its enormous impact on Egyptian cultural memory through viewing the foundation of the “White Walls” as a ritualized feat of strength of a newly arrived, southern-Egyptian royalty. The presentation will stress the use of the city by early pharaohs in terms of paradigmatic history, as a ritual stage to perform reoccurring cycles of royal festivals that allowed the pharaoh to share in the social capital of the founding ancestors. Beyond performance, the city also housed the royal annals, which were an instrumental archive of social memory that enabled the perception of a timeless monarchy that was so essential to pharaonic ideology.

Memory in the “House of Eternity:” Tomb Design and Remembrance in Egypt in the 3rd Millennium BCE

Inês Torres

Centre for the Humanities (CHAM), Nova University, Portugal

Immortality in ancient Egypt was intimately connected to remembrance: a reference to the past, real or fictional, through which individuals overcame death. Both immortality and remembrance were dependent on the living, who were expected to visit the tomb: the “house of eternity.” Tomb design was crucial to the experience of its visitors and, therefore, to the way the deceased was memorialized by the living.

As such, this paper investigates how individual and collective memories of deceased individuals were shaped by the physical space of their tombs. Focusing on a few case-studies of the 3rd millennium BCE, this paper foregrounds the importance of physical and visual aids in crafting memory, considering both the individual agency of the tomb owner in designing the tomb, and the importance of the experience of the tomb visitor as an agent in perpetuating the memory of the deceased.

To do so, it uses analytical approaches from the disciplines of science and cultural communication, particularly from the subfields of narrative models and techniques, public engagement, and neuromarketing. These approaches offer a deeper understanding of how the brain is affected by visual and cognitive messages passed on through material culture, and how the audience was engaged by different narrative techniques. The intersection between these disciplines provides a promising understanding of the relationship(s) maintained between tomb owner(s) and visitor(s), while also highlighting how gender, class, and lived experience could have influenced the ways in which memory and meaning were crafted through, and within, the tomb.

Between Heaven and Earth: Sacred Places, Contested Lands and Imperial Identity in the Southern Levant

Matt Winter

University of Arizona, USA

The strategic location of the southern Levant, which bridged Asia and Africa, ensured the political and economic importance of the region for imperial powers of the ancient Near East. Additionally, the region was the cradle for two major global religions, providing an additional element to the cultural importance of the Levant. This paper will examine the intersection of sacred places and the built and natural environments during the Hellenistic, Hasmonean, and Roman imperial periods. It will explore how religious and imperial, religious, and cultural identity was negotiated within larger imperial contexts through examining imperial and cultural policies in the construction of sacred spaces and processes of contestation against imperial placemaking. In taking a *lounge durée* approach during the successive imperial phases within the regions of Judea, Samaria, Galilee and Golan during the Hellenistic, early Roman, and late Roman periods, this paper explores how spaces, both urban and natural, that were deemed sacred were challenged in times when pagan, Jewish, Samaritan, and early Christian populations variously occupied or shared spaces with one another. Additionally, the contestation of sacred space among various populations led to a significant process of memory-making and memory erasure, especially in liminal boundaries, by determining what places were to be considered “sacred” and “profane” by different populations. This paper will utilize demographic trends, settlement strategies, and analysis of sacred monumental architecture located at pagan, Jewish, and Christian sites to trace how sacred spaces were constructed, challenged, and integrated into larger imperial geocultural narratives.

The Afterlife of a Tomb: (re)Making Memory at Herodium

Brian A. Coussens

University of North Carolina at Chapel Hill, USA

In 2007, Ehud Netzer’s team discovered the tomb of Herod the Great. According to the excavators, the king had begun building the site years before his death, motivated to memorialize the past and secure his legacy. Whatever his intent, Herod could not control how people received his projects and remembered him, a fact already apparent during his lifetime with episodes like the eagle affair and the theater incident. Herod’s control of his own narrative was hampered by the very nature of his medium: all objects—from the smallest bauble to the grandest monument—are multivalent. They permit multiple and even competing meanings to co-exist such that meaning- and memory-making become contentious activities. The ephemerality of Herod’s own meaning-making efforts become apparent after his

death, when the interment of an object—his body—transforms his tomb to a site that symbolizes his memory and, therefore, serves as a focus to be manipulated in the telling and the retelling of the king’s story. The purpose of this paper is to examine the life of Herod’s tomb after his death and to query how it functioned as a locus of memory-making. In particular, while acknowledging the tomb was always the site of multiple meanings, this project explores how power, manifest in physical control of the tomb, limits which memories find physical expression and traces the manipulation of the site as it passes from party to party across the first century C.E.

SESSION: 2E. Archaeology of Islamic Society I

Chair(s): Ian W. N. Jones, University of California, San Diego | Tasha Vorderstrasse, University of Chicago

A Medieval Islamic Village at Torre d’en Galmés, Menorca (Spain): Results from the First Three Seasons of the Menorca Archaeological Project

Alexander J. Smith¹, Amalia Pérez-Juez², Paul Goldberg³, Kathleen Forste²

¹State University of New York at Brockport, USA. ²Boston University, USA. ³Universität Tübingen, Germany

The Menorca Archaeological Project (MAP) is an international team focusing on the diachronic investigation of the Balearic Island of Menorca, building off of Boston University’s presence on the island since 2001. Menorca is known for its megalithic, Iron Age remains of the Talayotic Culture, but the island exhibited many other cultural horizons and colonial influences, including a population surge in the 12th and 13th century of Islamic refugees from Mallorca and mainland Spain. This population began settling long-abandoned Iron Age remains, reconstituting these sites to conform to their group’s needs and cultural practices.

Since 2020, MAP has focused on the medieval, Islamic remains of the site of Torre d’en Galmés, excavating portions of two large compounds on the site. Torre d’en Galmés is one of the largest Iron Age sites in the Balearic Islands and was also host to a similarly large, rural Islamic community later in its history. This paper will focus on the excavations of 2020-2022, showing that by excavating this medieval settlement atop a better-studied Iron Age village, the project was able to learn more about both periods. This paper will also describe the project’s methodology, along with the goals for MAP at Torre d’en Galmés in 2023.

Tungul (Old Dongola, Sudan): A Case Study of Pre-Modern Islamic Urbanism in Africa

Artur Obłuski

University of Warsaw, Poland. Oriental Institute, University of Chicago, USA

This paper presents the results of the UMMA European Research Council Starting Grant project investigating Tungul, a pre-modern African city and its population’s metamorphoses from Christianity to Islam and from capital city to a city-state. The emphasis is placed on households and neighborhoods however the communication aspect of the settlement is also examined. The paper attempts to identify a single household unit as well as a neighborhood on the basis of spatial organization of the domestic architecture and city as well as GIS-facilitated analyses of distribution of the artefacts and biofacts. This, together with textual sources creates a good departure point to

explore social organization of the community inhabiting Tungul in the last 400 years of its existence.

Connecting East Africa to the Persian Gulf and the Indian Ocean

Tasha Vorderstrasse

University of Chicago, USA

Assessing the trade that took place between the Persian Gulf, Indian Ocean, and East Africa in Late Antiquity is complicated by a lack of specificity in dating the most common type of evidence for trade with the Persian Gulf, blue-glazed wares. These ceramics, which are frequently only dated in a most general way to “Sasanian-Early Islamic,” are found frequently at sites in East Africa, namely in the Aksumite Empire, Ras Hafun in Somalia, and areas further to the south but the lack of dating to a specific period, makes it difficult to understand the way that this trade evolved through time from the Sasanian to Islamic periods. Nevertheless, there are indications that there was contact between the Sasanian Empire and the Aksumite Empire with the presence of Sasanian seals that appear in Aksumite contexts. There is also evidence for Indian sailors at the island of Socotra, just off the coast of Somalia. There is ceramic evidence for Aksumite contact with India in the presence of ceramics, as well as numismatic evidence, which points to the trade going the other way. This paper will look at the types of evidence in East Africa and the Persian Gulf and Indian Ocean to better understand the nature of this connectivity.

Maritime Technological and Cultural Hybridity: Recent Discoveries Spanning the Medieval Indian Ocean

Tom Vosmer^{1,2}, Sira Ploymukda³, Wongsakorn Rahothan³

¹Department of Maritime Archaeology, Western Australian Museum, Australia. ²University of Western Australia, Australia. ³Underwater Archaeology Division, Fine Arts Department, Ministry of Culture, Thailand

The complex web of trade routes spun across the medieval Indian Ocean encouraged the exchange of manufactured products, luxury goods, raw materials, foodstuffs and spices, as well as cultural and religious concepts and technological practices. Maritime technology exchange influenced the manner in which ships were conceived, and energised the cross-cultural appropriation of shipbuilding designs, materials, and methodologies.

For at least two millennia historical records from the western Indian Ocean mention sewn-plank ships. Today ethnographic echoes of that technology are found in India, Sri Lanka, Oman, East Africa and the Arabian Gulf.

By contrast, the dominant shipbuilding method in first-millennium Southeast Asia was ‘lashed lug’, confirmed by numerous archaeological examples. It was therefore startling when two 9th-century sewn-plank ships, the first archaeological examples of their kind were discovered, not in the western Indian Ocean but in Southeast Asia—Belitung in Indonesia (1998) and Phanom-Surin in Thailand (2013). While emulating shipbuilding practices from the western Indian Ocean, they incorporated local materials and artefacts from across the Indian Ocean, Southeast Asia and China.

A re-examination of the Belitung artefacts, interpretation of recently excavated Phanom-Surin material, combined with archaeological sewn-plank material from Oman and lashed-lug material from Southeast Asia, augmented by ethnographic data from the western Indian Ocean, Bay of Bengal and Arabian Gulf, allows broad exploration of current archaeological and ethnographic traditional shipbuilding knowledge, raises questions about the place of Belitung

and Phanom-Surin in first-millennium Indian Ocean shipbuilding and the implications for long-distance Indian Ocean trade and suggests approaches for future research.

SESSION: 2F. Technology in Archaeology: Recent Work in the Archaeological Sciences I

Chair(s): Zachary Dunseth, Brown University | Nathaniel L. Erb-Satullo, Cranfield University

The Judean Cooking Pots Project: Initial Results

David Ben-Shlomo

Ariel University, Israel

Cooking vessels play an important role testifying to the function of their find contexts as well as having chronological and cultural value. Due to their function, cooking vessels require more technical qualities than other pottery forms. Therefore their production may illustrate more skill than other pottery classes. Indeed, technologically, cooking ware production is known to have a distinct *chaîne opératoire*. After a long period of continuity in general morphology and manufacturing techniques of cooking pots in the Bronze Age Southern Levant, during the Iron Age II certain changes seem to occur, as the appearance of small thin closed pots and the use of quartz instead of calcareous temper. Recently a multi-faceted technological study of Judean Iron cooking pots was initiated. The current project combines typological, contextual, compositional and manufacturing technique analyses of cooking ware as well as an experimental archaeology study for the manufacture and usage of similar pots. The project is ongoing and the paper will deal with the initial compositional results and their significance. Petrographic and chemical analyses from a large group of sites in Iron Age II Judah indicate a specific clay selection and potter’s technology in the production of cooking ware. In sites in the Negev for example most of the cooking pots were imported from the Judean Hills or the Shephelah regions and not locally made. There were possibly a few production centers for these vessels distributing their products to relatively distant areas.

The “Thin Red Line” between Craft and Technology: Knowledge, Experience, and Adaptation in LBA Western Anatolian Metal Industries

Dalila M. Alberghina

Koç University, Turkey

The study of ancient metallurgical practices in 2nd millennium BCE Anatolia has increasingly revolved around the critical question of provenance and the pivotal identification of exchange networks and their socio-economic underpinnings. As a consequence, however, studies that focus more on the reconstruction of alloying and manufacturing practices through compositional and metallographic analyses are sparse. This holds true especially for western Anatolia, a region often considered as a “buffer” zone between greater political and cultural entities during the MBA and LBA phases.

The data presented in this contribution center on the diachronic study of alloying choices and metallurgical manufacturing processes attested at the LBA citadel of Kaymakçı (present-day Manisa). Elemental and micro-structural studies conducted on this metal dataset and their evidence for on-site secondary production raise questions regarding the adaptive mechanisms behind local industries in a period of claimed political instability and great exposure to contacts and mutual influences with the Aegean and the eastern Mediterranean. The goal here is to propose an alternative

interpretation of local metal technology by re-evaluating the archaeometric dataset in light of theoretical frameworks that underline the importance of sensorial cues and cultural facets along with practical aspects. Bridging technology and craft, rituality and socio-economic factors, this contribution aims to cast light on the multi-faceted systems of metal production in an attempt to re-evaluate the complex character of western Anatolian cultures in the LBA.

Archaeomagnetism of Destruction Layers and the Reconstruction of Biblical Military Campaigns

Yoav Vaknin^{1,2}, Ron Shaar², Oded Lipschits¹, Erez Ben-Yosef¹

¹Institute of Archaeology, Tel Aviv University, Israel. ²Institute of Earth Sciences, The Hebrew University of Jerusalem, Israel

Egyptian, Aramean, Assyrian and Babylonian military campaigns to the Southern Levant during the 10th-6th centuries BCE are mentioned in Near Eastern texts including the Hebrew Bible. Many destruction layers have been unearthed but only few, those securely linked to specific historical events, are accepted chronological anchors. Here we present archaeomagnetic synchronization of chronological anchors with debated destruction layers. We measured the intensity and/or direction of the ancient geomagnetic field recorded in 21 burnt destruction layers from 18 archaeological sites. These data were recorded at discrete points in time, when sun-dried mud bricks were burnt in conflagrations. The magnetic results from the chronological anchors were used as a skeleton for the Levantine archaeomagnetic curve for this period. We used this curve as a reliable dating tool for destruction layers and clay artifacts. For example, archaeomagnetic dating of the destruction of Stratum S-1a at Tel Beth-Shean showed that it had been destroyed almost a century earlier than previously assumed. When dealing with the period after ~800 BCE, our archaeomagnetic dating is particularly useful, due to the plateau in the radiocarbon calibration curve which limits high resolution dating. During this period the geomagnetic field in this region was characterized by rapid changes and high intensity values, including several spikes of more than twice the intensity of today's field. Our results enabled the chronological constraint of these short-term variations and the resolution of chronological debates regarding campaigns against the kingdoms of Judah and Israel, the relationship between these kingdoms and their administrations.

Metal Economy of the Bronze Age Western Georgia: An Investigation into Legacy Compositional Data

Joyce W. I. Ho¹, Nathaniel L. Erb-Satullo²

¹Harvard University, USA. ²Cranfield University, United Kingdom

The copper-based metal production in the Bronze Age western Georgia (Colchis) has been explored, but many questions remain about the technology and organization of this prolific industry. We analyse the chemical composition of 531 copper-based artefacts from legacy datasets produced during the Soviet period. As the findspot and artefact typology of samples are well-recorded, this study explores the compositional patterning chronologically, typologically, and spatially.

We reveal a massive injection of fresh copper into the system during the Late Bronze to Early Iron Age (LBA-EIA; c. 1500-600 BC). The prevalence of unalloyed copper metal chunks suggests that the smelting and alloying stages were separated. While ornaments were mostly made of tin bronzes, agricultural tools were predominately made of the softer arsenical copper in LBA-EIA. We argue that

producers consciously manufactured tin bronze ornaments to obtain a golden colour.

Spatial analysis demonstrates a north-south variation of alloy choices of LBA-EIA axes and agricultural tools, divided roughly into half by the Rioni River. The sharing of alloying preferences between the lowlands and their adjacent mountain zones was possibly due to a highland-lowland orientation of metal economy shaped by the functionally complementary workshops in different topographic zones.

The distributions of arsenic and tin concentration of LBA-EIA artefacts provides insights into recycling and alloying. Instead of extensive pooling and mixing of scrap metals, metalworkers mixed copper-based alloys with fresh copper to recycle metals. The pattern also suggests primary alloying in production, which substantiates the argument that local tin ores were exploited.

Reassessing Late Bronze and Early Iron Age Metal Production Sites in Georgia and Armenia

Nathaniel L. Erb-Satullo

Cranfield University, United Kingdom

Pioneering Soviet-era field research on metallurgical sites in the Caucasus revealed the region to be one of the premier metallurgical centers in the entire ancient Near East. Results of these projects percolated through to Western archaeologists in brief English summaries and periodic scientific exchanges, and eventually made their way into broader narratives about Near Eastern metallurgy. In many cases, detailed analytical research on production debris was not reported, so claims about the types of metals produced and the stages of production (e.g. primary smelting or secondary working) remain largely untested. Accurate data on these issues is essential for reconstructions about the processes of metallurgical innovation and the organization of production.

Kvemo Bolnisi, Georgia, and Metsamor, Armenia are two such sites whose potential importance merited reinvestigation. A workshop at Kvemo Bolnisi was originally published as an early iron smelting site, a significant claim given the scarcity of early iron smelting remains across the whole Near East. Control over the metallurgical center at Metsamor, a large, fortified site in the Ararat Plain with numerous furnaces and abundant slags, has sometimes mentioned as a motivation for Urartian expansion into the area. In both instances, careful microscopic and chemical analysis of metallurgical debris significantly alters prior interpretations of these sites and refines our understanding of the technology and organization of Caucasus metallurgy.

SESSION: 2G. The Journey to Document Minorities' Heritage in the Maghreb

Chair(s): Emna Mizouni, Carthagina, Tunisia

Challenges and Prospects of Conserving the Heritage of Religious and Ethnic Minorities in North Africa

William Raynolds

American Society of Overseas Research, Cultural Heritage Initiatives, USA

Since its initial monitoring, reporting and factfinding work in Libya in 2016, ASOR Cultural Heritage Initiatives recorded a pattern of Sufi heritage destroyed as part of a targeted attempt to erase the heritage of this religious minority. Expanding on this work, ASOR has recently

embarked on an effort to document sites of religious and ethnic minorities in Tunisia and Morocco, including work with members of the Jewish, Christian, Ibadi, and Amazigh minority communities.

This paper describes ASOR's recent documentation and outreach activities in cooperation with members of religious and ethnic communities, its efforts to build relationships between government and community members to improve the protection and preservation of religious and cultural heritage, and finally its ongoing work to foster interfaith cooperation and communal dialogue for the protection of heritage important to religious and ethnic communities.

The Role of Local Communities to Preserve Minorities' Heritage and Worship Sites

Zayneb Takouti

Carthagina, Tunisia

Why is it important for the Tunisian community to preserve heritage sites?

Generations have lived before us and have formed the world we tend to reside in. It's necessary to protect our heritage because it adds character and distinctiveness to the place, region, or community and thus provides a distinguished way for our collective and individual identities.

As a Tunisian civil society organization, Carthagina is focusing on the cultural heritage of the transnational minority in Tunisia, and protection of minorities includes some of the first articulations of cultural rights and protection of intangible cultural property.

We believe education and documentation are the best way of preserving minorities' culture and heritage. It's essential today to express the value of cultural heritage and increase awareness about minorities' heritage and worship sites. Our collaboration with ASOR to document the minorities' sites in Tunisia comes as an encouragement for cultural heritage preservation. It's a strategy for preserving both tangible and intangible cultural heritage by local communities.

The Field Work Observation, Challenges and Opportunities while Documenting Endangered Heritage

Jamel Ben Saidane

Carthagina, Tunisia

This paper focuses on the observations and the results collected from Carthagina's field work in collaboration with ASOR on documenting the endangered heritage sites and monuments.

First, we will present an update of the work progress to document the different historical sites related to minority communities in Tunisia with a highlight on all the steps and actions that have been made during the documentation process and the observations raised during this process.

The second part will be about the different challenges that we had to face and overcome during the process as well as the opportunities that the documentation process would offer such as the different use for the collected data such as: sites restoration, heritage promotion, etc,...

How to Protect the Shattered Memory of the Tunisian Jewish Singer "Habiba Messika"

Faten Bouchrara

Laboratoire du Patrimoine Université de Manouba, Tunisia

Prototype of a free woman and a daring actress, and adored by the Tunisian population, singer Habiba Messika was a real social phenomenon in her time. Following her tragic death in February 1930,

she was mourned by all segments of the Tunisian population, whether Muslim, Christian, or Jewish.

Even after her passing, her memory remained intact in Tunisia. The exodus of Jews to France and Israel following the events of 1961 and 1967 kept her memory alive in several countries. This remembrance continues to be evoked and celebrated through books, articles, films, plays, and different exhibitions.

In this paper, I will try to explain the reasons why her memory was kept alive, as well as the specificity and interest in remembering this diva of the Tunisian song, how her memory is still present, and how she became a human cultural monument. I will also present measures on how to protect and safeguard this intangible heritage that is still vividly alive but fragmented across several countries.

How Can Scouts Help Preserve Cultural Heritage and Promote It to the Next Generation?

Ines Mathlouthi, Mohamed Ali Khiari

Tunisian Scouts, Tunisia

In this paper we will showcase the work and efforts of the Scouting movement in preserving national heritage that has been going for decades and focusing on the TOURATH Project in which we have lifted the work to a new level of sustainability and solid partnerships with stakeholders and civil society organizations. We will also showcase the challenges faced by the scouts while implementing the activities of the project.

Memory Tourism in Tunisia: Creation of Tourist Circuits for Jewish Pilgrimages

Lassaad Dandani

Manouba Heritage Laboratory, Tunisia

The aim of this paper is to present the history of the birth and evolution of remembrance tourism in Tunisia. This religious tourism occupies an important place in the Tunisian tourist landscape and continues to develop further. The quest for their origins among several diasporas through their nostalgic visits has encouraged the birth and development of "identity tourism" also known as "memory tourism". In this presentation, I will focus on the Jewish diaspora in Tunisia and will try to understand the characteristics of the construction of places of memory through tourism.

Historically, the pilgrimages of the Jews in Tunisia offered a particular field of research starting with the development of tourism to the first places of religious heritage in Tunisia dating back to the second half of the 19th century. This vocational religious act was at the origin of a process of the patrimonialization of these mystical meeting places. The pilgrimages to the Ghriba in Djerba or Sayed Youssef El Maârabi from El Hamma of Gabès offer us interesting examples of this religious tourism. Through these experiences, I propose a project to create a tourist route around the places of Jewish pilgrimages.

SESSION: 2H. Complexity Without Monumentality: Rethinking Nomads of the Biblical Period

Chair(s): Erez Ben-Yosef, Tel Aviv University | Zachary Thomas, Tel Aviv University

Avoiding the Snare of the Positive: Prevailing Methodological Flaws in the Research on Early Edom

Erez Ben-Yosef

Tel Aviv University, Israel

Recent research in the Arava Valley has yielded evidence of a powerful nomadic polity that orchestrated intense copper production and long-distance trade during the early Iron Age. It will be demonstrated that (1) the identification of this polity with Edom is the simplest interpretation of the archaeological and historical records (Egyptian and Assyrian texts), and (2) ostensible difficulties that some scholars have with this identification stem from overlooking the nomadic (or polymorphous) quality of the early Edomite society, which results in a simplistic conflation between oscillations in archaeological visibility and changing degrees of social complexity and/or variations in territorial boundaries.

Biblical and Possible Archaeological Reflexes of Nomads in Monarchic Israel and Judah

Zachary Thomas

Tel Aviv University, Israel

The possibility that nomads continued to make up a significant portion of the population of Israel and Judah in the late Iron Age I and Iron Age II periods has recently come to the fore, but actually investigating this possibility is hampered by two problems: first, the possibility that some elements of the biblical text may relate to (and thus reveal) monarchic-era nomads has barely been studied; and second, a number of factors of environment and cultural homogeneity with the sedentary population make detecting nomads in Iron Age Israel and Judah extremely difficult, if not impossible. This paper will consider some possible reflexes of nomads in both the relevant biblical texts and archaeological record, and argue that the presence of nomads in the monarchic period is more readily apparent from certain textual clues, providing a further indication that the archaeological record is incomplete in this regard.

Early Edomite Fabric – Defining “Local”: New Studies on Pottery from the Early Iron Age Copper Production Sites at Timna

Willie Ondricek, Paula Waiman-Barak, Erez Ben-Yosef

Tel Aviv University, Israel

Both the Timna Valley and Faynan copper ore district play an important role in historical reconstructions of the entire eastern Mediterranean region during the Late Bronze (LB) through the early Iron Age (IA), a period of great social and political transformations. The question of the identity and the cultural connections of the people engaged in copper production at Timna over this period of more than 400 years is still a matter of debate. Of particular interest is the question of how to define the term “local” in regard to those tent-dwelling nomadic entities typical of the southern Arabia that were exploiting the copper resources in the Timna Valley during this period, when there was never any long-term continual presence of people due to its hyper arid environment and lack of water resources. This also speaks into the question of if the copper industry was “locally” or externally operated. An ideal tool to aid in addressing this question is the examination of pottery production, style and movement through the lenses of petrographic and chemical analysis.

In addition to analytical analysis of numerous ceramics collected within a tight and well defined chronological framework by the Central Timna Valley Project (<https://archaeology.tau.ac.il/ben-yosef/CTV/>) between 2013 and the present, systematic examination and sampling of natural resources that that could have been used for pottery production in the Timna Valley and surrounding region is being carried out in order to clarify this question. Preliminary insights will be presented.

Detecting Nomads: Pollen as a Potential Direct Proxy for Identifying Seasonal Pastoralism

Mark Cavanagh, Dafna Langgut, Erez Ben-Yosef

Tel Aviv University, Israel

There is a clear difficulty in archaeology’s ability to ascribe a nomadic character to the ancient occupants of archaeological sites, as the remains left by such groups are inherently scant and other indicators of a nomadic nature - such as seasonal migratory habits - are difficult to detect. Here we present a novel proxy for identifying seasonality – pollen trapped within dung pellets of goats and sheep – which can help in identifying and characterizing nomads and their migratory patterns. We focus on the case of early Iron Age Timna, where a nomadic society (identified with early Edom) was responsible for operating the copper mines for about ~350 years. Well-dated remains of caprine dung in excellent preservation conditions were analyzed and compared to contemporary pellets of wild goat (Nubian ibex, *Capra nubiana*), which were collected during the winter and summer months. The results will be discussed in several levels: (1) methods and methodology, (2) seasonality of human activities in the Timna mines during the early Iron Age, (3) pollen-based (supplemented with charcoal-based) paleoenvironmental insights into the Arava Desert and the Timna Valley, (4) applicability to the study of nomadism in the southern Levant and beyond.

The Dawn of Ancient Israel and the Dawn of Everything: Opening for an Anarchist Perspective on the Social Order of Ancient Societies of the Southern Levant

Øystein S. LaBianca

Andrews University, USA

The recent publication of David Graeber and David Wengrow’s *The Dawn of Everything: A New History of Humanity* (Farrar, Straus and Giroux, New York 2021) has engendered much discussion and even soul-searching among not only academics but also policymakers, pundits, and activists seeking a more equitable and less violent future for humanity. In their “new history of humanity,” the authors launch a full-scale attack on well-established narratives about the origins of agriculture, cities, and state-level societies for the purpose of challenging received notions about the link between these developments and the rise of inequality and hierarchy. A title of a recent review of the volume gets right to the point in describing *The Dawn of Everything* as “an anarchist history of humanity.” For those of us participating in conversations about “the architectural bias in much biblical archaeology,” “complexity without monumentality” and “the agency of invisible peoples,” this volume offers a great deal of fodder for reflection and thought. The presentation will highlight arguments, insights, and empirical findings found in *The Dawn of Everything* that has great relevance for rethinking and reimagining our understanding of the evolution of social order in the Southern Levantine societies of ancient Ammon, Edom, Israel, and Moab.

SESSION: 2I. Activating “Mummy Portraits” in Museums (Workshop)

Chair(s): Susanne Ebbinghaus, Harvard Art Museums | Georgina Rayner, Harvard Art Museums | Jennifer Thum, Harvard Art Museums

From Hypogeum to Museum: Contextualizing Funerary Shrouds for the Modern Museum Visitor

Lisette M. Jiménez

San Francisco State University, USA

Painted funerary portraits and shrouds from Roman Egypt have garnered the attention of Western audiences on account of their arresting imagery and style. Museum visitors have been captivated by the naturalism, technique, and visual hybridity embodied by the portraits, since their initial exhibitions in London in the late 1800s. This fascination has resulted in stylistic comparisons with Western portraiture artists and Western cultures that has diminished their ancient Egyptian cultural contexts. Consequently, the severing of ancient and archaeological contexts through museum display methods and didactics has fueled misperceptions about the function and meaning of funerary portraits, and at times, (un)intentionally fueled incomplete and inaccurate narratives about the lives and identities of the portrayed individuals. This presentation will explore how the display of painted funerary shrouds in museums can be adjusted to redirect the viewer’s gaze, de-fetishize portraits, and correct—or at least interrogate—centuries of inherent bias through context-oriented displays.

Portraits and Shrouds in the Collection of the Museum of Fine Arts, Boston

Lawrence M. Berman

Museum of Fine Arts, Boston, USA

Painted wooden panels inserted into the wrappings of Egyptian mummies in the Roman period (first-fourth centuries AD) as an alternative to the traditional face mask are celebrated as the only painted portraits of individuals in the Greek style to have survived from antiquity.

Ironically, the very aspects that made the portraits so appealing have interfered with our ability to look at them objectively and place them in context. Indeed, Roman mummy portraits have always been popular with collectors not otherwise interested in or attracted to Egyptian art. In a museum setting, removed from their bandages, mounted and hung on the wall, one is as likely to encounter “Faiyum portraits” in a classical gallery as in an Egyptian gallery.

Two fragmentary portraits purchased in 1893 from the Theodor Graf collection were the first Egyptian antiquities acquired by the Museum of Fine Arts through purchase rather than as gifts. Today the MFA has seven panel portraits, including two complete mummies. Related to these are four painted funerary shrouds with naturalistic portraits as well as six molded plaster masks.

These objects all have different collection histories: some purchased, some excavated, some acquired as gifts. This paper will present a historical overview of how these portraits were displayed, contextualized, and interpreted over the years.

Reengaging with Roman Egyptian Portraits and Panel Paintings through Technical Research at the Kelsey Museum

Caroline Roberts¹, Laurel Fricker²

¹Kelsey Museum of Archaeology, University of Michigan, USA. ²Interdepartmental Program in Classical Art and Archaeology (IPCAA), USA.

This paper presents preliminary results from the technical research of funerary portraits and panel paintings at the Kelsey Museum of Archaeology at the University of Michigan. These objects came to the Museum in the 1920’s and 1930’s through divergent routes of collecting: some were purchased on the Egyptian antiquities market from undocumented funerary contexts, while others were exported from Egypt following their excavation at the Roman Egyptian city of Karanis. The Karanis fragments are among the few known Egyptian panel paintings with documented archaeological provenience.

The Kelsey panels have been studied and used for teaching at the University for nearly a century, yet until recently they had not been examined using modern scientific methods. For this project, Kelsey conservators and U-M students used multiband imaging and X-ray fluorescence spectroscopy to study the materials and techniques used to paint the panels. This revealed that one of two panels described as ‘portraits’ from Karanis is a painting of a bird, while paint techniques identified on purchased panel fragments can be compared to funerary portraits in other collections.

The case studies presented here will demonstrate how technical research can be used to uncover new contextualizing evidence from long-held collections. These research implications are particularly meaningful for institutions with excavated archaeological materials, where new technical data can be linked to known spaces, regions, and groups of people. Technical research also offers unique learning opportunities to students engaged in the sciences and humanities, augmenting the pedagogic potential of university museums like the Kelsey.

Towards More Ethical Displays and Interpretations of Mummy Portraits and Masks in Museums

Georgina E. Borromeo

Museum of Art, Rhode Island School of Design (RISD Museum), USA

On view in the Egyptian gallery of the Museum of Art, Rhode Island School of Design (RISD Museum) are three painted mummy portraits (17.060, 39.025, 39.026) and two mummy masks (17.056, 40.155), dating from the 1st to the 3rd centuries CE. Displayed side by side in a wall case, the masks appear like works of sculpture, an effect heightened by their three-dimensionality and polychromy. Museum visitors would likely not grasp how they functioned in antiquity without reading the object labels. The painted portraits are displayed within a large case which also holds a painted coffin from the Ptolemaic period. The portraits’ proximity to the coffin suggests that they too were associated with the funerary realm. Because these masks and portraits are dissociated from the mummified human bodies whose faces they once covered, it is easy for visitors to accept them as “sculpture” and “paintings”, works of art in the contemporary sense. Their current display at the RISD Museum, associated with a school of art and design, could better emphasize their crucial role in ancient Roman-Egyptian funerary practices. How can we make clear that these works were taken from human burials and address the issues that arise from that? How did these so-called “mummy” masks and portraits get from tombs in Egypt to museums throughout the Western world? It is hoped that discussions around questions like these will help us create more ethical displays and interpretations of the mummy masks and portraits in our museum.

Learning Through Making: Copying Funerary Portraits with Historic Materials and Techniques

Kate Smith

Harvard Art Museums, USA

Since 1924, the Straus Center for Conservation and Technical Studies at the Harvard Art Museums has employed scientific analysis to discover what materials and techniques were used to create the collections seen in the galleries and studied by faculty and students. The Harvard Art Museums also has a century-long tradition of teaching and learning directly from the collection. The Forbes pigment collection, begun by the museums' first director, Edward Forbes, houses the world's largest collection of pigments and binders. Forbes taught what was affectionately called the "Egg and Plaster" course, in which students would copy fresco and egg tempera works using the original materials and techniques. This course is reflected in the current Materials Lab of the Harvard Art Museums, a making space where Harvard students and members of the public can come to learn about traditional materials and techniques. All of these strengths of the museum were brought together in support of the museums' Fall 2022 exhibition, *Funerary Portraits from Roman Egypt: Facing Forward*. Based on the discoveries of the museums' scientific investigations, and drawing on the materials of the Forbes pigment collection, our exhibition team designed a workshop for students to experiment with the encaustic technique, guided by a practicing encaustic artist in using the traditional methods and materials. Observing and copying the portraits became a way for students to remember the ancient dead, as much as it was to learn by re-creation.

THURSDAY, NOVEMBER 17, 2022 | 1:00PM-2:00PM (EST)

Early Career Scholars Brown Bag Lunch - Speed Networking: Alt-Ac & Ac-Adjacent Careers (Georgian Room, 2nd Floor)

THURSDAY, NOVEMBER 17, 2022 | 2:00PM-4:05PM (EST)

SESSION: 3A. Archaeology of Cyprus II

Chairs(s): Kevin Fisher, University of British Columbia | Catherine Kearns, University of Chicago

Cypriot Connections through the Middle Bronze and Late Bronze Transition in the Western Galilee: A Review of Residual Pottery from Tel Achziv

Brigid A. Clark

University of Haifa, Israel

The arrival of Cypriot imports to the Southern Levant is a well-documented phenomena in the Late Bronze Age, and the origins of this exchange are traced back to many Middle Bronze Age sites, with Cypriot imports appearing in indiscriminate contexts concentrated in the urban Coast Plain. The region of the western Galilee, in which Tel Achziv is a major coastal site, represents a clearly defined Mediterranean microregion which provides a unique case study for the rise of international relations of the Middle Bronze Age. Excavations at Tel Achziv were conducted from 1963-4, directed by Moshe Prausnitz, yet the full results of the excavations remain unpublished. The collection of 86 Cypriot imports published here are of the MB and early LB date and were found as residual sherds in Iron Age context by Prausnitz. The aim of this study is to present a previously unpublished collection of Cypriot pottery from Tel Achziv, and to assess the transformations of maritime trade with Cyprus between the in the period between the Middle Bronze Age (ca. 1950-1550 BCE) and into the Late Bronze Age (ca. 1550-1200).

Cypriot Limestone Sculpture: Symbols of Identity?

Pamela Gaber

Lycoming College, USA

Stylistic analysis of Cypriot limestone sculpture of the Archaic and Classical periods has reached a level of refinement that allows scholars to 1) discern regional variations, 2) discern the origin place of many sculptures, whether found on Cyprus or abroad, and 3) understand a great deal about local worship in sanctuaries all over Cyprus in both urban and rural settings. Much of the results of these analyses goes contrary to some of the current trends in scholarship. This is particularly so as regards the notion that kingdoms "founded" rural sanctuaries as political "boundary markers." These prevailing current trends appear to result from an assumption that European-like nation states somehow existed in first millennium BCE Cyprus. There is no evidence for such an existence. The notion of firm boundaries comes from that assumption and there is likewise no evidence for that. It is far more likely that rural populations visited whichever sanctuary was convenient for them and continued trading and working with more than one city-kingdom at any given time.

Cesnola, the Curium Treasure, and the Europeans

Ann-Marie Knoblauch

Virginia Tech, USA

In 1876, Luigi Palma di Cesnola sold a collection of Cypriot antiquities to the Metropolitan Museum of Art. The prize of the collection was 1500 objects—many in precious materials—known as the Curium Treasure. The treasure was said by Cesnola to come from a closed deposit underneath a mosaic floor at Kourion. The collection was presented to the Met’s trustees as a rare example of an undisturbed ancient temple treasury, and they were eager to possess such a prize as it set the young museum apart from its more established European counterparts. The Curium Treasure became the focus of an international scandal when in 1884 Max Ohnefalsch-Richter, a German archaeologist working on Cyprus for the British Museum, claimed that he traveled to Curium to locate the findspot described in print by Cesnola only to discover that it did not exist. He then publicly accused Cesnola of “fabricating from whole cloth” the history of the treasure and its discovery.

By this time in the mid 1880s Cesnola had been the director of the Metropolitan Museum for five years and had weathered a serious scandal regarding improper restorations of sculpture in the collection, a scandal mostly covered by local New York papers. Ohnefalsch-Richter’s accusations, however, made international news as European archaeologists weighed in on Cesnola’s character and the veracity of the Curium Treasure. This paper examines the European reaction (both scholarly and popular) to Ohnefalsch-Richter’s accusations, and the impact on transatlantic trust among archaeologists.

Port Society and Dining Differently in Early Medieval Cyprus

Ian E. Randall

University of British Columbia, Canada

As the stark picture of economic activity in the long late antiquity relaxes into a more nuanced understanding, we can begin to approach the shifting fabric of port society in new ways. Ports, with their hustle and bustle and exchange of goods, offer a somatic experience quite distinct from that afforded by inland areas. As economic currents in the Eastern Mediterranean shifted over the 6th to 8th centuries CE, the nature of this experience also changed, as can be readily seen in recent work on the ceramic corpus. Building off of the work of Myrto Veikou and Ingela Nilsson, this paper takes a material angle in exploring the potential for Early Medieval Cypriot port societies to act as heterotopic spaces of identity formation. By examining the differential connective access between town and country, landscape and seascape, the object worlds attendant on dining culture highlight divergent communities of practice that undermine, or reinforce, regional distinctions. This in turn has significant implications for how we think about identity formation and the Mediterranean interface in a period of dynamic centrifugal control.

SESSION: 3B. Museums and Social Justice I

Chair(s): Caitlin Clerkin, Harvard Art Museums | Katherine Larson, Corning Museum of Glass

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

Morag M. Kersel

DePaul University, USA

Stereotypical museum culture focuses on objects in vitrines, showcasing the success stories, 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. Museums have the potential to be relevant, socially-engaged spaces, acting as agents of positive change and engagement. 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 an annexing of artifacts and avoidance of issues related to the legacies of colonialism and imperialism, and which ultimately results in exhibitionary 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.

The Wellesley Neo-Assyrian Relief: A Necrography

Eric Jarrard

Wellesley College, USA

Cameroonian philosopher Achille Mbembe developed the concept of necropolitics as a biting critique of the Eurocentricism of Foucault’s biopolitical discourse. For Mbembe, one must account for the damaging legacy of colonial histories to appreciate the effects of empire on the human body. Building on Mbembe, art historian Dan Hicks advanced the concept of necrography—or inverse history—as a productive paradigm for analyzing the looted Benin Objects in the collection of the British Museum as a legacy of colonial war. Such efforts, he contends, seek to examine what it means to study objects pillaged and plundered through English colonialism. A necrography of looted objects, then, provides the necessary context that has been stripped away from them in the service of the colonial enterprise.

Using Hicks’s work as a blueprint, this paper investigates the “Captive Being Played” or the so-called Wellesley Eunuch [Wellesley Davis Museum; 1883.1]. The Davis maintains sparse details—provenance, origin, the subject it depicts—concerning the 30 cm triangular piece of a Neo-Assyrian relief, which remains tucked away in its archives; those that are available are implausible when subjected to minimal scrutiny.

This paper provides a preliminary necrology for this object. In so doing, I attempt to answer the fundamental question: What is our responsibility to the objects in our care? And, more importantly, how the curation of these objects extends the orientalist impulses out of which they were procured, metastasizing into new *lieux de memoire* as satellites of decaying empires.

“From Human Wrongs to Human Rights”: The Past, Present, and Future of the Ancient Egypt Gallery in the Slave Lodge, Iziko Museums of South Africa

Jessica Nitschke¹, Amy Sephton², Esther Esmyo²

¹ Stellenbosch University, South Africa. ² Iziko Museums of South Africa, South Africa

The Iziko Museums of South Africa holds a small collection of ancient Egyptian artifacts. Highlights from the collection are currently displayed in the Slave Lodge, a colonial-era structure which served as the South African Cultural Museum until the 1990s. Originally, the Egyptian antiquities were displayed alongside Classical antiquities,

European and Asian decorative arts. Following the end of apartheid (1994) and new national heritage legislation (1998), the exhibitions within the Slave Lodge were reorganised and replaced in order to transform the museum into a centre for the history of slavery in the Cape. The Egyptian collection has remained on display thanks to the place of ancient Egypt in the national educational curriculum and its significance for African cultural heritage. But with no dedicated curator and no other suitable exhibition space available, the exhibit has a rather ambiguous presence in the Slave Lodge. Nonetheless, Iziko staff have been committed to making this collection available for the public, and through collaboration with outside specialists reinstalled the exhibit in 2018 with two overarching goals: (1) make ancient Egypt accessible to a contemporary South African audience of diverse cultural and educational backgrounds; and (2) narrate the exhibit to align better with the Slave Lodge's mission of re-Africanisation and lifting up of marginalised voices. This paper will present a brief history of the collection, explain choices made during reinstallation, and outline plans for the future, all within the context of Iziko's mission to diversify its collections, audiences, and stories.

Gender Inequity in Museums: Evidence, Origins, Effects, and Solutions

Suzanne L. Davis

University of Michigan, USA

The gender gap in earnings is well-recognized, pervasive, and persistent; in 2020, women working full-time in the United States were paid 18% less than their male counterparts, a percentage that has remained relatively stable for nearly 20 years. In museums the gap is greater. A 2017 survey by the American Alliance of Museums (AAM) found that men were paid an average of 21% more than their female colleagues. Multiple surveys by the American Institute for Conservation (AIC) have found that men's wages are roughly 30% higher than women's for conservators employed by museums. The AAM and AIC surveys also show that the wage gap widens as other measures of job success increase, providing clear evidence of a glass ceiling for women in museums. In addition, these surveys reveal evidence of a mechanism known as the "glass escalator," whereby men advance more quickly in their careers, with advantages during hiring and faster access to leadership positions.

In this paper, compensation surveys and other sources are used to examine evidence of gender inequity in museums. This talk also explores how gender inequity is created and maintained, especially in women-dominated workplaces like museums. Where possible based on data, wage and career trajectory outcomes for women of color and LGBTQIA museum workers are discussed. Finally, the paper examines ways to improve equity, with a focus on structural employment practice changes at the institutional level and a very brief discussion of the role of self-advocacy for women in museums and other settings.

Museum Access for People with Disability in Lebanon: Overview and Facts

Rana Nasr, Hanan Charaf

Lebanese University, Lebanon

In Lebanon, it is estimated that 4 to 9.5% of the total population live with a disability. Yet, cultural sites rarely engage this community. The public Law 220/2000 on the rights of people with disability requires the government to make its public buildings accessible. However, a 2009 survey found that only 5 of 997 public schools met all of Lebanon's physical standards. Today, 20 years after passing that law,

no additional initiatives have been taken to increase inclusion in educational facilities such as museums. Museums are considered valuable educational environments where visitors can appreciate and learn about history, art and multiculturalism. In 2019, the International Council of Museum (ICOM) announced an alternative museum definition, subjected to a vote, which defines museums as places that "guarantee equal rights and equal access to heritage for all people". However, equal access to museums in Lebanon is still elusive.

This paper surveys the reality of accessibility for persons with disabilities in Lebanon and proposes concrete initiatives to improve equality and social inclusion in Lebanese museums based on a case study, with the hope to engage Lebanese museums in acknowledging diversity and adopting measures that serve the individuals living with disabilities.

SESSION: 3C. Yerushalayim, Al Quds, Jerusalem: Recent Developments and Dilemmas in the Archaeological and Historical Studies from the Bronze Age to Medieval Periods III

Chairs(s): Yuval Gadot, Tel Aviv University | Yiftah Shalev, Israel Antiquities Authority

Closed for Renovations? On the Access to the Temple Mount in Jerusalem during its Expansion

Tehillah Lieberman

Israel Antiquities Authority, Israel. Bar-Ilan University, Israel

The Temple in Jerusalem, located on the Temple Mount was the pinnacle of the city during many periods, reaching its climax during the Early Roman period. The city of Jerusalem grew in conjunction with the Temple's importance. Thus, tracing the progress of each of the two elements: the city and the Temple, is significant in the understanding of the general development of Late Second Temple Jerusalem.

Due to the limited archaeological evidence, the possible dating proposed for the construction, expansion and renovations of the Temple Mount complex were based primarily on historical sources. Traditionally associating the endeavor, including the rebuilding of the Temple itself and the expansion of the Temple mount along with the erection of monumental retaining walls, to King Herod.

Recent archaeological excavations conducted beneath Wilson's Arch, part of a bridge integrated into the Western Wall of the Temple Mount, exposed three constructional phases in the arch itself. Newly obtained stratigraphic evidence, supported by numismatic, ceramic and radiocarbon dating suggest all three phases, including the current arch, can be dated to the Late Second Temple period. This reflects on two main issues discussed in this lecture: the dating of the Western Wall of the Temple Mount from an archaeological perspective and therefore on the entire expansion project. Secondly, on accessing the Temple, in which the Jewish ritual activity persisted, during the prolonged phase of construction which may have continued for several decades.

Re-Mapping by GIS of the Course of Jerusalem's Third Wall and the North-eastern Sites along It

Yosef Spiezer

Bar-Ilan University, Israel

Dedicated to the late Prof. Amos Kloner

On the eve of Jerusalem's destruction in 70 CE, the city covered approximately 1,800 dunams (180 hectares) and featured palaces, wealthy quarters, markets, public and cultural structures, water

reservoirs, public ritual baths and inns. The city was surrounded by three fortified walls with towers rising to impressive heights. Flavius Josephus called the earliest wall the 'First Wall', and the wall built after it the 'Second Wall'. He called the last and newest wall the 'Third Wall' (Josephus Flavius, *The Jewish War V*, 136–148, below: War).

Remains of the Third Wall were discovered north of the Old City of Jerusalem over the years, but today they cannot be seen on the surface and are difficult to identify. It is therefore also difficult to precisely trace this wall as it was uncovered in past research, as will be shown below. The maps that have so far been published and include the area of the Third Wall are schematic and imprecise.

Sacred and Secular: Religious Sanctuaries in the Urban Planning of Byzantine Jerusalem

Ari Levy

Israel Antiquities Authority, Israel

Tales and descriptions of ceremonies and traditions associated with Byzantine Jerusalem by 5th and 6th century CE pilgrims illustrate how the budding Christian Church and secular Byzantine urban city planners shaped Jerusalem. Their accounts enable us to examine the urban aspects and the integration of the holy sites in the urban fabric.

In the first half of the 4th century CE, at the beginning of the Byzantine period and with the increase of Christian influence in the area, Jerusalem underwent several processes that affected its physical condition. Pilgrims, monks, and aristocrats began arriving in the city. While the urban space included city walls, streets, hospitals, hospices, and other public buildings, it was heavily shaped by the sacred spaces, as the sanctity of the city attracted thousands of believers from all over the Christian world. The people who came flocked to churches and pilgrimage routes that included historic and sacred sites.

As a case in point, the Church of Siloam will be presented along with the special reasons for its establishment and its integration into the liturgical and urban planning of Jerusalem. It had a special liturgical importance as will be seen in various Byzantine pilgrims' accounts. Through these texts one can learn about the array of holy centers in the city, the importance and influence of these centers on Jerusalem's urban plan and especially the roads that criss-crossed the city and connected the various holy sites within the city and connected the various centers of holiness outside of Jerusalem.

New Discoveries on the Medieval City Walls of Jerusalem

David Yeager

Israel Antiquities Authority, Israel

While the walls of ancient Jerusalem have been a subject often dealt with in scholarship, the walls constructed in the Middle Ages (1099-1250 CE) have received little attention. This is especially true regarding the walls in the eastern part of the city, from the Lion's Gate through to the northeastern corner of the city.

Recently Dr. Amit Re'em and I conducted an excavation along the Ottoman city wall. During our excavation we exposed remarkable remains of fortifications that dated back to the 12th century. These include a wide wall that was preserved to a height of four meters, a mote, and two projecting towers with small gateways that led from the mote into the city. The fortifications were built with hewn stones and fine architectural elements with diagonal chiseling and mason marks. Both are characteristic of the Frankish builders.

Who initiated these fortifications? Were they constructed by the crusaders, or was it a project of Salah al-Din?

In this presentation I will discuss this issue and present our interpretation of the site and its dating, as well as a few other remains

of fortifications from this period, shedding new light on one of the most obscure periods in the construction of Jerusalem's city wall.

SESSION: 3D. Archaeologies of Memory III

Chairs(s): Janling Fu, Harvard University | Tate Paulette, North Carolina State University

Narratives and Memory in Garni, Armenia

Elizabeth Fagan

Virginia Commonwealth University, USA

Anthropologies, histories, and archaeologies of memory face a challenge: how to uncover intangible echoes of the past? When we consider that memory is often deliberately shaped through practices like memorialization and also by forgetting and erasure, it becomes clear that memory is not only generally intangible but also frequently manipulated. This paper uses the history and archaeology of the site of Garni in Armenia to argue that when facing this challenge, archaeologists might find it fruitful to examine narratives meant to freeze the past and shape memory. When we focus on the narratives intended to convey a certain image of the past, the political power of memory becomes clear.

This paper will trace histories inscribed in Garni, and later written about the site, to show how material culture and sites can reveal narratives crafted in order to shape the story of the past to accomplish present-oriented goals. In particular, the paper shows how two stoneworkers literally inscribed a story of their involvement in a royal project, and how the story had changed by the time that Armenian writer Moses Khorenatsi discussed the site in his *History of the Armenians*. The paper then illustrates how the present-day tourist site of Garni continues this tradition of laying down an account that offers a particular picture of Armenia's history and identity to the world. Through this analysis, the paper shows the limits of freezing memory, of how even words inscribed in stone can resist.

Ancient Egyptian Kingship Memorialized: The Power of Royal Monuments in the Past and Present

Luiza Osorio G. Silva

University of Chicago, USA

The pyramids of Giza are the only manmade structures that can be seen from space—quite an incredible feat for monuments built more than three thousand years ago. Because these monuments still awe us today, we generally assume that they astonished the ancient Egyptians themselves in equal, if not greater, measure. In truth, the scholarly reliance on top-down evidence when discussing the ancient Egyptian royal institution (including not only monuments such as the pyramids, but also texts and visual representations) has led to a reification of kingship as a monument itself, one that continues to exert power over us.

This paper seeks to reconstruct this memorialization of ancient Egyptian kingship in both the past and the present by looking at how ancient Egyptians might have interacted with royal monuments and their frequent domination of the landscape. How might inhabitants of the pyramid town of Lahun, for instance, have engaged with kingship? Do our expectations of a pervasive royal presence in such places—seen today as utterly royal, in part because of the survival of the pyramid and the deterioration of the town—match ancient realities detectable in private texts and domestic evidence? In order to further our understanding of the ancient Egyptian royal institution, rather than simply rehashing narratives of omnipotence, we must interrogate

our narrow view of the monumentality of kingship and accept that the way we remember it may differ substantially from how it was seen anciently, at least by certain parts of the population.

“There a Church Has Now Been Built”: Monument, Memory, and Authenticity at Early Christian Pilgrimage Sites

Rangar H. Cline

University of Oklahoma, USA

The phrase “There a Church has Now Been Built” echoes through the Piacenza Pilgrim’s (ca. 570 CE) account of his travels in the Holy Land, spoken as he encounters holy springs, ancient trees, artifacts, and ancient monuments associated with a biblical past. Similar phrases occur in earlier accounts like those by Egeria (ca. 380 CE) and the Bordeaux Pilgrim (ca. 333 CE). These sources describe Christian monuments constructed to authenticate sites associated with biblical and other Christian stories. The pilgrimage destinations these sources describe typically sought to incorporate physical proofs of biblical stories. These proofs could include natural phenomena like the spring and oak at Mamre, earlier remains of human activity like Jacob’s Well or the Baths of Cornelius, vestigia like the chest print of Jesus, and caves like those on the Mt. of Olives and Bethlehem, which were by their nature unmovable and ineradicable. Through a presentation of pilgrimage accounts and archaeological material, this paper examines how early Byzantine pilgrimage spaces shaped the ways in which visitors interacted with natural phenomena and the remains of the past such that they were convinced of the authenticity of the holy sites and the stories and memories behind them. Such evidence reveals the ways in which early Byzantine authorities, monastics, builders, and tour guides shaped the architectural and artifactual remains of the human past and the topography of Roman Palestine to monumentalize a distinctively Christian map of the Holy Land.

Reconstructing Narratives: The Politics of Heritage in Contemporary Syria

Nour A. Munawar

Doha Institute for Graduate Studies, Qatar

It is predominantly known that history is written by winners. However, this statement is true when a conflict has a symmetric tendency. In the case of Syria, where the conflict has been widely considered asymmetric, history is being written by a regime/government that won the war by not losing it. This article investigates the interconnection between heritage and politics in Syria by scrutinizing heritage practices, uses, and abuses since the colonial period. First, this article examines regime/government-led post-conflict reconstruction projects in the aftermath of Syria’s current conflict. Then the article moves on and explores the creation of war narratives and the selective memorialization of Syria’s recent conflict by looking at the portrayal of contested war memories in the media and the production of oral history. I argue that heritage practices, uses, presentation, and promotion in Syria since the colonial period have produced a politicized one-sided (hi)story influenced by political agendas. This history includes highly politicized ongoing tangible and intangible heritage reconstruction works, freighted with cultural meaning, and primarily intended to bolster the power and authority of the ruling regime.

Effacing Ephesos: Stratigraphy, Translation, and Selective Memory in the Writing of a Modern “Ruinscape”

Leticia R. Rodriguez¹, Jason R. Vivrette

¹Trinity University, Department of Classics, USA. ²University of California, Berkeley, USA

This paper considers the place of memory—and, importantly, its effacement—in the formation of Ephesos as a modern archaeological site and archaeotouristic space. The paper focuses on two key texts, one primarily archaeological and the other literary: namely, the collected field reports (1877) of English architect and archaeologist J.T. Wood, the first person to formally excavate and document Ephesos in the modern era; and the travel writings of Sabahattin Ali, a major literary figure of the late Ottoman Empire and early Turkish Republic who catalogued his many visits to, and deep nostalgia for, Ephesos in one of his final short stories (1947).

In juxtaposing these texts, this presentation seeks to demonstrate how these foundational writings on and of Ephesos helped shape our understanding of the modern archaeological and touristic terrain of the site, as well as access to it. Particular focus is given to systematic interventions of remembering and forgetting in these texts (e.g., stratigraphy, translation) that have served to highlight and/or obfuscate specific historical, cultural, and linguistic layers of the archaeological landscape (i.e., what we might otherwise call ‘acts of selective memory’).

The paper draws on Helaine Silverman’s theoretical notion of the ‘ruinscape’ (2016): a process whereby a space acquires archaeological place-hood through professional excavation and other formal and state interventions—often at the expense of local inhabitants with alternative understandings, memories, and notions of place vis-à-vis the space in question (e.g., seasonal laborers inhabiting the site, and migrants and refugees subsisting on the ruins).

SESSION: 3E. Archaeology of Islamic Society II

Chair(s): Ian W. N. Jones, University of California, San Diego | Tasha Vorderstrasse, University of Chicago

A Late Medieval Synagogue at Huqoq/Yaquq in Galilee?

Jodi Magness¹, Dennis Mizzi²

¹University of North Carolina, Chapel Hill, USA. ²University of Malta, Malta

Excavations at Ḥorvat Ḥuqoq (Yaquq) in Israel’s Eastern Lower Galilee have brought to light a monumental public building that sheds new light on the history of the Jews in late medieval Palestine, about whom we know very little. We interpret this building as a late medieval synagogue—the first such synagogue to be unearthed in Israel—and argue that its construction was precipitated by the establishment of the Mamluk barīd, which passed by Yaquq, and by the tradition locating the tomb of Habakkuk at the site. In the late medieval period, Yaquq experienced a brief economic boom owing to the increasing number of travellers, including pilgrims, passing through the village. This wealth is reflected in the construction of this monumental synagogue and the discovery of a large gold and silver coin hoard to its south. In addition to serving the local community, the synagogue would have served the many pilgrims who visited Habakkuk’s tomb and nearby holy shrines.

A Preliminary Report of the First Season of Excavations in the Medieval Village at Khirbat al-Balu'a by the Balu'a Regional Archaeology Project (BRAP)

Ian W. N. Jones

University of California, San Diego, USA

This paper presents preliminary results of the 2022 excavations of the Islamic period settlement at Khirbat al-Balu'a in central Jordan, conducted as part of the Balu'a Regional Archaeology Project (BRAP). Although best known as an important Iron Age settlement, the southwestern portion of the site contains the remains of a large (ca. 3.5 ha) Islamic period village, including a large, square building (ca. 40 x 40 m) with a central courtyard at the southwestern edge of the village, which has been tentatively identified as a road inn. Earlier preliminary analysis of ceramics surface collected from the village indicated that the peak of settlement was during the Mamluk and Early Ottoman periods (13th-17th century AD). Using data from the first season of BRAP excavations in this area, this paper will reevaluate and clarify this dating to consider the settlement history of the village. It will also use the data from these excavations to clarify the relationship between the village itself and the potential road inn and evaluate the connections between Khirbat al-Balu'a, other villages on the Karak Plateau and in the surrounding region, and the regional center of al-Karak, ca. 20 km to the southwest.

Defining Patterns of Transition between the Early and Middle Islamic Periods in Southern Transjordan: The Case Study of Dharih

Piotr Makowski

Jagiellonian University, Poland

Until relatively recently, it has been commonly believed that the period between the mid-8th century and the end of the 11th century was a time of evident settlement crisis in southern Transjordan. At this point, we still do not have the necessary data to comprehensively examine this hypothesis. At any rate, it may seem that the paradigm of settlement decline is rather relative and subjective. It has become apparent from the various foregoing studies that a problem exists in regard to the proper understanding of materials gathered from archaeological field research. One aspect of this problem is that many archaeologists were merely not interested in the identification of excavated or surveyed remains, but rather in their interpretation, constructing their narration on the basis of a conventional overview of the material culture. Some sites in Tafilah and Wadi al-Hasa regions express considerable continuity during the Abbasid period, but also, often to a more limited extent, during the 10th and 11th centuries. Changes in the form of occupation are nonetheless apparent in all of them. To preliminarily illustrate the nature of these transformations, the current paper intends to present some remarks on the ceramic evidence from Dharih and some other neighboring sites in the region.

Formation of the Islamic Sacred Landscape on the Territories of Modern Jordan – The Study of Spatial Distribution of Votive Graffiti

Julia Maczuga

University of Bonn, Germany

Jordanian desert abounds in the rocks, which bear votive graffiti written in Arabic. Some of the boulders were part of the Early Desert Mosque constructions. The study of spatial distribution of religious graffiti can help us understanding how the sacred landscape of the region was shaped. Some scholars believe that the establishment of the mosques was connected to the seasonal occupation of the site by

Arab tribes, during the winter times, when wadis were green and became a source of food for the livestock. Therefore, desert mosques were religious places for local Bedouins. Others hold the opinion that the mosques functioned as small, seasonal waystations for early Muslim travelers and were built by Umayyad authorities in order to control traffic along important desert roads. It is also noteworthy that mosques and clusters of Arabic graffiti are placed in the vicinity of Safaitic and Thamudic graffiti, which were created before the advent of Islam. It is important to consider whether the continuation of cultic places took place and whether we can speak of successive sacred landscapes. Since graffiti dated to Mamluk period were found on stone slabs belonging to desert mosques, it can be assumed that the veneration of these places continued to the Middle Islamic period. However, it is also known from Mamluk official inscriptions that new mosques were established, which were located on the burial places of the Companions of the Prophet. Such holy places clearly originated from Islamic tradition.

SESSION 3F. Technology in Archaeology: Recent Work in the Archaeological Sciences II

Chair(s): Zachary Dunseth, Brown University | Nathaniel L. Erb-Satullo, Cranfield University

Silver Sources during the Golden Age of Islam: New Evidence from Large-Scale Geochemical Analysis of Dirhams

Jane F. Kershaw¹, Stephen W. Merkel²

¹ University of Oxford, United Kingdom. ² Vrije Universiteit Amsterdam, Netherlands

The expansion of the Islamic Empire into one of the most powerful early medieval polities was underpinned by vast reserves of silver coin, *dirhams*, minted in their millions. According to Islamic writers, silver mining focused in the Arab Peninsula and in Khorasan/ Central Asia. Yet, despite the enormous scale of minting, these suggestions have never been scientifically investigated. To explore the source of silver used in the early Islamic coinage, we carried out geochemical (lead isotope and trace element) analysis of over 140 Islamic dirhams minted across the Caliphate, and merged this data with existing legacy datasets.

We find that, following an initial reliance on pre-Islamic (Sassanian) silver resources under the Umayyads, a mining boom occurred across the Islamic territories under Abbasid rule. This encompassed new silver sources spread across modern-day Morocco to the Tien Shan mountains of Central Asia, but specifically did not include the Arab Peninsula. Rather than finding evidence for the complex movement of silver, our results suggest a regional silver supply network, with silver moving from mine to mint within North Africa, Iraq, Iran and Transoxania respectively. We pay particular attention to the major mint of Baghdad (Madinat-al-Salam). We provide evidence that this mint was supplied by mines in the Taurus mountains between Iraq and Turkey, an area frequently contested by the Byzantines. This, in turn, raises the question of whether access to precious metal resources fuelled Arab-Byzantine border wars.

The Rise and Fall on Antimony: Sourcing the Colour in Glass

Patrick Degryse

Katholieke Universiteit Leuven, Belgium

Antimony (Sb) is considered a rare metal in the archaeological record, and is found only in unusual circumstances. Nevertheless, it was utilised over several millennia as the prime material to opacify or

decolour glass and glazes, as well as in copper (Cu) alloys. In glassmaking, stibnite was the only available mineral raw material that could achieve the desired opacified colour of the earliest glass, whereas complex polymetallic ores were also suitable for metallurgical applications. Pre-existing knowledge of mining in the Caucasus set the pathway for the initial stage of antimonial copper alloys in the first half of the third millennium BCE and for metallic Sb ornaments in the second half of the third millennium BCE. The first major expansion of the use of antimony in metallurgy in the Racha-Lechkumi district in the southern Caucasus (present-day Georgia) started around 1700 BCE. Sb isotope analysis has allowed late Bronze Age Egyptian and Mesopotamian glass vessels to be matched with these stibnite ores, in particular from the Zopkhito mine. Comparative analysis, both geographically and between different pyrotechnologies including the precious metals and glass industries, explores why the use of antimony blossomed in the Late Bronze Age, and reconstructs a framework of exploitation, distribution/trade and use of antimony. Together with the equivalence of yellow glass and gold in the earliest glass objects, it is put forward that Sb extraction for glassmaking was probably separated from copper metallurgy, but associated with the mining of precious metals.

Sn Isotopes Identify Two Synchronous Tin Production Systems in Bronze Age Anatolia

Wayne G. Powell¹, K. Aslihan Yener², Ryan Mathur³, Michael Johnson⁴, Fikri Kulakoglu⁵

¹ Brooklyn College, USA. ² New York University, USA. ³ Juniata College, USA. ⁴ Stell Environmental Enterprises, USA. ⁵ Ankara University, Turkey

MBA texts from Kültepe mention tin arriving by caravans from unspecified eastern sources. However, at least two sources of tin ore lie within 150 kilometers of Kültepe. Although the extensive underground tin mining at Kestel date to the EBA and possibly later at Hisarcık, the isotopic composition of most tin ingots from the Uluburun shipwreck (1320BC) indicate production in the Taurus Mountains. Therefore, despite the Kültepe texts being silent on the matter, surface tin mining of local ores continued after bedrock workings were exhausted. Multi-method analysis determined that 2/3 of the LBA Uluburun tin cargo was produced at Bolkardağ (Taurus), while the remaining ingots were derived from Central Asian tin ores. With this two-source convergence in mind, preliminary analysis of bronze artifacts from both Kültepe and Tell Atchana was undertaken to determine tin provenance at each location. The LBA material from Tell Atchana yielded $\delta^{124}\text{Sn}$ values consistent with the Taurus-derived ingots of Uluburun. The Early to Middle Bronze Age artifacts from Kültepe display a larger range in isotopic composition. Furthermore, objects with lower $\delta^{124}\text{Sn}$ of Taurus origin correlate with lower Sn contents (<5wt%). In contrast, high $\delta^{124}\text{Sn}$ objects, likely derived from the Tien Shan (Uzbekistan), correlate with Sn ~10wt%. This relationship suggests that two systems of bronze production were active. Higher-value objects were crafted from tin imported by the Assyrian traders. At the same time locally sourced Anatolian tin from the Taurus was smelted to form lower-value objects, probably by the Kaneshite inhabitants.

The Many Expressions of Iron: Tracing Adoption and Adaptation of Iron Technologies in the Southern Levant

Vanessa Workman¹, Adi Eliyahu-Behar²

¹ Bar-Ilan University, Israel. ² Ariel University, Israel

In this paper we share findings from the investigation of several metal workshops uncovered in the southern Levant dated to the tenth-ninth centuries BCE - some of the earliest archaeological attestations of ironworking. Employing a multi-analytical approach, we report on iron production in the territories of Philistia and Israel and how they relate to bronze crafts at the time. Various forms of technological adoption and adaptation are expressed through the typology and formation techniques of production tools, chemical and mineral signatures of waste products, and the spatiality of craft practice. We also pull in insights gained from experimental trials to identify archaeological indicators for the production sequence of iron. Through the evidence at hand, we approach the subject of socio-technical identities in metal crafts in this early period of Levantine ironworking.

Forensic Examination of a Fragmentary Funerary Portrait in the Harvard Art Museums

Katherine Eremin¹, Georgina Rayner¹, Kate Smith¹ Jen Thum¹, Caroline Cartwright²

¹ Harvard Art Museums, USA. ² British Museum, United Kingdom

The collections of the Harvard Art Museums include 5 funerary portraits from Roman Egypt. All the portraits been the subject of intensive technical examination and analysis, in part in preparation for an exhibition in Fall 2022 showcasing technical and curatorial studies.

One of the most interesting portraits depicts a bearded man wearing a white tunic with the remains of a gold diadem in his dark hair and a highly detailed face, dated stylistically to around 150 CE. Technical examination revealed that the panel consists of 19 separate pieces of wood, which show distinct differences in the appearance of the painted surface. Analysis combined technical imaging, non-destructive analysis, and micro sampling for cross-section analysis to further study the pigments and the stratigraphy. In addition, samples of wood were taken from original and replacement pieces for radiocarbon dating and identification of the wood species used.

This study identified a core group of 7 original pieces that comprise much of the face and neck and part of the hair. The remaining 12 pieces contain most of the background, parts of the hair and proper left eye. Analysis of the pigments and stratigraphy of the paint layers allowed these inserted pieces to be divided into distinct groups. All of these appear to be pieces of other portraits of similar provenance that were reused to restore this damaged portrait. This use of ancient fragments is particularly clear in the presence of Egyptian blue in the background on several of replacement fragments pieces.

SESSION: 3G. Archaeology of the Near East: The Classical Periods

Chair(s): Michael Zimmerman, Bridgewater State University

Late 1st--Early 2nd Century CE Keys from the Roman Province of Iudaea (Judea): A Typological and Technological Study

Yarden Pagelson, Yoav Farhi, Yuval Goren

Ben-Gurion University of the Negev, Israel

This paper aims to provide an interdisciplinary study of one of the most captivating artifacts of the Roman period, keys. In addition to being unique in appearance, they evoke the connection between owner, object, and a place, evident by keys taken by Jewish refugees into the Judean Desert during the Bar-Kokhba Revolt of 132–135 CE. Although easily recognizable, keys and their locking mechanisms are rarely studied, often with disjointed typology and terminology.

From a craft perspective, keys are tools. They must have functional mechanical characteristics. We all know how frustrating a broken key can be! As each key fits a specific lock, they were likely forged locally, indicative of the 'native' technological skill. Such abilities are mentioned in textual sources (Dio Cassius 69.12.2 and Josephus' Bell. Jud. 2.649).

For this study, seven keys from Judea were investigated typologically and technologically. Before sampling, they were subjected to non-destructive x-ray radiography, allowing to identify the best sampling locations. These samples were then examined microscopically to assess their production methods and the technical skill of the local smiths. The material analysis of these objects will be discussed in light of archaeological parallels and relevant studies of Roman ferrous technology.

The Roman Cultic Place in Front of Pan's Cave in Paneas/Caesarea Philippi

Adi Erlich

University of Haifa, Israel

Terra cotta roof tiles are some of the most common and voluminous finds in the excavation of ancient synagogues but their significance has received only minor consideration. In this lecture we will review the evidence for terra cotta roof tiles in the ancient synagogue which was the preferred roofing used in the ancient synagogues in Late Antiquity throughout different regions. It will be shown that there is a change from a non-titled roof in the Early Roman synagogues to the common use of terra cotta roof tiles in the Late Roman/Byzantine period synagogues. It will be suggested that this shift in roofing style was not just merely a functional one but part of the broader developments that took place in the synagogue building in Late Antiquity, from a place of gathering primarily for study in the Early Roman period, with an unassuming flat roof, to a more ornate and monumental structure (both internally and externally) with a noticeable and prominent high tiled roof in plain view, as one of the features that transformed the synagogue into a "miniature temple" – מִקְדָּשׁ מִנְעוּט .

The Spatial Impact of the Seleucid Empire in North Mesopotamia: The View from the Erbil Plain in Northern Iraq

Rocco Palermo

University of Pisa, Italy

During the years 2019-2021 excavations were carried out in front of Pan Cave above the springs of the Hermon river in Paneas (Baniyas) in Northern Israel. Paneas was a cultic center dedicated to Pan since the Hellenistic period. According to Flavius Josephus, Herod the Great erected an Augusteum at Paneas, and his son Philip II founded there a city named Caesarea Philippi. Previous excavations by Zvi Maoz exposed a terrace with temples, shrines, courtyards and niches, that developed throughout the Roman period. Maoz did not complete the dig of the area in front of Pan's cave, but a wall with cultic niches that he found running south of the cave's western wall, led him to identify the place as Herod's Augusteum. Other scholars identified Augustus temple on the cliff to the west, or outside Paneas, at Omrit.

Our excavations yielded that throughout the Roman period, the area in front of the cave was an open place, with no remains prior to the 1st century CE. Therefore, Augustus temple was built elsewhere, and the cave's façade was visible to visitors. At first, an aqueduct was constructed, leading water out of the cave southward. Then, an open courtyard with niches accommodating altars, water installations

including a small pool, columns and a holy place were built, facing the cave. In our talk we aim to reconstruct the cultic compound, its possible source of inspiration, and function vis-à-vis the cave. Finally, we will offer alternative locations for the Augusteum.

Defending Nebo: The Hellenistic Defensive Architecture at Khirbat al-Mukhayyat

Debra Foran¹, Gregory Braun², Andrew Danielson³, Grant Ginson¹

¹ Wilfrid Laurier University, Canada. ² University of Toronto, Canada. ³ University of British Columbia, Canada

Khirbat al-Mukhayyat (Jordan) is located northwest of the city of Madaba on a ridge overlooking the Dead Sea. The site has long been associated with the ancient town of Nebo. The Khirbat al-Mukhayyat Archaeological Project (KMAP) was established to investigate the site's strategic and ritual role within the local landscape and wider region across a variety of time periods.

The first four excavation seasons have revealed numerous Hellenistic (3rd-1st centuries BCE) artifacts and features, including a well-preserved stepped bath and over 75 complete cooking pots, placed adjacent to and within Mukhayyat's Hellenistic defensive system. These fortifications, at the southern end of the site, consist of a large rectangular tower and a well-preserved boulder wall that were initially built in the Iron Age (8th-6th centuries BCE). They were subsequently renovated and reused in the Hellenistic period, at which time a glacis was also added.

This paper will explore the Hellenistic reuse of Mukhayyat's Iron Age defenses in the hopes of elucidating the purpose of the different components, how they functioned together, and how they are evidence of a continuous tradition of fortification construction across the southern Levant that began in the Bronze Age. By comparing the Hellenistic defensive system from Mukhayyat to contemporary examples from neighboring sites, we hope to identify common features indicative of wider regional traditions. These characteristics will allow us to narrow the chronological scope of this architecture and place the Hellenistic fortifications of Mukhayyat within the vernacular defensive architecture of the southern Levant.

Towards a Reconstruction of the Ceramic Building Material Industries in the Roman East through the Study of Brick Sizes

Craig A. Harvey

Western University, Canada

In his discussion on building hypocaust systems, the Roman architect Vitruvius prescribes the exact sizes of kiln-fired ceramic bricks to be used for the flooring, pillars, and suspended floor of these heating installations. As Roman-style baths spread throughout the provinces, so too did the construction of hypocausts and the need for ceramic building material. While hypocaust bricks uncovered in some regions (such as Britain and southern Gaul) largely adhere to the sizes specified by Vitruvius and thus reveal the global reach of Roman standardization, those found elsewhere, such as Cilicia, appear to have been based on local units of measure. This variation demonstrates the possibility of using brick sizes to assess local influences on brick production, and by extension the construction and adoption of Roman baths and bathing practices. Despite this potential, kiln-fired ceramic bricks have largely remained unexamined in much of the Roman East. This paper presents the preliminary results of the first transregional study of this often-overlooked material. Through an analysis of excavated bricks from Herodian baths as well as from baths of the Decapolis, southern Jordan, Dura Europos, and other regions in the

Roman East, this paper uses the sizes of these hypocaust bricks to begin reconstructing the development and organization of the ceramic building material industries in these regions. Although preliminary, the results of this study provide new insights into this hitherto largely invisible industry by illuminating issues concerning the scale of production, modes of manufacture, and logistics of transportation.

SESSION: 3H. Over the Mountains and through the Grass: Collaborative Archaeology in the Southern Caucasus and Central Asia, Papers in Honor of Karen S. Rubinson

Chair(s): Megan Cifarelli, Manhattanville College | Siavash Samei, College of Wooster

The Middle Bronze Age from Syria to Azerbaijan: Competition, Connections, and Mobility

Lauren Ristvet

University of Pennsylvania, USA

Karen Rubinson's early work on Trialeti and Dinkha Tepe emphasized the new connections that emerged between Mesopotamia, Iran, and the Caucasus during the Middle Bronze Age. Her support of my and my students' research on the Caucasus has been unstinting over the last fifteen years and I am honored to have the opportunity to present this paper, which draws upon some of my research on Middle Bronze Age material from Syria, Iran, and Azerbaijan.

Following a climatic downturn from 2200-1900 BCE that affected rainfall and river regimes from Egypt to the Indus, the Middle Bronze Age (2000-1500 BCE) witnessed a rise in pastoralism, the appearance of regularized trading ventures and diplomatic ties across a vast region, and an increase in warfare across Western Asia. I argue that these processes are interlinked and that together they set the stage for a new age of interaction. In this paper, I will focus on three regions—the Habur Plains, the Urmia-Solduz Valley, and Naxcivan—in order to elucidate this new Middle Bronze Age world order.

Of Cauldrons and Kurgans: A Mended “Metal Vessel with Basket Handles” from the Middle Bronze Age Qizqala Necropolis

Jennifer Swerida

University of Pennsylvania, USA

In 2001, Dr. Karen Rubinson published a brief essay in honor of her colleague, Professor Otar Japardize, in which she defined a type of metal vessel found in the Middle Bronze Age (MBA, 2400-1500 BCE) kurgans at the site of Trialeti in modern Georgia. These objects, made distinctive by their basket-style handles, constitute a small but discrete subset of the metal wares that first appear in the South Caucasus during this period. Based on the small size and mortuary find spots of the Trialeti vessels, combined with those of similar objects from MBA contexts throughout the Near East, Dr. Rubinson suggests that such vessels served a ritual or non-utilitarian function prior to their final disposition.

More recently, excavations by the joint American-Azerbaijani ‘Naxçivan Archaeological Project’ at the MBA necropolis of Qizqala have uncovered another such vessel in kurgan CR4. This artifact, described by excavators as a cauldron, was repaired during its use-life in at least two instances through the soldering of bronze plates to the vessel's exterior wall. With this paper, the author revisits Dr. Rubinson's early work on metal vessels with basket handles and, using the Qizqala example as a case study, builds an expanded biography for

both the type and the individual vessel. The paper additionally shows how the contexts of and repairs to the Qizqala cauldron provide insight to a broader functionality and cultural meaning than has previously been possible to associate with the vessel type.

Modelling Urarti (Over the Mountains and Through the Grass): Least-Cost Paths in Armenia

Tiffany Earley-Spadoni

University of Central Florida, USA

Early and Middle Iron (EI/MI) forts from the early 1st millennium BCE in Armenia provide an opportunity to ponder route selection in the ancient past. Archaeological survey has revealed several small chains of forts located between Lake Sevan and the Vayots Dzor region in southern Armenia. Some are located along modern primary routes of travel while others are not. Least cost paths (LCPs) were produced from known Urartian sites south of Lake Sevan to the Urartian fortress of Verahram located in the Maku region of Iranian Azerbaijan. The LCPs correspond well with the chains of forts, suggesting the accuracy of the modelling techniques. Given the positioning of fort chains, it is apparent that there was no single “road” that led to the southern shore of the lake. Instead, many tracks were apparently used and heavily defended. Some of these paths correspond with contemporary roads while others do not, indicating that people in the past may have regularly used more routes in this region than customary in modern times.

Barbarians, Cosmopolitans, and the Crafting of Recognition: Manufacturing Epistemic Values in Urartian Media

Adam T. Smith

Cornell University, USA

Few inventions of the Iron Age have been quite as durable as the figure of the barbarian. The Bronze Age, to be sure, was populated by peoples who were regarded by their neighbors with disdain—people who ate weird foods, lived in strange houses, and worshipped peculiar gods with unsavory rites. But simple chauvinism does not require the conceptual apparatus of the barbarian. Conjuring barbarians requires the creation of what Rolph Trouillot termed “the savage slot”, a categorial social position generated out of a set of epistemic values for defining Others and recognizing an “us”. In this paper, I examine how media generated by the state apparatus of the kingdom of Urartu (ca. 850-640 B.C.) worked to render the inhabitants of the conquered highlands as illegible, occupants of a savage slot with no historical, cultural, or aesthetic relation to the elites who ruled them. At the same time, media also worked to disembody the Urartian regime, alienating it from the highlands and aligning it instead with an international network of elites through a shared iconographic repertoire. The epistemic values generated out of these media programs effectively cleared the ground for the formation of new communities of identification out of the ruins of Urartu's collapse.

SESSION: 3I. History of Archaeology: Archaeology, Nation, Race and Us (Book Workshop)

Chair(s): Raphael Greenberg, Tel Aviv University | Yannis Hamilakis, Brown University | Nassos Papalexandrou, The University of Texas at Austin

Respondent and Workshop Organizer

Raphael Greenberg

Tel Aviv University, Israel

Dr. Greenberg will respond and lead a discussion on the papers presented in this workshop dedicated to the book he has published with Dr. Yannis Hamilakis, *Archaeology, Nation, and Race: Confronting the Past, Decolonizing the Future in Greece and Israel*.

Respondent and Workshop Organizer

Yannis Hamilakis

Brown University, USA

Dr. Hamilakis will respond and lead a discussion on the papers presented in this workshop dedicated to the book he has published with Dr. Raphael Greenberg, *Archaeology, Nation, and Race: Confronting the Past, Decolonizing the Future in Greece and Israel*.

Local Histories and Networks of Looting

Erhan Tamur

Columbia University. The Metropolitan Museum of Art, USA

My contribution will highlight two points that reflect the continuing prevalence of colonial modes of engagement with the past. The first one concerns the narratives of archaeology, namely historiographical overviews and surveys which are still characterized by a lack of engagement with sources in non-European languages. This lack not only creates and sustains a putative epistemological divide between the “east” and the “west,” but also perpetuates “great man histories” by systematically neglecting local, alternative narratives. The second point pertains to a burning issue in our field: the networks of looting. The intricate systems of looting that operate as a well-oiled machine today were established in a colonial setting in the second half of the nineteenth century in Ottoman Iraq. I believe that stressing this connection helps us question many of the legal and ethical definitions that are often taken for granted today.

Reflections on Archaeology and Nation in Israel

Ido Koch

Tel Aviv University, Israel

In my talk I would like to share thoughts on the significant role archaeology has in the Israeli society. A prime focus will be the archaeology of the first millennium BCE and how it continues to resonate in the 21st century in Israel and beyond.

The Startling Significance of Archaeology

Lynn Swartz Dodd

University of Southern California, USA

Greenberg and Hamilakis argue for archaeology’s revolutionary potential, borne of its potential to startle us. They till rich ground in submitting the archaeological gaze to critical reflection. I engage their ideas about potentials and responsibilities that are implied for us as archaeologists, as agents engaging in complex maneuvers that span pasts and presents. We take into our hands materials of varying durability that were created in past moments and assign them to systems of significances in the present in which every descriptive term of identity....name, color, place of origin...is determinative of future import.

Purification in Practice and Dialogue

Allison Mickel

Lehigh University, USA

Archaeology, Nation, and Race explores notions of purification in many senses. In my remarks I will pick up on this theme, pointing to additional ways in which it has come up in my own work on labor and epistemology in Near Eastern archaeology. In addition, I will respond to the format of the text, which itself suggests the importance of de-purifying our own writing and representations of archaeology.

THURSDAY, NOVEMBER 17, 2022 | 4:20pm-6:25PM (EST)

SESSION: 4A. Archaeology of Jordan I

Chair(s): Marta D'Andrea, Sapienza University of Rome | M. Barbara Reeves, Queen's University

Settlement Dynamics at Khirbat al-Mukhayyat: Analyzing Archaeological Survey Data to Evaluate Occupational History

Andrew J. Danielson¹, Debra Foran², Gregory Braun³, Stanley Klassen³, Věra Doležalková⁴, Grant Ginson², Christine Sylvester²

¹ University of British Columbia, Canada. ² Wilfrid Laurier University, Canada. ³ University of Toronto, Canada. ⁴ Charles University, Czech Republic

In 2000–2001, the Tall Madaba Archaeological Project conducted an archaeological survey of the site of Khirbat al-Mukhayyat (Jordan) in anticipation of future archaeological excavation. With the formation of the Khirbat al-Mukhayyat Archaeological Project in 2014, an important aim was to analyze this extant material culture from survey. The first goal of this analysis was to create robust hypotheses concerning fluctuations in occupation and the nature of human activity at the site that could be tested against future excavation, and the second goal centered around a test of the methodological extent to which previous survey data of this type may be used in archaeological interpretation. This paper presents the results of this analysis that includes an examination of the ceramics based on chronology and form, as well as distributional maps that identify areas of intensified activity on the site by period. These results are compared with recent excavations at the site. Ultimately, this paper highlights the trajectory of human activity at the site from the Early Bronze Age through to the modern period.

Olive Processing: EB IB Holemouth and Short-necked Jars

Natalia M. Handziuk

University of Toronto, Canada

During the Early Bronze Age (3800 – 2000 BCE) in the southern Levant agricultural infrastructure developed on a region-wide scale to facilitate the accumulation of surpluses including olive oil. These products became a mechanism for building wealth and authority from the EB IB through EB IV. At this time, large vessels were widely used in food production, processing, and storage. Plain holemouth jars and necked storage jars displaying grainwash decoration appear to be particularly associated with the production of olive oil. These vessel types co-occur at WZ130 – a specialized EB IB (3400 – 3000 BCE) olive processing site in wadi Ziqlab, northern Jordan. WZ130 is a single-period processing centre destroyed by a collapse event, sealing multiple complete and reconstructable vessels in-situ.

This discussion examines how holemouth and necked jars at the processing centre compare in terms of technological approaches to fashioning, finishing and surface treatments (Roux 2019). It interrogates the consistency of potting techniques within each type and examines the practice of large-vessel potting in the north Jordan Valley during the EB IB (Harrison 2011, Klassen 2009). The relationship between storage jars and olive oil is significant as they are woven into both domestic and community-level economies, while simultaneously providing the opportunity to leverage authority and build wealth in village and proto-urban economies.

Remodelling the Early Bronze II-IV Periods in Jordan in Light of Fresh Research: New Data and Missing Links

Marta D'Andrea

Sapienza Università di Roma, Italy

In past research, everything and its opposite has been said on the economy and society of the southern Levantine “walled settlements” in Early Bronze II-III (ca. 3000-2500 BC) on a scale from city-states to corporate rural communities. Scholarly consensus is that this phenomenon was both small-scale and intrinsically fragile, as suggested by the demise of most of these sites by ca. 2500 BC. Hence, the following Early Bronze IV (2500-1920 BC) would be the natural outcome of this weakness, bringing a generalized return to a non-urban agropastoral organization for six centuries before urban regeneration started.

The paper reconsiders how the evidence from Transjordan conforms to this picture, building on new readings of old records and recent excavations at archaeological sites such as Khirbat Iskandar. It suggests that local developments during Early Bronze II-III may differ from those of Cisjordan and explain regional differences during Early Bronze IV too. Moving from the analysis of stratigraphy and material culture as unique foundations of any solid chronological frameworks, correlated to recent radiocarbon dates, the paper reconsiders changes in material culture, economy, and society in Transjordan throughout the third millennium BC. Although there are missing links in the archaeological periodization, the analysis suggests that disruptions may have affected the development of urban settlements in Transjordan earlier than usually thought. It also shows that the local, resilient communities were capable of creative adaptive responses that may have been different at a micro-local scale and shaped the local organization during the following Early Bronze IV differentially.

Daily Life during the EB III in Jordan: Evidence from the Groundstone Tools from Numayra

Hanna Erfttenbeck

University of Notre Dame, USA

During the Early Bronze Age II-III (c. 3000–2500 BCE) people in the southern Levant created the first proto- and early urban communities in the region, characterized among other things by a new built environment and changing social dynamics. Researchers have identified the importance of investigating the daily lives of people within the EB II-III communities to understand how day-to-day interactions and practices within domestic spaces shaped their communities (Chesson 2003, 2015; Paz 2012). Between 1977 and 1983 the Expedition to the Dead Sea Plain conducted excavations at the EB III site of Numayra in Jordan, with a focus on the residential architecture in the central area of the site (Chesson, Schaub, and Rast 2020). These excavations resulted in a rich dataset that allows us to study the material footprint of everyday life at Numayra. This paper presents the Numayra groundstone tool assemblage and considers the diverse use of groundstone objects in the day-to-day lives of its inhabitants. Furthermore, this paper analyzes differences and similarities between the Numayra residential units by interrogating how these data inform our understanding of EB III social and economic community organization. Additionally, this paper discusses the value of studying legacy data and how underutilized materials, such as groundstone tools, can help us broaden our understanding of daily life within the earliest urban communities in Jordan.

Expedition 2022 to Khirbat Iskandar, Jordan

Suzanne Richard¹, Marta D'Andrea²

¹ Gannon University, USA. ² Sapienza Università di Roma, Italy

The 2022 campaign to Khirbat Iskandar was the twelfth full season of excavations at this key Early Bronze Age site in central Jordan. This season was sponsored by Gannon University and Sapienza University of Rome. Khirbat Iskandar is well-known for its important EB III and EB IV phases on the tell. Recovery of substantial and monumental EB IV architecture at the site has had a signature impact on scholarly perspectives on the period; the site likewise includes monumental fortifications in the EB III period, the latest of which appearing to be an EB III/IV defensive construction. A major goal of 2022 was to continue investigations of the highly significant EB III/EB IV transitional occupation uncovered in 2019 in Area C. That occupational profile consisted of 7 continuous phases over the latter part of EB III and into the EB IV period. The 2022 expedition was solely focused on testing the following hypotheses: 1) the stratified profile shows continuous occupation from the EB III destruction through 3 phases of late EB III and, without break, three phases of EB IV. 2) The stratified profile raises questions about the nature of the EB III “collapse.” The aim was to achieve more horizontal exposure of the critical layers exposed in Area C6 and 8 and to investigate the lowest phase in EB III reached, which appears to be a destruction level. The goal was to seek evidence of the mechanisms operative in the transition from an urban to a rural site.

SESSION: 4B. Museums and Social Justice II

Chair(s): Caitlin Clerkin, Harvard Art Museums | Katherine Larson, Corning Museum of Glass

Collectors Artists, and “Antiquity” at the Bowdoin College Museum of Art: New Interventions and New Stories from a New England Collection

Sean Burrus

Bowdoin College Museum of Art, USA

This paper shares two cases studies of exhibitions showcasing new strategies for responsibly and ethically sharing ancient art and artifacts from the collection of Mediterranean and Middle Eastern antiquities at the Bowdoin College Museum of Art (BCMA). *Assyria to America*, an exhibition open from 2019-2022, examined the ancient and modern histories of six Assyrian reliefs from ancient Nimrud at Bowdoin. The exhibition combined major loans and updated gallery strategies along with interventions by contemporary artists, programming on cultural heritage, workshops, and digital technologies including ‘virtual loans’ in order to share new research into the ancient, 19th century, and contemporary contexts of the reliefs at Bowdoin College as well as reflections on the responsibilities of institutions like the BCMA

Antiquity & America, opened 2022, explores the collecting of Mediterranean antiquities by Americans, their modes and motivations, and the prominent role the ancient Mediterranean has played in the history of American cultural and political life. From Americans’ first encounters with the ancient world in print, painting, and plaster in the 18th century, to antiquities and their collectors in the 19th and early 20th centuries, the exhibition reveals how profoundly the ancient world has shaped the arts, politics, and national identity of the United States. Revisiting strategies developed in *Assyria to America*, developing new modes of digital storytelling, and expanding the range of voices and perspectives represented in the exhibition, both historic and contemporary, *Antiquity & America* marks an

important moment in the sharing of the ancient art and artifacts at the BCMA.

Facing Display Practices in Ancient African Collections

Annisia Malvoisin

Bard Graduate Center/Brooklyn Museum, USA. University of Toronto, Canada

Stemming from momentous interest in the romanticization of the ancient world, ancient objects from African regions have been collected on an exponential scale. During these periods of collection, the objects experience a massive decontextualization and initial interpretation by the scholars through which they interact. Oftentimes, this experience is not reevaluated, and permanent gallery displays and exhibitions undergo contextual inaccuracy as a result. Through an exploration of specific objects from Egypt, Nubia, and West African regions, this paper discusses the importance of and direct relation between the historical provenance of collections from the Nile Valley and West Africa and the methods within which they are displayed in museums. The archaeological memory of objects is impactful towards understanding its institutional reality, which should contribute to proper approaches to curating permanent displays and exhibitions. The physical space of the museum gallery will also be explored in understanding its role in audience engagement.

ReFraming Ancient Art at the Harvard Art Museums

Caitlin C. Clerkin, Susanne Ebbinghaus, Amy Brauer

Harvard Art Museums, USA

The ReFrame initiative at the Harvard Art Museums aims to “reimagine the function, role, and future of the academic art museum.” Developed as longer-term conversations about practice and equity came to a head in the turmoil of 2020—with the COVID-19 pandemic, the murder of George Floyd, and responses to both—ReFrame highlights difficult histories and foregrounds new narratives and modes of storytelling, in order to build frameworks for more equitable museum practice. It began as a virtual programming series during the museums’ pandemic closure; with the museums’ reopening in September 2021, ReFrame appears in the physical museum as graphic, text, and object-based installations. Through these activities and more, the Harvard Art Museums seek to participate in contemporary conversations, create community, and align practice with institutional values of social justice.

The Harvard Art Museums’ ancient art curatorial team cares for ancient Middle Eastern, Egyptian, Greek, Roman, and Byzantine collections. This paper presents our implementation of this museum-wide initiative. Contextualized by ReFrame activities across the institution, we discuss “reframing” the ancient galleries at various scales—label interventions, gallery rotations, and longer-term planning—in order to contextualize displayed objects in different ways, present previously invisible contributors and stakeholders, and change the stories told in the permanent installations. Through this case study, we explore the goals, challenges, and possibilities for “ReFraming” ancient collections at a university art museum.

Connecting Collections and Community

Kiersten Neumann

Oriental Institute, University of Chicago, USA

The OI Museum collection consists primarily of artifacts excavated by OI archaeologists in the early twentieth century at historical sites spanning from Tunisia to Iran, with examples ranging in date from the

Paleolithic to the Islamic period. A selection of the collection is exhibited in permanent galleries devoted to Mesopotamia, Assyria, Syro-Anatolia, the Levant, Egypt, Nubia, and Persia, and in rotating special exhibitions. Such an expansive collection holds profound, enduring, and diverse meanings for a great number of cultures and communities, both past and present. Undeniably, a fundamental goal of a museum with such a collection should be to understand these connections and to create an inclusive and engaging environment for them to be expressed and celebrated, through exhibitions as well as programming; this holds especially true when the cultural heritage of the regions from which such artifacts originate is in peril. This paper will explore the ways in which this goal might be achieved through the example of the OI Museum and the many communities of greater Chicago with cultural connections to its collection.

SESSION: 4C. Archaeology and History of Feasting and Foodways

Chair(s): Elizabeth Arnold, Grand Valley State University | Jacob Damm, University of California, Los Angeles

Dietary Practices at Tell Kami del-Loz (Lebanon) during the Bronze and Iron Age

Shira Gur-Arieh^{1,2}, Patrick Roberts³, Mary Lucas³, Stefanie Eisenmann⁴, Daniela Lenz¹, Ptolemaios Paxinos¹, H el ene Weber¹, Michael Schultz^{5,6}, Philipp W. Stockhammer^{1,4}

¹ Ludwig-Maximilians-Universit at, Germany. ² University of Haifa, Israel.

³ Max Planck Institute for the Science of Human History, Germany. ⁴ Max Planck Institute for Evolutionary Anthropology, Germany. ⁵ University Medical School G ottingen, Germany. ⁶ University of Hildesheim, Germany

Tell Kamid el-Loz, in the Lebanese Beqaa Plain was situated on the central trade axis between the southern Levant and the early urban centers of Syria. The settlement flourished in the Middle (ca. 2000-1600 BC) and Late Bronze Age (ca. 1600-1200 BC), while in the Iron Age I-II (1200-600 B.C.), the tell was inhabited by rural populations. The most significant record of human presence in the subsequent Iron Age III/Persian period (600-64/30 B.C.) is a large cemetery that was in use until the Hellenistic Period. We hypothesize that the dietary practices of the tell inhabitants may reflect the change in settlement pattern between the urban centers of the Bronze Age to those of the rural Iron Age.

More than 100 burials dated between the Middle Bronze Age and the Persian-Hellenistic period, are the focus of this study. Of these burials, fifteen usable samples of dental calculus were studied using phytolith and starch analysis to understand the diversity and dynamics of individual human nutrition. To provide information on changes in dietary sources and reliance on animal protein by the site's inhabitants, about 100 burials were sampled for stable carbon and nitrogen isotope analysis of bone collagen.

The initial results of the plant micro-remain analysis raises questions about the possible pathways in which they were introduced to the dental calculus, while the stable isotope analysis provides broad insights into dietary changes through a period of significant political and economic change at Tell Kamid el-Loz.

Economic and Symbolic Roles of Wild Animals during the Late Bronze and Iron Ages of the Southern Levant

Lidar Sapir-Hen

Tel Aviv University, Israel

By the 2nd Millenia BC in the Ancient Near East, livestock animals are the dominant meat source, and wild animals constitute a very small supplementary proportion of the food animals. Wild animals in the Late Bronze and Iron Ages in the southern Levant are not extensively studied. Although their presence is recorded and reported in zooarchaeological studies, they often receive rather limited attention compared to the livestock animals and are sometimes only mentioned as "additional fauna". The aim of this paper is to examine wild animals in these societies: What was their role in past societies? Was their prevalence impacted by the local environment? Can their presence be linked to economic demands, historical events, or cultural choices? Results are based on a large body of zooarchaeological data set according to relative chronology phases and projecting data on GIS maps, to study the spatial and temporal changes. Study reveals that, the frequencies of hunted food animals range from random finds to ~12% of the total food assemblage. Although their frequencies are not high, gazelle and deer are found in almost every site, regardless of the site's local environment. Various other wild animals, including large game and large predators, are represented in the assemblages in lower frequencies and in specific contexts. Based on these observations and with correlation to historic events and cultural changes, wild animals' role in the economic and symbolic world of past societies is discussed.

Ritual Feasts? Residue Analyses of Late Hellenistic Cooking Pots from Mukhayyat

Gregory Braun¹, Kalyan Chakraborty¹, Debra Foran²

¹ University of Toronto, Canada. ² Wilfrid Laurier University, Canada

Since 2012, The Khirbat Mukhayyat Archaeological Project has conducted excavations at Mukhayyat (Ancient Nebo) in the Madaba region of Jordan. While no evidence for a permanent Late Hellenistic occupation has been discovered, agricultural installations and a ritual bath have been identified. Contemporary with these features is an occupational phase associated with activities that involved placing complete cooking pots upright on the ground, regardless of the steepness of the slope on which they were placed; these pots were then deliberately buried and soil was allowed to accumulate above the deposits. In order to explore the idea that these cooking pots were associated with seasonal ritual feasting activities at Mukhayyat, residue analysis (gas chromatography isotope-ratio mass spectrometry) was performed on thirteen vessels; results indicate that some of these vessels were used to cook ruminant animal meat as well as other plant-based foods. Together, this evidence supports the idea that these pots were deposited by local and non-local groups of people as part of a ritual feast, possibly related to agricultural activities or celebrations.

Cooking Habits and Animal Exploitation during the Early Islamic Jerusalem

Barak Monnickendam-Givon, Tehila Sadiel, Michael Chernin, Ortal Chalaf, Yasmin Szanto

Israel Antiquities Authority, Israel

Cooking vessels assemblages (*batterie de cuisine*) alongside faunal remains found in archaeological sites are markers for various people and groups' different dietary habits and cooking techniques in antiquity. The characters of the assemblages indicate the extent of investments in food and meals preparation and the preference of specific cooking techniques and exploitation of animals. During the Early Islamic period, the array of cooking vessels in use comprised both closed cooking pots and open cooking vessels. Closed cooking pots were used for cooking by boiling liquids and wet dishes. While

open vessels, such as casseroles and pans, were used for broiling, frying, and baking. The faunal assemblage reflects intensive exploitation of sheep and goats alongside larger animals such as cattle, horses, and large fowl.

Reconstructing the nature of the "Jerusalemite cuisine" during the Early Islamic period includes an integrative approach of studying clay and stone-made cooking vessels alongside the faunal remains. Our presentation will focus on the finds found during the ongoing Israel Antiquities Authority's excavations at the Western Wall Plaza. In the excavation, a well stratified, rich, and diverse assemblage of cooking vessels and faunal remains reflects the daily activity at the city's heart. The analysis of the different vessels and their ratio attests to different cooking techniques, and types of meat were preferred during that period. Analyzing the find from various perspectives allows for a more comprehensive reconstruction of daily life habits, economic choices, and behavioral decisions in Early Islamic Jerusalem.

Feeding the Gods: Ritual Analysis of Food Offerings during the Neo-Babylonian Empire

Michael Orellana

Universidad Peruana Union, Peru. Andrews University, USA

Food offerings constitute an essential part of religion during the Neo-Babylonian empire. The selection, processing, distribution, and consumption are regulated by specific rituals that ensure the distinction between the sacred and the profane. This presentation will analyze the mechanisms to maintain this distinction. It will also compare the rules that apply for making an exchange between the sacred and the profane. The method for such analysis will consist primarily in reading the literary descriptions of sacred food and comparing them with their archaeological parallels during the Neo-Babylonian empire. Special attention will be given to the interaction between the divine and human spheres.

Eating Donkeys (Equus Asinus) at Early Bronze Age Tell es-Sâfi/Gath

Haskel Joseph Greenfield¹, Jon Ross², Sarah Richardson¹, Tina L.

Greenfield³, Shira Albaz⁴, Aren M. Maeir⁴

¹ University of Manitoba, Canada. ² Ariel University, Israel. ³ University of Saskatchewan, Canada. ⁴ Bar-Ilan University, Israel

Most scholars normally consider the importance of donkeys in the ancient Near East to trade, transport, migration, and ritual. However, eating donkey flesh or using them for hides is historically and ethnographically well-documented, even if it is abhorrent to many modern and ancient cultures. This paper reviews the evidence for consumption of donkey flesh in the ancient Near East. We present recently collected and analysed zooarchaeological data that demonstrate that donkeys were not only used for transport of goods and people, but were also consumed both ritually and as a regular part of foodways during the Early Bronze Age of the southern Levant.

In recent years, a number of complete and articulated domestic donkey skeletons been unearthed beneath the floors of later Early Bronze III houses in a domestic neighbourhood at Tell es-Sâfi/Gath (Israel). However, there is also evidence for consumption of donkey flesh from the various loose donkey bones that are mixed in with the other faunal remains from each of the phases of occupation (EB5 a, b, and c) during the Early Bronze Age occupation at the site. This paper will present the archaeological evidence for donkey flesh consumption and discuss its significance in light of Early Bronze Age diet, society, and economy in the region, and household ritual behaviour.

SESSION: 4D. Ancient Inscriptions I

Chair(s): Jessie DeGrado, University of Michigan | Madadh Richey, Brandeis University

An Ivory Comb with an Alphabetic Inscription from Lachish

Madeleine Mumcuoglu¹, Michael Hasel²

¹ The Hebrew University, Israel. ² Southern Adventist University, USA

Lachish was a key Canaanite city in the second millennium before becoming the second most important city in the Judean Kingdom after Jerusalem in the Iron Age. The Fourth Expedition to Lachish (2013-2017) was conducted by The Hebrew University of Jerusalem and Southern Adventist University with several other consortium institutions. On the first day of the 2016 season, an ivory comb incised with an alphabetic inscription was discovered in Area AA. One side of the comb is characterized by six large teeth and was used to untangle knots in the hair. The other side of the comb, with fourteen fine teeth, could have been used to remove lice and their eggs as fine grooming. This is the fourth comb excavated at Lachish. Fine tooth ivory combs first appear in Egypt during the Predynastic period and then continue to the New Kingdom. This comb was made of elephant ivory, a luxury material exported from Egypt to Canaan. Such combs were widely used in the Levant during the Middle and Late Bronze periods with known parallels from Lachish, Megiddo and Ugarit. But where did the inscription on the ivory comb originate? One possibility, is that both the finished comb and the inscription originated in Egypt. Another possibility is that the ivory came from Egypt, but that the inscription was incised at Lachish. This presentation, and the next lecture by epigrapher Dr. Daniel Vainstub on the inscription itself, will explore these possibilities and its implications for the development of the alphabet.

A Proto-Canaanite Inscription Against Lice on a Comb from Lachish

Daniel Vainstub

Ben-Gurion University of the Negev, Israel

A newfound Proto-Canaanite inscription was engraved in a tiny double-side comb made of ivory dated to the Bronze Age. The inscription holds 17 tiny letters in two rows that form six words in a fully preserved verbal sentence.

The sentence expresses a wish that the comb shall root out the lice of the hair and the beard of the man that will use it. This new inscription provides very important contributions both in the paleographic field, and in the linguistic one.

In the paleographic field: a. For its being engraved in a datable C14 material it makes a decisive contribution to the debate on the dating of the Serabit el-Khadem inscriptions and the whole process of invention and development of the Canaanite script. b. The inscription holds two hitherto unknown Canaanite letters that contribute to our knowledge on the connection and development of the different scripts in the region: Canaanite, South Arabian and Ugaritic.

In the linguistic field: a. As for the first time a well-preserved verbal sentence in a Canaanite dialect of the Bronze Age was found, the words order, the use of the verbal tense and other syntactic features can be compared with their parallels in Biblical Hebrew and the Canaanite-Akkadian of the el-Amarna letters. b. The inscription does also special contributions to the lexicography's connections and developments between the Semitic languages in the region.

Ur-nigar Scribe of the Shipyard: Unpublished Ur III Text from the Iraqi Museum

Ali Hussein Mohsin

The Iraqi Museum, Iraq

The tablet under consideration (IM 239604) was donated to the Iraqi Museum within a collection of 800 archaeological finds in April 2021, and registered in the museum archives in July 2021. This tablet, inscribed with 17 lines on each side, contains an inventory list of a shipyard, and records amounts and quantities of commodities such as: asphalt, fruit trees (apple, pomegranate, date palm, pine, Euphrates poplar and juniper), animal leathers, and a large number of workers.

The scribe used many kinds of measurements to calculate the number of the quantities and their sizes that should fit in the boat:

(KUS-TA: cubit each, ŠU-DIM₂ = girah: a bushel, GID₂: length, GU₂: talent, MA-NA).

The text is dated to ŠS 1, with a certain mUr-nigargar assigned as the scribe of the shipyard. This personal name mostly appears in the cities of Girsu, Adab and Umma.

What makes this text particularly interesting is that it records a deficit (remainder) of asphalt to be used in building boats. The shape of the tablet suggests that it is from Girsu, but the content refers to the possibility that it might come from Umma or Girsu. This paper discusses the origin of the tablet, the fruit trees and their use in the boat, the extraordinary deficit amount of asphalt, and also searching for any trace of asphalt in the excavations of Umma and Girsu, in order to determine an assumed location for the shipyard.

The “Theophany” Inscription at Kuntillet ‘Arjud (KA 4.2) and Biblical Poetry: Evidence of Yhwh’s Southern Origins?

Julia Rhyder

Harvard University, USA

The inscriptional evidence from Kuntillet ‘Arjud has played a central role in the debates that surround Yhwh’s geographical origins. Much of the discussion has focused on the inscriptions that mention “Yhwh of Teman” and “Yhwh of Samaria.” However, recent scholarship has turned its attention to a fragmentary text (KA 4.2) written on plaster that features a poetic description of a theophany. It has been suggested that the language of KA 4.2 finds its closest parallels in biblical passages that ascribe a southern origin to Yhwh, and may therefore constitute a specifically southern theophany tradition. This paper, in contrast, by comparing the poetic language employed in KA 4.2 with a variety of biblical poetic texts, shows that the “theophany” inscription cannot be reduced to an allegedly southern theophany tradition. The inscription rather echoes with various biblical materials, while also employing terms that have no clear parallel in biblical theophanies. Moreover, the difficulty in establishing whether the theophany features the gods El and Baal alongside Yhwh, or rather employs the terms *’and b’* as honorific titles for Yhwh, further complicates the attempt to directly correlate KA 4.2 and the so-called “southern theophanies” of the Bible. The paper concludes by exploring the extent to which the pluriformity of the religious ideas expressed in KA 4.2 may illustrate the broader complexities of using the Kuntillet ‘Arjud inscriptions to bolster the biblical texts that allegedly prove Yhwh’s historical origins in the south.

SESSION: 4E. Archaeology of Islamic Society III

Chair(s): Ian W. N. Jones, University of California, San Diego | Tasha Vorderstrasse, University of Chicago

Decoding Spolia: Material Expression of the Decision-Making process Behind Rebuilding in Islamic Syria

Sherihan Inalo

University of Bonn, Germany

The modern concept of ‘spolia’ refers to the reused parts of architectural constructions taken from a demolished building. Spolia in the Middle Ages was a method of revival more than vandalism, as it gave the stone or the inscription a new life as a concept of survival and permanence. In later eras, especially in the Islamic period, the destruction of temples and the takeover of their property is a good example of the prolific use of spolia. Although it is an area of debate, scholars of classical archaeology and Urban Studies suggest that the main reason for reusing is a financial one. While this theory may be correct from the urban perspective of reuse, it has yet to be demonstrated for rural contexts.

This paper will discuss the decision-making processes surrounding returning to and rebuilding a place after leaving it, as well as the reused material culture -including the reuse of inscriptions- of the Islamic period in Syria in order to understand the cultural and social history behind the processes of reusing and rebuilding

This research is aimed at answering the questions surrounding why people in the past reused materials and how they did so, particularly after an environmental disaster or political conflict. It also seeks to address why certain places were chosen to be rebuilt rather than others and how this was determined to be more beneficial than starting somewhere anew.

Evoking the Elusive 15th-16th Century Horizon: A Newly Discovered Household Assemblage in Context

Bethany J. Walker

University of Bonn, Germany

The discovery in 2021 of a partially preserved vaulted structure outside the Mamluk Citadel at Tall Hisban offers the rare opportunity to study a complete household assemblage of the transitional Mamluk-Ottoman period. The 15th and 16th centuries are poorly documented in Transjordan, as ceramic imports generally disappear (with the disruption of supply chains), and there is an overall abatement in settlement (following the slow collapse of the Mamluk security and defensive apparatus). It has not been possible, then, to specifically date pottery from the 14th-16th centuries at most sites in southern Syria, or to distinguish Mamluk from early Ottoman pottery in Transjordan. The Field S assemblage – sealed by vault collapse and dated by well stratified pottery elsewhere at Tall Hisban and beyond – includes not only a wide range of ceramic wares, but also, significantly, a corpus of household metal objects related to food preparation and serving, animal husbandry, and agriculture.

This paper introduces this assemblage, focusing on two themes: the rapidly growing evidence for local production of handmade and wheel-made pottery, and the diverse material trappings of daily life in a late medieval Jordanian village. This paper will, additionally, explore this period in comparison to contemporary deposits at other sites in the region, and focus on what we are learning about a Hisbani workshop for Handmade Geometrically Painted Wares, some forms of which are identified for the first time.

The Different Fates of Architecture: Lessons Learned from Tall Hisban

Nicolo Pini

Université Libre de Bruxelles, Belgium

The paper aims to illustrate the results of the study of reoccupation and reuse patterns at Tall Hisban (Jordan), which have been the focus of a project conducted at the Université libre de Bruxelles (Individual Fellowships Marie Skłodowska Curie COFUND action; Project: “The different fates of architecture: reoccupation patterns in the Madaba Plains (Jordan) (ReMaPla)”, September 2020-August 2022). Major target of investigation has been a series of clustered structures, located on the western slope of the site (Field O), whose spatial organisation and extension as well as precise chronological development were yet to be determined.

Over the course of multiple field seasons, and especially after the recently concluded campaign in October 2021, important evidence has been gathered, allowing to draw first conclusions of the diachronic evolution of the built environment at Tall Hisban. In particular, the detailed description of the different ways in which reoccupation of earlier structures can be attested, offered important data to reconstruct and understand the occupational history of the site over the *longue-durée*. Despite the fact that most data belong to the Middle Islamic development of the site, that largely obliterated previous phases, it was possible to open windows also on earlier and also later periods, identifying recurring reuse and reoccupation patterns not only within Field O, but also across the site.

Diverging Paths: A Socio-Archaeological Investigation of Rural Settlement in Ottoman Palestine and Transjordan

Lauren K. Erker

University of Bonn, Germany

This paper will present the current debates on the settlement histories of Transjordan and Palestine during the Ottoman period. While this topic has been investigated for the Late Ottoman period due to a rich corpus of historical sources, the archaeology of rural sites for the entire period remains little understood in these regions, in particular for the Early Ottoman period. The continuity in material culture and rural building traditions from the Late Mamluk period into the Early Ottoman period and beyond presents a major obstacle in defining the material boundaries between these periods. This issue in dating has manifested in the archaeological literature as ‘a lack of evidence’ for the Early Ottoman period, leading to the blanket assumption that rural communities had abandoned permanent settlement for nomadism, with no further explanations for potential patterns of migration and ephemeral occupation. This assumption fails to acknowledge the nuances of rural life as well as the blurred line between ‘settled’ and ‘nomadic’. This paper will discuss these debates from the perspective of rural settlement typologies that are being developed as part of the author’s Ph.D. thesis in order to characterize archaeological sites beyond the common denominations of ‘hamlet’ and ‘farmstead’, facilitating an understanding of the different evolutionary trajectories of Palestine and Transjordan.

SESSION: 4F. Cultural Heritage: Before, During, and After Crisis (Workshop)

Chair(s): Tashia Dare, Independent scholar

Impact of Refugees Community at the Umm el-Jimal on the Re-Use of Basalt Stone in the Local Community Architecture and Urban Fabric

Ahmad Hussein AlAdamat

New Umm El-Jimal Municipality, Jordan

The Zaatarī refugee camp (12 kilometers from the Syrian border) is located within the Umm el-Jimal district—along with 75% of the Syrian refugee camps in Jordan. Syrian refugees mainly originate from the cities of the Daraa Governorate—an area with people who are related to Umm al-Jimal in culture and tradition, and are individuals with normal social and emotional needs.

Refugees in the region have often attempted to replicate the urban atmosphere of their homeland. This has led to an increased use of basalt stone in construction projects, particularly in walls surrounding houses in Umm al-Jamal. By acknowledging the impact of refugees on host communities and archaeological sites, these stakeholders can collaborate with one another to gain knowledge, interpretation, and use of archaeological sites. This partnership benefits descendant communities and archaeological practitioners, contributing to more relevant, rewarding, and responsible archaeology. The involvement of refugees in many projects—including the project of rehabilitating water reservoirs, cleaning up the archaeological site of Umm el-Jimal, and restoration of the Umm al-Jimal Valley—has led to the Community Based Participatory Research Project.

The current issue is that the study of archaeological sites for redevelopment and restoration is an on-site project, which is often done without integrating the local communities history and story of archaeological sites, some of these stories span over decades which created a gap between the local community and outside archaeologists. Umm el-Jimal Archaeological Project has explored the ancient ruins down through to the modern community and encourages meaningful interaction.

Prevention of Illicit Trafficking of Cultural Property in Jordan

Helen Malko, Ahmed Fatima Kzzo, Jihad Haron, Pearce Paul Creasman
American Center of Research, Jordan

Thousands of artifacts disappear from museums, places for worship, libraries, and archaeological sites every year. From figurines to paintings, from coins to jewelry, religious items to archaeological finds, tens of thousands of cultural objects forming part of the world’s human heritage are stolen. Conflict zones have become desirable targets for criminals, and the Middle East region suffers from looting at an unprecedented scale. Located at the heart of this region, Jordan’s role constitutes not only protecting its cultural heritage but that of its neighbors. Funded by the Embassy of the United States in Jordan and implemented by the American Center of Research (ACOR), this project aims to support the protection of Jordan’s cultural heritage through programming that highlights shared values, advances bilateral cooperation, and promotes mutual understanding. It provides training in best practices and skill-building to relevant Jordanian professionals, the Department of Antiquities staff, and other stakeholders to enable the more effective implementation of the U.S./Jordan cultural property protection MOU (signed 16 Dec. 2019), which aims to restrict the trade of archaeological artifacts and antiquities. This paper presents an overview of the project and its

goals, accomplishments, and future plans to solidify Jordan's efforts to fight against illicit trafficking on the local, regional, and international levels.

The Iraq Heritage Stabilization Program: Results and Recommendations

Darren P. Ashby, Richard L. Zettler, Michael D. Danti, William B. Hafford
University of Pennsylvania, USA

Since 2018, the Iraq Heritage Stabilization Program (IHSP) has worked closely with Iraqi heritage professionals and community stakeholders to protect and preserve Iraq's diverse cultural heritage. In this paper, the authors will provide an overview of IHSP's recent activities and offer recommendations on future work in northern Iraq. In addition, the authors will speak on the responsibilities for heritage professionals before, during, and after crises, drawing on their specific experiences working in Iraq.

Dignity in Material Culture: the Quest for the Elusive Truth

Jenna de Vries Morton

UJAP Umm al-Jimal Archaeological Project, Jordan. American Center of Research, USA

"But reconciliation, self-awareness, and finally the humility that makes peace possible come only when the culture no longer serves a cause or a myth but the most precious and elusive of all human narratives—truth," writes former New York Times foreign correspondent Chris Hedges in his 2002 bestselling book *War is a Force that Gives us Meaning*. Archaeologists have the opportunity to locate (or geo-locate) that seemingly elusive truth, physically, in material culture, which defies myth. In situ, documented, published, and displayed, the meaning in material culture provides a requisite of human harmony, dignity--through identity.

With its hundreds of epigraphic bids for posterity, Umm al-Jimal is a perfect example of identity creation in a local community in Jordan. The narrative in Umm al-Jimal is based on 100 years of archaeological research in the 2000-year-old antiquities site, surrounded by the contemporary village. It is a gorgeous humble singular human tale that is at once hyper local and transcendent. It is *identity* situated literally in the terrain, which cannot be reproduced or outsourced. But, through travel and digital media, it has the potential to satisfy a universal craving for shared human narrative, even as it avoids the uniformity of globalization. Using the writing of Amin Maalouf, Edward Said, Donna Hicks, Susan Stewart and others, this paper discusses the potential for conflict prevention through meaning and identity, housed in incontrovertible material culture.

To Loot or Not to Loot: A New Modus Operandi for Non-State Actors in Conflict Zones: the Ethical Dilemma of What Happens when Looters and Destroyers Become Carers and Preservers

Amr Al Azm

Qatar University, Qatar. Antiquities Trafficking and Heritage Anthropology Research Project (ATHAR), USA. Shawnee State University, USA

Traditionally groups like Taliban in Afghanistan and Hayat Tahrir Al Sham (HTS) in Idlib (Syria) are known for the destruction, looting and trafficking of cultural heritage materials. Such activity is well documented and is part of their modus operandi of exploiting cultural heritage for profit and propaganda purposes. Recently however there has been a change in this modus operandi to one where these groups are now publicly presenting themselves as protectors of cultural

heritage including archaeological sites, museums, etc. Both Taliban and HTS have made appeals to the international community and world organizations such as UNESCO for funding and assistance in carrying out this task. The ethical dilemma is how should the international community respond to such appeals. Should they accept this change of heart at face value and work with these entities despite their history or is this change a cynical ploy by these groups to find new means of exploiting cultural heritage for financial profit and legitimization of their control over territory and should therefore be ignored.

SESSION: 4G. Archaeology and Biblical Studies

Chair(s): Stephen Cook, Virginia Theological Seminary

Principles of the War of Ancient Israel: The Battle of the City of Samaria as a Case Study

Yair Almak

Shomron Tourism and Study Center, Israel

Ahab, king of Israel, is the second king of the house of Omri in the kingdom of Israel. This dynasty made a very significant impression on biblical history. My study deals extensively with this dynasty and the character of Ahab in particular.

An issue that has not been sufficiently examined in scholarship is the analysis of all the battles in which Ahab participated. It seems that a great deal can be learned about his personality from the different combat situations in which he took part. This is one of the earliest stages in the history of Israel that we can assess the capabilities of an organized Israeli army, which operates under a central government and is mentioned both in the Bible and in extra-biblical sources. The variety of sources (Mesha inscription, Tel Dan inscription, Inscriptions of Shalmaneser III, like the Black Obelisk) turns the study into a mosaic work of understanding the connections between the various sources.

We compared the data with the principles of warfare familiar to us today, as well as with what we know about the adversaries of the Kingdom of Israel in the ninth century BCE.

We want to present at the conference one battle as a representative for this research.

The "Battle of the City of Samaria" in Chapter 19 of the Book of Kings. The lecture will analyze the course of the battles in light of the ancient and modern fighting tactics.

Archaeology of Yahweh, Temple Orientation in Iron Age II Judah and Israel

Bruno Soltic

Lipscomb University, USA. Indian River State College, USA

The temple orientation in ancient Judah and Israel had minimal attention in scholarship, primarily because of the lack of excavated temples. With recent excavations at Tel Motza and the discovery of the 10th-century temple, it is an excellent time to examine the temple orientation in Ancient Israel and Judah.

Ancient Judahites mostly oriented their houses and settlements east to west. However, there is no active account for the phenomenon. Therefore, this paper explores the religious architecture of Iron Age II Levantine sites of Tel Motza, Tel Arad, Kuntillet 'Ajrud, Tel Dan, Tel Kedesh, 'Ein Gev, Megiddo, Tirzah, Samaria, Tel Michal, and several others, along with the Biblical descriptions of the Tabernacle and Solomonic Temple in Jerusalem. Examining those sites and the biblical text gives us a clearer picture of the eastern orientation of

cultic structures, how scholars can apply this discovery, and possible connections between the biblical text and the archaeological findings.

The Use and Abuse of Biblical Archaeology

Joshua A. Bowen, Megan H.C. Lewis
Digital Hammurabi, USA

It's often said that the archaeology of the Ancient Near East started with the Bible in one hand and a spade in the other. While the field as a whole may have moved away from its limiting and Christianity-centric origins, general interest in the archaeology of Syro-Palestine has not followed suit. Social media, YouTube, and popular archaeological tv shows continue to focus on using archaeological findings to "prove" the historicity of the narrative of the Hebrew Bible. Archaeological data that does not fit that narrative, or worse still, actively disproves it, are either ignored completely, or reinterpreted to fit the desired conclusion.

This paper will examine the use and abuse of Syro-Palestinian archaeology by online apologists and academics with a priori commitments, considering how the former rely on work by the latter, regardless of academic consensus.

SESSION: 4H. The Early Iron Age in Canaan, Israel, Judah, and Philistia

Chair(s): Jeffrey R. Chadwick, Brigham Young University | Aren M. Maeir, Bar-Ilan University

The Mystery of "Shrine 22": A Philistine Ritual Space from Early Iron Age

Madaline Harris-Schober

Ludwig Maximilian University of Munich, Germany. The University of Melbourne, Australia

The Philistine 'Shrine 22' and its development over the 12th and 11th centuries BCE from Field INE at Tel Miqne-Ekron provides interesting insight into the development of early Iron Age domestic ritual. Over the course of its life, the shrine changes in size, shape and use, with a variety of architectural features appearing and disappearing, such as platforms, column bases and thresholds. The finds from the shrine and its vicinity consist of notched scapulae, a lion-headed cup, typical Philistine pottery and a fascinating puppy burial. However, the history of research and publication surrounding Philistine 'Shrine 22' has been skewed due to a miscalculation of excavation data, such as finds incorrectly attributed to strata in a variety of publications and illustrations. The case of 'Shrine 22' is an example of how very specific comparisons, archaeological biases and a misuse of the term cult can lead to confusion of the archaeological record and false conclusions. This paper will attempt to dissect the various phases of the shrine and its architectural developments and material finds in hope of shedding light on this important and under published early Philistine sacred space. It can be suggested that the later developments of 'Shrine 22' may have been domestic in nature, functioning as more of a household shrine or intimate group gathering space rather than a public space. This Philistine shrine ultimately culminates in a small-scale domestic ritual space over the course of half a century, providing us with a rare example of early Philistine cult.

Philistia, the Philistines, and Shishak/Sheshonq

Aren M. Maeir

Bar-Ilan University, Israel

Much has been written about Shishak/Sheshonq I's activities in Palestine in the late 10th cent BCE, and what happened in Philistia at the time. Due to the fact that very few sites in Philistia are mentioned in the Bubastite Portal list of Palestinian toponyms, a common assumption is that the Egyptians and the Philistines were allies. In this paper, I will review the archaeological, biblical and textual evidence, in an attempt to reassess what in fact happened between the Philistines and the Egyptians during the reign of Shishak/Sheshonq I.

Level V at Lachish: New Excavations and Radiometric Datings

Yosef Garfinkel

Hebrew University of Jerusalem, Israel

Level V at Lachish had been discussed by many scholars over the years. Was it a simple village or a fortified city in the Kingdom of Judah? The dating of Level V ranges from ca. 1000 BC to ca. 800 BC. No clear chronological data for Level V, however, was available prior to the five excavation seasons (2013–2017) conducted by the Fourth Expedition to Lachish. In 2022 we will continue our efforts to reach a better understanding of this level. A set of 20 olive-pit samples from Level V and 12 from Level IV has already been sent for 14C analysis. Further excavation during the 2022 summer season aims to expose more Level V houses on the northern side of the site. The present lecture will cover the results of the most recent excavations and the new radiometric datings.

A Giant Iron Age I City: The Iron Fortification System at Tell es-Safi/Gath of the Philistines

Jeffrey R. Chadwick

Brigham Young University Jerusalem Center, Israel. Brigham Young University Religious Studies Center, USA

The Tell es-Safi/Gath Archaeological Project, directed by Aren M. Maeir, excavated the massive site of ancient Gath for 25 seasons between 1996 and 2022, revealing Canaanite phases from Early Bronze III, Middle Bronze II, Late Bronze I-II, its Philistine phases from Iron Age I to Iron IIA, its Judahite phases of the 8th century BCE, later phases from the Persian and Roman Periods, and part of its Crusader fortress, Blanche Garde. Iron Age I phases were found in Areas A and E on the tell's lower east side, in Area F on the upper west side (the earliest Philistine occupation), and in Areas D, K, and Y in the vast lower city at the northern base of the tell. Beginning in 2015, some 70 meters length of the fortification system of Iron Age Gath of the Philistines was also unearthed over several seasons in the north lower city. We now have a good understanding of the size, nature, construction method, and extent of the giant city's fortification walls. Among other things, we can reveal the metrics of the city walls, which were 2.38 meters thick, with megalithic stone foundations 1.5 meters deep, and mudbrick superstructures which would have stood over 7 meters high. Construction of these city walls commenced late in Iron Age I (11th century BCE) and continued into Iron IIA (10th to 9th centuries) BCE as forward towers were added and a fortified water plaza at the location of the city's main well completed.

Discussant

Eric Welch

University of Kentucky

Eric Welch will serve as a discussant for the session, The Early Iron Age in Canaan, Israel, Judah, and Philistia. His academic background and archaeological experience will be an important compliment to the session's presentations.

SESSION: 4I. Prehistoric Archaeology

Chair(s): Blair Heidkamp, University of Texas, Austin | Austin "Chad" Hill, University of Pennsylvania

Kites in Context: Prehistoric Black Desert Hunting Traps

Austin C. Hill¹, Yorke M. Rowan², Morag M. Kersel³, Blair Heidkamp⁴, Jen Feng⁵, Rosemary Hanson⁶, Quinn Comprosky³

¹ University of Pennsylvania, USA. ² University of Chicago, USA. ³ DePaul University, USA. ⁴ University of Texas, USA. ⁵ University of Illinois, USA.

⁶ Independent Scholar, USA

Neolithic peoples (~10000-5000 CalBC) constructed a vast, landscape scale system of animal traps, known as "desert kites", that primarily span a broad area concentrated in eastern Jordan, northwestern Saudi Arabia, and Syria, with additional examples found further afield. The immense scale of these structures, consisting of thousands of traps and tens of thousands of kilometers of walls, defies expectations about early adaptations in arid environments. The construction and use of these traps likely represent a major shift in human use of the landscape as people expanded into more marginal areas by adopting new technologies and subsistence strategies. Although their presence has been noted for decades, only recently has significant research coalesced around these structures, focusing on their role in Neolithic societies. Significant questions remain about these structures, from basic questions about their function and the timing of their construction, to more nuanced questions about how they were built, how long they remained in use, and their role in local and regional social systems. In this paper, we present the initial findings of a new project to investigate the desert kites in the Black Desert of Jordan.

Prehistoric Kabri – Wadi Rabah Culture at Tel Kabri

Shira Albaz

University of Haifa, Israel. Bar-Ilan University, Israel

This study will present the reviews and analysis of the published and unpublished materials from the Prausnitz excavations during 1958 and 1975 at Tel Kabri, in Area A.

Prausnitz's work at Tel Kabri included excavations as well as the collection of finds, which were discovered on the tell due to the various construction and infrastructure work which took place. Additionally, Prausnitz collected the materials which were found by members of Kibbutz Kabri, as a result of their agriculture work in the area (during 1956 and onwards). He most likely collected these materials in order to publish all the findings for better and broader understanding of the nature of the activity at Tel Kabri. Unfortunately, most of the finds and materials did not receive proper publication.

According to the archival material, which documented the Prausnitz excavations at Area A in 1985 and 1975, it can be understood that the excavation was conducted in five areas. The excavation documentation did not provide all the information, which made it difficult to understand the stratigraphy during the analysis of the material, but

with all of the combined data it was possible to understand the full picture.

From the various excavations which have taken place at Kabri over the years (1958, 1976 and 1986-1993) and of course including the new excavations expedition (2005 and onwards), we are learning that there was a large settlement at Kabri during the Late Neolithic Period.

Celebrating 66 Years of Lower Paleolithic Research in Azraq: A Long-Durée Perspective of Hominin Occupation within an Ecologically Resilient Region of Jordan

Jeremy A. Beller¹, Mostafa Fayek², Mark Collard¹, Amer al-Soulimann³, Andrew Garrard⁴

¹ Simon Fraser University, Canada. ² University of Manitoba, Canada. ³ University of Ferrara, Italy. ⁴ University College London, United Kingdom

The Azraq Basin is an important physiogeographic feature and hydrological catchment in the eastern desert of Jordan. At its heart today are the Azraq wetlands, an ecologically fragile oasis characterized by the spring-fed historic Druze Marsh and rehabilitated Shishan Marsh. The potential for Palaeolithic investigation in this region was realised by chance in 1956 when stone artifacts were uncovered during an irrigation project. Since then, several research projects have been conducted in the basin, involving archaeologists from a number of countries, including Diana Kirkbride, Lorraine Copeland, Andrew Garrard, Gary Rollefson, and April Nowell. The projects have discovered multiple Lower Paleolithic sites, including butchering and knapping locales, but their results have yet to be integrated. Beginning the process of doing so is the goal of this paper. Specifically, we summarise the current state of knowledge regarding Lower Palaeolithic occupation in the Azraq Basin. We highlight the collective efforts of researchers from 1956 to 2022 and discuss new research that links their discoveries. Reconstructions of the changing hydrology throughout the region reveal a gradual reduction of water availability from a palaeo-lake to a series of spring-fed marshy ponds concentrated in the center of the basin. A corresponding movement of hominins occurred, as they contracted around the newly-formed wetlands for resource security, yet continued to exploit a variety of lithic sources, created task-specific sites, and exhibited a high degree of mobility.

FRIDAY, NOVEMBER 18, 2022 | 8:20am-10:25am (EST)

SESSION: 5A. Archaeology of Jordan II

Chair(s): Marta D'Andrea, Sapienza University of Rome | M. Barbara Reeves, Queen's University

The Remarkable MB II Destruction Matrix at Tall al-Hammam, Jordan

Steven Collins

Veritas International University, USA

This paper presents aggregate results from fifteen seasons of excavation, observation, testing, and spatial distribution analysis of the MB II terminal destruction matrix (TDM) at Tall al-Hammam, Jordan. Although the TDM is ubiquitous across the site, particular attention is focused on the upper city palace complex where the depth of the matrix ranges from 1 meter to 1.5 meters. A significant number of observations and data-sets demonstrate that the entire depth of the MB II TDM was a single-event phenomenon of immense and violent proportions. The nature of the TDM is examined with a view to analyzing a range of causes suggested by several scholars. The purpose of the paper is not to propose a specific cause, but to show how the predictions of each causal theory stack up against field observations and data. (The author is director and chief archaeologist of the Tall al-Hammam Excavation Project, Jordan.)

The Corpus of Stamp Seals from the Southern Levant: New Data for the Glyptic Profile of Jordan during the Bronze and Iron Ages

Ben Greet, Christoph Uehlinger

University of Zurich, Switzerland

The *Stamp Seals from the Southern Levant* (SSSL) project is an interdisciplinary and international project that aims to build on the ground-breaking research initiated by Othmar Keel through his *Corpus of Stamp-Seal Amulets from Palestine/Israel* (1995-2017) and the crucial work of Jürg Egger (co-authored with Keel) on the *Corpus of Seal Amulets from Jordan* (2006) by not only finishing the yet unpublished parts of the corpus but also engaging in the Digital Humanities transition. The data from ca. 12,000 stamp seals will be translated into an updated and expandable open-access database that will allow for active contributions from scholars worldwide and serve as a sustainable reference tool for future research. The inclusion of all relevant data from recent excavations in Jordan is one of the project's crucial aims.

The digital transition includes the c. 650 stamp seals from excavated sites in Jordan listed in Egger/Keel's corpus and aims at the integration of items excavated since 2006. Using various functions of our database, we shall present some preliminary conclusions on the glyptic profile of Jordan from the Middle Bronze Age to the Iron Age, both spatially, chronologically, and topically (with regard to types, production, and iconography) in regional perspective. Our wider aim is to draw attention to the SSSL project and its usefulness for Jordanian archaeology, its newly developed research tool (available from 2023), and to invite scholars to become contributors to this exciting and ongoing project.

Nelson Glueck's 1938–1940 Excavations at Tell el-Kheleifeh, Jordan: A Further Reappraisal—Qurayyah Painted Ware (Glueck's "Midianite Pottery")

Joseph A. Greene¹, Marta Luciani²

¹Harvard University, USA. ²University of Vienna, Austria

Nelson Glueck excavated Tell el-Kheleifeh 1938–1940 but died in 1971 before completing a final report. After Glueck's death, his Kheleifeh archive was deposited at the Harvard Museum of the Ancient Near East (HMANE). In the 1980s, Gary Pratico studied selected material there (architecture, pottery, metal, inscriptions), which he later published as *Nelson Glueck's 1938–1940 Excavations at Tell el-Kheleifeh: A Reappraisal* (1993). Other finds—bone, shell, paleobotanical remains, geological specimens—were omitted.

Thus, a further reappraisal of Kheleifeh is needed. The ceramic chronology and settlement history in the Arabah, especially at Feinan and Timna, and in Arabia at Qurayyah are now better understood, with implications for Kheleifeh's dating and regional connections. Advances in archaeometry offer a host of new approaches to the ceramics Glueck collected at the site.

Recent research has clarified the famous "Midianite Pottery" (Luciani 2018), later renamed Qurayyah Painted Ware (QPW). With the stratigraphic and chronological sequence established by excavations at Qurayyah in northwest Arabia (Luciani 2019), we can propose a new classification and also dating for the "Midianite Pottery" found by Glueck at Kheleifeh. "Midianite Pottery" (or QPW) dates from the end of the Late Bronze to the middle Iron Age. Preliminary results of Neutron Activation Analysis of QPW sherds from Kheleifeh and Qurayyah by J.H. Sterba (TU Wien) show that some vessels from Kheleifeh originated in the northwest Arabian oasis. This suggests ongoing contacts between the Gulf of Aqaba and inland Arabia in the late 2nd millennium to mid-1st millennium BCE.

Nelson Glueck's 1938–1940 Excavations at Tell el-Kheleifeh, Jordan: A Further Reappraisal—The Paleobotanical Remains

Wilma E. Wetterstrom¹, Joseph A. Greene²

¹Harvard University Botanical Museum, USA. ²Harvard University, USA

Nelson Glueck excavated Tell el-Kheleifeh, on the Gulf of Aqaba, in 1938–1940, but died before completing a final report. After his death, the Kheleifeh archive was deposited at the Harvard Museum of the Ancient Near East (HMANE). In the 1980s, Gary Pratico studied selected materials and later published them in *Nelson Glueck's 1938–1940 Excavations at Tell el-Kheleifeh: A Reappraisal* (1993). Pratico omitted other finds—bone, shell, plant material, and geological specimens. A further reappraisal of Kheleifeh is thus needed.

The botanical remains—grain, wild seeds, fruits, fiber, cordage, and charcoal, now being analyzed at HMANE—open a new window onto Tell el-Kheleifeh and its economy. Barley, the principal grain, prepared as flatbread, porridge, and/or beer, was probably imported from outside the immediate region of the Gulf of Aqaba. Date palms grew locally and provided fruit, fiber for cordage, and wood for building and fuel. Doum palm, also a local tree, supplied fruit, an edible portion and a large seed with vegetable ivory suitable for carving beads and spindle whorls. Shrubs and wild grasses from the sparse landscape probably supplied kindling. The abundance of spindle whorls and preserved lengths of cordage and hanks of spun fibers suggest production aimed at more than a local market. Tell el-Kheleifeh, at the junction of major networks connecting Arabia, Egypt, Greater Syria, and the Mediterranean, was an essential stop for caravans on these routes, providing them with food, fodder, lodging and local products.

Enduring Traditions, The Collared Pithos in Transjordan

Trisha E. Broy

Andrews University, USA

Due to the *terra incognita* nature of the Transjordanian data preceding the last few decades, the overwhelming majority of past studies on the collared pithos focus almost exclusively on the form as it is known from Cisjordan. Until a thorough and independent examination of the vessel in Transjordan can be included, the overall understanding of the collared pithos is incomplete. Excavations in Transjordan have begun to reveal a different chronological scope and evolution of form than is observed in Cisjordan. Although any hard division between the regions is somewhat artificial, they are not so interdependent as to have identical ceramic horizons. By setting the Cisjordan highland examples as the control group for all studies of the collared pithos, an injustice may have been done to the data that has recently emerged from the east. This study endeavors to bridge the research synthesis gap and examine all available examples of collared pithoi from all available Iron Age archaeological excavations in Transjordan before comparing and contrasting them with the similar examples from Cisjordan. In this way, an updated paradigm of collared pithos distribution and development may be attained.

“Moabite Painted Ware” from Iron Age Tall Madaba. An Assessment of the Chronology, Typology, and Style

Wajed N. El-Halabi, Stanley Klassen

University of Toronto, Canada

Pottery with unique painted decoration from the region of ancient Moab has intrigued archaeologists since first discovered in early surveys by Albright and Glueck, and in the excavation of tombs and larger sites. Its appearance raised questions as to its origin and geographic distribution, along with its potential cultural, ethnic, and social affiliation. Due to its occurrence within the geographical region of ancient Moab and dating to the Iron II period, this pottery was given the label of “decorated Moabite Ware” or “Moabite Painted Ware”. However, as more sherds and vessels emerge through more recent excavation, temporal and regional differences are becoming apparent, highlighting diversity in both form and decorative stylistic features. This paper will discuss the so-called “Moabite Painted Ware” from the excavations at the site of Tall Madaba located in the highlands of central Jordan. Pottery fitting this description was uncovered in Fields A and B coming from both fill and secure domestic contexts dating to the Iron IIB period. We will present our preliminary analysis of the vessel forms on which these decorative features occur, as well as the various motifs and colour schemes. Our results suggest a chronological change occurs in the decorative features of this Ware through the Iron Age II period as well as potential regional diversity.

SESSION: 5B. Biblical Texts in Cultural Context I

Chair(s): Kristine Henriksen Garroway, Hebrew Union College | Christine Elizabeth Palmer, Gordon-Conwell Theological Seminary

Word-Craft in Ancient Israel: The Evidence for Craft Literacy in the Epigraphic Record and in the Hebrew Bible

Alice Mandell

Johns Hopkins University, USA

The diversity and complexity of the epigraphic record have shifted the study of early alphabetic inscriptions from narrowed analysis of the literacies of scribes connected to palace or temple institutions to the study of the literacies of diverse people who created and accessed

written media in this script tradition. Epigraphic evidence from the second and first millennia BCE speaks to the important role that craft specialists played in the production of inscriptions and highlights their impact on the evolution and diversification of this script tradition. The design of such inscriptions also informs us about the ways that artisans navigated the constraints of their materials as well as conventions about the visual presentation of this script to produce inscriptions on diverse media. To explore these issues, this paper examines the literacy practices of craft specialists in the Iron Age southern Levant through analysis of inscriptions of diverse media (e.g., stone, metal, ceramics, and seals of different media), and the ekphrastic descriptions of the crafting of inscriptions in the biblical text, with a focus on the design of Aaron’s inscribed uniform in Exodus 28 and 39. Together, these two bodies of evidence highlight the range of technical skills and sociolinguistic knowledge that was transmitted through craft literacy in ancient Israel.

Apprenticeship in Hebrew Inscriptions and Biblical Literature

William M. Schniedewind

University of California, Los Angeles, USA

Scribal training was done in an apprenticeship model in ancient Israel. Anthropologists refer to the apprenticeship model of learning as “Communities of Practice.” These communities are reflected in the use of the terms N ‘ R and BN in Hebrew inscriptions and biblical literature. Scribal training was part of a variety of professions (e.g., government, military, prophets) that use these terms to refer to relationships within the respective professions.

Economics, Provenance, and the Book of Deuteronomy

Sandra L. Richter

Westmont College, USA

The age-old question of the social location(s) of the Book of Deuteronomy remains critical to academic discussion of the book. The thesis of this paper is that the culturally embedded economic realities of this book should have something to teach us regarding its provenance. Toward this end, this paper surveys the archaeologically reconstructed economies of the Iron I, IIA, B, and C in ancient Israel--identifying diagnostic features of each in rural and urban areas--and juxtaposes those features to the literary contents of *Urdeuteronomium*. The question? What may be discerned of the social setting of the book (forthrightly addressed as an element of narrative or law, alluded to via metaphor or backdrop, or even mistakenly included as anachronism) from the economic details archived in the text.

The Textual ‘Lives’ of Ritual ‘Things’: Godnapping at the Nexus of Royal, Scribal, and Divine Spheres in the Hebrew Bible and the Ancient Near East

David A. Hannan

Gordon-Conwell Theological Seminary, USA

The aim of this paper is to examine the historiographic assumptions operative in previous explanations of the disparities in Shalmaneser III’s royal inscriptions’ accounts of the plunder of divine statues from the Aramean polity Bit-Adini at Mt. Šitamrat and to consider its implications for the literarization of spoliation in the Book of Samuel. After situating the spoliation of deity statues in the imperial ideology of the early Neo-Assyrian period, I demonstrate that there are multiple plausible circumstances that could account for why godnapping was inscribed in some objects recording Shalmaneser III’s

fourth *palû* campaign but remained unscribed in others. In turn, I raise doubts regarding whether or not attestations of despoiled deity statues in the Neo-Assyrian royal inscriptions should be mapped onto discrete instances of plundering such cultic objects in *realia*. While highlighting the value of engaging the philosophy of historiography in Assyriology, I consider the contribution this Assyriological investigation might make to our understanding of the Levantine scribal milieu in which the Book of Samuel was composed and adapted vis-à-vis Mesopotamian scribal practices of (un)naming deities among lists of plundered objects and the relationship between the presence, exchange, or theft of deity statues and interregional diplomacy and conflict in ancient Near Eastern society.

Temple Destruction and Reconstruction in the Harran Inscriptions and the Bible

Heidi Fessler

Loyola Marymount University, USA

This paper explores themes of temple destruction and rebuilding in the Neo-Babylonian Harran Inscriptions and the Bible. The Harran Inscriptions consist of three stelae discovered in southern Turkey that serve as apologetic texts to support the legitimacy of Babylonian King Nabonidus's reign and emphasize the devotion of Nabonidus and his mother Adad-guppi to the moon god Sin. This paper focuses on how the Harran Inscriptions celebrate the reconstruction of the temple for Sin that had been destroyed during the battle for power between the Assyrians and Babylonians at the end of the seventh century BCE. The accounts in the Babylonian inscriptions are contemporary with the Babylonian siege of Jerusalem and exile described in the Bible. The rebuilding of the Sin Temple at Harran took place while Judahites were still captive in Babylon decades before the restoration of Jerusalem during the Persian period. Parallels between the biblical and Babylonian accounts, including the reason for the destructions of the temples in Harran and Jerusalem, the impetus to rebuild the two temples, and the influential political powers behind the reconstructions, allow us to observe commonalities in Iron Age temple restoration rhetoric. The Harran Inscriptions' emphasis on pious political authorities and rebuilding the temple as a sign of religious devotion of a political figure further contextualizes the second temple period in biblical literature.

SESSION: 5C. Digital Archaeology and History I

Chair(s): Tiffany Earley-Spadoni, University of Central Florida | Matthew Howland, Tel Aviv University

A Geospatial and Typological Investigation of Late Antique Coins from Umm al-Jimal, Jordan

Neil Van Kanegan

Calvin University, USA

This paper reports on a project that categorizes and classifies Late Antique coins from the site of Umm al-Jimal, Jordan. These coins are classified on the basis of the figures, people, and inscriptions 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 helps to determine patterns of trade and commerce within the eastern Mediterranean spanning from the first century B.C.E to the eighth 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 eastern Mediterranean, as well as recent research that has used Umm al-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, Byzantine, and Umayyad trading post.

Remote Sensing for Dating: How Old Are the Qanat Systems of Erbil?

Mehrnoush Soroush¹, Jason Ur²

¹University of Chicago, USA. ²Harvard University, USA

This paper presents the results of our work in applying remote sensing to date the archaeological remains of the qanat systems of Erbil in Iraqi Kurdistan. Remote sensing and digital archaeology are excellent ways to document archaeological remains. The primary application of digital remote sensing methods is for site and landscape documentation. But can we use digital archaeology also to date landscape remains remotely? It is crucial to investigate how remote sensing can also be used for the relative dating of archaeological landscapes because most archaeological landscapes documented remotely using historical imagery are extensively or destroyed and cannot be examined in the field. Even when landscapes are preserved, it can be expensive and unreliable to apply the dates collected from small samples to large landscapes under investigation. The dense archaeological landscape of qanats on the Erbil plain, preserved on historic satellite imagery, is nearly obliterated. We argue that it is possible to use morphological signatures of qanat systems in combination with historical imagery and an understanding of the relationship between settlements and qanats to propose an approximate date for the main phases of qanat building in the region.

Architectural Design in Digital Visualisations of Archaeological Hypotheses

Dominik Lengyel, Catherine Toulouse

Brandenburg University of Technology (BTU) Cottbus-Senftenberg, Germany

The "design of abstraction" is the characterisation of a method of visualisation of hypotheses in the humanities, the translation from verbal to visual form, in particular the reflection of uncertainties in the knowledge of archaeology, historical building research and art studies.

The task is to develop a new visual language in the sense of the digital humanities that continues the legacy of the visual language of analogue times in virtual space in the manner of a new digital dialect.

For several reasons: On the one hand, the traditional visual language effectuates immediate communication about the contents. On the other hand, abstract models facilitate the highlighting of particular characteristics that are intended to be expressed.

Instead of a walk-through reconstruction of archaeological sites, the objective is to communicate the ideas behind them. The potential lies in incorporating the design creativity of architecture into

processes of understanding in the humanities.

This paper demonstrates the presenters' projects to examine the different methods, tools, participants, and competencies involved while working with information and knowledge in academic and professional archaeology. Projects shown are among others the authors' Chair's projects Ancient Metropole of Pergamon, developed in cooperation with the excavation director on site during the last fourteen years, and The Palatine Palaces in Rome, developed with the German Archaeological Institute Istanbul and Berlin, both projects funded by the Excellence Cluster TOPOI by the German Research Foundation DFG, and the authors' professional office's projects Cologne Cathedral and Bern Minster, developed for the respective Cathedral administration.

Resurrecting Hounds and Jackals: AI Reconstructions of the Game of 58 Holes

Walter Crist, Éric Piette, Matthew Stephenson, Dennis J.N.J. Soemers, Cameron Browne
Maastricht University, Netherlands

The game of 58 Holes is one of the most recognizable ancient games from ancient Southwest Asia and Egypt, but like most traditional games the rules were not written down and they have been lost. Howard Carter proposed rules for the game, and other scholars have similarly done so more recently, but a systematic accounting of the knowledge about the rules of the game and evaluation of candidate rulesets has not been reported.

The Digital Ludeme Project is documenting the knowledge of ancient board games from around the world and using Artificial Intelligence to identify plausible reconstructions of the games. For the game of 58 Holes, several different board morphologies show that the ruleset proposed by Carter, in which players race to a target space along separate tracks on the board, cannot apply to all boards because there are lines indicating connections and likely movement between the two tracks. Using a Cultural Social Network of cultural and political entities and the Ludii Games Database of over 1000 traditional games, candidate rules are identified based on games which are most similar and which are closely connected to the places where 58 Holes was played. Artificial Intelligence playouts in the Ludii general game playing software produce gameplay metrics to analyze the functionality of these rulesets on the different boards, allowing for comparisons to Carter's. We contextualize these findings with respect to the geographic patterning in the evidence for 58 Holes, to indicate board and gameplay preferences in different times and places.

SESSION: 5D. Ancient Inscriptions II

Chair(s): Jessie DeGrado, University of Michigan | Madadh Richey, Brandeis University

The Sacred Gods: Eshmunazar and Social Holiness

Charles Hughes-Huff
St. Bernard's School of Theology and Ministry, USA

The sarcophagus of Eshmunazar II, king of Sidon, is carved with an Egyptian-style portrait of Eshmunazar's head and shoulders. The body of the sarcophagus is inscribed in Phoenician alphabetic script protecting the king's rest with curses, which are guaranteed by his relationship with certain gods. He built four temples for these deities in Sidon. He can therefore expect that *'Inm hqdšm*, 'the sacred gods' will punish anyone who makes off with his coffin.

What does this designation, "the sacred gods," mean? In ancient Semitic languages, the root *QDŠ* 'sacred' or 'holy' is a quality intrinsic to deities. Deities and their priests may convey sacredness to people, places, and objects through ritual, but deities need no such rites themselves; they are holy in essence. Describing gods as sacred therefore seems redundant.

In this paper I argue that Eshmunazar's sacred deities are not merely a linguistic puzzle, but an early example of the social construction of religious practice. In my project, I will investigate how holiness entails allegiance. My hypothesis is that Eshmunazar's description of deities, and others like it rather marks the gods that are sacred to Eshmunazar, that is, the gods he chooses to honor. I examine this inscription in the context of the Priestly literature in the Hebrew Bible and similar expressions in Hittite texts and show the ways in which they express the social importance of allegiance in the conceptualization of the sacred and profane.

?Urtēnu's Private Incantation: A Textual and Material Study of RS 92.2014/KTU 1.178

Stephanie L. Cooper

Johns Hopkins University, USA

The text of tablet RS 92.2014 (=KTU 1.178) is among a handful of Ugaritic texts universally assessed as legitimate examples of an incantation. Previous scholarship on this intact tablet focused primarily on its textual content, particularly regarding difficult vocabulary and the prevalence of serpents among Ugaritic incantatory literature. In his collection of Ugaritic incantations, Del Olmo Lete classified this text as "an incantation against snakebite for personal use" (Del Olmo Lete 2014: 173). This paper concurs with Del Olmo Lete's personal use classification but furthers said proposal through an analysis of both the tablet's text and materiality.

Recent studies on Sumerian and Akkadian incantatory literature of various periods (e.g., Zomer 2018, Wasserman and Zomer 2022) have given insight on correspondences among tablet/object shape, size, use of space, content, and social setting. The present paper situates RS 92.2014 within this greater context. Through examination of the tablet's size, use of space, client personal name, find location, and client identity, as well as parallels and contrasts with Ugaritic and Akkadian incantatory objects, this study evaluates the presence and significance of a private incantation within the Ugaritic corpus.

Egyptian Classics in Nubia: Reading "The Teaching of Amenemhat" at the Temple of Kawa

Margaret Geoga

University of Pennsylvania, USA

This paper focuses on three literary quotations in the Temple of Kawa in the Kingdom of Kush. Commissioned by the Kushite king Taharqo in the 680s BCE, the inscriptions in the temple forecourt incorporate quotations of the enigmatic Middle Egyptian poem "The Teaching of Amenemhat," the only work of ancient Egyptian literature to depict the murder of a king. These quotations proclaim three times that Taharqo, like Amenemhat I in the poem, makes foreign lands "do the dog-walk." Although the quotations have been previously identified, their implications for the transmission, adaptation, and reception of "The Teaching of Amenemhat" in Kush remain unexplored. The paper first presents the Kawa quotations, contextualizing them within the sizable corpus of surviving copies of the poem and examining its adaptation from a scribal context in Egypt to a monumental context at Kawa. Next, the paper considers the

quotations' role in the forecourt's archaizing decorative program, which includes reliefs and inscriptions, as well as freestanding stelae and statues. Finally, the paper discusses the reception of "The Teaching of Amenemhat" in the context of the circulation of Middle Egyptian literature in Nubia. The paper offers preliminary conclusions about why the author(s) of the inscriptions, including Taharqo, chose to quote from "The Teaching of Amenemhat" in the temple forecourt, as well as how local visitors to the Temple of Kawa experienced the quotations.

An Epigraphic and Philological Contribution to the Debate Surrounding BT DWD ("House of David") in the Mesha Stele

Jean-Philippe Delorme¹, André Lemaire²

¹University of Toronto, Canada. ²Écoles pratiques des hautes études, France

The reading of BT DWD in the Mesha stele (line 31) has been first advanced by André Lemaire in 1994 following the discovery of the Tel Dan stele. Although his proposition did meet some criticism, it was generally accepted as tenable. Yet, scholarship has increasingly contested this reading over the last few years, whether on epigraphic and/or philological grounds. The recent publications of Finkelstein, Römer, Na'aman (2019), Na'aman (2019), and Richelle (2021) epitomize this trend. With the exception of the study of Langlois (2019), no real reply to these objections has been put forward.

The present paper will address this deficiency and offer a proper defence of BT DWD in the Mesha stele by presenting a complete epigraphic discussion, going beyond the isolated description/comparison of individual letters that has been privileged in previous studies. Letters will undergo comparison with a full script chart of the inscription in addition to a detailed analysis of the spatial/letter environment of the sequences B-T, T-D, D-W, W-D, as well as the term DWD (line12). All confirm beyond reasonable doubt the validity of the reading of BT DWD. Moreover, the claim that collective names rarely act as the subject of active verbal forms in royal inscriptions proves to be incorrect. This genre abounds with such examples (e.g. Mesha stele, Hadad, Çineköy, Bar-Rakkib), in addition to some passages of the Hebrew Bible that may have stem from this type of inscription.

SESSION: 5E. Archaeology of Israel I

Chair(s): Boaz Gross, Israeli Institute of Archaeology, Tel Aviv University

Kh. Es-Suwweida: An Iron Age Fort on the Carmel

Meir Edrey¹, David E. Friesem², Bärbel Morstadt³

¹Tel Aviv University, Israel. ²Department of Maritime Civilizations, University of Haifa, Israel. ³Ruhr-University Bochum, Germany

Kh. es-Suwweida is a small site located some 9km south-east of Tel Dor. It is situated on a hillock 154m above sea level in the southern spurs of the Carmel Ridge overlooking the coast. The site is surrounded by lush wadies which were used in antiquity for intensive agricultural cultivation, as evident by terraces and agricultural installations, and many natural springs are found nearby. The main architectural feature discovered at the site is an Iron Age IIA fort, measuring ca. 70x70m, with four towers erected in its corners. The site likely served as an administrative center, similar to other forts such as Tel Kabri and H. Rosh Zayit. However, unlike the latter two which have met violent destructions, it appears Kh. es-Suwweida has been abandoned during the late Iron Age IIA, as evident by the complete 'Hippo' storage jars and other pottery vessels recovered from the site

during earthworks by the IDF. Although the material culture at the site may be identified as "Israelite", the fort seems to have been part of the Phoenician settlement system on the Carmel coast, as the site was abandoned at the same time Dor and Tel Mevorakh were abandoned and turned Israelite. This paper will present the results of the first excavation at Kh. es-Suwweida and will attempt to answer questions related to the site's political affiliation, occupation, and abandonment.

The 2022 Season of Excavations at Hazor

Igor Kreimerman, Amnon Ben-Tor

The Hebrew University of Jerusalem, Israel

The 'Selz Foundation Hazor Excavations in Memory of Yigael Yadin' take place annually since 1990. This presentation will give a detailed report of the finds and main conclusions from the latest season, conducted in July–August 2022, focusing on the excavations in Area M that revealed Iron Age fortifications, storehouses and domestic structures, as well as additional remains from the Late Bronze Age palace.

Tel Esur: Temples and Public Structures in the Sharon Plain - Summary of the 2020-2022 Excavation Seasons

Shay Bar

Haifa University, Israel

Tel Esur is situated in Israel's Sharon Plain, near copiously flowing springs at the western mouth of Nahal 'Iron (Wadi 'Arah). It comprises a tel 3 hectares in area and a 5000 m2 mound nearby.

In the lecture I present the results of the 2020-2022 excavation seasons:

A large plaza dated to the Middle Bronze Age (henceforth MBA) IIB was exposed in Area B, to the north of the tel, above a MBA IIA fortification system with a 3-m-thick city wall with a unique pyramidal tower. Above these MBA strata, Late Bronze Age remains were revealed, including a massive structure, possibly a temple, with walls 1.3 m thick.

Remains of public structures were found in the small mound in Area D, to the east of the impressive remains of an early 8th Century BCE administrative building, previously fully exposed and published. The finds support the possible existence of a nearby temple. The public buildings in Area D are a fine example of the efforts of the Kings of Israel to reinforce their jurisdiction over the coastal plain, probably during the reign of King Jeroboam II (784 –748 BCE).

Salvage Excavations at Tel Hadid, 1995–1998

Ido Koch

Tel Aviv University, Israel

This paper presents the main insights from the final publication of the salvage excavations conducted at Tel Hadid, Israel, during 1995–1998 under the directorship of Esther Brand (Tel Aviv University). An extended area was excavated in one of the largest projects conducted up until that time in Israel, revealing occupational remains dating as early as the Intermediate Bronze Age and as late as 1950 CE. Of prime importance are several features that will be highlighted in this paper: Iron IIA–IIB cultic repository pit featuring dozens of chalices and a zoomorphic vessel; Iron IIC domestic units that yielded inscribed clay tablets associated with a community of deportees brought from Mesopotamia by the Assyrians; and several burial complexes dating to the Persian, Hellenistic, and Roman periods.

The Archaeology of Refugees: A Viewpoint from the New Excavations at Masada (2017-2022)

Guy D. Stiebel¹, Boaz Gross^{2,1}

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

Aside from the COVID19 pandemic there is no doubt that the most influencing phenomena that shaped recent years and had the strongest global impact have been: forced migrations and refugees. The new paradigm that served as a starting point to the TAU's Neustadter Archaeological Expedition to Masada, relates to the site during the First Jewish Revolt (66-74 CE) as a refugee camp. This notion proved to be most productive when one aims to reveal the identity of the heterogenic group of rebels that sought asylum in this remote desert site and not least the daily life of this complexed community and its members. In the paper we wish to present the new finds that emerged from the last five excavation seasons (2017-2022). We were thus able not only to shed new light regarding the varied groups but rather to provide insights and answers regarding the identity and memory packages of the refugees, their individual choices that reflect their strategies of survival and not least the way some of them defined and identified themselves and their status during this period of turmoil. Themes such as identity, gender and ritual will be dealt using the data gleaned from both traditional material culture studies alongside the information emerging from the rich epigraphic assemblage the synthesis of which reveal a far more complexed group of rebels.

The 2022 Season of the Shikhin Excavation Project

James Riley Strange

Samford University, USA

This paper will report on the progress of the 2022 Shikhin Excavation Project after a two-year hiatus due to COVID-19 restrictions. Excavations were resumed in the Roman period public building and ceramics manufacturing area.

SESSION: 5F. Maritime Archaeology

Chair(s): Bridget Buxton, University of Rhode Island | Tzveta Manolova, Université Libre de Bruxelles, Belgium

Maritime Installations at Wadi el-Jarf: The Harbor of Kings Snefru and Khufu on the Red Sea, Egypt

Gregory Marouard

Yale University, USA

Since 2011, a French team (Sorbonne University, IFAO, CNRS) has been excavating an exceptional port complex from the early Old Kingdom at Wadi al-Jarf along the Egyptian coast of the Red Sea. Considered as the oldest harbor in the world, it was used for a short period of time as a departure point for official expeditions to the Southern Sinai Peninsula, the principal mining area for copper and turquoise during Pharaonic times.

The extension of archaeological remains stretches over 5 km in length and preserves all the constituents of what we can now define as a typical Egyptian harbor. This site revealed the complex organization and well-structured logistics implemented by the royal projects and expeditions 4600 years ago.

According to pottery and epigraphy, the occupation of this massive installation is limited to the beginning of the Fourth Dynasty and seems to have been used exclusively during the reigns of kings Snefru, Khufu and, more anecdotally, Khafra (between ca. 2620 to 2550 BCE). In 2013, the site has received special attention after the discovery of

hundreds of fragments of administrative papyri, the oldest inscribed papyri ever discovered in Egypt so far. Some clearly name King Khufu and describe activities in close relation to the construction of the Great Pyramid at Giza.

Harbor installations on the Red Sea shore (Zone 6 area) are now fully investigated. This lecture will offer a first comprehensive overview of the multiple logistical installations, underwater remains and seafaring evidence discovered after a decade of excavations.

Building the Walls of Dor – Quarries, Submerged Barges, Ashlars, and Geo-spatial Analysis

Anthony T. Tamberino¹, Thomas E. Levy¹, Ehud Arkin Shalev², Assaf Yasur-Landau²

¹Department of Anthropology and Scripps Center for Marine Archaeology (SCMA), UC San Diego, USA. ²Leon Recanati Institute for Maritime Studies, University of Haifa, Israel

Aeolianite sandstone ridges along the Carmel Coast of Israel, locally known as “*kurkar*,” have provided raw material for local stone constructions for thousands of years. These local stone constructions reached a peak during the Hellenistic, Roman, and Byzantine periods. New archaeological research, both terrestrially at Tel Dor and underwater documenting sunken barges found in its surrounding submerged environment, provides unique “snapshots” of the *Chaîne opératoire* in ancient stone construction. Utilizing the most recent high resolution photogrammetric technologies and software for geospatial analyses, here we present the evidence and reasoning which reconstructs the *Chaîne opératoire* of some monumental and public ashlar constructions at Tel Dor, and suggests a relative date for the ashlar blocks found in the submerged sites near Tel Dor through typological analysis. The geospatial analysis of these data demonstrate how raw materials for stone ashlar blocks have been quarried from the native *kurkar*, transported towards the site, deposited to construct both public and private structures, and helps flesh out aspects of the industrial economy during the Classical periods when Tel Dor was occupied.

Sea Level Changes and the Locations of the Hellenistic and Roman Harbors at Tel Dor, Israel

Assaf Yasur-Landau^{1,2}, Thomas E. Levy³

¹Department of Maritime Civilizations, University of Haifa, Israel. ²The Leon Recanati Institute for Maritime Studies, Israel. ³Scripps Center for Marine Archaeology, USA

Finds at Tel Dor, situated along the Carmel coast of Israel, have established its great prosperity as a coastal city in the Hellenistic and Roman periods. In the second century CE, Dor's coins even hail the city as the “ruler of the seas”. Still, the Hellenistic and Roman ports of Dor were not discovered, despite extensive evidence for the use of all the bays surrounding the site, including the nearby Tantura lagoon, as anchorages during these periods. This has changed thanks to the recent 2019 and 2021 seasons of underwater excavations in both the South and North bays of Dor that exposed previously unknown, submerged structures that may be identified as maritime interface structures from the Hellenistic and Roman periods. These projects are part of the joint University of Haifa – University of California, San Diego Koret Expedition. This lecture will present these structures as well as possible indications to their chronology, their role in the maritime history of Dor, and their role in understanding the impact of sea level changes on maritime structures in antiquity.

Sea-Going Vessels Graffiti from Hellenistic Maresha

Elie Haddad¹, Michal Artzy², Stern Ian³

¹Israel Antiquities Authority, Israel. ²Hatter Laboratory, The Leon Recanati Institute for Maritime Studies, University of Haifa, Israel. ³University of Haifa, Hebrew Union College, Israel

Graffiti of sea-going ships dating to the Hellenistic period, 4th to the 3rd century BCE were found in two subterranean complexes, 89 and 557 at Maresha representing merchantmen and a war-boat.

In 1900, a ship graffito was discovered on a stone slab by F.J. Bliss and R.A.S. Macalister, later dated to the Hellenistic Age. In 1990, in burial cave 557, filled with washed soil and debris, representations of two merchantmen appeared. In 2017-16, in Complex 89, merchantmen and war boat bearing a ram, similar to the one from Athlit, were found. The merchantmen are of types plying the Mediterranean Sea, but the war boat is associated with Greek types, specifically, Macedonian.

Maresha is situated ca. 35 kilometers from the coast, in the Judean Shephelah. It was mentioned in ancient sources and clearly identified by an inscription in which resident Sidonians were mentioned. Hellenistic Maresha seemed to have been mainly of Phoenicians and other ethnic groups.

The question as to those who executed the ships' graffiti is approached. They were not artists, but mariners, sailors, whose knowledge of the details of the vessels is evident. But why these depictions so far from the sea? We propose that they were mariners, captives/slaves involved in the hard labor of preparation of the graves following either battles or other misfortunes.

Akko Harbor and Ancient Sea Levels

Jacob Sharvit¹, Bridget A. Buxton²

¹Israel Antiquities Authority, Israel. ²University of Rhode Island, USA

Shallow submarine port installations and buildings in the ancient harbor of Akko are a rich source of information on historic maritime landscape, climate, and sediment movement. An Israel Antiquities Authority-run conservation and preservation project was recently completed on Akko's southeastern seawall, including geophysical survey and excavation. A large (5 x 270m) archaeological trench was excavated along the base of the seawall, exposing Hellenistic, Crusader, and Ottoman sequences. The Hellenistic structures included a quay paved with large stone slabs, the remains of two large collapsed port buildings, impressive rectangular tower foundations, and remnants of a slipway and ship shed. These excavations were extended seaward to establish the extent of the quay, which was laid directly onto the bedrock using large rectangular ashlar blocks that appear to be mostly in situ. Analysis of the archaeological finds suggests a construction date in the late 3rd or early 2nd century BCE. Curiously, the original surface of these harbor installations is now found between 1.1-1.2m below present sea-level. Multidisciplinary research including marine geoarchaeological and sedimentological analysis, along with archaeological observations, suggests a sea level change of over 1.5m at Akko since the Hellenistic Period. This information is critical for understanding the environmental evolution of the central Levantine coast, and provides context to Akko's history as a political and naval outpost of the Ptolemaic and Seleucid Empires.

The Ancient Mediterranean Digital Project: An Open-access Database on Ancient Ships

Tzveta Manolova

Université Libre de Bruxelles, Belgium

Already a growing trend before the pandemic, the role of digital tools as the primary resource of many students and researchers for their day-to-day academic activities has reached an unprecedented scale, and now occupies a central and fundamental part in learning that is here to stay. The paper will present the outcome of a two year postdoctoral project, aimed at the creation of an open-source digital database on ancient Mediterranean ships of the Late Bronze and Early Iron Age, currently covering the eastern part of the basin based on my doctoral dissertation, with near future plans to include the western Mediterranean. The database is intended to become the principal online research tool on the topic of Mediterranean ships of the pre-classical periods, by providing an up-to-date, comprehensive dataset of ship representations, including in-depth contextual and technical information for each entry as well as high resolution, detailed visual documentation. The second component of the project, namely the creation of photogrammetry models of certain objects of the database will also be presented, followed by a discussion of their usefulness for remote learning and cultural heritage preservation.

SESSION: 5G. Reintegrating Africa in the Ancient World (Workshop)

Chair(s): Brenda J. Baker, Arizona State University | Geoff Emberling, University of Michigan

Interconnections & Coloniality

Iman J. Nagy¹, Robert Vigar²

¹University of California, Los Angeles, USA. ²University of Pennsylvania, USA

Archaeological interpretations examining interconnections across Northeast Africa are often framed within a colonial episteme inherent to Egyptology. Over the course of the last two decades there has been an increased recognition of the colonial foundation of Egyptology. However, there has been limited discussion surrounding the effects of the Egyptological footprint on the methodology and interpretations of Northeast African archaeology. Coloniality as an episteme centers essentialized cultural units, emphasizes binaries such as core:periphery and origin:diffusion, and enforces categories of social difference. In order to substantiate Egypt's position as the impetus for the 'rise of civilizations' in Northeast Africa, the epistemology of coloniality neglects frameworks that foster relationality. It is our contention that the epistemology of coloniality remains the primary lens for examining interconnections between the ancient cultures of Northeast Africa. We argue that rather than merely reflecting upon the historical process of colonialism and its coevalness with Egyptology, we must instead explore coloniality as a knowledge system which continues to influence the praxis of Northeast African archaeology via an Egyptological lens.

In this paper we will present two case studies which explore the interconnections between archaeological work in Northern Ethiopia and Nubia. We will ask why archaeological coloniality, expressed through Eurocentric, Egyptocentric, and Afrocentric approaches, continues to prevail as the primary framework for interpreting Northeast Africa. We will examine how we might approach interconnections between Egypt and Northeast Africa without reifying archaeological coloniality.

At the Edge of the Sahara: Trans-Saharan Decoration from Meroitic Nubia

Annissa Malvoisin

Bard Graduate Center/Brooklyn Museum, USA. University of Toronto, Canada

Somewhere between 200 BCE and 900 CE, a hole formed in the archaeological record connecting Northeast and West Africa. This hole is permeated by an enduring disconnect between the study of the cultural relationship between early medieval Nile Valley civilizations and Iron Age West African cultures just prior to the active transcontinental networks established through the Silk Road. This workshop presentation will ask questions of connection based on ceramic typologies dominant in Meroitic Nubia (ca. 343 BCE – 450 CE) that parallel typologies being produced during the same period in Mali, Nigeria, and Libya (African Iron Age, ca. 200 BCE – 1000 CE). The presentation will investigate ideas, tastes, trends, and social context in order to create analyses based on decorative styles.

Bead Connections of Late Antique Nubia

Joanna Then-Obłuska

University of Warsaw, Poland

The increased ties between Africa and Asia in late antiquity left strong evidence in Nubian ornamentation. Although the maritime contacts of Northeast Africa with South Asia have just been proven through analysis of glass beads found in this part of Africa and dated to the time of intensive Indian Ocean trade, there was almost no evidence of a link between Nubia and the regions to the west. A recent study of exquisite stone beads found in the Upper Nile Valley suggested their sources in Europe and West Africa, and found a link to similar material from Merovingian contexts.

While on the Red Sea coast, imported beads were usually found scattered in contexts other than burials, their identification in graves in the African hinterlands leads to further conclusions about their use by elite and non-elite owners.

Egyptian and Other Languages of Africa: Historical Philology and Early Models

Katherine Davis

University of Michigan, USA

The decipherment and early study of the ancient Egyptian language coincided with the rise of comparative philology and historical linguistics in the nineteenth century. Yet the genealogical status of Egyptian and particularly its relationship to other African languages remained an unsettled issue into the early twentieth century, due in part to an imperfect understanding of Egyptian and the later development of African linguistics as a field. Moreover, extra-linguistic factors—such as race, religion, and perceived level of “civilization”—operated within philological and linguistic models. Scholars assigned different levels of priority to linguistic and extra-linguistic factors, which in turn shaped their understanding of the development of language and even humanity itself.

This paper traces the intellectual history of the classification of Egyptian within its African framework from the earliest models that posited Egyptian as a link between Semitic and Indo-European languages (implicitly or explicitly disassociating it from Africa), through the development of “Hamitic” as a classification for languages of North Africa, and to the gradual separation between Egyptian philological scholarship and the field of African language studies.

(Re-)Incorporating African Languages into Egyptian Historical Phonology

Brendan H. Hainline

University of Chicago, USA

A persistent problem with the study of Egyptian historical phonology is that Semitic cognates are over-emphasized while those from Egyptian’s African relatives — the Berber, Chadic, Cushitic, and Omotic languages — are often completely overlooked. Perhaps the most egregious example of this is the so-called *neuerer Komparatistik*, a re-analysis of the Egyptian consonantal system based entirely on Egyptian and Semitic cognates. At its best, this has been scholarly negligence, but this trend has also been affected by the colonial and racist past of Egyptology that has tried to divorce Egypt from its African context.

In this workshop, I will be introducing a new database project with the goal of exploring Egyptian’s relationship with its African neighbors by focusing on basic vocabulary items — a special class of vocabulary items that resist borrowing and therefore present the opportunity for more secure cognates. The database includes basic vocabulary items from the Berber, Chadic, Cushitic, and Omotic languages on par with those from the Semitic branch, with an end goal of this project being a complete re-evaluation of consonant correspondences between Egyptian and all branches of the Afroasiatic language family. This database will be published online for other scholars to utilize, and I am seeking feedback in what tools and functions would make the database most useful and accessible to future users. It is my hope that this database will facilitate the identification of linguistic and cultural interactions between early Egypt and nearby societies in Africa.

SESSION: 5H. The Transition from the Neo-Assyrian to the Neo-Babylonian Periods I

Chair(s): Jonathan Gardner, Trinity Evangelical Divinity School | Christopher W. Jones, University of Helsinki

Reassessing the Role of the “Assyrian Megadrought” in the Neo-Assyrian to Neo-Babylonian Transition

Hervé Reculeau

University of Chicago, USA

The political demise of the Neo-Assyrian empire at the hands of a Babylo-Median coalition has puzzled historians for generations. Explanations have ranged from pure military history to socio-economic conflicts, and from protracted civil war to imperial overreach. Recent years have seen the increasing success of an overshoot model seeking to explain Assyrian imperial collapse through the ill-fated conjunction of overpopulation in the heartland (via the practice of mass deportation) and an abrupt episode of rapid climate change, documented in low-resolution paleoclimate records from various places in the Middle East, and most recently in a high-resolution speleothem record from a cave located within the Assyrian heartland, the Kuna Ba Cave. While a 125-year “Assyrian megadrought” (ca. 675–550 BCE) has been attributed a direct causal role in the collapse of the Neo-Assyrian empire, it is worth noting that the reversal from humid to dry conditions in the region actually occurred as early as the eighth century (730s BCE), and that the climate did not significantly improve until the end of the sixth century (520s BCE). The drought therefore brackets the entire period ranging from the acme of Assyrian imperial power to the Assyrian to Babylonian and subsequent Babylonian to Persian imperial transitions.

This paper reevaluates the paleoclimatic and historical evidence by focusing on chronology and the magnitude of climatic shocks, focusing on how climate change might (or not) have impacted the subsistence and political foundations of the main power players of the time: the Assyrians, Babylonians, and Medes.

Urban Life Between Empires: From Nineveh to Babylon

Shana Zaia

University of Vienna, Austria

While Neo-Assyrian and Neo-Babylonian studies have traditionally been treated as separate subfields, there is an increasing interest in comparisons between the periods and evaluating to what extent circumstances changed or remained the same as one empire gave way to the next. Of particular importance is the transition period during the late seventh through early sixth centuries BCE. The transition from the Neo-Assyrian to the Neo-Babylonian Empire is one that affected numerous sectors in society, including political, religious, and cultural institutions, and a complete image of the transition requires understanding all of these various aspects. This paper seeks to contribute to this conversation with some observations on how life for ordinary citizens may have changed (or not) in the cities of Assyria and Babylonia. While daily life is often difficult to access, this paper will draw on available textual and archaeological data to determine what the impacts of regime change on urban life might have been.

Nippur during the Transition from the Neo-Assyrian to Neo-Babylonian Periods

John P. Nielsen

Bradley University, USA

Nippur's trajectory through the transition from the Neo-Assyrian to Neo-Babylonian Empires, left it politically diminished and economically marginalized even as much of Babylonia underwent an economic expansion through the so-called long 6th century. The paper will summarize Nippur's position through the 7th century as a pro-Assyrian city, its ideological relationship to Babylon, and the effects of the conflicts that led to Babylonian independence. Special attention will be given to the evidence from economic texts dating to the 7th century.

From the Neo-Assyrian to the Neo-Babylonian Empire - a Babylonian Perspective

Martina Schmidl

University of Münster (WWU Münster), Germany

The recently started project "Governance in Babylon – Negotiating the Rule of Three Empires" (GoviB) under principal investigator Kristin Kleber, funded by the European Research Council, is currently working on editing, for the first time, texts from the private archives in Babylon which were excavated from 1899 to 1917. Among the newly edited texts is the archive and library of Marduk-šumu-ušur from the Šigûa family, N10 (Pedersén 2005: 198), a small archive which contains texts from both the Neo-Assyrian and the Neo-Babylonian period. The father of Marduk-šumu-ušur was Silim-Bēl, who acted as šākin ṭēmi and bēl piḫāti of Babylon. One of the texts of this archive is already famous for its topic, high treason against Nebuchadnezzar II (now BM 120021, published in Weidner 1954-65 and collated in Jursa 2001). In this talk, I will analyse newly edited texts from this archive from the Vorderasiatisches Museum in Berlin, and combine this information with lost texts known only from excavation photographs to provide new insights into the early Neo-Babylonian period from the capital city of Babylonia.

Court System in Babylonia between the Neo-Assyrian and Neo-Babylonian Periods

Malgorzata Sandowicz

University of Warsaw, Poland

It is a common opinion that Neo-Assyrian officialdom has provided a pattern for the nascent Neo-Babylonian state. Particularly the royal court and the military appear to have imitated the Assyrian state organization. However, not all branches of the Babylonian administration closely followed the Neo-Assyrian model. The court system is a pregnant case in point. While in Assyria justice was administered by high state officials, Babylonian courts traditionally operated based on collegiality: panels of judges and other collegial bodies formed the core of the judiciary.

This paper explores the differences and similarities between both models with special focus on the evolution of the Babylonian judiciary during the transition period between the Neo-Assyrian and Neo-Babylonian periods. It traces Assyrian elements that pervaded the Babylonian court system and pinpoints changes that were implemented after Babylonia had regained its independence. It argues that as far as justice administration is concerned, the transition period was surprisingly long.

SESSION: 51. The Royal Gardens of the Mediterranean and the Ancient Near East – A New Perspective I

Chair(s): Rona Shani Evyasaf, Technion, Israel Institute of Technology

Gardens as Sacred Spaces in Babylonia and Assyria in the First Millennium BCE

Allison K. Thomason

Southern Illinois University Edwardsville, USA

From the earliest periods, royally-created gardens were an important aspect of elite experience in Mesopotamian cities. The royal gardens built near palaces, with their diverse and exotic array of animals, orchards and plants, had obvious political significance attesting to the kings' abilities to procure, collect, and engender symbolically important flora and fauna for the good of the realm. In Assyria, texts and images show that gardens adjacent to palaces served as beneficial settings for royal encounters with rare and exotic animals and for the fertility of humans, animals, and plants as well as for the relaxation and pleasure of their elite visitors. In addition, Neo-Assyrian kings constructed other gardens for the gods Nabu and Ashur and their female consorts, typically next to or within temples. Similarly, during the Neo-Babylonian period, an important royally-constructed garden was placed next to the Akitu (New Year's) festival house at Babylon and served as a landscape of enjoyment and fertile pleasure for Marduk and his consort, Tsarpanitum. From royal inscriptions and related texts from the first millennium BCE, the temple gardens emerge as powerful landscapes, the sites of divine coupling, pleasure, and relaxation. This paper will argue that gardens for gods and kings alike served as essential landscapes that constructed and enhanced sacred, liminal, and cosmological associations between divine and earthly realms.

Gardens and Political Landscape Around Jerusalem during the Iron Age and Persian Period

Yuval Gadot, Dafna Langgut

Tel Aviv University, Israel

This lecture will present new and tantalizing information regarding ancient gardens that were designed and planted on hilltop overlooking

ancient Jerusalem. Jerusalem's scenery is charged with symbolism to this day. Monumental architecture located on the peaks of Mount Moriah, Olives, Zion and more, serves as political and religious landmarks that compete over authority and power. It seems that the recent excavations at Ramat Rahel and adjacent to the British Governor Residency on the 'Mount of the Evil Counsel' (Armon HaNatsiv), prove that this practice began at least during the Iron Age. It included the construction of monumental architecture that was adorned by an artificial garden, on hills that were observed from within and from around the city.

In our lecture, we will try to decode these symbolic landmarks by analyzing the flora planted in the gardens, the location of the gardens in relation to the city and mount Moriah and by contextualizing the finds within the royal exploitation of the rural landscape for viticulture.

"Putting the Royal Garden in Perspective" - Reconstructing The Gardens of Herod the Great

Yaniv Korman¹, Rona Evyasaf², Dafna Langgut³, Roi Porat⁴

¹Cornell University, USA. ²Technion, Israel Institute of Technology, Israel. ³Tel Aviv University, Israel. ⁴The Hebrew University of Jerusalem, Israel

This paper aims to serve as a guideline for the reconstruction of ancient royal gardens focusing on the Roman period. It begins by offering an overview of the principles of ancient garden design and an analytical survey of reconstructed gardens that are located at archaeological sites around the Mediterranean region. These form the foundation for the core contribution of the paper: a step-by-step methodology for moving from the recording of archaeological remains of royal gardens to reconstructions of their ancient appearance. The methodology discusses how analog and digital landscape architectural drawing techniques can be used to help researchers studying archaeological and historical gardens advance theories and develop directions for further research. Since excavation digs often reveal only a fragment of the garden, multidisciplinary collaboration of various specialists is required to reveal and connect the missing pieces. These specialists include art historians, literary scholars, and environmental scientists. Archaeobotanists have a particularly important role since their research unearths the ancient planting palette of the garden. The training of landscape architects allows them to synthesize the multidisciplinary studies produced by the specialists into visual diagrams that can be applied on the site and reveal their spatial implications. This paper uses the reconstruction of King Herod's palatial gardens as an in-depth example of the recommended multidisciplinary process to reconstruct the original appearance of ancient royal gardens.

FRIDAY, NOVEMBER 18, 2022 | 10:25am–10:40am (EST)

Coffee Break (Mezzanine Foyer, 2nd Floor)

FRIDAY, NOVEMBER 18, 2022 | 10:40am–12:45pm (EST)

SESSION: 6A. Archaeology of Jordan III

Chair(s): Marta D'Andrea, Sapienza University of Rome | M. Barbara Reeves, Queen's University

Excavating the Iron II Temple Courtyard and Staircase Areas in Ataruz: The 2017-19 and 2022 Fieldwork Seasons

Chang-ho Ji¹, Aaron Schade², Choon-ryeol Lee³

¹La Sierra University, USA. ²Brigham Young University, USA. ³Sahmyook University, Korea, Republic of

This paper summarizes the results from the 2017-19 and 2022 seasons of excavations at the Iron II temple courtyard area (Field E) and the eastern slope (Field G) in Ataruz. Sacrifice, the focal act of communal religious observance, was probably enacted in Field E, an open-air courtyard opposite the east facade of the temple. The area contained the butchering area for the sacrifices and cultic installations, including altars on which portions of most offerings were burned. The worshipers reached this courtyard by climbing the staircase (Field G) on the eastern slope of the site. After the early Iron II temple was destroyed, this courtyard area and eastern slope were reused and contained domestic stone buildings through to the early seventh century BCE. The 2022 excavation season connects Field E and Field G to clarify the architectural and stratigraphic linkage between the courtyard and the monumental staircase. This paper also provides a report of the intensive surface survey in the modern cemetery area, north and west of the Iron II temple area, one mainly conducted to address whether or not the Iron II fortification system was of the casemate type.

The 2022 BRAP Excavation Season at Khirbat al-Balu 'a in Central Jordan

Kent Bramlett¹, Monique D. Roddy^{2,1}, Friedbert Ninow¹

¹La Sierra University, USA. ²Walla Walla University, USA

The Balu 'a Regional Archaeological Project (BRAP) returned to Khirbat al-Balu 'a for a third season in 2022. Balu 'a is a large, 16 ha basalt site located south of the Wadi Mujib with occupational remains from the Bronze and Iron Ages to the Hellenistic, Roman, and Islamic periods. Long-term project goals include building a ceramic typology of the Balu 'a region and understanding the political, economic, and environmental history of this major site that controlled access to the Central Karak Plateau. The 2022 season continued our focus on the Iron II settlement in three main areas: a well-preserved domestic structure, the defensive fortification system, and the monumental Qasr. We established a preliminary understanding of the comprehensive stratigraphic sequence in each of these areas in 2019 and focused this season on expanding our exposures to build a better picture of the function and phasing of these Iron Age structures. In addition to the work in the Iron Age settlement, excavation started in the Middle Islamic Village and continued on the Pathways to Presentation project (conservation, long-term presentation planning, and tracking of site disturbances).

Sacred Time at Home Part I: The Figurines from Tall Jalul Field G

Abelardo J. Rivas

Andrews University, USA

In the modern Hashemite Kingdom of Jordan, Tall Jalul is one of the most prominent features on the Madaba Plains. It is the most significant archaeological site on the central Jordanian plateau. Excavators have opened nine fields at Tall Jalul, where several architectural remains have been uncovered. Excavations at Tall Jalul began in 1992. In 2007 Field G was opened, and arguably, the two most important finds from Field G are a city wall and a channel that extends from Field W through Field G and continues down to the outside of the city (Younker et al. 2009: 30). Field G is a multiroom domestic building divided into four sections: northern, central, western, and southern. Its occupation lasts from the beginning of the Iron Age IIB until the Later Iron Age II/Persian Period. A total of 118 small objects and artifacts have been registered from Field G of Tall Jalul. The materials include basalt, stone, ceramic, limestone, bone, flint, bronze, carnelian, iron, ivory, and glass. Their suggested functions include food preparation, textile fabrication, military, administrative, cultic, and personal adornment. At Field G, twelve figurines emerged. Most of them are in non-critical loci. They seem to portray eclectic cultural and artistic concepts since their features resemble Egyptian, Mesopotamian, Syrian, Transjordanian, and Cisjordanian depictions. This paper presents initial findings regarding these figurines and possibly cultural, social, and cultic implications for our understanding of domestic religion.

New Nabataean Funerary and Cultic Structures from Hawara (Humayma, Jordan)

M. Barbara Reeves

Queen's University, Canada

Nabataean Hawara (Roman Haurra, modern Humayma), the largest ancient settlement in Jordan's Hisma Desert, was founded in the first century BC by a Nabataean prince at a water-rich site on the trade routes between Petra and the Red Sea and southern Arabia. The sandstone hills and ridges bordering Hawara have been the focus of several ground surveys conducted by the Humayma Excavation Project. These include a survey of the rock-cut tombs conducted in 1992 and 1993 (by Oleson and Somogyi-Csizmazia) and a survey of petroglyphs and quarries in 2014 (led by Reeves). Reeves subsequently requested that the photographers of APAAME (Aerial Photographic Archive for Archaeology in the Middle East) take aerial images of the 2014 survey area to assist in contextualizing the ground work. The resulting images (taken in 2016 and 2017) included not just the area requested but also other parts of the site, including areas containing rock-cut tombs. Careful analysis of these images, in conjunction with the ground survey results, revealed the presence of previously unknown funerary and cultic structures that likely date to the Nabataean period. These include monumental chamber tombs (similar to façade tombs) and possible ritual feasting areas (*triclinia*, *biclinia*, *stibadia*). Although these structures have not yet been excavated, the contextual information provided by the aerial photos contributes important new information about life and cult in this important Nabataean community.

The Making of a Roman City. Refuse, Recycling, and Rebuilding in Petra's Domestic Complexes

Sarah E. Wenner

University of Cincinnati, USA

My project reconceptualizes how Petra was built, not through the traditional lens of the aesthetics of urban architecture and the monumentality of architectural forms but through a study of urban volume, or the materials that were so often hidden behind a cityscape's façade but nevertheless were essential for its shaping. The majority of the city's volume was not made up of newly-formed brick or freshly-quarried soil, but consisted almost entirely of urban waste. Various formal and informal systems guided its management, as well as its storage and reuse. In other words, the frameworks dictating the life-cycles of discarded waste also created an economy of refuse.

This paper explores the use-patterns of refuse using excavation data from the Petra North Ridge Project. It traces the use of refuse in the city's nascent construction industry in the 1st century CE, when the majority of Petra's urban monuments were built, through the 4th century, when much of the city was destroyed by an earthquake, thus necessitating massive rebuilding. My study of waste signatures demonstrates that the consumption of waste in Petra's building practices was not only tied to the local economy and diachronic demographic shifts, but also suggests that demand for the material was so elevated during certain periods that it had to be obtained through extraordinary measures.

Umm al-Jimal's Churches in Context: Religion and Society, 300–800 CE

Darrell J. Rohl

Calvin University, USA

Umm al-Jimal, a rural town of the southern Hauran, features a high concentration of Byzantine period churches, all tentatively dated to the middle of the sixth century. First documented a century ago by Howard Butler's Princeton Expedition and explored in more depth over the past 50 years by Bert de Vries and the Umm al-Jimal Archaeological Project, the site's 16 churches offer a valuable opportunity to explore the dynamics of domestic and religious life during the Byzantine period and beyond the establishment of Islamic rule. The churches represent a broad spectrum of different typologies: hall churches and basilicas, intramural and extramural churches, public churches and non-public churches, possible monasteries, and churches that represented both Chalcedonian and non-Chalcedonian Christianities. This paper reviews past interpretations of these churches alongside the evidence from recent fieldwork, including excavations in 2019 and 2022, which seek to clarify the churches' chronologies and the connections between the church structures and the neighborhoods they serve. Key results of these field seasons will be presented, along with an explanation of how new data is helping to better understand these churches within their local context at Umm al-Jimal, regional context within the Hauran and Southern Levant, and broader Roman/Byzantine/Early Islamic context.

SESSION: 6B. Biblical Texts in Cultural Context II

Chair(s): Kristine Henriksen Garroway, Hebrew Union College | Christine Elizabeth Palmer, Gordon-Conwell Theological Seminary

Why Doesn't Solomon Hunt? The Deuteronomistic Portrayal of Solomon in Light of Neo-Assyrian Royal Iconography

Jonathan S. Greer

Grand Valley State University, USA

King Solomon is depicted throughout 1 Kings as an ideal ancient Near Eastern monarch: he is exceedingly wise and fabulously wealthy, he amasses a large army and chariot corps, establishes trade routes

and treaties, and builds fortifications including a palace and a temple. In many ways, this Deuteronomistic portrayal mirrors Iron Age royal propaganda, especially that known from Neo-Assyrian epigraphic and iconographic sources, but with one glaring exception: Solomon doesn't hunt. This paper seeks to address this omission in light of Neo-Assyrian royal ideology, in general, and the role and meaning of the royal hunt, in particular.

Like a Bear Robbed of Her Cubs: 2 Sam 17 in Light of Royal Animal Imagery within the Book of Samuel and the Ancient Near East

Kenton F. Williams

Independent scholar, USA

Within the broader ancient Near East, it is common for the king (and at times his enemies) to be described using animal metaphors to signify his strength and ferocity in battle. Animals like the lion, or wild bull, were often employed as conceptual metaphors for the king. Such images serve to form a part of the repertoire of figurative language surrounding the ideology of the king. This paper argues that animal imagery is employed in a similar manner within the book of Samuel. Specifically, when we examine the speech of Hushai concerning David in 2 Sam 17 in this broader cultural context of kingship, we are able to see an artful response to Absalom crafted by Hushai, that draws upon a number of animal metaphors (bear/lion) to dissuade the would-be king from pursuing his father. Additionally, it will be argued that the kingship of David that is described by Hushai in 2 Sam 17, builds upon and alters known motifs already employed within the book in 1 Sam 17, in order to highlight a certain progression of David as a warrior. By examining these passages, and the way in which they utilize royal animal imagery, we gain a clearer picture not only of David, but of the ideology of kingship that he represents according to the author of Samuel.

Feasting and Violence in the Early Monarchy: 1 Samuel 20 as Case Study

Sarah Gane Burton

Andrews University, USA

Scholars have noted the role of feasts in maintaining power, as demonstrated in ancient texts and archaeological remains (e.g., Meyers 2014, Greer 2013). This paper seeks to understand the significance of violence at or around feasts in the early monarchy in Israel, using the narrative account in 1 Samuel 20: 24–34 as a case study. I will first discuss royal feasts in the Hebrew Bible and the ancient Near East, which provide the social and political background to the story. I will then situate the narrative within the (likely) context of an enlarged four-room house, thus providing a spatial framework (Faust and Bunimovitz 2014). Next, I will examine the ways in which kingship and kinship appear in tension (e.g., David's supposed clan duties over court duties, Saul's claim that "the son of Jesse" threatens the throne). I will then assess the presence of a weapon in an Israelite domicile through the lens of networks/assemblages (Latour 1999) and the implications of its use as a breach of protocol in a domestic setting during a feast and against a family member, specifically the heir to the throne. I will argue that the dynamics reflected in this narrative are a microcosm of the challenges presented by a society centralizing from a tribal alliance to a monarchy. I will conclude by discussing the social and political ramifications of this feast as "ritual gone wrong" (McClymond 2016) and its foreshadowing of political instability.

David and Other Biblical Slingers in Light of Ancient Texts, Pictures, and Artifacts

Boyd SeEVERS

University of Northwestern, USA

A number of biblical accounts, including David and Goliath, mention the use of slings. Understanding these passages in light of relevant ANE texts, pictures, and archeological finds adds color and clarity to the practice of slinging. This presentation will describe the practice of slinging, how slings were made and used, what ammunition slingers used, how far and fast and accurately slingers could sling, and what damage they could do.

"Death Will Not Separate Us": Ruth's Loyalty Oath (Ruth 1.17) in Light of Judahite Burial Practices

Jordan B. Barr

Florida State University, USA

Ruth's decision to stick with Naomi (Ruth 1.14-19) is arguably the best-known scene from the entire book. Ruth's passionate plea to Naomi promises that she will follow her mother-in-law wherever she goes, and that Naomi's people and god(s) will now become Ruth's people and god(s) (v. 16). She even declares that "Where you die, I will die; and there I will be buried" (v. 17a). Ruth's moving speech climaxes with an obscure oath formula: כה יעשה יהוה לי וכה יסיף כי (v. 17b). This paper proposes a translation based on syntactical features, literary context, and material culture.

First, I assess whether Ruth 1.17 is a typical oath formula. Second, I situate v. 17 in the wider social context of mortuary practices in ancient Judah. I draw upon Matthew Suriano's recent work (2018) into the relationality of death inside the Judahite bench tomb, a site of communal care where the dead lived on through their relationships inside and outside of the tomb. Third, I argue that my proposed rendering of v. 17 fits not only this mortuary context but also the literary context of the book. Ruth's enigmatic oath, and especially her statement of dying and being buried along with Naomi (v. 17), are best understood within the relational burial practices in ancient Judah. In effect, Ruth imagines that her new, covenantal relationship with Naomi will continue into the post-mortem existence they both will share in the tomb.

SESSION: 6C. Digital Archaeology and History II

Chair(s): Tiffany Earley-Spadoni, University of Central Florida | Matthew Howland, Tel Aviv University

Surveying Timna in the 21st Century: Data-base Design and Accessibility

Omri Yagel, Eshchar Gichon, Erez Ben-Yosef

Tel Aviv University, Israel

The Timna Valley in the Southern Levant showcases an impressive archaeological record of over 6,000 years of metallurgical activities. The hyper-arid environment and the relatively small impact of modern mining on the archaeological sites have enabled exceptional preservation conditions, making Timna a unique case-study not only for the evolution of metallurgy but also for human-desert relations in a confined geographical context. The archaeological value of Timna was recognized as early as the 1950s, engendering multiple surveys and excavations in the subsequent decades carried out by the 'Arabah Expedition'. Despite the significant work of the expedition, Timna's archaeological dataset has not been updated for decades. However, in

recent years, renewed archaeological investigations have been conducted in the valley, primarily on behalf of the Central Timna Valley (CTV) Project, led by Prof. Erez Ben-Yosef of Tel Aviv University. As part of the CTV operations, a meticulous pedestrian survey was conducted in all major sites in the valley, followed by a major full scale pedestrian survey of the entire valley (which is still ongoing).

The renewed surveys are conducted using high-resolution spatial recording systems (dGPS) accompanied by high-resolution drone and ground digital photography. The end goal of the project is to create an online, easy-to-use, digital Timna database containing all of the previously published and newly gathered archaeological data. The current presentation will focus on the importance, objectives and design of this relatively large database, and will discuss the means of data accessibility with regards to the current case.

Mapping and Synthesizing Ancient Arabia: The Maparabia Project and the Production of an Online Atlas, Gazetteer and Dictionary Jeremie Schiettecatte

The French National Centre for Scientific Research (CNRS), France

Whoever has had the opportunity to consult maps of the ancient Near East has often noticed the absence of most of the Arabian Peninsula. The region is often relegated to purported desert emptiness. Yet, 50 years of research into the regional pre-Islamic history have shown otherwise. And the last decade was an incredible booster, fostered by the production of corpuses, the investigation of new territories, and its share of breakthroughs.

In other words, there is a considerable amount of data that addresses topical issues and it is now possible to take advantage of the existing corpuses to develop the tools for their analysis, synthesis, and to make them accessible to the greatest number. This is the purpose of the Maparabia project (ANR/CNRS/CNR; 2019-24), which encompasses a variety of fields of research: history, archaeology, epigraphy, palaeography, geomatics, and geography. Based on archaeological data and large digital epigraphic corpuses (DASI, OCIANA), the project aims to develop online research instruments, adhering to Open Science and FAIR principles: an atlas, a gazetteer and a dictionary of ancient Arabia.

The purpose of this paper is to present the preliminary results of this project and the collaborative research opportunities it opens up for the international scientific community. The resources produced by the project are not only meant to be accessible to all, but also to be reusable, either through interoperable repositories or remote-access tools.

Star Seeds: Building a Digital Glossary for the Zodiac Project that Will Outlive the Project's Funding

Christian D. Casey

Freie Universität, Germany

The Zodiac Project (ZODIAC—Ancient Astral Science in Transformation) explores the invention and spread of the zodiac—the division of the sun's path in the sky into twelve equal parts—from its origins in Mesopotamia in the 5th century BCE to its widespread adoption throughout the ancient Mediterranean world over the following eight centuries.

The Zodiac Project as a whole relies on both iconography and text to better understand the evolution of ancient astral science, but here I will focus exclusively on the textual component. Understanding the spread of the zodiac through textual evidence entails collecting data from numerous ancient witnesses—thousands of texts in multiple

languages and scripts. Our initial goal is to create a linked, open glossary of zodiacal terms, both for ourselves to use internally and to share with the academic community. The public-facing glossary will be free to use, include sophisticated search capabilities, and link to other online digital projects.

But while some digital-humanities projects may be maintained and funded in perpetuity, the Zodiac Project's digital glossary must survive on its own after the term of our grant ends. How do we build a project that combines the best of state-of-the-art web applications with the forward-compatibility and small footprint of a simple webpage? Here I offer one answer to this question using examples from our ongoing work while asking for feedback from others. In the process, I hope to chart a new way forward for grant-funded projects to create free, open, future-proof digital resources.

Big Data and Pedagogy: The Database of Religious History as a Resource for Comparative Historiography

M. Willis Monroe, Andrew Danielson, Carolyn Arbuckle Macleod
University of British Columbia, Canada

In an age of "Big Data," the study of the history and archaeology of religion is faced with an exponentially increasing quantity of data and scholarly interpretation. Scholars attempting comparative studies find that it is no longer possible to remain current even across multiple disciplines. New digital and queryable tools are necessary to efficiently and accurately navigate basic information, and the trajectory of scholarly interpretation both in "big history" and regionally (or chronologically) restricted contexts. For the ancient Near East, a resource offering one attempted solution is the digital and open access Database of Religious History (DRH). The DRH consists of different types of entries structured around sets of questions focused on different categories: "groups," "places," or "texts". In aggregate the entries weave scholarly interpretations into a form that can be examined both qualitatively and quantitatively. This provides an ample resource for scholars interested in cross-cultural and comparative studies in the history and archaeology of religion. Additionally, this resource serves as a platform for classroom use, allowing students to examine the interpretations of scholars and experiment with forming hypotheses from a wide swath of data. In the following paper, the basic structure of the database is presented together with brief case studies that demonstrate the potential of the DRH for research and pedagogy related to the ancient Near East, and the ways that it can efficiently cross traditional disciplinary boundaries.

From the Mixed-Up Files of Mr. Edgar J. Banks: Mapping the Connections and Distribution of Cuneiform Tablets in US University Collections

Sara Mohr

Hamilton College, USA

The widespread movement and sale of antiquities from the Middle East has resulted in at least 181 universities and colleges in the United States acquiring cuneiform objects for their special collections and campus museums. Some of these collections have been published and are available as part of major digital projects like the CDLI, while many have not. Digital mapping offers us a prime opportunity to track down these objects and make their locations known to researchers and educators. Through the creation of such a map, I have been able to visualize the geographic spread of these 181 collections and pair this visualization with an open access bibliography of those collections that have been published. These open access resources have made the

next step of this project possible: making connections between the collections. This paper will discuss the process of using the digital map as a tool for identifying these connections via place of origin, place of composition, collector, seller, etc. Once various collections have been tied together, the original map becomes a base for visualizing how objects move in the modern world and how they may have arrived in the United States to begin with. Special issues under consideration through this work include representing gaps in our knowledge, how we record and share the movement of artifacts, and how objects are affected by institutional closure.

Digital Archaeology and Software Sustainability: Lessons Learned from Open Context's Sixteen Years

Eric C. Kansa, Sarah Whitcher Kansa

The Alexandria Archive Institute / Open Context, USA

This paper describes technology sustainability issues faced in over sixteen years of supporting research data management in archaeology. Since Open Context went online in November 2006, it has undergone multiple software “refactorings” (rewrites), in addition to ongoing incremental maintenance and enhancements. We describe the rationale for the major updates, largely in response to the needs of data authors and to take advantage of the ever-expanding ecosystem of open source Web, search, geospatial and data analysis libraries. While we have maintained the integrity of data and citation URLs through each refactoring, these rewrites have cut costs through less dependency on our own custom code and more reliance on better established open source libraries.

Open source capabilities increasingly support the specialized and niche needs of archaeologists, despite the continued absence of widely accepted information standards. To accommodate and support the diverse ways archaeologists describe their data, Open Context's initial design and strategies for organizing data, though implemented with different software, were initially heavily influenced by the OCHRE project's pioneering approaches. Since 2006, greater popularization of Linked Open Data and graph-style databases has led to more options to manage heterogeneous cultural heritage data. We are now making plans to replace large portions of Open Context with components from Arches, an open source application specifically designed for cultural heritage data management needs. In this way, we avoid reinventing the wheel and can leverage significant investments in software engineering and data modeling behind the Arches project to help sustain Open Context's services.

SESSION: 6D. Ancient Inscriptions III

Chair(s): Jessie DeGrado, University of Michigan | Madadh Richey, Brandeis University

“Ill-weav'd ambition, how much art thou shrunk!” Re-examining At the Fullers UET 6/2, 414 as a Dialogue Between Weaver and Fuller

Laura B. Mazow

East Carolina University, USA

A challenge in reconstructing textile processing is interpreting references to crafts that are no longer practiced and whose specialized vocabulary is no longer understood. Reference to such an activity is found in the Neo-Babylonian text At the Fullers. The text is traditionally read as a dialogue between a fuller and a difficult customer, who insists they know best. Wasserman's (2013) analysis identifies this text as didactic literature: its main point less its humor than its desire to teach craft terms. The challenge, however, is that

many words are craft-specific and don't appear elsewhere or have a different common meaning. Furthermore, the humor is expressed through both literal and figurative language. Recognizing figurative language in a text distant in time, geography, and culture adds layers of complexity. Attempts to reconstruct fulling based on this dialogue are difficult at best.

In this study, ethnographic, ethnohistoric, and experimental studies support new interpretations of key words that enable us to recognize three areas of concern: the fringe, the shrink, and the nap. The fuller's responsibilities to control for shrinkage and texture are crucial for determining the textile's final shape, size, and feel. However, the fulling process, which matts the woolen fibers, can result in the undesirable effect of felted fringe. Thus there is much tension between the initial speaker, who I argue is a weaver, and the fuller as each has little regard for the other's expertise. This tension creates some acerbic retorts that are literally and figuratively funny.

The Nazareth Inscription and the Antiquities Trade of Ottoman Palestine

Michael Press

University of Agder, Norway

In recent years, Kyle Harper has brought new attention to the Nazareth Inscription, an early Roman imperial decree warning against disturbing tombs. Nothing is known about its provenance except a sentence from the notebook of its original owner: “sent from Nazareth in 1878.” Because of the association of tombs, Nazareth, and the early Roman period, many have argued that the inscription relates to Jesus—even though the note says only that the inscription was sent from Nazareth, meaning it could have been found elsewhere and brought there. Harper has offered two different suggestions in his publications: first, that the inscription must have come from Nazareth itself, because Nazareth was not a hub of the antiquities trade at the time; and more recently, that the inscription has nothing to do with Nazareth at all, but is instead tied to an early Roman (tyrant) on Kos.

In this paper, I suggest that study of the late Ottoman antiquities trade provides a new perspective on the inscription's provenance. In the late 1800s, Nazareth was indeed a significant regional node in the network of antiquities coming from Galilee and even east of the Jordan. The implications for the origins of the Nazareth Inscription are clear. Instead of an inscription dealing with a known event—whether the crucifixion of Jesus or the desecration of a tyrant's grave—we are left with the usual fate of inscriptions that emerge on the antiquities market: an object whose ancient context will probably never be recovered.

Writing in Zoara. Inscriptions and Graffiti in Ancient Ghor as-Safi, Jordan

Konstantinos D. Politis

Ionian University, Greece

In the Ghor as-Safi, the oldest objects which can be designated as ‘inscribed’ (or marked) were found with a Ψ shape on stones 13,000 years ago.

Various marks have also been found etched on pottery from the Early Bronze Age, Middle Bronze Age and Iron Age. These may indicate ownership, measurement or the contents of vessels, but have not yet been conclusively deciphered.

About 500 legible inscriptions and graffiti of various forms have come to light from historic Zoara in Ghor as-Safi, many of which have a religious character. The unusually high number of texts (mostly

engraved on stone) alludes to the area's ancient prosperity, largely based on particular agricultural products (especially balsam, indigo, dates and sugarcane) produced by irrigation from the perennial water source of the Wadi al-Hasa and natural resources (bitumen, salt, sulphur and copper ore), which were all widely traded beyond the region. Financial wealth gained from these commercial activities apparently led to an educated and literate society, as is evident from the sophistication of the writing.

The international nature of the population is highlighted by the different languages and names revealed on the inscriptions (though the use of the Latin language is distinctly absent), which also mention that some of those who died in Zoara came from other cities such as Petra, Augustopolis (Udhruh), Phaino (Feinan) and even as far away as Sepphoris in Galilee. This diversity is also mirrored in the material culture found during archaeological excavations of various areas in the Ghor as-Safi.

The Sarcophagus of Pompeiae Ludeae in Arles (France)

David Hamidovic

University of Lausanne, Switzerland

In 2009, on the right bank of the Rhône River in Arles, in south-eastern France, a group of ancient tombs were exhumed. A unique double sarcophagus was discovered. The names of two deceased persons are written on the body of the sarcophagus, one of a man and one of a woman: Pompeiae ludeae. The name Pompeia is common in Narbonnaise but the cognomen ludea is very rare. As no decoration of the type menorah, etrog, lulav, shofar, for example, is present and as the inscription was probably made in the 3rd century CE, that is to say after the disappearance of the province of Judea in 135, doubts remain about the Jewishness of the deceased. I suggest that this is the case, however, by comparing it with the practice of retaining geographical origin in cognomen over several generations in the Jewish diaspora. If this hypothesis is valid, this would be the oldest Jewish inscription discovered in Gaul.

SESSION: 6E. Archaeology of Israel II

Chair(s): Boaz Gross, Israeli Institute of Archaeology, Tel Aviv University

Magico-Religious Coins in Ancient Synagogues

Tine Rassalle

University of North Carolina at Chapel Hill, USA

Over the course of the last century, 14 synagogue buildings have been excavated in Israel and the Diaspora in which coin hoards dated to the Late-Roman/Byzantine period have been found hidden under the floors of the building. The function of these hoards is an enigma: the coins did not fulfill any practical or functional role within the building and the strange phenomenon is also not mentioned in any written sources. In this paper, I want to give an overview of these deposits and bring in my own interpretation: I contest that the coins are magico-religious devices connected to the second tithing. No longer able to bring the *ma'aser sheni* to the Temple after its destruction, the coins were kept at home and then brought into the sacred space at the time of its construction or renovation, to bless the building and its visitors. This presentation will link the coin deposits to ancient Jewish beliefs in the evil eye, and the evolution of templization of the synagogue in Late Antiquity.

Casemates and Floors and Walls: Another View of Iron Age Fortifications at Tel Gezer

Gary P. Arbino

Gateway Seminary, USA

The issues surrounding the Iron Age city walls at Gezer have been discussed for over one hundred years. Tracing the Iron Age city wall lines over 70 meters between HUC Fields II and III, the recent Tandy excavations shed light on these questions while raising new ones. Tandy re-excavated - but did not remove - the casemate walls west of the 'Solomonic Gate' and examined Macalister's, HUC's, and Dever's findings and assumptions. While much was more clearly understood, the precise connection between the casemate and city wall itself and some of the walls and surfaces inside was more obscure. The wall proved to be more complex than originally assumed. As part of ongoing research, careful attention to the make-up and construction of the city wall itself and its relationships to both stratigraphically earlier features below the wall and contemporaneous intramural elements adjacent to the wall has allowed for a nuanced architectural history. This paper will present that history; from the initial Iron I city wall and glacis, to the major redesign of the late Iron IB/early Iron IIA, through the multiple reconstructions of the city wall, glacis, and casemate system from the Iron IIA to the Hellenistic Period.

The Wall of the Ages: The Fortifications in Area P at Tell es-Safi/Gath

Shoshana R. Guterman

Bar-Ilan University, Israel

As part of the excavations of Tell es-Safi/Gath, Area P was excavated along the eastern slope of the tell. One of the main goals of the excavation of this area was the exposure of the Early Bronze Age fortifications. These fortifications were initially identified in the excavations of Frederick Bliss and R.A. Macalister in 1899.

Dated by Bliss and Macalister to the "Jewish Period"; the current project initially believed that the fortifications should be dated to the Late Bronze Age, based on the discovery of a large Late Bronze Age building built up against the fortifications to the north. However, after additional excavations to the south of the fortifications it became clear that the fortifications were originally constructed during the Early Bronze Age and continued in use into the Late Bronze Age. This is evident through the rich Early Bronze Age material, excavated on the outside of the fortifications, and proven through the excavation of a 2.35m deep probe which provided evidence of clean Early Bronze Age materials, with an even earlier Early Bronze Age wall discovered beneath (and covered by) the Early Bronze Age fortification wall.

This presentation will present the significance, construction, and utilization of the fortifications in the Early Bronze Age through the Late Bronze Age in the upper city at Tell es-Safi/Gath, and its rediscovery in 1899. Additionally, it will review the current understanding of the construction and dating of the fortifications in Area P based on the architecture and remains discovered alongside it.

Top-Down Production Strategies and Bottom-Up Consumption Practices: The Phenomenon of Egyptian-style Pottery in the Late Bronze Age Southern Levant

Jacob C. Damm

State University of New York College at Cortland, USA

The local production of Egyptian-style pottery at sites in the southern Levant is crucial for understanding the nature of Egypto-

Levantine interaction in the New Kingdom empire. Recent work has demonstrated the scale and scope of the phenomenon, though its exact social significance has proven divisive. To shed new light on this issue, I will address the problem from a new direction by exploring the tension between top-down production and bottom-up consumption practices within the garrison community. While it is well known that the Egyptian-style ceramics industry at Levantine sites only produced a small fraction of the forms known from contemporary Egypt, the exact rationale behind why certain forms were produced in the imperial periphery remains hazy. Moreover, the large-scale consumption of certain vessel types (e.g., Egyptian-style simple bowls), when compared to the extreme rarity of other functional classes of Egyptian-style vessels, suggests that there was an uneven local adoption of Egyptian-style pottery despite its industrial manufacture within garrisons. To better understand this phenomenon, I propose that we might profitably compare the Egyptian-style ceramics industry at Levantine garrisons with another kind of contemporary community known from New Kingdom Egypt—specifically, those work communities that were directly provisioned by the crown. This group includes both artisan communities as well as expeditionary groups sent to extract raw material from distant mines. By examining how such groups were supplied with pottery by the central authority it is possible to better understand the relationship between Egyptian-style ceramics and cultural production at southern Levantine garrisons.

A Reexamination of the Canaanite Gate and Related Storerooms and their Relationship with the Water System of Tel Gezer

Daniel A. Warner

Valencia College, USA

In 2010, New Orleans Baptist Seminary and IAA took on the task of re-excavating the Gezer Water System, first exposed by R. S. Macalister. Its purpose was to determine the water source, the date of its construction, and what, if any, was the relationship of the surrounding buildings, namely the Canaanite gate and its storerooms, to the west. Neither Macalister nor later excavations of HUC under Joe Seger address these issues. Because of the close proximity of both the Canaanite gate and storerooms to the water system, probes were launched into specific parts of both from 2016-18. To better facilitate our understanding, it was also decided to remove Macalister's backfill along the gate's inner (northern) façade. It was taken all the way down to bedrock, creating a vast expanse, totally exposing the underworkings of the entire width and height of the gate and parts of the storerooms allowing for closer examination. In addition, the line of bedrock was followed and exposed to the west, creating a significant path to the water system's entrance. These operations made some exciting discoveries shedding new and significant insights about the overall topography, the gate's and storerooms construction, and their relationship to the water system. Additional evidence for the Chalcolithic period also appeared.

SESSION: 6F. Cultures of Mobility and Borders in the Ancient Near East

Chair(s): Shane M. Thompson, North Carolina Wesleyan College | Eric M. Trink, James Madison University

Patterns of Control: Craft Organization throughout the Oxus

Teagan A. Wolter

University of Chicago, USA

The Oxus Civilization of Bronze Age Central Asia sits at the intersection of the steppe and the sown. Though growing out of the long-sedentary Namazga culture of the Kopet Dagh foothills, Oxus settlements would become closely tied with mobile, Andronovo-related peoples of the Eurasian steppe. Beyond these close connections, the Oxus would participate in far-reaching trade networks, as its finely crafted goods were traded throughout the Middle Asian Interaction Sphere. These factors mean that understanding the various structures of craft organization and control are key to understanding the way power was structured within the Oxus Civilization. This study examines the spatial arrangement of workshops in and around sites of the Oxus and surrounding region to explore the relationships between elites and communities of craft producers. Through the analysis of craft organization at sites associated with more sedentary (Gonur Depe, Sapallitepa, Altyn Depe) and more mobile (Ojakly, Sarazm) populations, we will see the approaches to control adapted to differing populations, as well as see the commonalities within the broader region.

Controlling Bodies and Borders: Crimmigration in the Ancient Near East

Eric M. Trink

Colby College, USA

There are many moments in the past to which we might turn to understand how we have arrived at our present point where migration is almost ubiquitously understood by world governments not as a basic human right but as an issue of national security, and therefore, as a criminal offense. The temptation may be to assume that this trend is a product of the modern nation state. There are certainly aspects of the current criminalization of migration that arise from the structures of the nation state, but a look into the past reveals several recurring human tendencies regarding responses to mobile persons. This paper explores the topic of governmentally legitimized movement in the ancient Near East through the analysis of textual records. Examples span both chronology and region but share the common threads of tabulating human movers of all types for the purposes of either restricting or promoting mobility. The goals of the paper are first to investigate broader cultures of mobility and second to analyze whether migration/mobility were in effect criminalized among certain groups or types of movers.

Between Sedentarism and Mobility – Understanding the “Hapiru” of the Bronze Age Near East

Philomena Over

Ludwig Maximilian University (LMU), Germany

“Hapiru”— a name that used to spread fear among city rulers of the Late Bronze Age Levant. In the context of changing political power balances in the second millennium BC, the term started to appear in textual sources across the Near East – especially in the correspondence between the Egyptian pharaoh and Levantine city rulers. Apparently, the Hapiru were living outside these Bronze Age city structures – robbing and destroying city-states much like terrestrial “pirates”. Judging by textual sources, they were malicious aggressors, outsiders, and a permanent threat to urban society and order: a picture drawn by external reports.

My socio-archaeological analysis of the written documents shows how the term “Hapiru” in its complexity prevents our understanding of the heterogeneity of this phenomenon. While, since the 1950s, researchers have agreed that the term “Hapiru” does not depict an

ethnic group, I will argue that we need to understand the Hapiru as a heterogeneous group that went through identical social and political processes to ultimately become merged into a single phenomenon within the wider geopolitical and chronological framework of the Middle to Late Bronze Age Near East.

Furthermore, I will show how this new perception of the Hapiru can contribute to our understanding of mobility and (semi-)mobile groups at the time, and how an integration of philological sources, cutting-edge scientific methods, and archaeology can change our perception of Near Eastern Bronze Age communities between sedentarism and mobility.

The Immigrant Judean Peasants of Yaḥūdu, Babylonia: Their History and Identity on an Imperial Estate

David Danzig

Institute for the Study of the Ancient World (ISAW), New York University, USA. Save Ancient Studies Alliance, USA

The preliminary scholarly conceptualization of the Babylonian rural social landscape, gleaned from the cuneiform Yaḥūdu Corpus, is of a general multiculturalism. The onset of immigrants' acculturation is said to be evidenced by the plethora of inter-cultural contact found in these texts. In contrast to this, I show that there is a dichotomy between the Judean farming peasantry of the village of Yaḥūdu and the local elite of that community. Whereas the current notion of inter-ethnic contact and resultant multiculturalism is accurate at the level of the local elite, the Judean peasants lived in cloistered isolation and maintained their tightly-knit ethnic community over the course of three generations in Yaḥūdu. This is achieved by analyzing a group of texts related to the tax farming of Aḥīqam, the main protagonist of Group 1 of the Yaḥūdu Corpus.

I also collect the information for estates of high imperial officials in the Neo-Babylonian and Achaemenid Empires. Although a number of scholars have noted the existence of these estates, none has yet integrated our knowledge of them and discussed them as an intentional phenomenon in these empires that continued through the eras of these empires. I situate the community of Judean forced immigrants of Yaḥūdu in this context, as a multigenerational, largely ethnically homogenous, peasant enclave within an imperial estate. Finally, I propose that this reconstruction may serve as a template for how we understand the relocation and identity development of groups of forced immigrants within the Babylonian countryside during the Neo-Babylonian and Achaemenid Empires.

Cattle Movement Across Interregional Borders during the Early Bronze Age: A Preliminary Survey of Isotopic Data from Bovines of the Egypto-Levantine Landscape

Eleutério Abreu De Sousa

Macquarie University, Canada

Archaeological evidence and limited texts provide evidence for trade and cultural connections between Egypt and the Levant for the Old Kingdom/Early Bronze Ages (c. 3700-2100 BC). The wide range of non-local imports on both sides of the border has led to the belief that Egypto-Levantine interrelations existed in the Early Bronze Age. Evidence based on archaeological, textual, and zooarchaeological sources from Egypt and Levant suggest that cattle were important to the religious, societal, and economical spheres of society. However, it is unclear whether animals (particularly cattle) were involved as goods in trade at the interregional level. Old Kingdom iconographic and literary evidence including the Royal Annals, suggest that cattle

transport may have occurred on a consequential basis as war booty. The ancient sources therefore, demonstrate a gap that does not outline the use of animals in interregional trade relations. This research explores the question of animal movement from an isotopic perspective to better understand if cattle were part of Levantine interregional trade relations with Egypt. In light of this question, the study presents preliminary isotopic data from bovine and plant remains in Egypt and the Levant to better understand the possibility of cattle movement across the Early Bronze Age landscape.

Terror Management for Mobility Studies

Isaac Alderman

Baruch College, USA

Terror Management Theory is one of the most prominent perspectives in existential psychology and its insights have been used to better understand contemporary attitudes and behaviors with regard to a huge array of human experiences, including issues related to migration and borders. Despite this well-documented utility, TMT is rarely used to help elucidate ancient cultures. Study of ancient mobility can benefit from utilizing the insights from TMT, for—in keeping with this session's theme of defining and controlling mobile bodies—an important aspect of the approach is the recognition of the ways in which we re-define the human body into various systems of meaning in order to better control our existential anxieties. Not only do we make our own bodies meaningful, we impart meaning, often malevolent, onto the bodies of others and the control of those bodies becomes an existential imperative.

SESSION: 6G. Career Options for ASOR Members: The Academy and Beyond

Chair(s): Emily Miller Bonney, California State University, Fullerton

Pipe Dreams and Realities of Making Archaeology Work For You

Zuzana Chovanec

Cyprus American Archaeological Research Institute (CAARI), USA

The difficult state of the US academic job market in archaeology and adjacent fields has been a hot topic for a now increasing number of years. Graduate programs have been criticized for churning out PhDs without adequately preparing them for a job market that exists or providing direction in how to transform academic CVs into resumes and research experience into marketable skills. The field itself has now come under further scrutiny for its discriminatory and extractive past and present – making the job market shift in new directions. In this presentation, I share my own path in various sectors (academic, cultural resource management, nonprofit, museum, government), with practical suggestions.

Weaving Together Meaningful Employment in A Complex World

Tashia Dare

Independent scholar, USA

In today's economy having multiple jobs at one time is not uncommon. As a result, weaving together meaningful employment can be difficult. Though admittedly this is challenging it can also be enriching. Furthermore, while navigating employment inside and outside the academy, it is important to understand that skills developed in graduate school and beyond are transferrable from one setting to another and one must learn how to implement those skills.

For this presentation, I will share my own experience of piecing together employment inside and outside the academy from working in

museums to teaching and tutoring college students to federal employment. Through this I will discuss some of the benefits and drawbacks I have encountered. In addition, I will expand upon the value of teaching experience because I have found that this is one of the most transferable skills. Many employers highly regard this kind of background because of the skills educators utilize everyday—organization, planning, problem-solving, written and oral communication, listening, assessment, research, and critical thinking.

Working for a Museum

Jane Hickman

Penn Museum, USA

When I was a graduate student in Anthropology at the University of Pennsylvania, I expected I would have a traditional academic career. I loved teaching and writing but was not keen on the idea of taking multiple one-year positions before I settled down into a tenure-track position. Soon after I graduated in 2008, when I was teaching several classes at Penn, I was fortunate to be offered the job of Editor of Expedition magazine, a publication sponsored by the Penn Museum. This job provided opportunities I would not have had in academia, and I ended up involved in many aspects of the Museum; I taught short classes in my specialty (ancient jewelry), developed and edited books and other special publications, and, more recently, co-curated an exhibition on dress and adornment. My experience in editing led to my appointment as Chair of the Publications Committee for a overseas research organization.

The Value, and Fun, of Having a PhD in an Archive

Paul Flesher

University of Wyoming, USA

Archives store information about the past, where it waits for researchers to find it, analyze it, and publish results based on it. Although the standard professional degree for archival employment is an MLIS (Masters of Library and Information Science), a PhD can provide an entree to a position at many archives, especially when accompanied by an MLIS or at least some archival training. Once there, a person with a humanities or social science PhD will discover that they have daily access to a research laboratory of human thought and experience, and the job pays them to explore the collections to find exciting materials and then study them for deeper understanding. What more could a PhD-holder want from a career?

This talk will give a brief characterization of archival work and where and how a person with a PhD can make a career in it. It will discuss paths into archival employment as well as careers that the archival field makes possible. Finally, this talk not only draws upon on my personal experience with archives—I direct the American Heritage Center, one of the nation's ten largest, non-governmental archives—but takes advantage of wisdom shared with me by several PhD-holders who work in archives.

SESSION: 6H. The Transition from the Neo-Assyrian to the Neo-Babylonian Periods II

Chair(s): Jonathan Gardner, Trinity Evangelical Divinity School | Christopher W. Jones, University of Helsinki

Neo-Babylonian Imperial Propaganda and the 'Evil Empire' of Assyria

Christopher W. Jones

University of Helsinki, Finland

Scholars have usually understood Nabopolassar's revolt of 626 BC and the subsequent destruction of the cities of the Assyrian heartland by a Median-Babylonian alliance as a native Babylonian uprising against foreign domination. Yet Assyrian rule over Babylonia depended on the support of local urban elites to govern Babylonia's cities and rural tribes. This paper will argue that rebellions against Assyrian rule in the seventh century were driven by competition between elites for status and offices, and that Babylonia lacked a strong unifying identity during this period outside of loyalty to the king of Babylon. Historical memory of Assyrian rule over Babylonia moved through three distinct phases: Negative assessments of Assyrian rule rose to prominence during the reigns of Nabopolassar and Nebuchadnezzar II, when royal inscriptions touted the new dynasty's victory over the Assyrian enemy. Under Nabonidus this was reversed, as Nabonidus promoted a positive image of Assyria and sought to present the Neo-Babylonian empire as a continuation of the earlier Assyrian empire. Finally, in Late Babylonian literature Nabopolassar was contrasted favorably with Nabonidus and his war against Assyria was presented as an act of liberation against an oppressor, even as the accomplishments of Assyrian kings were also celebrated. The image of Assyria as an 'evil empire' to which Babylonians were uniformly opposed should be understood as an image crafted in the early Neo-Babylonian empire in an attempt to unite a divided Babylonia and suppress opposition to the rule of a new dynasty.

A Question of Empire: Identity and Imperial Strategies in 1st Millennium BCE Mesopotamia

Adrienne Spunaugle

University of Helsinki, Finland

For scholars of the ancient Near East, the Neo-Assyrian empire has held a central position to which all others have been compared. Research into the Neo-Babylonian empire has thus focused on the territorial expansion and maintenance of the preceding and subsequent empires without regard for the differences in ideology that point to an empire of a completely different sort. Although the Neo-Babylonian royal correspondence has yet to be discovered, there is much that exists in the presently available textual record that distinguishes the Neo-Babylonian empire from its predecessor.

While the study of empires within the ancient world has long been stuck in a paradigm that holds Rome and Assyria as the quintessential examples, ongoing research in the field of empire studies has illustrated multiple forms of empire exist. The Neo-Assyrian empire emphasized constructing a shared identity, which illustrates several key points that indicate a different governing strategy to that of the Neo-Babylonian empire. In contrast, the Neo-Babylonian imperial ideology focuses on the individuality of its composite parts. This paper thus argues that the lack of an imperially instituted narrative of an empire-wide shared identity indicates a key shift in managerial approach adopted by the Neo-Babylonian government to that of the Neo-Assyrians.

Made in the Image of the Gods: The Interplay between Assyrian and Babylonian Archetypes of Royal Administration.

Joshua L. Jones

The University of Texas at Austin, USA

In the scholarship of the ancient Near East, a subject that intermittently emerges but remains difficult to delineate is sacred kingship. Some have argued that the research concerning this subject often draws too heavily from the regional phenomenon of African

stranger-kingship, and, consequently, has little applicability to kingship in the ancient Near East. However, recent and intriguing research based upon a broad range of ethnographic studies affirms that pre-axial forms of monarchic rule necessarily fall under the classification of sacred kingship, and sovereigns do or have demonstrated to some degree or another that they are or were strangers to society. African-stranger kingship happens to be only one manifestation of how kings the world over are foreigners in many ways to their subjects. This paper will demonstrate how scholarship concerning sacred kingship applies to monarchic governance in Mesopotamian history. Mesopotamian kings by their very nature were a part of but apart from society, and they manifested this in various ways, one of which is how they branded themselves. The Neo-Assyrian and Neo-Babylonian royal inscriptions illustrate how their respective sovereigns established themselves as strangers, despite the fact that they may have belonged to the region or people over whom they ruled. Furthermore, this paper will point out that, although Assyria and Babylonia perceived their kings to some extent as more than human, they each manifested their own particular proclivities for how they believed the king should administer his divine commission.

Now What? How Successfully Accomplishing the Imperial Mission of Conquest Contributed to the Fall of the Empire

Jonathan S. Gardner

Trinity Evangelical Divinity School, USA

A widely-understood, foundational ethos of the Assyrian Empire was that of expanding the sphere of influence and control to encompass the entire understood world, as highlighted most notably in the Coronation Ritual, as well as in several hymns. Impressively, the Assyrians can be said to have actually accomplished this, becoming the first “successful” world empire (Mario Liverani, *Assyria: The Imperial Mission*, 266). However, just as they reached their goal during the reign of Ashurbanipal, their entire empire collapsed and was nearly erased from history.

The purpose of this session is to explore the various reasons for Assyria’s stunning fall. In this paper, it will be argued that one of the many factors for the fall was tied to a royal ideology centered almost entirely around conquest. Much like a dog chasing its tail, Assyrian kings did not actually know what to do once they caught what appeared to be a near-impossible goal and were unable to pivot to a new world reality. Consequently, Assyrian royal prestige began to suffer a major breakdown which was compounded by other fractures in their empire also discussed in this session.

To accomplish this, the development and reliance on militaristic imagery will be traced through the Assyrian Empire with particular attention placed on Ashurbanipal’s attempts to shift Assyrian royal ideology and their overall lack of success. Secondly, the Assyrian imperial organization will be examined to show how reliant it was on a militaristic, powerful king.

Prophecy from the Neo-Assyrian to Neo-Babylonian Periods

Jennifer E. Singletary

Pennsylvania State University, USA

A wealth of sources can be adduced concerning prophecy from the Neo-Assyrian period. However, far fewer texts from the Neo-Babylonian period attest to prophetic activity, and written records of oracles are thus far completely absent. From this, it seems clear that the role of prophecy has changed in the later period, but the reasons for this transition remain obscure. What forces led to the comparative

dearth of prophecy in Mesopotamia, or at least its documentation, following the destruction of Nineveh? Why might the Babylonians have taken less of an interest in prophecy than the Assyrians in this period? How do changes in the records concerning prophets compare to what can be ascertained about other divinatory professionals at this time of transition? This contribution investigates the Neo-Babylonian evidence concerning prophecy and prophets, comparing it with references to prophets and prophecy from the Neo-Assyrian period, to analyze the differences in how prophets are represented in the textual record and consider what factors may have contributed to these changes.

SESSION: 61. The Royal Gardens of the Mediterranean and the Ancient Near East – A New Perspective II

Chair(s): Rona Shani Evyasaf, Technion, Israel Institute of Technology

A Garden to Eternity, Tutankhamun and his Wonderful Organic Treasures of Delight

Filipa Simal

Faculdade de Arquitectura de Universidade do Portot (FAUP), Portugal

Holder of a unique identity — a secret balance—, the garden-space, during the Ancient Egyptian New Kingdom, is revealed as a place of order and stability, sensuality and delight, happiness and vitality, as well as supremacy and power. Associated to nobility and more directly with the life of the royal palaces, it contained within itself the life of the “Here and Now” and the “Hereafter”. The word Pharaoh — per’aa, meaning the great house — connected the king to that reality, the one of the garden and the house, where one could not exist without the other, accentuating its supreme power over the territory and connecting him to the image of the royal dwelling itself. The garden was a means of extending life, the mechanism that ensured survival in life and death, and the king was the one who held this reality in many ways.

In November 1922, precisely a hundred years ago, Howard Carter, the English Egyptologist, discovered and entered the tomb of Tutankhamun, the Boy King (KV62), considered to be the best preserved and furthestmost unbroken pharaonic tomb ever discovered in the Valley of the Kings. With it, ‘Wonderful Things’ were revealed, and a significant amount of botanical findings led us into incredible findings.

Through careful observation we believe that the KV62, can lead us to determine the importance of archaeological findings in understanding the importance of the garden, his influence in the economy and in the society and its role in the dynamics of ancient Egyptian life.

Garden Ceramics at Jericho: evidence for an important horticultural trend in Royal Gardens

Rachel Bar-Nathan¹, Dafna Langgut²

¹Israel Antiquity Authority, Israel. ²Tel Aviv University, Israel

A luxurious peristyle garden in the Third Winter Palace of Herod the Great near Jericho has been uniquely preserved in the desert environment. The subject of ongoing study since its discovery in 1978 by Ehud Netzer (Hebrew University), it featured rows of ollae perforatae (ceramic planting pots) buried in situ in the garden soil. Similar pots were found also in other gardens of the palace complex, but not in Herod’s other palaces. Recent palynological studies found large tree and shrub species of western Mediterranean gardens whose

pollen could not have blown in from the surrounding desert, indicating that the trees were miniaturized in these pots. The closest comparanda for the Jericho pots come from the gardens of the emperor Augustus at Prima Porta, near Rome, and Augustus' shrine near Actia Nicopolis.

The paper explores the implications of the new findings on the study of the ollae perforatae and garden culture in Judea and the surrounding region. Similar pots are found in slightly later contexts at Petra. Herod is famous for using gardens and dramatic landscapes to show his ability to control nature across cultures, demonstrating his authority to rule an independent Jewish kingdom with the support of Augustus and Rome. These simple planting pots are filling in the details.

“What Happens in the Garden, Must Not! Stay in the Garden.”

Rona Shani Evyasaf

Technion, Israel

In many ancient cultures around the Mediterranean and the Ancient Near East, gardens were used by the rulers to express power, legitimacy, and success.

In the palaces, each of the different wings, rooms, and courts had a specific function. Consequently, their decorations, size, and location were in accordance with their use. Thus, in this sense, public areas of the palace were usually larger and more decorated, as they were meant to impress the visiting audience.

Though sometimes used by the rulers and their families for private and leisure activities, the gardens were essentially another public space of the palace used for propaganda. The gardens allowed the rulers to do things impossible to accomplish inside the palace. Their vast, open spaces could host a larger number of visitors and guests than the palace courts and multi-participant events such as banquets and army parades. By creating new landscapes in the gardens, filled with unique and exotic wonders, the rulers were imitating the act of creation of the gods; their lavish gardens emphasized their ability to control nature on the one hand and supply the needs of their subjects on the other.

This paper aims to examine the physical design of Mediterranean and the Ancient Near Eastern Royal gardens which, through the use of topography, water, vegetation, building materials, and such, aimed to create the right impression upon the visiting spectators so that they may refer the ruler's glory to 'the rest of the world.'

FRIDAY, NOVEMBER 18, 2022 | 12:50pm-1:55pm (EST)

ASOR Members' Meeting, Sharon Herbert, Presiding (Georgian, 2nd Floor)

FRIDAY, NOVEMBER 18, 2022 | 2:00pm-4:05pm (EST)

SESSION: 7A. Cultural Heritage: Preservation, Presentation, and Management

Chair(s): Kiersten Neumann, Oriental Institute, University of Chicago

Cultural Resource Management Legislation in Israel and its (Not So) Longue Durée

Boaz Gross

Israeli Institute of Archaeology, Israel. Tel Aviv University, Israel

Antiquities laws are a manifestation of their cultural zeitgeist. They reflect aspects of the nationality, religion, diplomacy, and economics, but in their foundation they are the State's attempt to govern, regulate and determine the fate of material elements of cultural heritage in its domain.

The Israeli Law of Antiquity was introduced in 1978, thirty years after the foundation of the state. It came to replace a British Mandate ordinance which was set in 1920, in the aftermath of World War I, and the conquest of the Holy Land from the Ottoman Empire. It wasn't the first antiquity law of the land, however. In 1874, the Ottoman empire set in place the first antiquity legislation in the history of the country, as part of an attempt to control and enforce its authority over the relics of its vast realm. This, mainly to curb the growing competition and hunger for ancient near-eastern artifacts in the western empires.

In this paper I will examine the evolution of antiquities laws in the Land of Israel, from the end of the 19th century to present day, through the changes in political, cultural, and religious setting, and its implications on cultural resource management.

Assessing the Threat of the Makhool Dam to Heritage in the Central Tigris, Iraq

Tobin M. Hartnell¹, Ali Obaid Shalgham², Yalda Razmahang³, Riyadh Hatem², Hendrik Rohland⁴

¹American University of Iraq, Iraq. ²State Board of Antiquities and Heritage, Iraq. ³Université Lumière Lyon 2, France. ⁴Hochschule für Technik und Wirtschaft Dresden (HTW Dresden), Germany

The restarting of the construction of the Makhool Dam on the Central Tigris will severely impact the natural and cultural heritage of this historic region. With the dam reservoir expected to cover significant territory in Kirkuk and Salahaddin Governorates, water will submerge up to 1000 heritage sites and displace up to 250,000 people. The dam project will also severely affect one of Iraq's Key Biodiversity Areas, as the Tigris River Valley is home to several endangered species. This presentation will focus on the most at-risk cultural heritage, including the threat to the World Heritage Site of Ashur, as well as the role of remote sensing, artificial intelligence, and local on-the-ground surveys to document heritage before it is inundated by the dam waters.

The JECM Ceramics from Field G: From Legacy to Teaching Collection

Alexandra Ratzlaff

Brandeis University, USA

Years of site excavation can ultimately lead to massive collections that can take up to decades before they undergo analysis. More recently, with evolving excavation practices and the hiatus of field projects due to COVID, many of these collections are experiencing new life in publication projects and as part of study sets as researchers see the opportunities that lie with these available resources. The Joint Expedition to Caesarea Maritima (JECM) 1978 and 1980 Seasons in Field G yielded an impressive ceramic assemblage ranging from the Hellenistic to Islamic Periods. With extensive material uncovered over years of excavation, the material from Field G only recently began to be explored. In a partnership between the JECM and Brandeis University, the assemblage now has a second life from legacy collection to teaching collection and publication opportunity for student scholars. This paper will present an overview of how the JECM Field G assemblage is used as a case study for students learning about ceramic analysis, the process of publishing artifacts from previous excavations, and how to use this material as an avenue for public engagement.

Creating a Heritage Place and Its Role in Enhancing Community Interaction: Al Mudhif in Philadelphia as a Case Study

Yaroub Al Obaidi

University of Pennsylvania Museum of Archeology and Anthropology, USA

The Al Mudhif Project in Philadelphia is unique project that has contributed to enhancing understanding between societies with multiple perspectives. It has an important role as a distinct place in absorbing different opinions and finding understandings about what is going on around us.

A heritage place to inspire and introduce the history, civilization, and linking the past with the present to build a better future is especially important after what societies went through during the pandemic and its aftermath. By creating a historical place made of a material that represents the first interaction between humans in Mesopotamia and the raw material of construction that was available thousands of years ago is a unique way to engage people with the past.

Creating a place and space to bring together two mutually understanding parties is relatively normal. However, the case of bringing together two parties who are supposed to be far apart presents circumstances where there is a gap between them that hinders the process of understanding and real interaction. This can be resolved by the positive energy of the place created from the possibilities of natural materials.

The place becomes the goal, the vision, and the medium to deliver the message to others through the effective management of heritage places and the inspiration of their symbols, as well as a joint building of understanding and freedom of expression.

SESSION: 7B. Digital Archaeology and History III

Chair(s): Tiffany Earley-Spadoni, University of Central Florida | Matthew Howland, Tel Aviv University

How to Share Palmyra in 3D?

Patrick Maxime Michel

Lausanne University, Switzerland

3D models have become common-place, but are rarely shared in a way which preserves their complexity or enables collaborative use. After the loss of Cultural Heritage and Memory on the site of Palmyra in Syria, 3D models offer a way to access to and to transmit this Heritage. However, new technologies are not accessible to all. File size and ever-shifting proprietary software dependencies present significant barriers to the use of 3D data outside of the creator's computing ecosystem. In this presentation, we would like to share the newest results on our work on the Baalsham'in Temple (from University of Lausanne -Switzerland) and show how we were able to build upon recent virtual reconstruction projects in Palmyra in a collaborative way. Using new reconstructions of the Temple of Bel, Baalshamin, and Tower of Elahbel, we employ versatile multi-resolution 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 Holy Land as a Metaverse: A New Approach to Digitization, Analysis, and Collaboration

Neil G. Smith

University of California, San Diego, USA

What role do archaeologists working in the Holy Land play in the potential next big revolution in how society organizes itself and communicates? Beyond the buzzword "Metaverse", technology is quickly approaching a convergence of virtual reality (VR), augmented reality (AR), digital twins, and globally accessible big data. In the field of archaeology, especially in excavations being carried out in the Holy Land, we have similarly pursued over the past twenty years development of technologies to digitally preserve, visualize, analyze and share digital twins of the archaeological record. Archaeology is an inherently destructive science necessitating all efforts to be made to adequately record data in the field and digitally store it in an accurate and comprehensive record as possible. Once we have a digital twin of our data, digital immersive environments are naturally a convenient means to fully take advantage of it for analysis and visualization. This places us as archaeologists in the peculiar position of being at the forefront of creating a key component of the Metaverse, namely the virtual and augmented representation of all past human life and society. This paper presents a new approach to digitization, analysis and collaboration that allows us to begin building out the metaverse of the archaeological past. Khirbat al-Iraq Shmaliyah is used as a case study, one of the most well-preserved excavations in the region of ancient Edom. Through real-time rendering it's possible to fully immerse oneself within the archaeological site, navigate through it, and analyze the artifacts and stratigraphic layers.

The French Digital Collection: archeologie.culture.fr, "Archaeology and Heritage of the Middle East"

Thomas Sagory

Musée d'Archéologie nationale, France

In the recent decades, archaeology in the Middle East has undergone major upheavals which have changed our methods and visions with the critical situation and problematic accessibility. The online collection of the french ministry of Culture "Archaeology and Heritage of the Middle East" - archeologie.culture.fr, provides cultural heritage enthusiasts, professionals, teachers, and researchers with digital access to cultural heritage from the middle east. This work is based on collaboration between different institutes and brings together the work of archaeological missions in this region. The 3D

restitution forms an interesting support for our research with an approach of linking the sites, their archives and museum collections for the virtual representation.

From prehistoric to medieval period, the platform brings together archaeological sites (Larsa, Mari, Ugarit, Nimrud, Khorsabad, Palmyra, Saint-Symeon, the Umayyad mosque of Damascus...) and thematic subjects (the cylinder seals of the ancient Near East and the cuneiform writing). This work represents a conceptual approach that highlights the contribution of digital technologies to archaeology for better understanding, more visibility and large accessibility.

Building a Narrative! The Role of Museums in Video Games

Emily M. Yankura, Jake Hubbert
Brigham Young University, USA

Video games are one of the largest media sources in the world and, as with most art, often draw inspiration from real life. With thousands of new games released every year, it is not a surprise that many incorporate museum elements. While museums are present in many video games, the ways players interact with them vary depending on the game. The role of museums in video games can extend anywhere from simple game mechanics to integral elements of worldbuilding and plot. We argue that the passivity of museums in video games reflects public perception of real-world museums. Museums in video games often help the world-building process within the digital space of the game, which is reflective of real-world perceptions of museums that construct rhetoric of past lives in the real world. This paper would seek to understand how video game players interact with such museums in three different games. The analysis would include the role the museum plays within the game – collecting, as an active character, and world-building – and the experiences that the player have by means of that role. We would compare the lore and ideologies that museums perpetuate in the physical world to the data collected in the evaluation of these video games. The results from this study would help archaeologists and museum professionals understand the distinctive ways in which some of their audiences engage with their collections and exhibits, which could then be used to improve public perception and community engagement.

To Be or Not To Be... A Digital Archaeologist. That is the Question.

Terrence J. Nichols
Lipscomb University, USA. Lanier Center for Archaeology, USA

In this new digital era, many aspects of technology have found their way into archaeology. Beyond simply integrating computers and other digital tools, the label of 'digital' archaeology and its related field of 'visual' archaeology has lent new and fuller meanings to these terms. Yet, the notion of a digital or visual archaeologist is in many ways dismissed as something less than a "real" archaeologist. This is often done because the definition or practice of a digital or visual archaeologist is not yet fully understood, defined, nor realized. Moreover, in colloquial terms, it seems to contrast a "new school" versus "old school" mentality, as if digital technology is somehow mutually exclusive rather than mutually beneficial to archaeology.

It is the purpose of this study to define and describe digital and visual archaeology and the role of digital/visual archaeologist. This paper will present the mutual benefits to archaeology, in order that as a field we may engage in conversation about constructive ways to incorporate digital aspects. In addition, beyond engaging with changes that affect the practice of archaeology will be the way these changes affect the classroom of archaeological students. These young

archaeologists-in-training, as is the nature of a student, are looking towards the future and want to see how new technology may be used in the field of archaeology, and question if they should be or not be a digital archaeologist. This presentation hopes to answer the questions and concerns of both the 'old' and 'new' schools.

SESSION: 7C. The Archaeology of the Kurdistan Region of Iraq I

Chair(s): Jason Ur, Harvard University

Regional Middle Islamic (11th -15th Century CE) Ceramic Production on the Erbil Plain: An Archaeometric Approach

Kyra E. Kaercher

University of Cambridge, United Kingdom

Regionalization in ceramic production is understudied in the Islamic period in northern Iraq, especially in terms of the unglazed, undecorated ceramics. The production and movement of fine wares have been studied across the Islamic World, but it is usually assumed that unglazed materials are locally made. However, studies in the Levant on Islamic cooking wares show that this is not always the case. This presentation presents a study on the Islamic ceramic assemblages from the Erbil Plain to better understand local production and regionalization processes.

The Erbil Plain surrounds Erbil, Iraqi Kurdistan and has been undergoing intensive archaeological survey by the Erbil Plain Archaeological Survey. Six sites dating from the 11th – 14th centuries CE were sampled, and the petrographic analysis shows various potting traditions at each site, as well as some possible linkages across the region. Portable X-Ray Fluorescence and Wavelength Dispersal-X-Ray Fluorescence were used to establish chemical composition groups which have been linked with possible sites of manufacture. The combined results show that rural sites are producing all types of ceramics, contrary to the belief that only larger, urban sites produced the finer, glazed wares. There is also a robust exchange in more utilitarian ceramics, including storage and cooking vessels. This shows that rural areas are more connected in terms of economics, society, and politics, than thought before. This shifts our focus from understanding just the interaction between large cities and urban centers and into understanding the wider rural interactions in the Middle Islamic Period.

Zahiku a New Mittani Centre on the Kurdistan Region

Hasan Ahmed Qasim

Kurdistan Archaeology Organisation, Iraq

In autumn 2018, the low water level of Mosul lake allowed rescue excavations to be carried out at the archaeological site of Kemune. The excavation revealed parts of a large building, probably a palace, dating to the Mittani period. Within the building, cuneiform tablets, seal impressions, remains of wall paintings, and a huge amount of pottery was found. One cuneiform text indicates that Kemune was probably the ancient city of Zahiku.

The flooding of Mosul Lake in 1986 caused the submersion of a large number of Archaeological sites. Prior to this event, some of the affected sites had been excavated in the framework of the Eski Mosul Dam Salvage project organized by the Iraqi State Board of Antiquities and Heritage. However, most sites in the catchment area of the lake drowned without being archaeologically investigated. Among them is the site of Kemune which is part of the multi-period settlement complex of Kemune Zheri located in present-day Duhok province of Kurdistan Region (Iraq).

The site is situated on an elevated terrace at the eastern side of the Tigris overlooking the river. It consisted of an oval high mound and a lower city located to the north.

In 2013, the Antiquities Department of Duhok conducted the first survey at Kemune under the direction of Dr. Hasan Ahmed Qasim when the site partially resurfaced due to decreased water levels. During this initial survey, several small finds were recovered, among which was the fragment of a cuneiform tablet.

The Chalcolithic Settlement of Asingeran, Navkur Plain: Results of the 2021 Excavations and Surveys

Marco Iamoni¹, Maddalena Scattini², Riccardo Valente¹

¹Università di Udine, Italy. ²Università Ca' Foscari, Italy

The aim of this paper is to present the results of the 2021 archaeological investigations carried out at Asingeran. These focussed on three different activities, excavations, pottery classification and survey. The first permitted to recognise a likely necropolis characterized by a relevant number of jar burials of infants/subadult individuals. The absence of residential buildings suggests that the area was used almost exclusively for funerary rituals, thus suggesting an internal “functional” subdivision of the Chalcolithic settlement of Asingeran.

A preliminary classification of the jars used for the burials and more in general of the Late Chalcolithic excavated ceramics will be given: this, together with a set of 14C determinations, has permitted to refine the chronological phases of Asingeran and propose a more precise chrono-typological scheme for the site and the Navkur Plain.

The last section of the paper will discuss the result of two surveys. The first is a regional survey around Asingeran, which permitted to refine the use of digital images as fundamental tool to improve the recognition of ancient settlements in Northern Mesopotamia via the identification of specific digital signatures. The second is an intensive survey of the adjacent cultivated fields, whose data, combined with a geophysical prospection carried out by P. Cramer, provided a better estimate of the dimension of the Chalcolithic settlement.

Assyrian Rural Settlement Patterns: Excavation Results from the Erbil Plain

Petra M. Creamer

Dartmouth College, USA

Recent geophysical investigation at the Site 458 on the Erbil Plain of Iraqi Kurdistan has revealed remaining structural features of a Neo-Assyrian village. Among various smaller structures – likely residential in nature – the site also is home to two monumental buildings. These buildings, with parallels to other elite administrative houses in the Assyrian Empire, contain rooms which have been tentatively identified as storage facilities. Fieldwork slated to be conducted in Fall 2022 will excavate these structures. This paper is a presentation of the results of the first season of excavation at Site 458 – the first excavation of an interfluvial village established in the Neo-Assyrian period. Results will be integrated with a discussion of Assyrian urbanization and settlement systems in the imperial Heartland, especially relating to the question of deportee presence at these smaller, interfluvial sites.

SESSION: 7D. Archaeology of Egypt I

Chair(s): Krystal Pierce, Brigham Young University

The Fag el-Gamous Coffin and Associated Burial

John Gee

Brigham Young University, USA

Discovered in 1989 on the BYU Egypt Expedition, the Fag el-Gamous Coffin has never been properly published. Misplaced for many years, the coffin was rediscovered in March 2022. It will be reexamined in late March 2022. This presentation will provide a fresh description of the coffin and its associated burial. It will provide a discussion of the inscription on the coffin, which was incorrectly read. It will also discuss the unusual features of the coffin and the mummy, and those features that point to the burial date. Additionally, we will discuss the problems that the coffin presents for previous interpretations of the site at Fag el-Gamous.

Road to Wadi el-Hudi: Networks, Routes, Landscapes, and the Locals in the Eastern Desert

Kate Liszka

California State University, San Bernardino, USA

The Wadi el-Hudi team returned to Egypt in pandemic-laden-Fall 2021 for a series of important discoveries interlaced with (mis-)adventures. This talk will share some of the team's recent discoveries about how large-scale mining expeditions were conducted in the desert during several periods of Egyptian history: not only the well-known activity of the Middle Kingdom but also newly documented phases during the Persian, late Ptolemaic-Early Roman, and Islamic Periods. The mineral resources brought miners here, especially for a unique source of amethyst for jewelry. Additionally, the team discovered an ancient, marked road that leads back to Aswan, which may have led to the ancient fortress of Abu in the Middle Kingdom. Yet the road certainly continued to be used for thousands of years as the main path to Wadi el-Hudi. Excavations this season also found evidence of officials and institutions in the desert and in the Nile Valley who supported these exhibitions. And they can show how the entire landscape of Wadi el-Hudi featured in the large-scale mining operations. Some people hunted gazelle to eat and cut down trees to burn, while others continued to prospect for other viable veins of amethyst. And the Wadi el-Hudi team also finally found evidence of local interactions with the nearby pastoral nomads and other small-scale groups of Egyptian and/or Nubian miners carrying out informal and unconnected(?) mining ventures. This talk explores the complex methods that ancient peoples employed to carry out large-scale mining expedition on the edge of their world.

Meroitic Connections: Handmade Pottery in Egypt's Eastern Desert in the Third Century BCE

Jennifer E. Gates-Foster

University of North Carolina, USA

Recent archaeological work in Egypt's Eastern Desert, east of the Nile River Valley and south of the Sinai, has revealed a network of fortresses and way stations constructed in the mid-third century BCE. The occupants of these desert forts left behind a remarkable material and textual record that gives detailed new information about their daily life, foodways and the network of contacts that sustained this desert community, including interactions with nomadic peoples of the region. This latter evidence will be the focus of this presentation, particularly newly discovered ceramic vessels that attest to contact between the residents of the 3rd century BCE fort and a group of

desert peoples, called Blhm.w (Blemmyes) in the demotic ostraka and Τρωγοδύται (Trogodytes) in the Greek ostraka found at the site. Handmade pottery was found in the middens of the fort along with the ostraka and is potentially associated with this group. These vessels, which have no published parallels, are similar but not identical to the pottery of the early Meroitic period in northern Sudan and with the 'Eastern Desert Ware' attested in the later Roman era in this desert region. This later type of pottery was also recovered at B'ir Samut in rooms that were reoccupied in the second half of the third century CE. Taken together, this new evidence points to B'ir Samut as a location of sustained contact between desert populations and residents of the Nile Valley both in the Hellenistic and later Roman eras.

The Katimala Inscription Revisited

Brian P. Muhs, Tasha K. Vorderstrasse
University of Chicago, USA

The Katimala Inscription is a hieroglyphic text inscribed on behalf of a ruling Queen Katimala on an older temple of Hatshepsut and Tuthmose III at Semna in Lower Nubia. Queen Katimala is unknown apart from the inscription, and scholars have debated whether to date her and it to the early first millennium BCE before the rise of the Kushite Dynasty, or to the mid-late first millennium BCE toward the end of the Napatan Period. Darnell (2006) argued in favor of the earlier dating, primarily because of paleography, and despite the grammar favoring the later dating. This paper will reassess the paleographic and grammatical evidence and will also examine socio-historical factors.

After the New Kingdom and prior to the Kushite Dynasty, Egyptian textual sources barely mention Nubia, and textual sources from Nubia virtually do not exist. After the Kushite Dynasty, however, both Egyptian and Napatan textual sources refer to Lower Nubia as a contested borderland from which local rulers repeatedly emerged, until Ptolemaic, Meroitic, and Roman rulers reasserted control over the region. Furthermore, Kushite and early Napatan queens play an important role in succession and legitimation but do not themselves act as rulers, while some late Napatan queens may rule and some Meroitic queens certainly do. Socio-historical factors therefore favor a later rather than an earlier date for Katimala and her inscription.

Ancient Napata (Jebel Barkal) as an Urban Center of Meroitic Kush

Geoff Emberling¹, El-Hassan Mohamed Ahmed², Tim Skuldboel³, Saskia Buechner-Matthews⁴

¹Kelsey Museum of Archaeology, University of Michigan, USA. ²National Corporation for Antiquities and Museums, Sudan. ³University of Copenhagen, Denmark. ⁴Independent scholar, Germany

The capital city of Meroitic Kush (ca. 300 BCE – 300 CE) is usually considered to have been Meroe, a site in the savannah region of northern Sudan whose royal burials and elite structures preserve evidence of contact with Egypt and the Mediterranean world, supported by relatively abundant textual documentation. The earlier Kushite center of Napata, located at the base of a rock outcrop known today as Jebel Barkal, is generally thought to have been greatly reduced in size and importance during the Meroitic period. Excavations at Jebel Barkal by five different archaeological teams during the past decade have begun to call this view into question. Research suggests that in fact the city at Jebel Barkal may have been larger than Meroe itself, that monumental construction was continuous through much of the Meroitic period, and that Napata

maintained regular contact and possibly even a high volume of trade with Ptolemaic and Roman Egypt. These results further suggest that, for Kush, the idea of "capital city" may be misplaced.

This paper will review old and new evidence for the Meroitic settlement at Jebel Barkal with a particular focus on recent results of the Jebel Barkal Archaeological Project of the University of Michigan and National Corporation for Antiquities and Museums (Sudan).

SESSION: 7E. Gender in the Ancient Near East

Chair(s): Stephanie Lynn Budin, *Near Eastern Archaeology*

Masculinities, Hierarchy, and Representations of the Blind Harper in Ancient Egypt

Kelly-Anne K. Diamond

Villanova University, USA

Gender studies has established that there is no essential femaleness or maleness, femininity or masculinity, but once gender is ascribed to an individual, the social order constructs and holds that person to gendered norms and expectations. This was also true for ancient Egypt where gender production was part of daily life. The blind harper is a character well-known in the ancient Egyptian pictorial record from tomb/temple walls and moveable objects. Exploring gender performance through artistic representation is a useful way to consider the social position of the blind harper and to understand his incorporation into the hierarchical system. This system reinforced gender expectations for individuals and the musical performances in which the blind harper appears are displays of gendered interactions that emphasize these expectations.

This paper maintains that there are multiple masculinities and affirms that a gender status emerges through a sex category but is not intrinsically connected to it. I argue that images of the blind harper exhibit multiple characteristics that are associated with femininity, submissiveness, subordination, and lack of virility. This combination of physical attributes marks the blind harper as embodying a form of masculinity that is low in the masculine hierarchy. A bald/shaved head, blindness, chubbiness, middle age, and sitting position unite to varying degrees to embody one construct of masculinity that existed in ancient Egypt. This paper will demonstrate the ways in which the ancient Egyptian artists signaled the blind harper's gendered social status while also maintaining that of the other males around him.

Men In-Deed: The Self-Conscious Representation of Masculinity on the Sidonian Relief Sarcophagi

Kiernan Acquisto

Boston University, USA

The architectonic relief sarcophagi from the Royal Necropolis of Sidon tell us a great deal about the gender identities of their patrons and how gender was performed by elites in fifth- and fourth-century Sidon more generally. These four sarcophagi — the Satrap Sarcophagus (ca. 425 BCE), Lycian Sarcophagus (ca. 400 BCE), Mourning Women Sarcophagus (ca. 360 BCE), and Alexander Sarcophagus (ca. 310 BCE) — are the only sarcophagi from Persian-Period Phoenicia that bear narrative figural reliefs. They stand in contrast to the larger corpus of anthropoid sarcophagi, which depict a schematized likeness of the deceased, theoretically rendering the gender of the individual buried within immediately apparent. Men and women are depicted on the anthropoid sarcophagi in a constrained, static way, whereas the carvings of the relief sarcophagi feature men actively engaged in masculine pursuits, such as hunting and warfare.

In this paper, I suggest that the adoption of the relief sarcophagi was motivated by the desire to represent both masculine bodies and masculine deeds. In all four cases, the masculinity on display is a hegemonic masculinity which is elite in origin and centered on the performance of ideal manhood. It was entangled with the display of dominance, usually through violence but also through less overt representational choices. The sarcophagus imagery portrays the male patrons of the sarcophagi as superior to animals, women, and — most importantly — weaker men. This outward portrayal of gendered activity is explicit and socially resonant in ways that elite grave goods and simple portraiture cannot fully be.

Questions of Female Agency in Hittite Archaeology

Aimee E. Hanson

Barton College, USA

Since the influence of the third-wave feminist movement of the late 1960's to 1990's, gender archaeology has become an increasingly visible and important field for advancing scholarship's understanding of the ancient world. The best indication of this growth is the explosion of publications in the last three decades concerning women in Ancient Greece and Rome, but a similar increase in gender research can also be seen in studies of multiple cultures of the Late Bronze Age, particularly Cyprus and Assyria, while conversely Hittite gender scholarship has advanced at a markedly slower rate. In discussions of gender archaeology, the question of agency is of central importance, as the identification of "agentive" women has been the primary method for demonstrating women's contributions to societies of archaeological study. The definitions and theoretical approaches popularly used for classifying agents v. non-agents in the textual and archaeological record however, particularly those employed by Hittite scholars, are insufficient to completely examine how much or little agency any Hittite woman may have. This paper seeks to identify issues with traditionally used criteria for defining agency, propose a revised framework for identifying agents in the Hittite archaeological record, and explore how updated frameworks for agency used in the studies of Greek and Roman gender archaeology can inform future studies of Hittitology.

Why is Ištar a Fertility Goddess?

Stephanie L. Budin

American Society of Overseas Research (ASOR), USA

In an outsider's overview of gender studies in the ANE Niek Veldhuis once asked, "How did we ever come to believe that Inana has anything to do with fertility? Inana or Ištar is strongly associated with sex, war, and legitimate kingship—but hardly ever with fertility."

This presentation is offered in answer to this question. Starting with engendering tendencies of the Victorian Era in which Assyriology (and eventually Sumerology) got its start, I follow the historiography of Inana/Ištar's "fertilization" through the 20th and 21st centuries. While the current hypothesis is that the goddess's overt eroticism was repressed under Victoria into notions of fertile fields and babies, the chronology actually indicates that Inana/Ištar became a "fertility goddess" in the later 20th century, primary through the influence of the New Age and the rise of the so-called Mother Goddess Movement. In the end, we came to believe Ištar was a fertility goddess not in the Age of Victoria, but the Age of Aquarius.

SESSION: 7F. Interdisciplinary Approaches to Seals, Sealing Practices, and Administration I

Chair(s): Sarah Scott, Wagner College | Oya Topçuoğlu, Northwestern University

In Decent Exposure: Female Nudes in Near Eastern Glyptic

Diana L. Stein

Birkbeck (University of London), United Kingdom

The ancient Near Eastern motif of the nude female continues to captivate and confound us. Recent research has convincingly debunked the theories based on 19th century concepts of female sexuality, fertility cults and prostitution, presenting us with a variety of viable alternatives. While most of these studies focus on southern Mesopotamia in the early second millennium BCE, this paper foregrounds Syro-Mesopotamia, concentrating on three inter-related variants of the nude female in second millennium BCE glyptic: the nude female with open or cut-away robe, the 'so-called Mistress of Animals, and the nude female with uplifted skirt. Together, they open up new vistas by directing our attention back to the earliest nude female depictions and their contexts. Information on the beliefs and customs of hunter-gatherer societies based on ethnographic research offers insight into her identity, personalities and functions. The threads of continuity that weave across space, time, and media help us distinguish between the nude female variants on seals – which are old, which are new, which are borrowed, and why. With her exposure thus enhanced, we can hazard a guess as to why some variants are paired in the same composition while others appear interchangeable. We can also better imagine the moods, emotions and sensations attendant at events like those depicted in presentation and adoration scenes, which look generic, dispassionate, and repetitive to the modern eye.

The Contest Scene on Seals in the Ur 3 Period

Rudolf H. Mayr

The Rosen Collection, USA

Scenes in which figures in human form fight adversaries in the form of animals or monsters, conventionally called "contest scenes," appear on seals throughout the history of Mesopotamia.

I have cataloged about 200 contest scene seals impressed on tablets of the Umma archive (Ur 3 period, southern Iraq), representing the complete spectrum of contest scene seals in use at this period. In my presentation I will analyze the contest scene (and its significance at this period) from every angle I can think of. I will show how the contest scenes of this period resemble those of the Akkad period, and how they differ; I will discuss the design features distinctive of the Ur 3 contest scene. I will compare the finest specimens with the crudest ones and ask what this comparison tells us. I will also consider the nature of the action depicted.

Contest scenes appeared on one in about a dozen seals at this period. The others all had presentation scenes, which showed the seal owner being led into the presence of a deity or the king. Presentation scenes and contest scenes are completely unrelated, both visually and thematically. Nonetheless, a scribe would typically own a contest scene seal at the beginning of his career, which he would replace, after a few years, with a presentation scene seal. Does this usage pattern tell us something about Neo-Sumerian society?

Of Pins and Loom Weights: Women's Sealing Practices at Karahöyük and Beyond

Nancy Highcock

British Museum, United Kingdom

The practice of using implements other than stamp and cylinder seals to seal clay objects is well evidenced by both their impressions and mentions of such practices in texts. While tablets and bullae impressed by body parts like fingernails and adornments like hems and rings have been noted, few methodical studies have been dedicated to this widespread practice (Ricetti 2016). This paper will focus on the relationship between one type of seal substitute—the clothing pin—and one type of impressed object—the loom weight—to explore how textile production related to ideas of ownership and gendered identities. The main case study will re-examine the more than 300 crescent-shaped loom-weights, many of them bearing pin impressions, which were excavated from the MBA levels at the site of Karahöyük in central Anatolia (Alp 1969). While these objects have been studied to better understand weaving technologies during this period (Lassen 2015) or wider urban sealing practice (Weingarten 1994), the fact that many of them are impressed with a particularly feminine object-type, the clothing pin, has been only remarked upon. Through an analysis of the impression patterns, the significance of clothing pins to the construction of feminine identity, and comparison with impressed loom weights in the eastern Mediterranean, the importance of the seemingly humble loom weight to the construction of women's identities will be highlighted. By contextualizing the stamped crescent-shaped loom-weights within wider gendered practices, this paper will explore the material entanglements of textile production, women's portable wealth and socio-economic agency.

Seals from Kassite Basmaya

Agnete W. Lassen¹, Haider Almamori²

¹Yale University, USA. ²University of Babylon, Iraq

In 2013-14, Iraqi archaeologists conducted salvage excavations at the site of Basmaya, located c. 10 km south-east of Baghdad and the Tigris-Diyala River junction, unearthing two levels of Kassite architectural remains and more than forty graves. The rich finds include four cylinder seals, two of which can be dated to the Old Babylonian period on stylistic grounds, and two to the Kassite period. This paper will consider their implications for our understanding of Diyala and trans-Tigridian seals in the Old Babylonian and Kassite periods, and reassess the so-called "Pseudo-Kassite" group, usually thought to be a poorer quality emulation of the First Kassite glyptic style.

SESSION: 7G. The Debate over the Identification of Bethsaida-Julias

Chair(s): Rami Arav, University of Nebraska at Omaha

Five Seasons of Excavations at el Araj and the Identification of Bethsaida

Mordechai Aviam

Galilee College, Israel

During five seasons of excavations (Kinneret Institute for Galilean Archaeology and NYACK College) at the archaeological site of el-Araj (Bet HaBek) on the northern shore of the Sea of Galilee, three distinct layers were identified in Area A, below the 19th century house of Abdul Rahman Pasha Bek:

- Crusader and Mamluk period, sugar industry.

- A Byzantine - Early Islamic 5th to the 8th century C.E. monastery, with a large basilica paved with mosaic floors in its center. The church was mentioned by Willibald from his visit in 724 C.E. as built over the house of Peter and Andrew
- About two meters below the floors of the monastery rooms, we found a layer dated to the Roman period. Pottery and coins dated from 1st to the 3rd centuries. Area C is located 80 meters to the north, where rooms were found, dated only to the Roman period with coins from 1st to 3rd centuries and pottery from 1st century B.C. In the lower layer were found also typical "Jewish" lime-stone vessels, as well as coins from the same period, including a coin of Herod Phillip.

Unlike suggestions in the past, it is clear now that the site of el-Araj was inhabited from the 1st century B.C. and probably began as a Jewish village. The existence of a bathhouse in the Roman period, shows signs of urbanization in what had previously been a rural site. Based upon the discoveries we concluded that the site of el-Araj is a better candidate for Bethsaida-Julias.

The Stratigraphy and Sedimentology of the Bet Habek Archeological Site: The Burial of the Roman El-Araj at the Northeastern Sea of Galilee Coast, NE Israel

Nathaniel Bergman, Noam Greenbaum

Department of Geography and Environmental Studies, University of Haifa, Israel

The archeological site of Bet Habek is located on a large delta plain deposited by the Jordan River and three other central Golan Heights streams. It is situated on the edge of a pronounced shoreline break, where modern lake level reaches a maximum height of 208.8 m below sea level at contact with the delta front. The archeological dig of El-Araj is 3.5 m deep covering natural fluvial basalt gravel and coarse sand layers indicating that the site was settled on a dry surface where the lake shoreline was further to the south. This suggests that the lake level was lower than 211.5 m b.s.l. However, natural fluvial layers up to 0.4 m thick were also found between the Roman and the overlying Byzantine layer.

Our conclusion is that the Roman layer was buried by fluvial sediments. This is supported by the absence of molluscs typical for the lacustrine deposits. The coarse texture of the natural layers resembles the texture of the nearby bank exposure of Meshushim stream supporting the fluvial origin of the sediments rather than the finer lake layers. The stratigraphy and sedimentology suggest alternating lake sediments, i.e. lake levels with coarse fluvial sediments transported during large floods.

An Arc of Remembrance: Historical Geographical Evidence for the Site Identification of Bethsaida-Julias

R. Steven Notley

Nyack College, USA

In his work on historical geography *The Land of the Bible*, Yohanan Aharoni outlined the principles for site identification: (1) location of the proper general vicinity in accordance with the ancient sources; (2) analysis of the name, its development, and its preservation in the area; (3) the archaeological evidence. While much attention has been given to the competing archaeological claims by e-Tell and el-A'raj for identifying the location of ancient Bethsaida-Julias, less attention has been paid to the first two principles; namely, the topographical details provided by the ancient historical sources and the toponymic

evidence. In this study we will trace the correspondence between the historical sources in the Roman and Byzantine periods and their first-hand description of Bethsaida-Julias with the geographical setting for the el-A'raj excavation project. We will also include a brief consideration of the Arabic toponym el-A'raj with the aim to demonstrate that this enigmatic name, in fact, has tenaciously preserved an ancient memory of the location for New Testament Bethsaida. When considered together what we possess is an arc of remembrance that extends from the Roman and Byzantine eras into the Ottoman period which identified the New Testament Jewish fishing village of Bethsaida at the site of Khirbet el-A'raj.

The Evidence for Biblical Bethsaida at Et-Tell

Carl E. Savage

Northwind Seminary, USA

In the study of the cultural and social matrix of the first century in the Galilee, scholars have commonly prioritized written sources over archaeological evidence because written sources seem to contribute more directly to an understanding of the religious beliefs and practices of a community. This paper instead presents archaeological evidence that demonstrates that Bethsaida (Et-Tell) clearly underwent a change of material culture in the Late Hellenistic period that indicates the new presence of a Jewish community in the first centuries BCE and CE. While architectural elements for the first centuries do not appear to have extensively survived, the ceramic, coin, and other assemblages from the period show a change from polytheistic northern and western characteristics to one more oriented toward the Judean south. The settlement clearly expresses its "Jewishness" with little polytheistic intrusion until later into second and third centuries when the Roman presence again forcefully intrudes into the region. The site appears to have been abandoned before the influence of the Byzantine empire so there is no evidence of a clear later Christian presence. These material culture elements suggest strongly that Bethsaida (Et-Tell) was the NT site mentioned in the Gospel and other early literature.

The Hellenistic and Early Roman Coins from Et-Tell

Gregory C. Jenks

Centre for Coins Culture & Religious History, Australia

During three decades of excavations at Et-Tell, more than 600 coins have been found. Around two-thirds of these coins are from the Hellenistic and Early Roman periods, including 60 Jewish coins issued by Hasmonean and Herodian authorities. The coin record from Et-Tell reveals a distinct transition from Seleucid imperial authority to Jewish coins issued by the Hasmoneans. This pattern is sustained through to the end of the first century of the Common Era and suggests that Et-Tell was the location of a Jewish community through the Hasmonean and Herodian periods. The coins also reflect the elevation of Bethsaida to city status by Philip in a gesture to Tiberius on the anniversary of his mother's death. Due to the early death of Phillip in 34 CE this process seems not to have advanced much beyond a formal declaration, the dedication of a small temple to Julia/Livia and some minor fortifications. The coin data indicates that the elevated site of Et-Tell was abandoned towards the end of the Early Roman period, with just three Late Roman/Byzantine coins having been found. This is consistent with geological studies relating to seismic activity in the region and changes to the northwest corner of the Kinneret at the time.

Bethsaida; The Case for E-Tell

Rami Arav

University of Nebraska at Omaha, USA

Prerequisites for identifying Bethsaida versus archaeological finds from e-Tell.

1. E-Tell is Zer or Zed in Josh. 19:35. Finds: Iron Age monumental city.
2. Three Apostles were born at Bethsaida. Meaning the place must be Hellenistic. Finds at e-Tell: Hellenistic settlement.
3. Renamed to Julias, (Mark calls it village) meaning, participating in the Roman Imperial Cult. Finds: A Roman temple, figurines of Livia.
4. Reinforcement. Finds: First century city walls.
5. Josephus: Julias did not take part in the Jewish Roman war. Finds: Agrippa II coins.
6. Did not reach fruition, no coins of Julias were minted.
7. Eusebius, no new info unknown from the Gospels, meaning, Bethsaida/Julias declined. Finds: abandonment.
8. Willibald (8th century) spent a night at Bethsaida. But Willibald's accounts are littered with confusions. Capernaum, claimed by Corbo and Loffreda, seems more plausible for his visit. Refuting this claim is needed, not done thus far.
9. Notley, the church in el Araj mentioned by Willibald. A proof of existence in the 8th century is needed.

What was discovered at El Araj?

Geological research in the Dead Sea and the Sea of Galilee discovered a severe climate change in 50 CE leading to drop in the level of the two lakes.

Josephus speaks of a drought in the middle of the first century CE.

The first century settlement is undoubtedly the military fortified camp of the mercenaries of Agrippa II in 65 CE mentioned in Josephus Vita 70-73.

SESSION: 7H. Palace-Clan Relations in Ancient Israel: A View from the Jezreel Valley

Chair(s): Omer Sergi, Tel Aviv University

From Village to Royal Estate- the Changing Role of Ḥorvat Tevet in Rural Jezreel Valley of the Bronze and Iron Ages

Karen Covello-Paran

Israel Antiquities Authority, Israel

Ḥorvat Tevet is located at the foothills of the Hamoreh Hill on the northeastern margins of the Jezreel Valley. Built on three terraces sloping to the northern bank of Naḥal Tevet the site enjoys a strategic vantage point, overlooking the ancient routes that connected the Jezreel Valley with the Galilee Hills and with the 'Akko Plain. Following a series of trial and salvage excavations on behalf of the Israel Antiquities Authority and the Israel Institute for Archaeology together with Tel Aviv University, nine occupation levels were identified spanning the Late Bronze Age I to the late Roman period. Notwithstanding unstratified Intermediate Bronze Age and Middle Bronze Age ceramics indicating settlement at the site during these periods, the earliest excavated phase of occupation at Ḥorvat Tevet consists of a small LB I sanctuary. After an occupational hiatus of several hundred years, the site was resettled in the Iron I-early Iron IIA as a rural village. During the late Iron IIA, the site acquired a public function—probably as the administrative center of a royal estate—

marking a series of episodes of destruction and rebuilding. The site remained abandoned throughout the Iron IIB and was resettled in the Iron IIC noted by scanty building remains and a well-preserved cremation burial. This paper will review the major finds uncovered in seven excavation areas and explain how the excavations in the site have illuminated several key issues in the archaeology of the Bronze and Iron Ages.

The Early Iron Age Cemetery of Ḥorvat Tevet: Life and Death in a Rural Community in the Jezreel Valley

Jordan Weitzel

Tel Aviv University, Israel

Recent excavations at Ḥorvat Tevet in the Jezreel Valley, Israel have revealed a cemetery consisting of 25 burials dated to the Iron I period (11th–10th centuries BCE). In this paper, burial practices in the cemetery are analyzed in order to shed light on social complexity, economy, ritual and ideology of the people living at the site on the eve of its transformation into a royal agricultural estate under Omride rule. Based on the finds within the graves and variations between individuals, it is concluded that the site was home to a rural community characterized by minimal wealth accumulation and only limited social stratification. Furthermore, the local origin of most of the objects indicates that the site possessed few long-distance trade contacts, though there are some implications, such as the discovery of beeswax, that the site was related to the Beth-Shean Valley. Finally, these results are contextualized in light of burial data from the LB II–Iron IIA Jezreel Valley in order to define aspects of continuity and change during the transition from Canaanite city-states to territorial polities. This research opens a window into the largely unexamined rural communities of northern Israel and the processes that occurred there during this tumultuous period. Moreover, given the rarity of cemeteries dated to the early Iron Age, this discussion is an important contribution to defining the elusive burial practices of this period.

The Late Iron IIA Cylindrical Holemouth Jars and Their Role in the Royal Economy of Early Monarchic Israel

Madeleine Butcher

Tel Aviv University, Israel

The Holemouth Jar is a cylindrical jar, with a relatively small capacity of ca. 6 litres. It first appears in the Late Iron IIA (9th century BCE), with their distribution being largely restricted to the Northern Kingdom of Israel.

While in most sites affiliated with 9th century BCE Israel, these jars appear in relatively small numbers, they have been found in large numbers, only in sites in the Jezreel and the Beth-Shean Valleys. The largest number of jars – ca. 260 jars – was found at Ḥorvat Tevet, identified as a royal estate in the service of the Omrides. In addition to that, some 80 jars were found in a warehouse leaning on the Omride palace 1723 in Megiddo, 50 more are found in the Omride royal compound in Jezreel and some 70 jars in Tel Rehov. It is therefore evident, that these jars had some specific use, within a system of redistribution, centred on Ḥorvat Tevet.

This paper aims to present a new typology of these northern holemouth jars and discuss the spatial and chronological distribution of the northern holemouth jars according to their specific typology, in order to reconstruct their purpose and use and accordingly to reflect on their role within a redistribution system within Omride Israel. Such discussion will shed light on the economic mechanism which enabled the Omrides to exercise political hegemony in a rural society.

Great Pots Look-Alike – A Case Study of a Single Community of Practice in the Iron Age IIA

Ortal Harush

Tel Aviv University, Israel

A newly formed and unique type of vessel became one of the hallmarks of the Iron Age IIA, known as ‘Hippo’ jars. These vessels, found mainly in the Jezreel and Beth-Shean Valleys and at two administrative sites, Ḥorvat Tevet and Ḥorbat Rosh Zayit, have been linked to the administrative system of the Kingdom of Israel.

The standard production of Hippo jars points to high intensity of production and thus reveals the economic-political social organization of the production system to which it belongs.

New 3-D methods, using newly developed advanced shape analysis, should make it possible to quantify subtle morphological variability. This analysis would allow us to identify morphological trends and traits from a regional perspective, aiming to emphasize communities of practice and their nature, even in such highly standardized objects as the Hippo jars. To understand the role of Hippo jars in the Israelite administrative system, we scanned over 150 jars in 3-D to extract accurate geometric parameters and analyzed these using advanced shape analysis and petrographic studies. This research has shown that while produced in different venues, these vessels are the product of a single-knowledge community.

This paper will present aspects concerning the nature of this unique assemblage to draw regional, historical and socio-economic conclusions.

Late Iron IIA Ḥorvat Tevet as a Royal Estate and its Implication to the History of Early Monarchic Israel

Omer Sergi

Tel Aviv University, Israel

Ḥorvat Tevet is a small site located in the rural hinterland of the Jezreel Valley, some 15 km east of Tel Megiddo. During the late Iron IIA the site changed its layout, and consequently its societal status, as monumental and public buildings were built on its summit. Evidence suggests that during this period the site functioned as an Israelite royal estate, namely, a place where agricultural commodities were produced, collected, and stored before their further redistribution in the service of Israelite royal and urban elites. As such, the site reflects on the economic mechanism that enabled the formation and maintenance of early monarchic Israel, and thus it may also reflect on the kingdom’s socio-political structure. In this presentation, and in light of former presentations in this session, I will present the Israelite royal estate in Ḥorvat Tevet, its mode of operation, and its implication to the socio-political history of early monarchic Israel.

SESSION: 71. Let Me Tell You a Story: Reflections on Archaeological Story-Telling (Workshop)

Chair(s): Emily Miller Bonney, California State University, Fullerton | Leann Pace, Wake Forest University

Storytelling in the Museum

Annelies Van de Ven¹, Sarah K. Costello²

¹Université catholique de Louvain (UCLouvain), Belgium. ²University of Houston - Clear Lake, USA

Storytelling lies at the heart of how museums share their collections with the public. However, not all stories are treated equally. Museum displays create implicit hierarchies among objects through their placement and the level of interpretation the works receive.

Archaeological collections, with their small finds and fragmentary artifacts, find that many of their stories are relegated to the succinct, objective language of a label, necessarily truncating the rich associations that each object embodies. This does not allow much space for stimulating visitors' imagination, and is even less conducive to motivating a critical approach. In cases where there are gaps in the object's origins, the regular label format may give little to no clarification on the object's life. As a thought-experiment in the possibilities of object biography, we chose the case study of a humble bronze figurine in Musée L's archaeological collections. Despite its missing provenance and incomplete provenience, we developed a series of display interventions through which we could tell its story in the museum in new ways.

The Masada Myth: A Pedagogical Approach

Kristine Garroway

Hebrew Union College, USA

Masada looms large in the imagination of all those who are familiar with the site. It is a favorite of my students who take my class *Digs and Disputes*, a class which discusses the religion and politics bound up in the archaeological narrative of Israel. In this five-minute talk, I will use the site of Masada to explain how I teach archaeology as a narrative in which historical accounts, the lead excavators, their institutions, the local population, religious groups, and world politics all play a part in telling the story. I will focus on two of the essential questions in my class: Whose story is it and, who gets to tell the story?

The Science of Digging a Hole and the Art of Telling a Tale

Fredric R. Brandfon

Expedition to the Coastal Plain of Israel, USA

If as Anson Rainey said, "archaeology is the science of digging a hole and the art of telling a tale," this presentation will concentrate on the art of archaeological tale telling. Any historical reconstruction from archaeological materials should be guided by three principles. First, the historian must negotiate with the archaeological evidence with the understanding that writing about the past is always altered by the open-ended future. Second, the historian must choose a context for his or her story from a variety of possible contexts: political economic, sociological, technological and so forth. Third, in crafting a historical narrative, the historian should understand Stephen Toulmin's analysis of justificatory arguments as set out in his book, *The Uses of Argument*. Second, the archeologist must choose a protagonist for his or her story. For instance, even if the protagonist is a piece of pottery to tell the story of that object, the storyteller must choose his or her subject. It may be "red slipped ware" or "Israelite" pottery or "Iron Age" pottery. But a conscious choice must be made so that the story is cohesive. Third, the archeologist must choose a context for his or her story. There is no single context for a story; there are many to choose from. There may be an economic context or a ecological context or a sociological context or a commercial context or a technological context. The story may be told with more than one context but the archeologist must make a conscious decision and choice. History is not the past. It is the sentences we write about the past. Whereas we cannot choose the past we prefer, we can make informed choices about the historical sentences we use to communicate about the past.

Stories Newly Spoken: Biographical Storytelling as a Means of Reconsidering Modern Reception of Ancient Culture in Early American Cities

Emily S. K. Anderson

Johns Hopkins University, USA

My discussion explores the benefits of biographical storytelling in studies problematizing the reception of ancient culture. It arises from research examining the presence of reproductions of ancient objects in modern American cities, focusing on a plaster cast collection of ancient Mediterranean sculpture in late-nineteenth-century Baltimore. Three types of biographical storytelling have proven crucial in this project: the slave narrative, obituary, and a first-person chronicle written from the perspective of a sculptural cast of the Greek goddess Diana in the collection. While reception studies concerning modern spaces can scrutinize the lives of individuals in a way that is impossible in analyses of ancient societies themselves, we know that accounts of modern contexts often fail to include the experiences of many persons. This project has sought to recognize people intimately involved in the context of the acclaimed cast collection whose presences and participation have been largely overlooked. These include an African American man who had been enslaved and an Italian immigrant to the city. Archival research has uncovered pieces of these persons' stories with which to query their involvement with the collection and its community. Meanwhile one of my students composed a first-person narrative from the perspective of the Diana cast, providing a means for seeing the actions of these people by contemplating the view afforded by the unbiased gaze of the objects. Stories emerge as a powerful means for recovering and recounting lives that have gone largely unseen in traditional accounts of how ancient culture became part of American cities.

Re-embodiment Minoan Ritual through Data-Constrained Storytelling

Brent E. Davis

University of Melbourne, Australia

Unlike anthropologists, archaeologists do not have access to living informants who can explain how and why artifacts were used; and written information is often absent or unavailable. However, understanding of other people is not gained solely through the spoken or written word; and all knowledge of others involves interpretation, even when the source of information is speech or writing. Human knowledge and emotion motivated the actions that led to the creation, use and deposition of artifacts, and some of that knowledge and emotion is embedded in the objects themselves and in their contexts. Archaeologists can at least attempt to interpret this information within the constraints of the data; yet in the traditional style of archaeological interpretation, with its external and retrospective point of view, it is difficult to lend any sense of immediacy to interpretations of the motivations and emotions of ancient people.

In this presentation, I illustrate a method of communicating such interpretations as hypothetical stories in which ancient people interact with objects in ways that might account for the archaeological evidence. This approach can be illuminating, though to be successful, the stories must be very tightly constrained by the archaeological data. Using a brief story based on data from the excavation of a single object from a Minoan shrine, I demonstrate how such stories can be constructed, and why this approach is useful.

FRIDAY, NOVEMBER 18, 2022 | 4:20pm-6:25pm (EST)

SESSION: 8A. So Wicked and So Wild: Aging, Old Age, and Bodily Representation in the Ancient World and Modern Academy

Chair(s): Alison Acker Gruseke, Union Presbyterian Seminary

Who is Childish? Comparisons between Children and The Aged in the Ancient Near East

Kristine Garroway

Hebrew Union College, USA

There is a saying that you are only as old as you feel. This saying suggests that an individual can break free of the social constructs placed on them. Biological age need not define who you are. Such an attitude does not appear to be popular in the texts of the ancient Near East. This paper will explore attitudes towards individuals in the ancient Near East who resided at either end of the age spectrum. While there are texts that show love and care for the young and old, there are also texts suggesting these groups were the recipients of hostility and marginalization by adults in the prime of their lives. Drawing upon Rivkah Harris's work, this paper will first draw together ways in which these two groups experienced direct marginalization before pivoting to focus on the indirect hostilities faced by the young and old alike. Examples of direct marginalization will be drawn from economic texts and proverbs, while indirect hostility can be found in lullabies and myths. The paper will close with some suggestions for why children, who were deeply desired, and the aged, who were to be respected for their wisdom, were nonetheless subject to both hostility and marginalization.

The Power and Authority of Menopausal Women of the Southern Levant

Susan Ackerman

Dartmouth College, USA

In the Phoenician inscription of Eshmunazor II, his mother is identified as at least socially, if not biologically menopausal: a widow whose fourteen-year-old son has just died an untimely death. Similarly, in 1 Kings 15, Ma'acah, the widow of King Rehoboam of Judah who then serves as the queen mother of Kings Abijam and Asa, is identified as at least socially, if not biologically menopausal. Elsewhere in the stories of the Judaeen monarchy (2 Samuel 14), a so-called "wise woman" also presents herself as at least socially, if not biologically menopausal: a widow with sons who are described as having come of age (they are old enough to fight one another), even if they are not necessarily mature in spirit (they are, after all, fighting one another). This "wise woman" then presents the story of their conflict to King David, in order that he might reflect on the familial tensions manifest in his own household.

My interest in this paper is how the menopausally-constructed "wise woman" of 2 Samuel 14 asserts herself as royal counselor to David, much as the mother of Eshmunazor is identified as a priestess and Ma'acah acts in a priestly manner by having made an image of the goddess Asherah. More generally, my interest is in the ability of menopausal women in the southern Levant to assert themselves in leadership roles, because, I will argue, their responsibilities as child-bearers and child-rearers have ended and so they are able to direct their attentions elsewhere.

"You are Old and Your Sons Do Not Follow in Your Ways" (1 Sam 8:5): Intersections of Old Age and Prophecy in 1–2 Samuel

Alison Acker Gruseke

Williams College, USA

The biblical books of 1–2 Samuel narrate the inauguration of Israel's monarchy, but they are equally the story of Israel's prophets and the power-sharing arrangements they brokered among themselves, the priesthood, the deity, and the kings Saul and David. Youth and old age figure prominently, suggesting that the historian was aware of and deliberately manipulated existing intersections among age rank, social capital, religious office, politics, and even morality, yet the connections the narratives trace are not formulaic. Israel's first kings are described as youthful in their ascents to power, and Samuel's call to prophetic office takes place while he is a child (1 Sam 1:24), yet both kings remain under the authority of the (older) prophet Samuel, then Nathan. Old age also appears as a possible disqualifying factor for office: the priest Eli manifests signs of old age that diminish his senses, physical abilities, and attentiveness to social and religious duty, while Samuel's old age is cited as motive for Israel's demand for a king. Ironically it is Israel's "elders" who urge this dramatic change (1 Sam 8:4–5). Together these texts gesture toward the privileges and possibilities of older age in ancient Israel while also acknowledging the problem of aging bodies and their changing place in the social landscape.

Old Age is Over Rated: Jacob's "Egyptian" Attitude toward the End of Life

Stephen L. Cook

Virginia Theological Seminary, USA

When Joseph introduces his father Jacob to Pharaoh, the old man of one hundred thirty years laments his frailty and transience as a sojourner among the living (Gen 47:9). A full and satisfying life, like that of his father Isaac (Gen 35:29), has eluded him. Tired of his hard existence, he is ready to be gathered to his ancestors who have already passed on. Some Egyptian texts similarly describe old age as a time of fatigue and weariness. Indeed, Egyptian tomb paintings rarely depict old age, due to the focus of the dying on eternal rejuvenation in the next world. This paper explores Jacob's attitude toward death, expressed before Pharaoh, which seems rather more "Egyptian" than "Hebraic."

Processes of Elderly Marginalization in Early Rabbinic Literature

Albertina Oegema

Protestant Theological University, Netherlands. Radboud University, Netherlands

In this paper, I will analyze processes of elderly in- and exclusion in early rabbinic sources. In rabbinic literature, the elders are generally highly respected for their Torah wisdom and experience. Less visible are those elderly who are relegated to the margins of rabbinic society for their decreasing mental and physical capacities. This paper aims to bring their position and perspectives to the fore by systematically exploring the layered processes of elderly privileging and marginalization. Specifically, I will apply the notion of intersectionality so as to demonstrate that old age did not function as an inherently stable category of oppression or powerlessness among the rabbis. Rather, due to the intersection of old age with gender, freeborn/slave status, Torah education, and the body, these patterns of elderly privileging and marginalization are fluid, negotiated, and contextually determined. On the basis of selected early rabbinic sources (3rd/4th cent. CE), I will examine the role of intersectionality in household

contexts and study its impact upon the status of household heads, their wives, and slaves. With this examination of elderly privileging and marginalization, this paper will contribute to the as of yet limited systematic study of the social ramifications of the ageing process—i.e., marginalization, exclusion, and stereotyping—in scholarship on old age in rabbinic literature and adjacent disciplines.

SESSION: 8B. Archaeology of the Southern Levant: A Festschrift in Honor of Jodi Magness

Chair(s): Owen Chesnut, North Central Michigan College | Josh Walton, Capital University

Barriers, Passages, and Movement through Space in the Late Roman Synagogue at Huqoq

Martin Wells

Austin College, USA

Since 2011, excavations at Huqoq have revealed the remains of a synagogue dating to the late 4th or early 5th century CE. The date, general architectural plan of a basilica, and Jerusalem-facing orientation make it comparable to the synagogues at Gush Halav and Meiron in the upper Galilee and, in the lower Galilee, those at Horvat Ammudim, Wadi Hamam and Arbel. Several architectural details, however, distinguish the synagogue at Huqoq from these others: a stylobate pierced in at least two places by mosaics or odd stonework and a sunken nave. In this paper, I will examine the unique configuration of these fundamental architectural features, highlighting their singularity among other Galilean-type synagogues yet noting their similarity to churches of the early Byzantine period. This will lead to a discussion on the questions such features raise: how might have worshippers moved through space, and between spaces, within the building? and what did these features, and the placements and movements they prescribed, mean to the community at Huqoq?

Stamping out the Embers: The Roman Counterinsurgency Campaign and the Siege of Machaerus

Gwyn Davies

Florida International University, USA

The fall of Jerusalem in 70 CE may have been trumpeted as a great Flavian victory, but the fact that Titus had seized the enemy capital did not mean that the First Jewish Revolt had been entirely suppressed. Rebel forces continued to hold out, particularly south and southeast of Jerusalem, and the reduction of the remaining centers of resistance was a necessary task. The prosecution of these operations, however, was very much a thankless task. After all, with the celebration of Titus' Triumph at Rome, victory had already been proclaimed in the most public of ways and so the authors of the final defeat of the Jewish insurgents could expect little glory to accrue from any successes that they achieved. This may explain how a succession of regime loyalists were appointed as governors of Judea: men who might be expected to carry out their missions with little fanfare but who could be trusted to bring this costly rebellion to its close. Although the most famous episode of the ensuing counterinsurgency campaign remains the siege of Masada, this paper attempts to reconstruct the earlier stages of the campaign and, in particular, reviews the archaeological evidence for the Roman field works thrown up during the siege of Machaerus. This operation represented a much greater military challenge to the Roman army than the later episode at Masada and the methodical way in which the siege was prosecuted demonstrates how professionalism and careful

tactical appreciation were instrumental in obtaining battlefield success for the Romans.

A Primer for Reading Roman Coin Iconography: Perspectives from Roman and Biblical Studies

Nathan T. Elkins

American Numismatic Society, USA

Images on Roman coins inform a number of questions about the Roman Empire, ranging from political ideology, agency/intent, audience and reception, and so on. Further, this source material is actively studied by philologists, historians, art historians, archaeologists, and scholars of Jewish or New Testament studies, all of whom often prioritize different types of comparative evidence to contextualize their study of numismatic images (e.g., literary, biblical, art historical or archaeological evidence, etc.). My presentation, based on my forthcoming chapter in *Minting Worlds: Roman Coinage and Christian Origins in Context* (edited by Helen Bond and Mark Lamas), attempts to offer some methodological guidance for New Testament scholars wishing to study images on Roman coins that would have been encountered by people who lived at or around the same time as Jesus. The case study for this methodological primer considers contemporary coinages circulating in Rome and in Judaea in the early first century CE, differentiating the types of images they bore, the cultures that viewed them, and addresses questions of agency/intent behind images as well their intelligibility.

The 4th c. Church at 'Ayn Gharandal (Arieldela) and the Emergence of Early Christian Architecture in the Late Roman Army of Palestine

Robert Darby, Erin Darby

University of Tennessee, USA

Since 2015 the 'Ayn Gharandal Archaeological Project has been excavating the remains of a 4th c. church discovered inside the ruins of the Late Roman castellum belonging to the Cohors II Galatarum at 'Ayn Gharandal (Arieldela) in southern Jordan. To date three seasons of exploration (2015, 2017, 2019) have brought to light the majority of a small, but well-preserved apsidal church adjacent to the fort's principia and a complex of inter-connected rooms which some evidence suggests may have served ritual functions, specifically baptism and chrismation. This paper will discuss these discoveries and what we can infer about the lived religious experience of the Roman army on the frontier of Arabia-Palaestina and its role in the spread of Christianity in the 4th c.

The 'Ayn Gharandal church, which appears to have been built and subsequently abandoned during the course 4th c., has few regional parallels, save for the nearly identical structure discovered at the nearby "sister" fort at Yotvata (Costia) by Magness and Davies, with the majority having been built later in the 5th-6th c.. Thus, the discovery of the 'Ayn Gharandal church offers a particularly important benchmark for our understanding the formalization of Christian churches into the architectural landscape of the late Roman army in Palestine. The monumentality of the church, its placement in respect to the principia, and its secondary use of rooms in the fort all point to the significance awarded to the church and the emergence of a new architectural paradigm for the Roman army.

SESSION: 8C. The Archaeology of the Kurdistan Region of Iraq II

Chair(s): Jason Ur, Harvard University

Complex Spatial-Temporal Dynamics in the Sirwan/Upper Diyala River Valley: Middle Bronze Age Pottery Assemblages from SRP 18 and SRP 94

Daniel Calderbank, Claudia Glatz

University of Glasgow, United Kingdom

As part of the Sirwan Regional Project's (SRP) strategy, excavations were undertaken at selected sites in the Sirwan/Upper Diyala River valley to reconstruct the region's spatial and temporal settlement development. This talk will focus on two sites: SRP 18 (Tepe Kalan) and SRP 94 (a Middle Bronze Age component of the Khani Masi site cluster). These sites, located just 14km apart, show contemporaneous sequences of occupation, supported by radiocarbon data (ca. 2000-1850 BCE). Despite their contemporaneity and geographical proximity, their respective pottery assemblages show significant differences, particularly in those vessels used for eating and drinking. Detailed examination of these pots will offer insights into diverse practices of cultural production in this contested zone, but will also raise methodological issues as to how archaeologists align practices of typology building with dynamic historical processes and the potential for alternative temporalities.

Recent Results from Kurd Qaburstan, a Second Millennium BC Urban Site on the Erbil Plain

Glenn M. Schwartz

Johns Hopkins University, USA

In the 2022 field season, excavations were conducted by a team from Johns Hopkins University at Kurd Qaburstan, a 95 hectare urban site south of Erbil in the Kurdistan Region of Iraq. Our primary focus was on the Middle Bronze occupation, when the site expanded to its maximum size and may have been the local political capital, and on the Late Bronze occupation, probably datable to a pre-Mittani era. Excavation results included evidence derived from large-scale architecture on the northern slope of the high mound as well as from investigations of an apparent monumental temple on the lower town, in addition to other areas.

Recent Research on Late Prehistoric Occupation Along the Upper Diyala/Sirwan River (Garmian, Iraqi Kurdistan)

Elise Jakoby Laugier

Rutgers University, USA

Late prehistory (6th-4th millennium BCE) was a time of intense and regionally diverse social change across Greater Mesopotamia. Recent work across Northern Iraq is allowing us to build on and refine earlier understandings of this crucial time period that were developed in adjacent regions. Research along the Upper Diyala/Sirwan River, in particular, is shedding light on both the local dynamics of prehistoric occupation as well as the role of the Upper Diyala/Sirwan in broader Zagros-Mesopotamian interactions.

This paper presents preliminary data from geophysical survey, ceramic investigation, and test trenches from a series of Ubaid period sites as well as geomagnetic and surface survey data from the recently excavated Uruk period site, Shakhi Kura. Results highlight (1) the successes and failures of different geophysical methods, (2) the Ubaid ceramics in the region, and (3) preliminary insights from microarchaeological investigations. Research was conducted as part of

the Sirwan Regional Project (SRP) and was generously supported by the ASOR Mesopotamian Fellowship.

Kani Shaie: Fieldwork Report of the 2022 Excavation Season

Steve Renette^{1,2}, André Tomé², Michael P. Lewis³, Khaled Abu Jayyab⁴, Kathryn Grossman⁵, Ali Khayani⁶, Tiago Costa², Francesco K. B. Simi², Maria da Conceição Lopes²

¹University of British Columbia, Canada. ²University of Coimbra, Portugal. ³University of Cambridge, United Kingdom. ⁴University of Toronto, Canada. ⁵North Carolina State University, USA. ⁶University of Tehran, Iran, Islamic Republic of

In March 2022, the Kani Shaie Archaeological Project based at CEAACP/University of Coimbra initiated a new phase of fieldwork in the Bazyan Valley, west of Sulaymaniyah, Iraqi Kurdistan. With a new five-year contract with the General Directorate of Antiquities and the Kurdistan Regional Government, the Kani Shaie Archaeological Project is documenting the threatened archaeological heritage of the Bazyan Valley with the central site of Kani Shaie as its main focus. After an investigation of the site's stratigraphy with an almost uninterrupted sequence from the Late Neolithic to the Early Bronze Age, excavations at Kani Shaie are now investigating occupation of different periods in more detail. This paper deals mainly with the Early Bronze Age levels, which formed the focus of the 2022 fieldwork season, including a summary discussion of architectural layout, ceramic assemblages, clay sealing practices, and faunal remains. In addition, we will introduce the targeted explorations of Late Chalcolithic 2-3 kilns on the site's southern slope, as well as a sounding into the earliest occupation of the site during the sixth millennium BCE.

SESSION: 8D. Archaeology of Egypt II

Chair(s): Krystal Pierce, Brigham Young University

Beer and Food Offerings of Early Egypt: A Case Study from the Predynastic Cemeteries of Nag-ed Deir and Ballas

Amr Khalaf Shahat

University of California, Los Angeles (UCLA), USA

This study presents the archaeobotanical findings from the predynastic cemetery of Nag ed Deir and Ballas previously excavated by Reisner. The northern cemetery of Ballas, is located in Upper Egypt in the Quena bend area while Nag ed Deir is located near Sohag governorate. The graves were small oval pits with the deceased in flexed position buried with food offerings. Beer mash made of barley and local fruit as sweetener is among the uniquely preserved offerings in Nag ed Deir. It is important to reconstruct regionally specific food recipes. Other species such as Pistacia fruits indicate import products and is significance for reconstructing history of cultural interaction in early Egypt. Some botanicals were used material cultures. For example, castor beans, preserved in desiccated conditions in the predynastic cemetery of Ballas. The beans were strung together and found around the neck of the deceased suggesting the use of the plant as material culture. Since castor bean is known later one as major import from Nubia, the use of castor beans as necklace may have served as identity marker of the deceased. Carbon dating and stable isotope analyses were conducted on some samples to situate the interpretation of the botanical samples within the larger grave and cemetery contexts, and to expand our understanding of the social history of food offering in the predynastic upper Egyptian region.

The 2021 and 2022 Seasons at the Seila Pyramid and the Earliest Expression of a Pyramid Complex Feature

Kerry Muhlestein

Brigham Young University, USA

We will present the findings from two seasons of excavating at the Seila Pyramid. During these two seasons we re-excavated the western and southern sides of the pyramid. These excavations revealed new and surprising things about how the pyramid was constructed, and helped more firmly determine the dimensions of the pyramid. We also did high tech scanning of the pyramid to help refine these measurements.

Further, we analyzed the presence of post-holes on the eastern side, and hypothesize that this is the first expression of an offering and canopy space that would become a standard part of pyramid complexes. Thus the Seila Pyramid, once again, offers insights into the nascent transition to standard pyramid complexes.

Transformation on the Giza Plateau: The Central Field Cemetery

Julia V. Puglisi

Harvard University, USA

Wedged between the causeways of the Menkaure and Khafre is the “Central Field,” a ten-hectare cemetery dating from the reign of Khafre to the end of the Old Kingdom. Its development is integral to the history of the Giza Necropolis, which partly owes its establishment as royal burial place to the quarrying of limestone in the Central Field area. Once this area became a cemetery under Khafre, tomb construction in the Central Field underwent a series of innovative changes that took advantage of the unique landscape: rock-cut mastabas were shaped from remaining outcrops, and some of the earliest rock-cut tombs in Egypt were carved into quarried cliff faces. Other important changes—such as painted burial chambers and the transfer of the viziership to non-royal officials—appear for the first time in the Central Field, reflecting the religious and socio-political changes in the Memphite area during the second half of the third millennium BCE.

Despite its importance for understanding the Giza Necropolis and the history of the Old Kingdom, these changes have not been fully investigated since the excavations by Egyptian Egyptologist Selim Hassan (1886–1961) in the early 20th century. This paper exposes some gaps in the record of archaeological fieldwork at this site and presents some observations on the dating of Central Field tombs from my ongoing dissertation, which explores the development of this cemetery during the Old Kingdom.

Rediscovered: The “Lost” Arabic Diaries of the Harvard University–Boston Museum of Fine Arts Expedition

Peter Der Manuelian

Harvard University, USA

In 2006 I was fortunate to discover in Egypt more than seventy Harvard University–Boston Museum of Fine Arts Expedition Diaries written by succeeding generations of the Diraz family of reises from Quft, who steered George Reisner’s Harvard University–Boston Museum of Fine Arts Expedition in Egypt, Sudan, and Palestine for more than forty years. With this find a new frontier has opened on the contributions of Egyptians to the great Western expeditions of the early twentieth century. Recent attempts to do justice to unnamed and unheralded Egyptian archaeologists will benefit from such a treasure trove of written data: thousands of pages of Arabic text and drawings. A summary history will be given of the main archaeological

players of the Diraz family from el-Qal’a, Quft, followed by the account of the discovery and recent history of the Arabic diary books in Egypt and Boston. The paper will conclude with comments on their significance, with a few examples. The Arabic diaries form part of a new data mining study since they offer us a reassessment of the Egyptian role in what are usually described as Western excavations in Egypt.

SESSION: 8E. Empires of the Broader Ancient Near Eastern World: Settlement Strategies and Infrastructure

Chair(s): Petra M. Creamer, Dartmouth College | Rocco Palermo, University of Pisa

Organizing the People: The Persian Imperial Social Structure at Elephantine

James D. Moore

Humboldt Universität zu Berlin, Germany

The Aramaic sources from Persian period Elephantine refer to groups who come from the farthest reaches of the Persian empire. Previous research has identified those who were not Egyptian as “military” or “mercenaries” under Persian imperial mandate. New developments in studies on the Persian empire offer new paradigms through which the well-documented Elephantine community can be more accurately interpreted in an advanced colonial system with complicated social hierarchies. In this presentation I look at the imperial social structure from the rich Aramaic and Phoenician data from Egypt and in comparison to the provincial experience found in Babylonia. I argue that the Persian imperial administration invested in a class system of state dependents, who were valuable in Persian efforts of inculturation. The Persians invented a level of “high administration” that sat over, yet worked within, provincial/local administrative life. They organized social status around economic value and taxation and formed elaborate ways to finance the imperial (public) works, well beyond simple land ownership. An important conduit for maintaining the social structure of the empire was the postal system that connected various royal estates and the administrative centers within them. This path of communication helped maintain the complex social statuses found in the documents and ensured that taxable items from provincial regions, such as Elephantine, made their way back to Persepolis.

Settlement Strategies Along the River: The Western Frontier of the Neo-Assyrian Empire

Andrea Titolo

Sapienza Università di Roma, Italy

The Neo-Assyrian Empire has been one of the major focuses for researchers since the early days of Near Eastern Archaeology. Studies on the Neo-Assyrian Empire have focused on a wide range of topics, from the analysis of regional settlement systems to the inspection of long-term changes in the archaeological landscape, employing different analytical tools to highlight strategies of imperial administration reflected in structural landscape modifications. Long-term settlement pattern analysis, combined with historical sources and cross-regional comparisons, has proven to be particularly effective in reconstructing imperial dynamics in the Assyrian core and on the edges of the Empire, highlighting differences and similarities in the Assyrian landscape management.

This paper builds on these recent studies and will contribute to the understanding of imperial dynamics along the imperial frontiers. In

particular, the paper will focus on three regions along the Euphrates: the Karkemish area – from Halfeti to Tell es-Sweyhat, the Tell Masaikh region – from Deir ez-Zor to Abu Kemal, and the Haditha dam region (ancient Suhu). The analysis will focus on the regional settlement patterns and the broader archaeological landscape both in the Iron age and in a long-term perspective to explore the political and economic aspects of the ancient settlement systems. Cross regional analyses and comparisons with neighboring and more distant regions within the Neo-Assyrian empire will provide more context for the regional dynamics evidenced for the study areas, allowing for a broader perspective on imperial settlement strategies.

Constructing Continuity: Antiochus I and the Settlement of the Seleucid East

Ben Abbott

University of Pennsylvania, USA

For much of the two and a half centuries of the Seleucid empire's existence, no other kingdom from Western Europe to the Indian subcontinent laid claim to so much territory or to such cultural and social variety. One of the ways in which the Seleucids sought to maintain control of this vast territory was through an unprecedented program of settlement and city-founding across the empire. No Seleucid rulers surpassed the combined foundation efforts of the empire's first two kings, Seleucus I and his son Antiochus I, who ruled the western and eastern halves of the kingdom as co-rulers ca. 294-281 BCE. While Seleucus' settlement activities in the west have received significant attention from ancient and modern writers, Antiochus' settlement activities in the east have often been overlooked as peripheral and relatively insignificant.

Using new archaeological data and reappraising extant Classical and Near Eastern written sources, a more complete picture can be drawn of the settlement of the eastern Seleucid empire. During his co-reign, Antiochus I transformed the Seleucid east (Mesopotamia, Iran, and Central Asia), consolidating the landscape with a system of large cities and smaller settlements. I argue that while Antiochus oversaw this transformation, he presented himself as a restorer of continuity, propagating an imperial narrative which presented this new Seleucid settlement policy not as radical change but as a restoration of the past. Antiochus would later employ this policy of fabricating continuity as a defining feature of his broader approach to Seleucid kingship.

A Tale of Two Cities: Kumidi and Sumur as Egyptian Centres during the Amarna Period

Francesco Ignazio De Magistris

Oxford University, United Kingdom

The written sources dated to the late 18th Dynasty describe the Egyptian presence in the norther Levant as pivoting around the two centres of Sumur (Tell Kazel) on the coast and Kumidi (Kamid el-Loz) in the interior. This presentation will reconstruct their convoluted history, and will present three main conclusions: that Kumidi was transformed into an Egyptian centre when Sumur was first lost to Abdi-Aširta of Amurru, that following Sumur's recapture the two centres shared administrative and military duties, and that after the second and final loss of the coastal centre Kumidi replaced it in its functions. The three conclusions will be reached through two argumentative avenues, one involving the diachronical succession of the events regarding each centre, and one involving their "Proximity Factors," their areas of influence inside the Egyptian Levant. The first one will identify the key moments in the history of the two centres, to

establish when Sumur was lost, and when Kumidi was transformed into an Egyptian centre. The second one will show that Kumidi's Proximity Factor, after Sumur's capture to the forces of Amurru, overlap with that of Sumur itself.

Urbanism and Empire in the South Caucasus

Lara Fabian

Albert-Ludwigs-Universität Freiburg, Germany

This paper considers the relationship between urbanism and imperialism in the South Caucasus starting in the Late Iron Age, with a focus on the Hellenistic and Parthian-Roman periods. This was a time when urban centers in neighboring spaces in Southwest Asia became key infrastructural nodes in imperial networks: spaces where economic power was consolidated, political power enacted, and cultural power instantiated. However, the extent of the South Caucasus polities' participation in these wide-scale patterns of urbanism remains unclear. Of particular interest in this examination is whether the patchy evidence suggests any sort of continuation of the so-called "Caucasian model of development" that has been hypothesized for earlier periods, whereby significant political complexity developed in the absence of widespread urbanism.

Relying on archaeological and textual sources, I present the laconic but diverse evidence for models of urbanism in the region. Sites from this period for which the archaeological evidence is strongest – places like Artashat, Qəbələ, and Urbnisi – demonstrate a range of urban forms that for a variety of reasons could be called 'noncanonical' from the perspective of Near Eastern or Mediterranean empires. Both etic (ancient) and emic (medieval) accounts flesh out our picture of these urban spaces, particularly in the case of Armenia, where the sources hint at an interesting tension between urban centers and more rural elite power-bases. The evidence opens space for considering the variety of roles that urban centers played in the consolidation of regional polities along the fringes of imperial space.

The Limits of Colonial Infrastructure in Hellenistic Central Asia: Decentralized Administration in the Rural Oases of Bactria and Sogdiana

Zach Silvia

Bryn Mawr College, USA

From the late 4th - late 2nd c. BCE southern Central Asia fell under the administration of Greek and Hellenized kingdoms out of the ashes of Alexander's conquests. Ancient Mediterranean sources indicate that the territories of Bactria and Sogdiana were administered from only a few cities despite covering a territory encompassing northern Afghanistan and much of Uzbekistan and Tajikistan. This seems to be confirmed by the discovery of Seleucid and Greco-Bactrian urbanization at the sites of Bactra and Ai Khanoum, although other administrative centers identified by ancient authors as cities are now known to have been large garrisons.

Present theories of Hellenistic imperial administration in Central Asia are urban-centric and are stymied by limited engagements with archaeological evidence from rural areas. This includes evidence for settlement patterns, hydrological management, fortification networks, and production centers documented and published in Russian by Soviet and post-Soviet scholars. This talk explores evidence for imperial infrastructure in the rural hinterland of Hellenistic Central Asia. Drawing on a new, near comprehensive archaeological gazetteer of Hellenistic Central Asia combined with explorations of a relict rural landscape in western Sogdiana, I suggest a decentralized but extractive

mode of colonial rule in this region. Whereas garrisons and fortifications were planted along major road networks, likely to extract taxes and monitor rural populations, decisions about hydrological infrastructure and agricultural production were likely left up to locals. This complicates notions of centralized Seleucid and Greco-Bactrian kingdoms in Central Asia and indicates instead the fragility of rule outside of the urban centers.

SESSION: 8F. Interdisciplinary Approaches to Seals, Sealing Practices, and Administration II

Chair(s): Sarah Scott, Wagner College | Oya Topçuoğlu, Northwestern University

An Official Community of Practice: Neo-Assyrian Seals with Ninurta and Anzu

Kate Justement

Institute for the Study of the Ancient World (ISAW), New York University, USA

Most often analyzed through an historical lens as tools of administration or through an art historical lens with an eye to iconographic meaning, cylinder seals are a rich resource for studying society in the ancient Near East. This paper will consider a small group of Neo-Assyrian period (ca. 1000 – 612 BCE) cylinder seals that utilize a similar iconographic scene – that of the warrior god Ninurta shooting the mythical Anzu bird. In an attempt to contextualize these seals more deeply, some of which are directly attested as the seals of Neo-Assyrian officials, this paper will explore potential connections to various other media within the provincial administrative sphere. Utilizing a community of practice theoretical lens, this paper will also discuss the ways in which the myth of Anzu and the warrior aspect of the god Ninurta are often utilized allusions among the administration of the Neo-Assyrian Empire. Additionally, the myth and the seals this specific scene appears upon will be tentatively argued to be a building block for ideological group cohesion among various actors across the Neo-Assyrian administrative operation.

Discoveries through Digitization: Seals in the Yale Babylonian Collection

Elizabeth A. Knott

Yale University, USA

In 2020–2021, the Yale Babylonian Collection undertook a seal digitization project supported by the CLIR foundation. The goal of this grant was to digitize all c. 4,000 stamp and cylinder seals in the collection – many of which had never previously been published. The photographic documentation of a large collection of seals required the standardization and systemization of approaches and practices. This presentation focuses on the insights that came about through the digitization project, ranging from the orientation of prehistoric stamp seals to the endless nature of cylinder seal images and the object biographies of bezel inlays. It also offers an assessment of the challenges of digitizing small intricately carved seals made of a variety of materials.

Digital Glyptics: New Approaches to the Study of Stamp-seals from the Southern Levant

Eythan Levy, Stefan Mürger

Bern University, Switzerland

The paper presents ongoing research of the Swiss-Israeli project “Stamp-seals of the Southern Levant – A Multi-faceted Prism for

Studying Entangled Histories in an Interdisciplinary Perspective”, funded by the Swiss National Science Foundation. In this presentation, we focus on aspects of data visualization and analysis, following a digital humanities approach.

The project’s database comprises ca. 12’000 items unearthed in controlled excavations both in Israel/Palestine and Jordan. It is based on Othmar Keel’s pioneering work, whose printed “Corpus of stamp-seal amulets” comprises ca. 7500 entries. This corpus has now been fully digitized and is being complemented by the addition of the remaining ca. 5000 items by an international team of scholars.

The implementation of the large collaborative database raised several practical and methodological challenges related to topics such as taxonomy, chronology, clustering or spatial distribution. We addressed these challenges by developing digital tools, which will be show-cased in the presentation.

New Insights from Stamp Seal Photography

Ben Greet

University of Zurich, Switzerland

As part of the “Stamp Seals from the Southern Levant” (SSSL) project – an interdisciplinary and international project building on the research of Othmar Keel through his Corpus of Stamp-seal Amulets from Palestine/Israel (6 vols. 1995-2017) – photography of all six sides (following Baruch Brandl) of c. 900 seals was conducted at several museums in both Europe and the United States. This paper will present a methodology for stamp seal photography based on this work, including equipment and workflow, as well as several new insights and issues related to glyptic studies that were revealed by this work, which include (but are not limited to):

1. The subjective nature of photography of stamp seals is hidden behind the presentation of photographs as objective data. Instead, photography should include a detailed methodology that indicates the impact that this process has on the data presented (which we will include in our eventual corpus and database).
2. High resolution images highlight new details – especially in relation to production – and their inclusion within a new digital database allows all interested scholars to access a degree of resolution that cannot be reproduced in print published material.
3. Inclusion of all six sides of the seal (especially with broken seals) reveals new information about the material of seals that should now be supplemented by measured weights and possible density calculations. Additionally, this enhanced photography can either highlight (e.g., through chips and breaks) or obscure (e.g., not representing transparency) material details.

SESSION: 8G. CRANE 2.0: Large-Scale Data Analysis and the Reconstruction of Human-Environment Interaction in the Ancient Near East

Chair(s): Timothy P. Harrison, University of Toronto

Agent-Based Modelling of Human-Climate Interactions in the Ancient Near East

Lynn Welton

University of Toronto, Canada

In recent years, it has become inescapably clear that the ultimate impacts of climate change are not simply due to its environmental effects, but have also been mediated through global social and political responses to such change. The ways that climate change influences society therefore are inherently both environmental and social phenomena. Understanding of ancient climate and its significance to human societies is a complex problem, involving a combination of not only the variability of climate both through time and across space, but also the problem of ancient societies' perception of these changes and their response to or mitigation of perceived risks associated with them. Palaeoenvironmental proxy data, combined with global or regional climate modelling, can provide us with a series of realistic possible climate scenarios, but does not provide insight into how societies may have reacted to changes in environmental conditions. This paper examines the role that agent-based modelling can have in testing possible ancient responses to climate variability and in reconstructing how human populations might have perceived and responded to these changes, with particular reference to CRANE's ongoing agent-based modelling initiative. This approach allows us to examine more systematically the potential responses that individual households or communities could have had to perceived changes in their environment, and their ultimate impacts on variables such as population dynamics and patterns of land use.

Severe Multi-Year Drought Coincident with Hittite Collapse: Historical Implications

Sturt W. Manning

Cornell University, USA

What types of climate change could substantially affect human history? The past holds evidence addressing this pressing and much discussed modern concern. At the same time: too often in recent scholarship various and general shifts in climate are attributed historical explanatory power without specific and detailed articulation and explanation. The end of the Late Bronze Age ca. 1200BC is an example. A ca. 300-year (low-frequency) shift to drier, cooler, climate conditions from about 1200 BC is regularly associated with the collapse of several ancient civilizations in the East Mediterranean-Near East. However, specifics of synchronized climate and human-history-scale associations are lacking. To the contrary, the archaeological-historical record contains multiple instances of human societies successfully adapting to low frequency climate change. Instead, it is likely that particular back-to-back multi-year occurrences of rare, unexpected, extreme climatic events may push a population beyond adaptation and centuries-old practices providing resilience. This paper examines the collapse of the Hittite empire, one of the great powers in the ancient world for five centuries, ca. 1200 BC. Comprising a vast empire centered in a semi-arid region in Anatolia with political and socioeconomic interconnections throughout the ancient Near East, the Hittite empire faced regular--and intersecting--sociopolitical,

economic, and environmental challenges, but proved resilient. Ring-width and stable isotope records obtained from contemporary juniper tree-rings in central Anatolia provide a novel high-resolution drought record. An unusually severe continuous drought ca. 1198-1196 ±3 BC potentially indicates a tipping point previously avoided – and highlights the type of episode capable of overwhelming contemporary risk-buffering practices.

High Resolution Climate Modelling of the Near East

Deepak Chandan, Fengyi Xie, Richard Peltier

University of Toronto, Canada

Recent years have been witness to a steady rise in collaboration between the fields of archaeology and numerical palaeo-climate modeling for the purposes of understanding the climatic controls on the dynamics of ancient societies. The climate modelling and the agent-based modelling initiatives of the CRANE project seek to build on this momentum to understand the human climate interactions in the Ancient Near East.

To understand those interaction, one needs to first understand the “Green Sahara” that existed during the early and the middle Holocene. The transformation of the Sahara Desert into a vegetated and habitable landscape and its subsequent demise were important external influences on the Chalcolithic societies in Northern Africa and the Middle East.

We present the results of our efforts to understand this Green Sahara and model the climate of the mid-Holocene Near East. We will discuss the theory of onset and termination of the Green Sahara using results from Global Climate Models (GCM), and the characteristics of high-resolution climate for the mid-Holocene Near East that we have obtained using a dynamically downscaled methodology involving a Regional Climate Model (RCM). The higher resolution of the RCM compared to the GCM (~30 km vs. ~100km) allows us to better capture the regional topographical heterogeneities and provide distinct past climate reconstructions at each archaeological site of interest. The RCM also includes a high-resolution Mediterranean Sea component. The data from our high-resolution model will provide an important external input to CRANE's agent-based modelling initiative.

Paleoethnobotanical and Isotopic Research and the Reconstruction of Human-Environment Interaction in the Orontes Watershed

Doga Karakaya

University of Tübingen, Germany

In this study, we analyzed ancient plant remains to distinguish certain environmental, climatic and anthropogenic factors that might have affected the environmental stability from two settlements in the lower Orontes Basin; Tell Tayinat and Zincirli Höyük. Our analysis aims to diachronically compare the ecological characteristics of different plant species through the Early and Middle Bronze and Iron Ages. To date, approximately 300 paleoethnobotanical samples have been analyzed at both sites, resulting in classification of more than 200 plant categories. Preliminary results indicate that although both sites are located along the same geological formation in the Orontes Watershed and almost identical crop choices through ages, the diversity of wild/weedy plants differ among two sites. The ancient plant remains from Tell Tayinat and Zincirli offer a number of important aspects to investigate climatic and/or anthropogenic impacts on the environmental conditions, human decision for crop plant use, crop growing conditions, and soil fertility.

New Paleoenvironmental Evidence from Cores Collected in Southern Iraq: A Preliminary Report

Graham Philip¹, Dan Lawrence¹, Jaafar Jotheri²

¹Durham University, United Kingdom. ²University of Al-Qadisiyyah, Iraq

Southern Iraq witnessed the emergence of the first complex societies, including cities, states and empires. Understanding the landscapes in which these entities operated is critical to explaining this emergence. At present, however, we have limited knowledge of the nature of the environments within which these developments took place. This paper will offer the first report on the evidence from three trial sediment cores, each approximately 12 m in depth, collected at offsite locations in the vicinity of the ancient cities of Ur, Larsa and Adab, in late 2020.

SESSION: 8H. Bioarchaeology in the Near East

Chair(s): Megan A. Perry, East Carolina University | Sarah Schrader, Leiden University

Isotopic Assessment of Diet and Infant Feeding Practices among Ottoman-period Bedouin from Tell el-Hesi

Lesley A. Gregoricka¹, Jaime M. Ullinger²

¹University of South Alabama, USA. ²Quinnipiac University, USA

While ethnographic and ethnohistoric studies among Bedouin populations have provided important information about the foods consumed by these groups, little bioarchaeological work has focused on Ottoman-period Bedouin communities. Here, stable nitrogen and carbon isotopes from human skeletons (n=20) recovered from Tell el-Hesi (1500–1800 CE) in the southern Levant offered the opportunity to learn more about past foodways and infant feeding practices among historic Bedouin.

Adult $\delta^{15}\text{N}$ values point to the importance of animal products for these communities. Nevertheless, differential access to animal protein was evident between the $\delta^{15}\text{N}$ values of males (mean = $10.7 \pm 0.4\text{‰}$) and females ($9.2 \pm 0.6\text{‰}$), who may have consumed proportionally more plant-based proteins. Carbon isotope values suggest a mixed C_3 - C_4 diet for both females ($-17.6 \pm 0.5\text{‰}$) and males ($-17.3 \pm 0.1\text{‰}$) and indicate that C_4 products like millet or sorghum may have contributed to diet, obtained either through trade or grown by Bedouin themselves. Alternatively, higher $\delta^{13}\text{C}$ values may have come from the consumption of secondary products from C_4 -grazing animals like camels.

Nonadult $\delta^{15}\text{N}$ values reveal an extended period of supplemental breastfeeding for at least two years – similar to those reported among more nomadic historic Bedouin groups – before values decline to those found in adults. Higher $\delta^{13}\text{C}$ values among nonadults ($-15.7 \pm 1.9\text{‰}$) differed statistically (Mann-Whitney: $U=12.5$; $z=1.74$; $p=0.04$) from those of adults, possibly indicative of a specialized diet for pregnant and nursing mothers as well as for young children that included more C_4 resources, perhaps derived from camel's milk or cereals.

Understanding Hidden Heterogeneity in Frailty through the Social Determinants of Health: A Case Study from Ancient Egypt

Anne Austin

University of Missouri - St. Louis, USA

In 1992, Wood and colleagues published a landmark article discussing three key issues that challenge how we can interpret health in past populations: demographic nonstationarity, selective mortality, and heterogeneous frailty. The last of these remains a key issue as the

underlying factors impacting individual levels of frailty are often hidden.

Around this same period, public health experts were similarly challenged to explain health disparities on a global scale resulting in the concept of the Social Determinants of Health: factors in one's social structure, environment, and behaviors that can explain health inequalities.

In this paper, I argue that applying the Social Determinants of Health to bioarchaeological contexts can help reveal hidden heterogeneity by identifying how social structures in the past could have directly impacted health outcomes. As an example, I present my research on cribra orbitalia and enamel hypoplasia in three tombs – TT217, TT290, and TT298 – at the site of Deir el-Medina. The rates of these lesions in comparison to published data from other sites in ancient Egypt and Nubia suggest the people of Deir el-Medina had overall lower rates of childhood stress indicators. To explain this, I model how social cohesion – one factor within the Social Determinants of Health – is evidenced in texts from the site. Aligning this with results from public health research, I demonstrate processes through which social cohesion could lower rates of cribra orbitalia and enamel hypoplasias at Deir el-Medina.

New Archaeogenetic Insights into Population Dynamics in Syria, Lebanon and Cyprus during the 1st Millennium BCE

Philipp W. Stockhammer^{1,2}, Michal Feldman³, Stefanie Eisenmann², Eirini Skourtanioti², Hartmut Kühne⁴, Michael Schultz², Barbara Tessmann^{6,7}, Harald Ringbauer², Choongwon Jeong⁸, Johannes Krause²

¹Ludwig Maximilian University, Germany. ²Max Planck Institute for

Evolutionary Anthropology, Germany. ³University of Tübingen, Germany. ⁴Free University Berlin, Germany. ⁵University of Göttingen, Germany. ⁶Museum für Vor- und Frühgeschichte, Germany. ⁷Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte, Germany. ⁸Seoul National University, Korea, Republic of

In the past few years, archaeogenetic analyses have provided valuable insights into human interaction on population level in southwest Asia during the Bronze Age, adding information to the rich archaeological and historic evidence. However, compared to the 2nd millennium BCE, genetic transformations of subsequent periods are hardly understood. Now, we have reconstructed 2nd and 1st millennium human genome-wide data from present-day from Cyprus, Lebanon and Syria with a particular focus on Kamid el-Loz (Lebanon) and Tell Schech Hamad (Syria). Combined with the already published data of preceding and contemporaneous date, the new genomes enable a much better understanding of the demographic events taking place in this region during the 1st millennium BCE. We are now able to trace continuities and discontinuities with regard to populations on a biological level and shed light on individual and group mobility.

The Emergence of Fruit Tree Horticulture: New 7,000-year-old Findings from the Southern Levant

Dafna Langgut

Tel Aviv University, Israel

Compared to the evidence for the origin of cultivated cereals and pulses in the Old World, the information on the beginning of fruit tree horticulture is fragmentary. The study would provide the earliest robust evidence for olive (*Olea europaea*) domestication based on the occurrence of its remains outside *Olea* present natural habitat. Fig (*Ficus carica*) horticulture will be discussed mainly in relation to new remains from Chalcolithic Tel Tsaf (the occurrence of young charred

fig branches, most probably as a result of pruning). Other fruit trees like grapevine (*Vitis vinifera*) and date palm (*Phoenix dactylifera*) will also be examined for their natural distribution and current archaeological and archaeobotanical evidence. The paper will argue that the central Jordan Valley may have been the primary site of fruit tree domestication as early as ca. 7,000 years BP.

Philistine Rural Temple Economy: The Early Iron Age Fauna from Nahal Patish

Edward F. Maher

Northeastern Illinois University, USA

Excavations at the site of Nahal Patish in the northwestern Negev have previously revealed an Iron Age Philistine temple dating to the end of the 11th – early 10th century BCE. The non-domestic status of one area of the site as a functioning temple complex is suggested based on architectural features (layout of Structure 249, altar, standing stone, benches, and favissa pits) and additional ritual paraphernalia that includes chalices, stands, and a lion-headed drinking cup. The faunal sample from the temple precinct represents an opportunity to investigate the role animals played in ritual context in terms of their species selection, culling schedules, body part representation, symmetry bias, as well as other details. Relatively little data on Philistine cultic proceedings are known from rural occupations, and what exists is mostly derived from urban centers. This study represents an important opportunity to further understand early Philistine cult as it was performed in a boundary zone on the fringe of southeastern Philistia.

SESSION: 8I. Network Thinking and Methods in Near Eastern Research (Workshop)

Chair(s): Ioana A. Dumitru, Centre for Urban Network Evolutions, Aarhus University | Christine Johnson, Western Washington University

Building a Spatial Network of Stone Objects, the case of Tel Burna, Israel

Shih Hung Yang¹, Chris McKinny², Itzhaq Shai¹

¹Ariel University, Israel. ²Gesher Media, USA

Network analysis has been developed as a potential research approach oriented towards relational analysis. Since the late 1980s, archaeologists initially applied this approach in archaeology, and have been producing fruitful results in analyzing settlement patterns, regional interactions, trade networks, etc., which are mostly from a macroscopic perspective. But, can network analysis also be applied onto the intra-scale, and discuss the relation between archaeological remains? This paper aims to explore this possibility based on the spatial factor of stone objects found at Tel Burna, Israel. From 2011 to 2017, an enclosure on the site was excavated and it has been suggested that a Canaanite cultic space existed there which dated to the 13th century BCE. Hundreds of stone objects are distributed over 20 excavation squares, where implies the spatial characteristic related to the ritual behavior. By studying the typology, function and coordinate value of each stone object, we build a spatial network and enumerate centrality values of “betweenness” to describe the relation between objects and sub-spaces within the enclosure. NetworkX module of Python is the coding tool used in this research. An analysis of a spatial network composed of stone objects provides a more in-depth understanding when compared with the distributing pattern of stone objects, as the former represents where the core area of stone usage might have happened. We suggest that the application of network

analysis is still valid even within an intra-site scale and between material remains, when node and edge of the network are well defined.

The Pros and Cons of Using (Un-)directed Data in Social Network Analysis

Adrienne Spunaugle, Tero Alstola

University of Helsinki, Finland

Network analysis has received much attention of late from scholars of the ancient Near East as a means to organize and structure the multitude of data that may be gleaned from textual and archaeological sources. Unfortunately, however, less attention has been given to the network theory and sociological research that informs such approaches. Undirected networks have allowed us to suggest possible levels of relationships between persons mentioned in the same texts, but they are unable to tell us much about the hierarchy of individuals or analyze the type of relationships presented in the sources. Incorporating sociological analysis into network theory requires additional steps to encode the relational ties (edges) with the direction of the flow of power dynamics, but ultimately allows scholars access to additional insights into the lived experiences of the ancient world. We here present a small portion of our research into the social strata evidenced in the cuneiform record from Nippur, Iraq, between 747 – 477 BCE that illustrates the differences between approaching the data from an undirected and directed network.

In Her Interest: Exploring Female Agency through Kinship and Marriage Networks for Credit Practices in the Neo-Babylonian and Persian Periods

Evelien Vanderstraeten

University of Helsinki, Finland

To date, no comprehensive study exists on the correlation between kinship and marriage ties and women’s ability to improve their socio-economic situation in the Neo-Babylonian and Persian periods (630–330 BCE). Women, whether married, unmarried or widowed, took up economic responsibilities within their family or household. This study looks at loans as an avenue for women to gain more economic independence and to expand their individual network. The sources used are the clay tablets inscribed with legal texts in cuneiform script kept in private family archives. Profiting from the ongoing digitization in the field of Assyriology that made the majority of the vast and scattered text corpora accessible via open-access digital repositories (Proso Bab, HBTIN, Oracc), this paper addresses firstly the logistics of building-up the dataset and secondly the networks. The women in the texts held three roles: creditor, debtor or guarantor. The credit provided, derived either from their dowry or non-dowry property. The results show a wiggle room shaped in response to the constraints of the patrilinear inheritance law and forthcoming from a sense of family solidarity in which women could lend either to family or to non-family members.

Confronting Uncertainty in the Archaeological Record: A Network Analysis Perspective

Ioana A. Dumitru

Centre for Urban Network Evolutions (UrbNet), Aarhus University, Denmark

Information used to configure archaeological networks can be impacted by many potential sources of error resulting from incomplete datasets, inconsistent data quality, speculative typologies, inaccurate value estimates, non-representative sampling, etc. This is

not a problem that is unique to archaeological network analysis, but rather a characteristic of archaeological research as a function of the fragmentary nature of the archaeological record. This presentation will reflect on the ways in which network analysis is distinctly impacted by data uncertainty while simultaneously being uniquely capable of negotiating and compensating for such field-wide issues. At the core of this presentation will be a critical examination of uncertainty around the longitudinal study of production activities from multi-period contexts associated with wide chronological date ranges. The case study that forms the basis of this presentation considers problems around measuring change in the production process associated with 1600 years of obsidian exploitation, production, and trade in the northern Horn of Africa.

Trust and Social Network Formation in the Archaeological Past

Laura A. Swantek

Arizona State University, USA

Social mechanisms for trust must be in place for people to form lasting and productive connections in a social network. Research indicates that institution-based trust is founded on the observation of past behaviors and the building of social capital over time, but identification-based trust or trust based on cultural similarities is immediately and more freely granted between strangers. How do we recognize the latter form of trust and measure it when studying social networks in the archaeological record? This workshop presentation will briefly discuss examples of identification-based trust and offer insights into how we can better understand the formation processes of social networks in the past.

Musical Soundscapes of Mesopotamia

Anna Glenn¹, Ioana A. Dumitru²

¹University of Munich, Germany. ²Center for Urban Network Evolutions (UrbNet), Aarhus University, Denmark

From the late third millennium through the first millennium BCE, numerous textual and iconographic sources attest to a rich tradition of ensemble performances. Although many instruments attested in cuneiform texts cannot be identified with precision, in most cases it is possible to identify an instrument as a string, percussion, or wind instrument, and, in conjunction with the iconographic repertoire, to recognize particular features of the musical soundscapes of different periods. In this paper, we apply social network analysis (SNA) to visualize and analyze the relationships among individual musical instruments, in order to explore the configuration of instrumental ensembles across time and space in Mesopotamia.

Our primary data comprises a database of Sumerian and Akkadian passages in which musical instruments are played in an ensemble, spanning multiple text types (literary, liturgical, academic, documentary) and periods (late third millennium through first millennium). Using this database, we generate SNA diagrams to illustrate potential relationships among instruments mentioned: each Sumerian and/or Akkadian instrument name is represented as a node, and each instance of this instrument being played with another is represented as a tie. Analyzing these diagrams, we are able to identify patterns in the instrument types typically played together.

Having presented promising results for this methodology for first millennium texts at last year's annual meeting, we now present a diachronic study exploring the applicability of SNA in identifying and tracing shifts in the Mesopotamian musical tradition.

Transportation Routes and Network Models

Christine L. Johnston

Western Washington University, USA

This presentation will examine the opportunities and challenges of using formal network methods to examine trade and transportation routes in the ancient Mediterranean. Network models have been used to examine a variety of complex systems in the past, visualizing and analyzing existing and emergent social processes. From trade systems to transportation routes to inter-site viewsheds, networks can help us understand the interplay between society and their landscapes. Network graphs can be rendered to reflect actual physical space or topological correspondence, highlighting spatial or behavioural relationships in the data. In this workshop contribution, object distribution networks will be assessed against administrative and geographic networks—include overland and riverine transport—to examine the best methods for integrating different types of network data (GIS, textual, material, etc.). As a case study, this presentation will use Late Bronze Age imported ceramic network data from New Kingdom Egypt.

SATURDAY, NOVEMBER 19, 2022 | 8:20am-10:25am (EST)

SESSION: 9A. Art Historical Approaches to the Near East I

Chair(s): Stephanie Langin-Hooper, Southern Methodist University | Leticia Rodriguez, Trinity University, Department of Classics

A Cooperative Empire: Depicted Animals and Reciprocal Constitution at Persepolis

Neville G. McFerrin

University of North Texas, USA

In the reliefs that enliven the stairways of the Apadana, animals and human delegates process together. While these animals, are often understood as tribute, unlike the objects carried as gifts for the king, these animals, like the delegates they accompany, convey themselves in the procession, walking before, behind, and alongside their human counterparts. Although directed by delegates, in none of the twenty-one delegations in which animals appear is any delegate depicted administering pain in an attempt to correct or coerce any animal, even those, such as lions, which might cause bodily harm to the humans that surround them. Much as Persian ushers take armed human delegates from subject nations by the hand to lead them towards the king, so too do human delegates lead lions and camels alike through reciprocal touch.

This paper asserts that the depicted relationships between humans and animals on the reliefs of the Apadana conceptualizes the agency of animals in parallel to the agency of humans, acknowledging animals as actors in their own right, and in doing so, offering an avenue through which to consider the reciprocal, mutually supportive relationships that are at the core of the Achaemenid imperial system, as it is conceptualized on the site of Persepolis. Through a consideration of animal movement, the dress of animals, and the comportment of humans interacting with animals, the paper argues that, like the delegates who accompany them, animals join the system as partners, a partnership that doubles that of subject and ruler.

Where Image and Word Meet: The Stele of Vultures

Taha Yurttas

Harvard University, USA

The well-known Stele of the Vultures from Tello (ancient Girsu) commemorates in a mythico-historical narrative the border conflict between the city-states of Lagash and Umma c. 2450 BC. This paper explores the interaction between text and imagery, focusing on the location of the textual narratives in relation to visual representation. Using a combined analysis of visual and linguistic syntax, it takes the argument in Winter SHA 16 (1985) a step further and argues that an integrated reading of the two media, down to a level of Sumerian grammar, is necessary to fully untangle the message conveyed by the monument. The complex composition it bears must have been effected through a collaborative effort between sculptor(s) and poet(s) who jointly determined its spatial arrangement.

The Date Palm and the Volute Motif

Norma Franklin

University of Haifa, Israel

The date palm symbolizes eternal life. This attribute is well documented on the walls of Aššurnaširpal's 9th c BCE palace at Nimrud. The message of the date palm spread westward, just as the date palm had done some 500 or perhaps even a 1,000 years earlier. The physical date palms are lost to us, although occasionally we find their pits and their pollen in the archaeological record. What does

remain, carved in stone and fashioned in ivory, is the volute motif. This motif represents the base of the date palm, the very essence of the date palm's message of eternal life. Thus the motif became a protective device, a symbol of life eternal. This presentation will trace the use of the volute motif in the Levant during the Iron Age and discuss how the motif and the date palm continued to be associated with funerary cult and ritual.

The Left-Handed Scribes of Ancient Egypt

Ella Karev

University of Chicago, USA

In the context of innovative and experimental ways to approach physical copies of written texts, this paper addresses the hand behind the brush, or more accurately, its 'handedness', also known as laterality. Laterality refers to the use of one dominant hand or the other, especially in fine motor skills like writing or painting. In both art and writing, laterality can be determined through an analysis of the direction of individual strokes: we are more likely to 'pull' rather than 'push' an ink-laden brush, and so right-handed writers tend to pull their writing implement from left to right, whereas left-handed writers do the opposite, regardless of the direction of writing, i.e. left-to-right vs. right-to-left.

The experimental aspect of this paper comes in the form of collected brush-writing samples from left-handed writers, including those whose native language is written left-to-right as well as those whose native language is right-to-left; the stroke directions of these writers indeed suggest that—as in art—laterality can be determined in brush-writing on papyrus. This paper explores both the concept of determining laterality—a new approach in textual studies—and the possible identification of a left-handed scribe in P. Berlin 3023 and 3025 (The Tale of the Eloquent Peasant) on the basis of previous art-historical research as well as the collected left-handed brush writing samples.

The Fights of the Gods in Akkadian Period

Laura Battini

The French National Centre for Scientific Research (CNRS), France.

Akkadian artists began an unusual theme that seemed to disappear in the following epochs, the struggles between the gods. Seventy or so cylinders represent this motif, with a refined style and execution designed to arouse the most emotion. This motif linked to the representation of the human world is anthropologically distressing. Through the use of seals and inscriptions, the present communication aims to understand to which audience this theme was intended, why it appears in this era to disappear later and what are its meanings.

SESSION: 9B. Manners, Etiquette, and Protocols in the Ancient Near East I

Chair(s): Ludovico Portuese, University of Pennsylvania, Università degli Studi di Messina

How to Say "please" in Ancient Egyptian: An Analysis of Politeness in Old Kingdom Personal Letters

M. Victoria Almansa-Villatoro

Brown University, USA

After Brown and Levinson's 1987 *Politeness: Some Universals in Language Usage*, the study of (Im-)Politeness has become a productive topic in pragmatics and linguistic anthropology. Over the last decade this field of study has expanded to investigate the use of linguistic

etiquette in ancient correspondence. In this paper I present my research on politeness in Old Kingdom Egypt (c. 2700-2200 BCE) using personal letters sent from inferiors to superiors, between equals, from superiors to inferiors, and to deceased relatives. My work had primarily two research objectives: 1) determining whether the most common and appropriate communicative behaviors in Egypt were rooted on connection/proximity appeal (positive politeness) or deference/distance (negative politeness). 2) assessing whether in Old Kingdom Egypt politeness was socially mandated and followed rigid hierarchical rules (discernment culture), or is part of a strategical behavior for which speakers evaluate risks and benefits to maximize success (facework culture). My findings show that social solidarity and a strategical appeal to community sentiments overruled deference even in communication with superiors. However, hierarchically mandated behavior was also present in such unnegotiable practices as the use of honorifics. Finally, letters to deceased relatives are remarkably “impolite”, which suggests that benefits from deceased were most effectively attained by means of the ritual actions that accompanied letter deposition. As a whole, my research argues that manners in communication created and strengthened relations with living peers in the same way that cult maintenance and care provided dead relatives with their place in the Egyptian society.

The Importance of Being Reckless: Mores in the Ur III Times in Light of the Court Records di-til-la

Andrea Rebecca M. Marrocchi Savoi

Sapienza Università di Roma, Italy

The period of the Third Dynasty of Ur (hereafter Ur III, XXI century B. C.) is one of the best documented in all of human history, currently about 120,000 edited texts are known. Although there is no Mesopotamian Galateo ovvero de’ costumi of the 3rd millennium B.C., it is possible to partially recreate the socially accepted etiquette during the period of Ur III through data emerging from the corpus of di-til-la. The di-til-la are legal texts from the Ur III period that record court proceedings and give insight into several aspects of the social order during that time. Legal texts, by their nature, are the result of an event felt to be a break in established social practice. Through the recording of the vulnus, these documents provide significant information regarding what was considered misconduct. Therefore, it is possible to reconstruct part of the social etiquette by proceeding in an opposition reasoning, i.e. the contrary of what is condemned would be the socially accepted behavior. Hence, the aim of this paper is to provide a general overview of socially accepted conduct and behavior in the Ur III period. After a brief introduction on the corpus, the most significant texts for the analyses in this paper will be presented. Based on the data emerged from the di-til-la corpus, the manners of the period will be reconstructed, focusing on the connection between mores and social roles. Not of secondary importance will be the analysis regarding the etiquette of different genders.

Exploring Manners, Etiquettes, and Protocols with Šuila-prayer Ištar 1

Alan Lenzi

University of the Pacific, USA

It is well-known that ancient Mesopotamian prayers reflect various social manners, etiquettes, and protocols and thus offer a veritable treasure trove of data for the purposes of this session. Rather than survey a host of texts and compile example upon example in an avalanche of disconnected data, I use one particular prayer in this

paper, the *šuila*-prayer known as Ištar 1, as both a point of entry into the data and a point of departure for its exploration. I interpret this prayer with an eye on the many ways in which various gestures, postures, expressions, and proxemic interactions combine to establish, on the one hand, a clear hierarchy between the meek supplicant and the mighty divinity and to create, on the other, the requisite rapport with which the supplicant importunes the goddess to respond favorably. As much as the supplicant assumes the divinity’s domination and subjugation over the human sphere, the supplicant also boldly requests the divinity’s specific attention as reciprocity—a reply in kind—for services rendered. Assuming a male supplicant (the prayer is used in the royal *bīt salā`a mē* ritual), my interpretation also explores the gender dynamic between the man who offers the prayer and the goddess to whom it is directed.

The Gifts at Ebla: An Anthropological Perspective

Lorenzo Verderame

Sapienza Università di Roma, Italy

The archive from the royal palace of Ebla is an exceptional case in the Ancient Near East. It is the oldest excavated palatine archive and the only one dated from the third millennium. The archive, which is complete, presents an exhaustive documentation of the palace activity for a period of about fifty years. Most of these documents record entries and deliveries of goods and services from and to Ebla and other major cities of the region. The Ebla palace periodically distributed large quantities of goods, mostly textiles and metals, to foreign rulers and officials as well as to the Ebla personnel. This entire system has been analyzed through the conceptual frame of “commerce”, assuming these gifts were outgoing goods.

In this paper, I will analyze these issues from a different perspective. The adoption of a modern exchange perspective and its related terminology and concepts has distorted our understanding of a more complex system of relationships in an area where proto-state and tribal urban societies coexisted and whose structure and functioning we do not yet fully understand. In order to grasp the dynamics of this (re)distributive system, in this paper I analyze the goods issued by the Ebla palace to officials and rulers through the anthropological lens, focusing on the “gift exchange” theory. The paper suggests that, even though trade may have been the primary or secondary purpose, these gifts should be taken into account in their symbolical dimension as creators of complex relationships between the participants.

Curriculum and Political Culture at Old Babylonian Nippur

Philip Jones

Penn Museum, University of Pennsylvania, USA

The last few decades have seen scholars make considerable progress in understanding how the scribal curriculum of Old Babylonian Nippur and other contemporary cities taught students to write Sumerian in cuneiform. In general, the scholarly emphasis has been on identifying the different stages involved in this educational system and how they contributed to the junior scribes’ acquisition of literacy.

This paper, in contrast, will examine parts of that curriculum to answer the question of what lessons for their future role in adult society, the students may have been expected to absorb along with the basic ability to read and write.

SESSION: 9C. Trade, Entanglement, and Cultural Interconnections in the Greater Hesi Region: Interdisciplinary Approaches

Chair(s): Kara Larson, University of Michigan | Geoffrey Ludvik, University of Wisconsin - Madison

How to Determine If Someone Is Lying?

Jeffrey A. Blakely

Cobb Institute of Archaeology, USA. University of Wisconsin-Madison, USA

During excavations between 1977 and 1983 the Joint Archaeological Expedition to Tell el-Hesi identified a workshop facility in Areas 1, 2, 3, 11, 12, and 13 of its Field VI. Neither Gary L. Johnson (the supervisor), the project's senior or junior staff, the student workers, nor the specialist staff could identify potential product(s). The production of incised bone tubes was suggested and ultimately it was confirmed that this was one product of the workshop, but given the size and character of the workshop such a product could only be a secondary byproduct of a larger process. Our recent research into the production of incised bone tubes suggests that one step in the manufacturing process involved heating the bone in a solution of sodium hydroxide, potassium hydroxide, or a combination of the two. This conclusion reinforced an unsupported speculation that the installation was a lye production workshop, if not a soap manufacturing facility. The context is EBIIIA and no comparable facility is known in the region for over three millennia.

Among the factors to consider whether lye, or even soap, was being made includes: was the technology known, were the needed resources available (or uniquely available), is there a tradition of making lye or soap known in the region, is there evidence of resource utilization found in the archaeological record, did the lye somehow mark needed tools or containers, how was the soap or lye being used, and is there evidence to support such a usage.

Tracing Carnelian Beads in the Southern Levant: Case Studies from Tell el-Hesi and Bet Dagan, Israel

Geoffrey E. Ludvik^{1,2}, J. Mark Kenoyer¹, Randall Law¹

¹University of Wisconsin-Madison, USA. ²Cobb Institute of Archaeology, USA

This study presents the results of comparative analysis of technological, stylistic, and mineralogical characteristics of carnelian beads from two sites in modern Israel/Palestine. We examine 18 carnelian beads from Tell el-Hesi from the Islamic period Bedouin cemetery, some in primary deposits, others either curated or mixed from much earlier levels, alongside 22 carnelian beads from the EB IV/MB I cemetery at Bet Dagan.

To compare the similarities and differences in carnelian beads from a single-period site and a multi-period tell, we consider context, style, morphometric proportions, technology of production, and preliminary elemental composition. Using detailed measurement protocols, elliptical fourier function analysis, scanning electron microscopy, analysis of drill hole taper, and laser ablation inductively-coupled plasma mass spectrometry (LA-ICP-MS), the authors assess the likely geographic/cultural origins of these beads. Using multiple lines of evidence, we argue that 21 beads from Bet Dagan derive from workshops associated with the Indus Valley, since they not only were made with Indus-style technologies but, based on the preliminary LA-ICP-MS results, appear to derive from carnelian sources in Gujarat, India. Such artifacts should be considered objects of high value, foreign to the Levant and representative of long-distance exchange. A different pattern of bead use was identified at Tell el-Hesi, with

carnelian beads demonstrating more diverse styles, techniques, and possible sources in Egypt, Arabia, and India. It is hypothesized that this difference reflects changes in interregional connectivity in different time periods.

Pondering Pigment Purpose and Procurement During the Late Bronze Age III

Sarah J. Richardson

University of Manitoba, Canada

Pigments have been in use for the past six millennia in multiple contexts. Their earliest use is in the decoration of pottery, which used easy to gather naturally occurring materials that were simple to use. Often these include oxides of readily available minerals such as iron or copper. Throughout the progression of their use, the pigments themselves became more refined and synthetic pigments were developed, the earliest of these was Egyptian blue. In addition to becoming more refined they also became more widespread to include the painting of statues and walls, more detailed decoration of pottery, cosmetics, ink for writing, and occasionally dyes. There are written records of different pigments from both Mesopotamian and Egyptian archives from the Early Bronze Age as well as later Greek and Roman archives, and writers such as Vitruvius and Pliny the Elder.

When recovered archaeologically, unused pigments, those considered here, are commonly found adhered to pottery or containers and as separate lumps that are thought to represent manufactured or reduced pigments ready for use. Presented here is an investigation of pigment use and procurement throughout the Southern Levant from the Late Bronze Age. This is done by considering both the pigments themselves, for the procurement, and the context of the pigments including both the surrounding materials recovered and the use of the structure, to determine possible purposes when combined with written sources from the period.

Artifacts in Transit: Potter's Marks in the Hesi Region

Rachel Banks

Mississippi State University, USA

The Early Bronze III potter's marks found at Tell el-Hesi and the nearby site of Tel Halif are unusual in the corpus of Levantine pottery. Potter's marks have been found at numerous sites in the greater Hesi region, from Hesi to Megiddo, dating from the Bronze to the Iron Age. What makes the potter's marks from Hesi and Halif curious is that the marks appeared at both sites in the EBIII, that X-ray fluorescence tests and neutron activation analysis studies both indicate that the potter's mark sherds to be local in manufacture, and that the marked sherds nevertheless exist alongside evidence of extra-regional trade.

This paper explores the possibilities of local pottery production in contexts outside of household industry. It will examine the potential for large-scale, specialized local production of pottery at Tell el-Hesi and Tel Halif with the evidence provided by the potter's marks. With the data from these two sites, I hope to reevaluate the scope and variety of EBIII ceramic production at Tell el-Hesi and also reimagine some theoretical frameworks surrounding primary state formation in the greater Hesi region.

Tracing a Craftsperson: An EB III Levantine Bone Tube Production Center for the Southern Levant

Kara Larson¹, Geoffrey E. Ludvik², Jeffrey A. Blakely^{2,3}

¹University of Michigan, USA. ²University of Wisconsin - Madison, USA. ³Cobb Institute of Archaeology, USA

Recent work at Tell el-Hesi, Israel has established the presence of a bone tube workshop operating during the EB IIIA (2800-2700 BCE). Levantine bone tubes from the Early Bronze Age are typically constructed from ovicaprine or cattle long bones and incised with various decorative linear motifs. These artifacts are rare in the archaeological record and, when encountered, are recovered primarily from Early Bronze Age elite burial and settlement contexts. Thus, the discovery of a bone tube workshop at Tell el-Hesi provides the unique opportunity to look at the distribution of such artifacts across the Southern Levant to ascertain the level of trade and exchange between the workshop and the broader region. Based on the proposed workshop *chaîne opératoire* and the established baseline of morphometric variation characterizing the Hesi workshop style/tradition, bone tubes recovered elsewhere are compared to this known production center. Here, we demonstrate that a subset of bone tubes from other EB sites in the Levant share morphometric proportions, motif sequences, styles, and materials with the bone tubes recovered from Tell el-Hesi. The authors interpret these artifacts as products of the Hesi workshop, providing evidence for a bone tube exchange operating during the EB IIIA period. Thus, Tell el-Hesi is contextualized as an established and engaged entity in a broader entanglement with other nearby sites during such a formative period in Levantine prehistory.

Dating with ¹⁴C: Results and Implications on Understanding the Temporal Landscape of Tell el-Hesi in the Region

Erika M. Niemann

Mississippi State University, USA

The results of ten ¹⁴C paleobotanical samples from the Early Bronze occupation at Tell el-Hesi will be presented. The samples were selected to represent the lifespan of the EB III occupation at the site. Through these results, the temporal landscape of Tell el-Hesi will be more resolutely defined which will aid in future scholarship conducted at the site. The resulting framework from this study will allow for chronological comparisons between Tell el-Hesi and regional neighbors. As a conclusion to this study, the implications of this research on the narrative of Tell el-Hesi in the region will be explored.

SESSION: 9D. Archaeology of Egypt III

Chair(s): Krystal Pierce, Brigham Young University

A Revolution in Portraiture: Queen Tiye and the Sculptor Tuthmose at Amarna

Paul Dambowic

Pratt Institute, USA

Cyril Aldred, in his 1951 book on New Kingdom art; and Jan Assmann, in his 1996 publication on the presentation of the self in Egyptian portraiture, underline the pharaonic role in the development of the new Amarna monotheistic theology and its visual iconography. They attempt to unravel the ambiguities of the realistic and the ideal in portraiture, and find the ideology and patronage of Amenhotep III and his son Akhenaten to be the key. This paper contends that the most revolutionary changes in Egyptian portraiture were negotiated

between the sculptor Thutmose and Queen Tiye, who was Amenhotep's wife and Akhenaten's mother. The bust in the Berlin Museum of her daughter-in-law, Queen Nefertiti, is a continuation of the new style that would allow for the representation of realistic signs of ageing and illness, and of the anomalies of physiology and medicine, in order to produce a lifelike likeness rather than an ideal type.

The plaster heads of the Thutmose workshop at Amarna, as well as the numerous images of Tiye, and even her skeletal and facial remains, provide an abundance of evidence with which to compare and test this hypothesis. It relies on the measurement and establishment of the canons of proportion of human physiognomy and facial geometry, and new techniques developed in the New Kingdom of the use of slight asymmetries to produce the new portraiture. These new techniques were transmitted to later workshops, and, eventually to Roman Egypt.

Remove Gender and Stir? The Case for Archaeology of Social Identities

Leah Neman

Joukowsky Institute for Archaeology of the Ancient World, Brown University, USA

2021 marked the thirtieth anniversary of the publication of *Engendering Archaeology*, a volume edited by Joan Gero and Margaret Conkey that invited archaeologists and their readers to push past the inherent androcentrism of contemporary studies and view their data in new ways. In this paper, I propose moving beyond gender to a heuristic framework of social identity in response to theoretical developments regarding gender, sex, and identity in the last three decades. I demonstrate this approach through a case study of ostraca from Deir el-Medina that mention menstruation as a pollutive process and consequently restrict the movement of both the menstruating individual and their male-bodied contacts. Almost all studies of gender in ancient Egypt focus solely on women and uncritically assume that "woman" as it is constituted by the body-determined modern structural essentialist category exists. Archaeology of social identities considers smaller, context-specific groups of people that are observably defined through their interactions with external axes of identity including femininity/masculinity, geography, divinity, and social role. This framework can be applied to at any level of the social scale; however, I believe the most exciting possibility of this approach is its potential to change how we discuss the societal groupings and treatment of non-elite individuals because it does not rely on self-identification. This paper opens a conversation and invites debate on the intersection of theory and methodology in Egyptological research.

Being Egyptian Abroad: Domestic Space in Foreign Lands

Thais Rocha da Silva

Universidade de São Paulo, Brazil. Harris Manchester College, University of Oxford, United Kingdom

This paper is part of a larger project that explores new methodologies to understand the Egyptian domestic space during the New Kingdom in foreign domains. While Egyptologists focused mainly on architectural features and domestic activities, not much attention was drawn to senses within houses. Settlements that housed specialised workforces were usually planned and allocated by the Egyptian state and their archaeological evidence shows various types of interaction between the government and the inhabitants of these settlements. In mapping these interactions, it is necessary to identify the type of domestic experience of the inhabitants taking into consideration sensory aspects of the houses, such as light, ventilation,

maintenance and control of temperature, visibility, odours and sounds. These elements are paramount to understanding the ways of living and the relationship that people established with the landscape in which they lived. The combination of Egyptian architectural elements from the houses combined with foreign features allows us to identify and understand the diversity of responses of these populations to the landscape and to the presence of the Egyptian state. How does living abroad affect people's lives? How social life was transformed in the domestic sphere impacting gender, family relations? In this paper, I discuss how some methodological approaches from Household and Sensorial Archaeology can improve our understanding of specific social negotiations within the domestic environment and the Egyptian presence in foreign territories.

A Solar-Ship Voyage: Ancient Egyptian Religion as Inspiration of Sun Ra and the Birth of Afrofuturism

Rita Lucarelli

University of California, Berkeley, USA

Presenting himself as an alien coming from Saturn, Sun Ra has been considered a pioneer of Afrofuturism whose music and live performances with his Arkestra are nowadays a classic in African-American jazz music, theater and poetry. Egypt has been a central source of inspiration for this polyhedric artist; this paper will analyze in particular how Sun Ra used and re-interpreted elements of the ancient Egyptian religious culture and its deities in his work and how such contents relate to the development of the Afrofuturistic philosophy within the American climate of political unrest during which he lived and performed.

SESSION: 9E. Archaeology of Anatolia I

Chair(s): James Osborne, Oriental Institute, University of Chicago

The 2022 Season of Work at Çadır Höyük on the North Central Anatolian Plateau

Sharon R. Steadman¹, Tevfik Emre Şerifoğlu², Gregory McMahon³, Burcu Yıldırım⁴, Jennifer C. Ross⁵

¹State University of New York College at Cortland, USA. ²Koç University, Turkey. ³University of New Hampshire, USA. ⁴Leiden University, Netherlands. ⁵Hood College, USA

After a study season in 2019, and two limited seasons due to the Covid-19 Pandemic, we were finally able to conduct a full-scale season of work in 2022. We continued excavations in the Chalcolithic operation on the southern slope which was the focus of work in 2021 as well. The ground stone foundation deposit discovered in the 2021 excavations of the Pre-Omphalos Open Air Western Compound was likely the first installation residents laid for the construction of this compound. The 2022 excavations have begun to reveal the underlying architectural compound which in many ways mimics the domestic agglutinated structure in the eastern area of the Chalcolithic exposure. Discoveries related to this new architectural phase in the Western Compound will be reported on in this presentation. We also continued our research on the 5200 and 5900 KYA climate change events, with special attention to how the Çadır community responded to climate variation to navigate food insecurity concerns.

We re-opened our Byzantine operations focusing on the chapel area on the western side of the summit. After our three-year hiatus we continued work in the Bronze and Iron Age excavations on the eastern and northern slopes of the mound. The extensive Hittite fortification

system suggests Çadır was a moderately important Hittite settlement. Our goal in 2022 and successive seasons is a greater exposure of the Hittite occupation which presently lies under significant Iron and Byzantine deposits currently under excavation. Our efforts toward this goal will be reported on in this presentation.

Application of Access Analysis to Middle Bronze Age Palaces at Kültepe, Alalakh, and Ebla

Atakan Atabaş

University of Illinois at Chicago, USA

Architectural features are key to understanding human interactions with buildings. Space syntax theory focuses on the effects on human behavior in space. Additionally, access analysis is one of the methods to help us understand the human behavior within a building in terms of the permeability of space. What is more, this approach provides information about how deep or shallow a building is, and this information can be used to discuss the functions of various sections in that building. In this paper, the accessibility of three Middle Bronze Age palaces at the archaeological sites of Kültepe, Alalakh, and Ebla is analyzed. The results of access analysis provide significant information not only about each palace's permeability but also offers perspectives on the similarities and differences in architectural traditions of different regions. The Warshama Palace at Kültepe and the Yarim-Lim Palace at Alalakh are comprised of 40 and 37 spatial units respectively, whereas the Western Palace at Ebla features 27 units. Based on the quantitative analysis of the spaces in each of these palaces, I argue that the Warshama Palace has the shallowest system of circulation. At the same time, the two other palaces in northern Syria are almost identical to each other in terms of depth value. According to the access analysis results, it is possible to claim that the architectural features and social norms of the urban societies in Ebla and Alalakh are relatively close to each other in terms of accessibility, while the Warshama Palace deviate from those two.

The Bronze and Iron Age Regional Center of Türkmen-Karahöyük: Final Results of the Türkmen-Karahöyük Intensive Survey Project

James Osborne¹, Jesse Casana², Petra Creamer², Anthony Lauricella¹, Michele Massa¹

¹University of Chicago, USA. ²Dartmouth College, USA

Building on preliminary survey results of the larger Konya Regional Archaeological Survey Project (KRASP), the Türkmen-Karahöyük Intensive Survey Project (TISP) was begun in 2019 with the goal of understanding the archaeological signature of the largest settlement in the archaeologically rich Konya Plain. Results in 2019 confirmed that this massive, 30 ha and 35 m tall mound was the region's most important site for much of its occupational history, including the Late Bronze and Iron Ages, when it apparently expanded off the mound to include a large but only faintly discernible lower city. Accompanied by the discovery of a significant Hieroglyphic Luwian inscription authored by "Great King Hartapu," that season established Türkmen-Karahöyük as the Iron Age capital city of the region and incidentally shed light on other long-mysterious monuments by the same individual. This paper reports the final results of TISP, including the discovery of fragmentary pieces of Iron Age sculpture and another Luwian stele, this time carved with only one sign. The most significant contributions of the past two seasons of fieldwork are the results of a large-scale magnetometry survey that reveals the architectural layout of the final late Hellenistic period of occupation on the mound's surface as well as the Iron Age

outer town. This work was conducted in collaboration with the Spatial Archaeometry Research Collaborations (SPARC) Program.

Re-organization of the Late Neolithic Settlement at Çatalhöyük in its Climatic and Environmental Contexts

Arkadiusz Marciniak

Adam Mickiewicz University, Poland

The final centuries of the 7th millennium BC were marked by significant changes in the functioning of the Neolithic settlement at Çatalhöyük. They corresponded with a significant deterioration of the local climate. In this paper, I intend to scrutinize the character of complex relationships between shifting occupations, offsite zone exploitation, and the 8.2-kyBP climate event. These developments will be discussed in the context of changes in the natural environment, in particular the drainage water system of the Çarşamba river, the reorganization of the settlement space, and the exploitation of its immediate environs. I intend to investigate whether the climatic changes of that period were the major driver of this significant re-organization of life for the inhabitants of the Çatalhöyük settlement. The paper shall also outline the character of the resilience strategy adopted by the Çatalhöyük inhabitants community towards the end of the 7th millennium BC.

A Provincial Scriptorium? Investigating the Storeroom/administrative Complex in the Lower Town at Late Assyrian Tušhan

Britt E. Hartenberger¹, Timothy C. Matney², M. Willis Monroe³, John MacGinnis⁴

¹Western Michigan University, USA. ²University of Akron, USA. ³University of British Columbia, Canada. ⁴University of Cambridge, United Kingdom

Excavations at the Late Assyrian provincial center of Tušhan (modern Ziyaret Tepe) revealed a palace on the high mound and a possible administrative building in the lower town. The administrative structure, Building II in Operation G/R, was located to the west of a building interpreted as the residence of a wealthy household. We have described Building II previously as a storeroom and administrative complex, given its tablets, tokens, and large quantity of stored goods. Its two-courtyard plan differs from the adjacent house, which has one central courtyard. In an ASOR paper in 2018, we described the finds across Building II and noted that some types of items were duplicated around both the southern and northern courtyards. We are now investigating if the building functioned as a scriptorium for a Temple to Ishtar, as suggested by Parpola based on the tablets found in its southern half, and if so, whether it functioned as two buildings or one. Since 2018, we have improved the phasing of the building, allowing us to reexamine doorways and passages, and have also completed a functional ceramic typology which will allow us to reassess use of space. We will compare Building II to other buildings where texts and possible archives have been found in other provincial centers as well as the imperial capitals.

Comparing Bronze and Iron Age Urbanism, Economy, and Environment at Zincirli, Turkey: Results from the 2021 Excavation

Virginia R. Herrmann¹, David Schloen², Kathryn R. Morgan³, Timur Demir⁴

¹Penn Museum, USA. ²University of Chicago, USA. ³Duke University, USA. ⁴Gaziantep University, Turkey

The 2021 excavation season at Zincirli, Turkey, combined targeted excavations on the central mound with a program of specialist analyses in order to deepen our understanding of activities at the site during the Middle Bronze Age II and Iron Age II and to broaden our perspective on these periods by comparing evidence for spatial organization, architecture, agropastoral economy, and paleoecology between the second and first millennia BCE. Excavation of Area 2 on the Eastern Citadel continued the exploration of the destroyed buildings of the Middle Bronze Age II and collected samples for the multidisciplinary study of the activities and environment of this complex. Among the discoveries this season was the first evidence of occupation at Zincirli during the Late Bronze Age under Hittite hegemony. In Area 3 on the South Citadel, we expanded the excavation of the first Iron Age II reoccupation of the mound, producing new insights into the construction of the fortifications of this period. And new excavations were undertaken in the area of the Northwest Palace for the first time in more than a century. This small exploratory trench in the midst of modern Zincirli village showed that this part of the mound served as a dumping ground prior to the construction of the Northwest Hallenbau and revealed new evidence for an intense conflagration. Finally, comparison of the results of archaeobotanical, phytolith, and archaeozoological analyses of material from the Middle Bronze and Iron Ages gives insight into the environment and economy of these two periods.

SESSION: 9F. Scribal Hands and Habits in Cuneiform Texts

Chair(s): Nicholas Reid, Reformed Theological Seminary (Orlando) and the Institute for the Study of the Ancient World (ISAW), New York University | Klaus Wagonsonner, Yale University

A Change of Hand: Some Thoughts on Code-Switching in Script

Klaus Wagonsonner

Yale University, USA

Code-switching is a term used in linguistics to refer to a speaker alternating between two or more languages or language varieties. In this paper, the term is applied to writing. It is not uncommon that scribes, either intentionally or unintentionally, switch between different writing styles. In cuneiform script, both more archaizing and more progressive or simplified sign forms are frequently found in close proximity to each other. This is particularly well attested in the Old Babylonian period. In later periods, the use of a different way of writing is often intentional. Scribes may highlight certain parts of a text such as significant terms or colophons. The use of certain writing styles may further be owed to the copying process. The paper aims at discussing these different types of code-switching and their possible reasons.

Linked Open Data for Cuneiform

Adam G. Anderson

University of California, Berkeley, USA

Wikidata's ontology for Linked Open Data already provides a multi-dimensional framework for linking numerous features of an inscribed artifact, such as a cuneiform tablet, but as of yet, there are no properties in place for recording scribal variations at the level of each individual cuneiform sign for a particular tablet. To address the growing need for linking textual data at the most granular levels, that of a scribal hand, this presentation will introduce the latest open source resources for linking distinctive features of a tablet, from characteristic sign forms to fingerprints and beyond.

Scribal Practice in the Mesag Archive: Wedges, and Language Use and Misuse

Emmanuelle M. G. Salgues

University of California, Santa Cruz, USA

This paper presents an overview of the scribal habits and practices found in the Mesag archive. The Mesag archive consists of more than 600 texts documenting the activities of a Sargonic estate in the heart of Sumer during Naramsin's reign. While the archives from the surrounding provincial centers, Girsu/Lagash, Umma, were overwhelmingly written in Sumerian, the Mesag corpus uses both Sumerian and Akkadian, sometimes in the same text. This multi-language use (and sometimes misuse) is paralleled by its place within the southern provincial landscape while being part of the broader imperial network with direct ties to Akkadian royal centers further north and the capital Agade itself.

The tablets are written in the Classical Sargonic script with variability in sign shape and writing register and include memos, receipts, land surveys and allocations, inspections, balanced accounts, as well as sealed documents and a few duplicates. There are several scribes at work including household scribes, provincial administrators, and imperial scribes. A few tablets are even written in the first person.

As a closed corpus recorded over a few years only, the Mesag archive provides a good case study for close analyses of writing practices and their scribal context.

Thus Says Hammurapi

Nicholas Reid

Reformed Theological Seminary, USA. Institute for the Study of the Ancient World (ISAW), New York University, USA

Writing occurs in a dynamic, non-static context that is influenced by more than education and training. Among other things, the execution of writing by a scribe could be influenced by training, experience, and reading documents written by different scribes. While great advances have been made in the study of scribal hands and habits, many influences remain unidentifiable based on the limited amount of evidence. For this reason, it can be useful to consider tablets written in a particular context to see what features emerge. While it is unlikely that these tablets were written by the king himself, there are over one hundred Old Babylonian letters attributed to Hammurapi. In this paper, I will discuss the text and paratext features of these tablets to see what patterns and idiosyncrasies emerge.

SESSION: 9G. Archaeology of the Near East and Video Games

Chair(s): Tine Rassalle, Independent scholar

Archaeology as a “Sim”-ulation: Evaluating Archaeological Representation in the Sims™ Franchise

Keri Porter

University of Notre Dame, USA

The Sims™ is one of the best-selling video game franchises of all time, with the most recent release, The Sims™ 4, having over 36 million players worldwide as of 2022. The game is intended to simulate real-life interactions, and expansion packs for both the Sims™ 3 and the Sims™ 4 introduce archaeology as an activity for players. While the Sims™ 3 expansion occurs in the fictional cities of real-world countries like Shang Simla, China, Champs Les Sims, France, or Al Simhara, Egypt, the Sims™ 4 expansion takes place in the fictional South American inspired location of Selvdorada. In the Sims™ 3,

archaeological fieldwork is presented as little more than tomb raiding for profit that is performed by “adventurers.” Most relevant to the looting concerns of Near Eastern archaeology, a quest-line in Egypt even has players assist MorcuCorp, a cooperation aimed at stealing “relics” for the black market. In the Sims™ 4, archaeology is a potential career and a developable skill with the processes of excavation and lab analysis being accurately represented. Still, both games portray archaeology as exploitative, colonialistic, and a practice conducted in non-local places. Furthermore, artifacts in both games are owned and can be sold by the archaeologist. Given the overall popularity of these games and their inconsistent representation of the discipline, archaeologists must consider what messages are being conveyed through digital media and how these messages might influence public opinion of archaeology or archaeological practice in the future.

“What our archaeologists might have wrong”: Exploring Archaeological Positionality, Interpretation, and the Unknown in the Horizon Series

Cecelia Chisdock

University of Notre Dame, USA

It is not uncommon for archaeologists to ponder what future archaeologists, denied any context, may deduce from the remnants of our material culture. Similar questions are explored in the rebirthed post-apocalyptic world of Horizon Zero Dawn (Guerilla Games, 2017) as the protagonist explores the remains of our own world to piece together the past and prevent another apocalypse. In the process, players encounter common artifacts like watches and keys, quickly discovering the interpretations of their “ancient” function are incorrect, including those proposed by the sole “archaeologist” character. In the sequel, Horizon Forbidden West (2022), the limits of archaeological knowledge are made even clearer as a new group of characters with much greater access to historical data still proceed with interpretations both players and the protagonist know to be false. Yet these interpretations are not simply wrong for their own sake. Much the same as real-world archaeology, including in the Near East, they are influenced by the prior knowledge and beliefs of the characters, their positionality in fictional time, space, and culture, and the constraints and biases of the data itself. This paper investigates the ways in which video games, and the Horizon series especially, may be used to reflect on positionality in archaeology, the processes of archaeological deduction and assumption, and how we contend with what we simply do not, and cannot, know. In the process, it will also explore the ways this can be used to understand, learn, and teach about these aspects of archaeology.

After the End of the World: Archaeology and Antiquity in the “Horizon” Video Game Series

Megan H. C. Lewis

Digital Hammurabi, USA

Everyone who has played a videogame featuring archaeology will be familiar with the “archaeologist as treasure-hunter” motif – Laura Croft being one of the most prominent examples. The ancient world is commodified, and valued primarily for the beautiful objects it produced. Rarely is archaeology presented as anything different, and almost never is it shown to be an effort to better understand societies and cultures that preceded the games’ present time. The ancient world is often brought in only as a prop, containing little actual engagement with or understanding of the source cultures (“Assassin’s Creed” games are notable exceptions). This paper will examine the use

of archaeology and antiquity in the “Horizon” video games – “Horizon: Zero Dawn”, and “Horizon: Forbidden West”, arguing that it represents a new direction for the presence of archaeology in video gaming that more closely aligns with the aims of the academic discipline. Horizon’s use of multiple ancient cultures and societies is complex and imaginative, both engaging with the source material, and creating an innovative multi-layered world full of archaeology and ancient historical reception. The ancient world is viewed primarily as a world of information, rather than a source of treasures to be plundered.

Urbanization and State Development in City-Builder Games

Briana Jackson

Pratt Institute, USA

The city-builder games *Nebuchadnezzar*, *Sumerians*, *Pharaoh*, and *Predynastic Egypt*, set in ancient Mesopotamia and Egypt, follow a general format where game progression mirrors the progression of civilization. Completing missions advances the player into the next chapter of history, as well as unlocks new game features, such as new industries or advancements in agricultural technologies. These games begin with a tutorial that is set at the moment of first settlement and when agriculture and animal husbandry are introduced. Then, mission-by-mission the games present new features of ancient society that are imperative to their functioning, as well as development of social stratification and industry specialization, trade in staples and luxury goods with other cities or foreign civilizations, municipal organization, and development of power systems. This format follows real-world development of ancient societies. Furthermore, the towns in which the games’ missions begin are actual ancient Mesopotamian and Egyptian sites whose archaeological record reveals they saw the earliest instances of settlement and fledgling urbanization. This paper examines the ways in which *Nebuchadnezzar*, *Sumerians*, *Pharaoh*, and *Predynastic Egypt* demonstrate urbanization and state development in Mesopotamia and Egypt. It shall also discuss how their general game mechanics and formats make this game genre a good tool for teaching these subjects.

Online Communities and Archaeogaming: The Role of the Archaeogaming Collective and the Save Ancient Studies Alliance (SASA)

Michael S. Zimmerman¹, Jacob Coffey², Kate Minniti³, Shannon Martino⁴, Alex Vandewalle⁵, Abaan Zaidi⁶

¹Bridgewater State University, USA. ²Testimony, LLC, USA. ³New York University, USA. ⁴Morton College, USA. ⁵University of Antwerp, Belgium. ⁶Save Ancient Studies Alliance, USA

Scholarly interest in archaeogaming has skyrocketed over the last few years, seemingly accelerated by the COVID-19 pandemic, causing archaeologists to seek out alternative scholarship paths in place of or alongside traditional fieldwork. This flourishing in archaeogaming has also seen the rise of a number of organizations dedicated to exploring and expanding the archaeology of games and gaming. This paper will outline the key contributions of two such organizations, the Archaeogaming Collective and the Save Ancient Studies Alliance, or SASA. These contributions include explorations of key topics and issues in archaeology, from gamification and game-based learning (GBL) in the archaeology classroom, to streaming live-play games with archaeologists, to live-play role-playing games (RPGs) exploring the ethical issues surrounding subsistence looting and the illicit antiquities trade, to SASA’s latest project, the Archaeogaming Video Learning

Modules (AVLMs), under the direction of Abaan Zaidi. The work being done by these organizations will be highlighted in this paper, and future directions and implications of their ongoing work will also be explored.

SESSION: 9H. Working with Law Enforcement and the Military to Combat Trafficking and Preserve Cultural Heritage (Workshop)

Chair(s): Catherine P. Foster, U.S. Department of State

The Penn Cultural Heritage Center – The Cultural Property Expert On-Call Project

Richard M. Leventhal

University of Pennsylvania, 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 continue to work 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 of the center

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

Catherine P. Foster

U.S. Department of State, 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 FBI’s Art Crime Team: Mission and Partnership

Randolph J. Deaton IV

Federal Bureau of Investigation (FBI), USA

Art and cultural property crime—which includes theft, fraud and forgery, looting, and trafficking across state lines and international borders—is a global problem with estimated losses in the billions of dollars annually. In order to investigate these crimes, recover and repatriate lost and stolen cultural heritage objects, and bring to justice the perpetrators of these crimes, the FBI has a dedicated Art Crime Team with rapid deployment capabilities. Established in 2004, the Art Crime Team consists of over 20 Special Agents with each member

responsible for addressing art and cultural property crime cases in an assigned geographic region and conducting public outreach to museums, galleries, auction houses, and collectors. Art Crime Team members receive specialized training in art and cultural property investigations and assist in related investigations worldwide in cooperation with foreign law enforcement officials and FBI legal attaché offices. The Art Crime Team is led by a Supervisory Special Agent and supported by a Senior Advisor and a Management Program Analyst. The Art Crime Team is coordinated through the FBI's Art Crime Program located at FBI Headquarters in Washington, D.C. The U.S. Department of Justice provides special trial attorneys to the Art Crime Team for prosecutive support. The Art Crime Program also maintains the FBI's National Stolen Art File, a computerized index of reported stolen art and cultural property for use by domestic and international law enforcement agencies. Since its inception, the Art Crime Team has recovered more than 16,000 items valued at over \$800 million.

Developing a Cultural Heritage Case

Mary E. Cook

U.S. Department of Homeland Security Investigations, USA

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

Rebuilding of the Army's New Monuments Men and Women through an Operational Value Proposition

Andrew Scott DeJesse

U.S. Army Civil Affairs & Psychological Operations Command, USA

Until recently, the Department of Defense has applied minimal resources towards 1954 Hague Convention compliance. This was primarily due to three reasons: DoD's viewed the cultural property protection (CPP) as operational barrier; the lack of 'uniformed' expertise, and CPP advocacy through heritage-centric language. To break siloed perspectives, the building of the Monuments Men and Women for the 21st Century centers on a partnership model of common interests, shared core problems, mutual sense of urgency, utilization of networks, and delivery of operational capabilities. This discussion will describe how USACAPOC's 38G-6V Heritage & Preservation Officer Program and its partnerships are providing DoD with new sets of capabilities to better understand the operational environment and achieve mission success.

SESSION: 9I. Grand Challenges for Digital Research in Archaeology and Philology (Workshop)

Chair(s): Timothy P. Harrison, University of Toronto | Miller C. Prosser, Oriental Institute, University of Chicago

Long Live . . . Digital Data? The Computational Research on the Ancient Near East (CRANE) Project's Data Curation Program: Long-term Storage for Digital Archaeological Data

Stephen Batiuk

University of Toronto, Canada

The volume of digital archaeological data has been growing dramatically over the last few decades, and while there has been a concomitant drop in the cost of storage systems for the data, all forms of physical storage are still temporary in nature, susceptible to data loss. Long-term data curation is an issue that is rapidly becoming a

major concern for archaeological research projects, both legacy and those "born digital". The Computational Research on the Ancient Near East or CRANE project is an international and interdisciplinary research collaboration that has been building a framework for integrating and analyzing the wide variety of data produced by archaeological excavations. Using the Online Cultural and Historical Research Environment (OCHRE) digital data from 10 separate modern and legacy projects, as well as survey and ceramic data are being integrated into the CRANE system. As part of CRANE's Data Management Plan, we have worked with the University of Toronto Libraries (UTL) to develop a Data Curation Program that will permanently archive digital data through UTL's digital preservation systems, ensuring ongoing public access to CRANE's digital data long after the completion of the project. Using the data from the Tayinat 1930's excavation as a case study, this presentation will describe CRANE's Data Curation Program and lays out a model for the long-term storage of digital archaeological data.

From Ground to Web: Using OCHRE to Analyze and Publish Archaeological Data from Idalion, Cyprus

Andrew M. Wright

Oriental Institute, University of Chicago, USA

A common challenge of digitizing legacy excavations is how to analyze and disseminate the data in a sustainable manner. Previous papers in this workshop illustrated the difficulties and solutions in digitizing and integrating 25 years of archaeological data from the American excavations at Idalion, Cyprus, using the Online Cultural and Historical Research Environment (OCHRE). The OCHRE database system provides advanced tools for storing, linking, and analyzing data in a secure repository. This final paper examines how we've used OCHRE to analyze and publish data from Idalion in a way that is both secure and accessible to specialists and the public alike. For example, simple relational properties can be used to create complex Harris Matrices. Meticulous pottery statistics can be used to generate informative and comparative charts and graphs. Various types of geospatial data can be visualized to gain a better understanding of the results and contexts of the excavations. Perhaps most importantly, data can be published online with the click of a button. Indeed, OCHRE has proven to be an innovative and reliable system for bringing legacy data to life.

Digital Approaches to the Philological and Poetological Analysis of Ugaritic Poetic Texts

Clemens Steinberger

University of Göttingen, Germany

Currently, there is no digital edition of the Ugaritic poetic texts providing a poetological analysis of the corpus. A newly established research group at the University of Göttingen aims to close this gap and develop an online platform on which the texts will be reconstructed both philologically and poetologically. The focus will be on the study of verse structure, parallel verse patterns, stylistic devices, and motifs. The multilayered analysis will be displayed on a freely accessible website allowing complex queries.

A team of the Göttingen State and University Library will develop a digital platform on which the texts will be annotated under a variety of aspects. The data model builds on a text-as-graph approach: text is represented as a connected graph whose nodes and edges are represented by different entities (e.g. lexemes, phrases, cola, verses, etc.) and their relations to each other.

Our presentation will address the challenge of dealing with different layers of information within one text section, both when annotating text units of different sizes that overlap, and when presenting complex annotation grids on the website. In addition, basic requirements of a philological database for Ugaritic poetic texts and possible approaches to poetological analysis using digital tools will be explored. At the same time, we will highlight the great potential that lies in the poetological analysis of ancient corpora when editing and translating the texts.

The Online Publication Service of the University of Chicago

Miller C. Prosser

University of Chicago, USA

The academy has not sufficiently addressed the grand challenge of digital publication. Even if the printed volume persists, one must admit that the future of publication will increasingly be digital. With an eye to this future, we announce the creation of the Online Publication Service (OPS) of the University of Chicago. Operating like a traditional press, OPS editors oversee the publication of domain-specific series in archaeology, philology, lexicography, media studies, and more. Instead of producing printed books, the OPS will produce peer-reviewed, open access digital volumes. Each volume will be citable by a DOI maintained by the UChicago Library System; but digital publication calls for something more. OPS publications will be integrated in the OCHRE database platform, making their data accessible at a granular level within as well as across volumes. By leveraging the institutional infrastructure of UChicago, the OPS brings to digital publication the credibility of rigorous peer-review, the stability of field-tested database platform, and the longevity of a university library system.

The Online Publication Service of the University of Chicago: Organization and Context

David Schloen

University of Chicago, USA

This paper will discuss the administrative organization, editorial processes, and funding model of the University of Chicago's new Online Publication Service, with emphasis on the importance of institutional endorsement and of adherence to longstanding requirements for academic publication, including mechanisms for editorial oversight, peer review, citability, and permanence to ensure that the materials published are trusted and can be used effectively by scholars. Of equal importance is the integration of such a service within the wider landscape of research and teaching in digital humanities, which is achieved at the University of Chicago through its degree program in Digital Studies of Language, Culture, and History.

SATURDAY, NOVEMBER 19, 2022 | 10:25am-10:50am (EST)

Coffee Break (Mezzanine Foyer, 2nd Floor)

SATURDAY, NOVEMBER 19, 2022 | 10:40am-12:45pm (EST)

SESSION: 10A. Art Historical Approaches to the Near East II

Chair(s): Stephanie Langin-Hooper, Southern Methodist University | Leticia Rodriguez, Trinity University, Department of Classics

Experientiality, Emotions, and Images – Narrating War and Violence in Early Dynastic Mesopotamian Visual Culture

Elizabeth Wagner-Durand

Institut für Archäologische Wissenschaften (IAW), Albert-Ludwigs-Universität, Germany

In the last decades, the visual media have constantly pushed modern recipients' boundaries, at least in the so-called WEIRD (western, educated, industrial, rich, democratic). Visualized brutality, carnage, and sexualized violence have become a constant part of daily media consumption, mostly based on fictional narratives with explicit content. This often highly "aestheticized" violence is regularly far from the life-worldly experiences of the most people consuming these narratives. The wear out-effect of these images has made many (of us) numb to the broad spectrum of sensory feelings and emotions that ancient observers of images of terror and violence in Ancient Mesopotamia might have experienced when consuming contemporary pictures of such kind. By applying concepts of both narratology (e.g., experientiality and narremes) and of theories of emotion research, this paper seeks to understand the impact of images of war and violence on distinct groups of recipients in Early Dynastic Mesopotamia. Therefore, the paper focuses on the narrative and visual mechanisms used to potentially evoke specific emotional and sensory effect on people. In doing so, the study also refers to the actual horizons of experience of the recipients. To avoid abstracting these images, the paper also considers their carriers, their function, as well as their (architectural) contexts if known. Thereby, we strive for a more in-depth understanding of images of terror and the terror of images.

The Guardian Lions from Susa: How to Approach Them in the Iconographical-Iconological Framework of Erwin Panofsky

Sara Hajinezhad

University of Naples L'Orientale, Italy

Three pairs of terracotta guardian lions were discovered during the excavations of Mecquenem in the southwest of Ville Royale in Susa close to an unknown temple. The tradition of setting up statues of lions as temple guardians can be traced throughout the 3rd millennium until the 1st millennium in the ancient societies of Elam and Mesopotamia. In Susa, on the Acropole, stone lions were found in the temple of Inshushinak in the 2nd millennium while fragments of at least three terracotta lions laid on the floor of another temple dated to approximately 700 BC. Notable Mesopotamian lion guardian statues were discovered in Shaduppum (entrances to the temple of Dagan), Eridu, Khafajeh. Applying the Iconographical-Iconological approach of Panofsky, the researcher tries to decode the symbolic and metaphorical interpretation of the lions. In the framework of the well-known king-lion metaphor, the king is associated, compared, and identified with the lion using formulas like "lion with the wide-open

mouth”, “lion with awe-inspiring eyes” and “lion with the raised paw”; this textual evidence finds a direct representation in the guardian lions, suggesting that they embodied the king himself. Therefore, it is the king who keeps the temples untouched with the vigour and ferocious aggressiveness of a raging lion and yet welcoming the visitors with the awe-inspiring eyes of a supreme lion who has no rival and is never failing, standing firm in his strength.

Ammonite Sculpture

Katharina Schmidt

Albright Institute of Archaeological Research

A number of stone statuary are known from the Iron Age kingdom of Ammon in present-day Jordan, all of which were made locally, yet differ greatly in style and iconography. The statues, torsos and heads depict local rulers, members of the elite, deities, and female heads with “curly wigs.”

The statues must have originally been incorporated into monumental buildings and therefore belong to the representation of the Ammonite royalty but also its elite circles. Most of the sculptures come from the immediate area around the Citadel of Amman, the Iron Age Rabbat-Ammon, which functioned as the capital, but some were also found in the hinterland. None of the sculpture was found in its original context of use, thus its function cannot be derived from it. It is therefore the analysis of the statuary themselves that offers the decisive key to enable an archaeological argumentation on their significance for the local population and its elites.

Rudolph Henry Dornemann (1983) and Ali Abou Assaf (1980) have carried out research on the stylistic and iconographic analysis of the statues in the past, thereby laying a valuable groundwork for further studies. Both works, however, included only about half of the corpus known today, so that a revision seems appropriate at this point of time. The presentation will focus on the stylistic and iconographic analysis of the Ammonite sculpture corpus known to date and will attempt to derive from it further questions with regard to the land and inhabitants of the kingdom of Ammon.

Highland, Lowland: Exploring the Landscape of the Halil Valley through a Chlorite Vase in the Metropolitan Museum of Art

Breton A. Langendorfer

University of Pennsylvania, USA

The corpus of chlorite artifacts produced in the valley of the Halil Rud in southeastern Iran during the third millennium BCE have undergone exciting shifts in interpretation over the course of the last twenty years. Scholars now recognize that these objects, far from constituting an “International Style” created to appeal to foreign audiences as previously thought, were instead products of the distinctive cultural and ecological milieu of the Halil Valley culture. Indeed, the iconography of these objects largely derives from the natural landscape of the valley and surrounding mountains, rather than aspects of the urban society which its makers participated in.

This paper examines a vase held within the collections of the Metropolitan Museum, which depicts the environment of the Halil Valley through representations of its most characteristic landforms. By superimposing bands of mountain scale and palm tree patterns, the artist ingeniously repurposes ornamental designs to recreate the immediate visual impression of the Halil landscape, setting dense date plantations before a distant mountain backdrop. My research uses this object as a launching point for a wider discussion of the nature and purpose of landscape depiction in ancient Near Eastern art, the

possible cultural and cosmological implications of the bifurcated environment the vase presents, and the wider fascination with sensorial evocation and texture evident within the chlorite objects as a group of artifacts. In exploring these topics my aim is to suggest future avenues of research for a visual culture we are still only beginning to understand.

The Lives and Meanings of Bronze Human-headed Cauldron Attachments in the Ancient Near East

Nassos Papalexandrou

The University of Texas at Austin, Department of Art and Art History, USA

Despite their strong stylistic affinities with North Syrian visual arts, late eighth-century cauldron attachments in the form of human-headed birds have usually been inscribed in evolutionary stylistic accounts of pre-classical Greek art. Though far from secure, their iconographic interpretation as figures depicting the famous sirens of Greek epic has even dictated the prevailing nomenclature in scholarly books and articles. However, these artifacts originate in the Near East and had an archaeologically attested life there (e.g. Phrygia, Urartu) before their usage spread to Greece and Italy. By carefully examining the lives of attachments or cauldrons vis-à-vis their function in Near Eastern contexts of discovery and circulation, this paper aims at rehabilitating these artifacts in the areas in which they first acquired their shape, form, and meaning. Their widespread distribution suggests that they were probably interpreted according to local needs and traditions but comparisons with better documented Near Eastern arts (e.g. Assyrian), suggests that a core meaning rooted in solar associations may have been invariably inscribed in the iconographic DNA of these objects.

SESSION: 10B. Manners, Etiquette, and Protocols in the Ancient Near East II

Chair(s): Ludovico Portuese, University of Pennsylvania, Università degli Studi di Messina

The ‘Queens of the Arabs’ as a Case Study of Neo-Assyrian Etiquette Regarding Women and Physical Violence

Ellie R. Bennett

Ancient Near Eastern Empires (ANEE), University of Helsinki, Finland

This paper will contribute to the discussion of Neo-Assyrian women and violence by suggesting the aversion to depicting women and explicit physical violence was a partial reflection of Assyrian etiquette. I will suggest this is visible in the Neo-Assyrian royal inscriptions, which describe the aftermath of battles against the ‘Queens of the Arabs’. This will go beyond current discussions, which is restricted to the artistic depiction of women in the palace reliefs. The ‘Queens of the Arabs’ were recorded as actively fighting against the Assyrians, and in two cases they were treated substantially better than contemporary male rulers. ‘Queen of the Arabs’ Samsi survived her defeat, whilst the king Paqaha was killed and replaced. ‘Queen of the Arabs’ Adiyeh was defeated and captured alive by Assurbanipal, but didn’t suffer the same humiliation as the Arabian king Uaita’, who was made to guard a city gate of Nineveh like a dog.

The narratives of Samsi and Adiyeh suggest the Assyrian aversion for women to experience physical violence went beyond their depiction in the palace reliefs. I argue that the treatment of Samsi and Adiyeh after their defeat by the Assyrians suggest that the correct etiquette for their captors was to protect these women from suffering any further

physical harm or violence. This would contribute at least partially to the decision for Tiglath-Pileser III to install Samsi as a local ruler, and for Assurbanipal to spare Adiyē the same humiliation Uaitē' suffered.

Castration and Codes of Conduct: Somatic Techniques and New Manners in the Late Assyrian Art of Dur Sharruken

Omar Simon N'Shea

University of Malta, Malta

The bas-reliefs lining the walls of Neo-Assyrian palaces have been mined as a rich source of ideological tropes that the Neo-Assyrian king employed to shape the visual discourse of empire. Most studies to date investigate the asymmetrical relationships of power that the Assyrians visualised in order to emasculate their enemies. This representation of alterity was, however, also dependent on the self-image presented in the reliefs. This self-image is usually analysed in studies that compare diachronic changes in the royal image per se, or in the material assemblage across different reigns. Little is known of the extent to which court protocol, as a ritualised form of self-identity, relied on the observance of norms of etiquette in the somatic techniques of manners, particularly of persons close to the royal body and the palace apparatus in general; in dress, especially the codes of headgear and sleeves; and in gesture, for instance in the clasping of hands during processional movements and while standing in diplomatic receptions or ritual compositions. In the Neo-Assyrian record, these somatic techniques intersect with another form of bodily management as part of the formation and administration of empire: castration. Using the test case of Dur-Sharruken, the short-lived royal residence of Sargon II in Khorsabad, I will discuss how the practice of castration gave rise to new codes of conduct among this class of elite males whose bodily modification opened new possibilities of self-presentation as well as new horizons for engaging with and within the Assyrian court and its royal members.

In the Presence of the King: Toward the Concept of Accessibility of the Hittite King

Marta Pallavidini

Freie Universität Berlin, Germany

The king, any king in any historical moment, is not a regular person that can be easily approached by anyone. There are specific rules to follow in order to be admitted in his presence and also there are rules regarding how close to him it is possible to be for different types of people, depending on how they are related to him. Rules and protocols may vary in according to the historical period and/or society, but the goal of them is always to protect the person of the monarch and the institution that he represents.

In the Hittite culture we assist to two different phenomena: on the one hand, the admission to the presence of the king is relatively easy, and the king is involved personally in almost every aspect of the political, cultic, administrative, and diplomatic life of the Hittite State. On the other hand, his person – in particular his body – is protected from the approach of people by a strict series of rules, involving matters of purity but also the close relation between the body of the king as a person and the fact that his person represents an institution.

This paper will explore on the basis of the textual evidence the regulations related to the topic of approaching the Hittite king and will try to explain the dichotomy between the relatively simple admission to the presence of the king and the complex procedure of accessibility to his person.

Discussant

Megan Cifarelli

Manhattanville College, USA

Megan Cifarelli will serve as a discussant for the session, *Manners, Etiquette, and Protocols in the Ancient Near East*.

SESSION: 10C. Archaeology of Arabia

Chair(s): Charlotte Marie Cable, Michigan State University | Lesley Gregoricka, University of South Alabama

Indus Related Artifacts in Oman: A Reassessment of Shared Technologies in Stone and Ceramic Production Processes

Jonathan M. Kenoyer¹, Frenez Dennys², Sophie Méry³, Randall W. Law¹

¹University of Wisconsin - Madison, USA. ²University of Bologna, Italy. ³University of Rennes, France.

The discovery of a wide range of Indus related artifacts at Umm an-Nar and later period sites in Oman and Eastern Arabia in general has resulted in considerable discussion about the nature of interaction between these two regions. In this paper we will focus on the technologies of soft and hard stone bead manufacture, soft stone seal manufacture and pottery production to examine the presence of possible shared technologies that may have been developing simultaneously in both the Indus/Makran regions and Eastern Arabia. Analysis of the raw materials as well as the technologies of production can provide new insights into the chaîne opératoire associated with each of these technologies. Comparisons between soft stone beads made in major Indus sites and those found in Oman suggest that there are some shared processes, as well as some distinct ways of production that may indicate local trajectories in Oman itself. Similar comparisons can be made regarding the production of seals in Oman using chlorite. The preparation of clays and manufacture of Indus style pottery in Oman will also be compared to the processes for local Umm an-Nar pottery to reassess the differences and possibly similarities in ceramic technologies between the two regions.

Beyond the Oasis: Preliminary Results of the NEH-Sponsored 2022 Bat Archaeological Project, Oman

Eli N. Dollahide¹, Jennifer L. Swerida², Reilly S. Jensen³

¹New York University, Abu Dhabi, United Arab Emirates. ²Penn Museum, USA. ³University of Utah, USA

The UNESCO World Heritage Site of Bat, Oman is home to one of the world's most complete ancient landscapes from the 3rd millennium BC and is the largest archaeological site in Oman and the UAE. The site has thousands of tombs, numerous settlement areas, and at least seven monumental stone and mudbrick towers that date to the Early Bronze Age. With support from the US National Endowment for the Humanities, NYU Abu Dhabi, and the Penn Museum, the Bat Archaeological Project (BAP) completed a two-month winter fieldwork campaign at the site in January and February 2022 focused on areas beyond Bat's central oasis.

Research during the 2022 season focused on several understudied areas of the site: the eastern edge of the Settlement Slope at Bat's southern boundary; Khutm Settlement near modern Wahrah; and the newly-discovered Umm an-Nar settlement at Rakhat al-Madrh located 7km southeast of Bat. Each of these areas revealed interesting findings, including the discovery of a Bronze Age processing platform for human remains; an Iron I/II fort at Khutm; and new evidence for pastoralism and plant cultivation. This talk will present these preliminary results among others and highlight the project's new

strategy for community engagement, based on arts outreach and mutual discovery.

Utilizing Non-destructive Portable X-ray Fluorescence in Investigating Bronze Age Pottery from Kuwait and Bahrain

Hasan J. Ashkanani

Kuwait University, Kuwait

Pottery assemblages from the site of Al-Khidr on Failaka Island, Kuwait, and Barbar Temples in Bahrain were analysed to reconstruct the chemical composition of Bronze Age wares and to build a mineralogical database of Bronze Age pottery dated from Failaka Periods 1-3B and Barbar IIb-c (2000-1650 BCE). A total of 145 ceramic sherds from Al-Khidr and Barbar, as well as reference groups, were analysed by non-destructive portable X-ray fluorescence (pXRF) spectrometry. Preliminary petrographic thin-section analysis was applied to four samples to reconstruct possible clay paste recipes and to identify raw materials. The results indicate that geochemical analyses can successfully distinguish subgroups within a typological category of ceramic assemblages non-destructively. The results identified two subgroups within the Al-Khidr typological category: the Dilmun Barbar tradition and the Mesopotamian tradition. Future comparative compositional studies can be conducted to explore other aspects of craft specialisation, such as ceramic technological choices and possibly the influence of sociopolitical units. The result of this study was also used as a reference, in turn, to further investigation for fingerprinting the assemblage from Kuwait of Late Neolithic Age, known as Ubaid culture in the 6th millennium BC. The performance of pXRF were also compared to ICP-MS to test the reliability of the instrument and suggested to be utilized in the Arabian-Persian Gulf pottery studies.

Project: Economy and Character of the Early Iron Age in South-eastern Arabia

Paul A. Yule

Heidelberg University, Germany

Different research initiatives illuminate our project including an ongoing site gazetteer, classification of red-metal artefacts, study of Early Iron Age (EIA) cemeteries, tomb architecture and other artefacts. Fieldwork in the al-Salayli find zone in the eastern governorate of the Sultanate of Oman begins with the cataloguing of numerous hut tombs which are taken to date to the EIA.

Whereas we began site mapping in the 1980s by means of 1:100,000 maps, this changed in May 2000 when the US government turned off 'selective availability' for the world. More importantly, Google Earth revolutionised site prospection especially when high-resolution imagery became available for larger parts of Oman after 2006. Where greater resolution is needed, programmable drones provide the best results, producing high resolution imagery: A flight in the al-Salayli valley of a surface 1300 x 700 m produced some 100 GB of data including the landscape model and high-resolution imagery (DJI Matrice M300 and a Zenmuse camera). Flight altitude: 250 m above surface (alt. 670-780 m relief). Flight time: 55 minutes. A Leica Viva CS15 GNSS served for the geo-positioning of some 50 DIN A2 targets placed in the topographic zone. The major problem was getting a radio license in order to use the instrument.

Aside from the hut tombs, on present evidence most activities at Salayli are of early Islamic (9th-10th century CE) date. Intersite mining and smelting vary greatly within a single period.

Reconstruction of Fishing Technology from the Um-an-Nar Culture of HD-1, Ras al-Hadd, Sultanate of Oman

William R. Belcher

University of Nebraska - Lincoln, USA

Large quantities of fish remains have been recovered from the site of HD-1 on Ras al-Hadd, Sultanate of Oman. These remains date to primarily the Um an-Nar period between the 2nd and 3rd millennium BCE and have allowed us to examine the habitats of exploitation and infer the types of environmental constraints for possible extractive technologies. Fishing technology is usually focused on the reconstruction of technology based in habitat preference of identified fish remains. However, this current research focuses on specific suites of artifacts of fishing technology and make speculative remarks concerning the type of habitat and fish that may have been targeted as prey species. These artifacts primarily include fish hooks of varying sizes and net weights of various sizes and manufacture.

Tracking the History of Sardine Foddering in South Arabia

Abigail F. Buffington

The College of William & Mary, USA

In southeastern Yemen, the UAE, and in Oman (particularly Dhofar), pastoralists traditionally feed large-bodied herd animals (e.g., camels and cattle) and occasionally small-bodied animals (e.g. sheep and goats) a mix of fodder feed during the dry season, including dried sardines (a tribe of small, oily fish in the Clupeidae family). This dependence on marine aquatic resources links ethnographically to a transhumant circulation of pastoralists between escarpments and wiydan regions in the South Arabian highlands to urban centers, towns, and encampments in the coastal plain. This inclusion of animal products in the managed diets of herbivores is a unique solution to potential grazing supplement needs, which links to social patterns within pastoralism. The antiquity of this practice of sardine foddering should parallel the history of such vertical transhumance circulations. In the case of Dhofar specifically, the introduction of camels links to the initiation and spread of this practice. Considering the limited likelihood of recovering camel remains in the faunal record due to their expected number and use in the pastoral economy, it is important to investigate these histories in other records. In this study, I will examine the diatom and sponge spicules record recovered from dung mat features excavated from archaeological and recently abandoned pastoral sites in Dhofar's interior.

SESSION: 10D. Environmental Archaeology of the Ancient Near East

Chair(s): Elise Laugier, Rutgers University | Brita Lorentzen, Cornell University

Insights from the Hellenistic Galilee: Agricultural Economy at the Site of Khirbet-el-'Eika

John M. Marston, Alexander T. Dorr

Boston University, USA

The Hellenistic site of Khirbet-el-'Eika and its well-preserved botanical assemblage provide a unique opportunity to investigate local agricultural strategies and the agricultural economy of the Galilee. Archaeobotanical investigation of the Galilee during the Hellenistic period, and of the Hellenistic Levant more broadly, has been limited. Agriculture during this period is thus still poorly understood, especially regional differences across the Levant. Presenting new evidence from the rural administrative site of Khirbet-el-'Eika, we seek to illuminate agricultural strategies pursued at the site prior to its destruction in the

mid-2nd century BCE. The botanical assemblage was preserved in situ within a set of burned storage contexts. In these storage areas we find that most contexts contained one or a mixture of several pulses, primarily garden pea and a small-seeded variety of fava bean. While cereals are present in the assemblage, their abundance is low, distinct from the typical Levantine model of cereal- and pulse-dominated agriculture. The recovery of large deposits of mustard and flax provide insight beyond simply the cultivation of staple food crops, allowing consideration of agricultural strategies related to textile, oil, and spice production. The nature of the site and preservation of the assemblage similarly encourages an investigation of spatial organization and storage practices. Future integration with analyzed archaeobotanical remains from other sites will produce a better understanding of Hellenistic agriculture and both how and why strategies differed among regions in the Levant.

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

Brita Lorentzen¹, Gideon Hadas², Orit Peleg-Barkat³

¹Cornell University, USA. ²Israel Antiquities Authority, Israel. ³Hebrew University of Jerusalem, Israel

We present results from analysis of a wood assemblage from a Byzantine period (4th-6th century CE) village in the En Gedi oasis. Wood remains were collected by the En Gedi Oasis Expedition in 2013-2019 and consist primarily of roofing material, household objects, and furniture destroyed with the rest of the village in the mid-6th century CE. Thirty-one samples are worked wooden elements, including pegs, tenons, and the wooden frame of a bed or stool.

Identified taxa include local plants (date palm, jujube, tamarisk, acacia, willow) from the desert and within the oasis, and native and cultivated Mediterranean taxa (pine, cypress, walnut) from the Judean Hills nearby. Several high-quality imported timber taxa are also present, including cedar (currently undergoing strontium isotope analysis to determine its source) and boxwood from the northeast Mediterranean and false ebony (*Dalbergia melanoxylon*) from the Horn of Africa, likely transported to En 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 En Gedi's inhabitants were part of a vast network of long-distance maritime and overland trade during the 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.

The Agricultural Economy of the Iron Age Southern Levant: Contrasting Preliminary Archaeobotanical Data from Tel Abel Beth Maacah and Khirbat al-Balu'a

Geoffrey Hedges-Knyrim

University of Connecticut, USA

The agricultural economy of the Iron Age Southern Levant remains underexplored archaeobotanically, especially at an integrated, regional level. The data that is available suffers from a lack of abundance values and is often difficult to access or unpublished. Out of 26 Iron Age sites with available data, only 6 have abundance values and other quantitative measures. This paper will give a regional analysis of the

agricultural economy during the Southern Levantine Iron Age (1200–586 BCE) by contrasting preliminary data from two sites: Tel Abel Beth Maacah (ABM), a 10 hectare site located at the northern end of the Huleh Valley, and Khirbat al-Balu'a (Balu'a), a 25 hectare site located just south of Wadi Mujib. The preliminary samples presented come from domestic contexts, specifically surfaces, ovens, and pits.

Agricultural practices are inferred from ubiquity, proportion, and CA at the intra and inter-site levels. These practices will then be related to environmental (e.g. annual precipitation, location, and elevation), political (centralized vs. decentralized), and temporal (e.g. Iron I vs. Iron II) factors. Preliminary results show a difference between the sites due to annual precipitation (~600 mm per annum at ABM vs. ~300 mm per annum at Balu'a), which is consistent with prior research in Southwest Asia (Smith and Munro 2009; Vermeersch et al. 2021). The results from these sites will then be integrated with the available data to present a regional archaeobotanical picture of the Iron Age Southern Levantine agricultural economy.

A Multidisciplinary Investigation of Agricultural Economy in Northern Israel during the Byzantine/Early Islamic Period: The View from Tel Shimron

Kathleen M. Forste^{1,2}, Kali Wade², John M. Marston¹

¹Boston University, USA. ²Atlatl Archaeology Ltd., Canada

Tel Shimron is a multi-period site located in the northern Jezreel Valley in modern-day Israel. Its proximity to major communication corridors has contributed to its waxing and waning as a regional center across the last 5,000 years, and during the Byzantine and Early Islamic periods the settlement was a small village. Ongoing excavations have revealed a residential neighborhood dating to the Byzantine-Early Islamic transition period (c. 7th–8th centuries CE), with rectilinear stone buildings lining a street. Few living surfaces are preserved, but artifacts and soil samples collected from extensive fills and collapse layers across this neighborhood illuminate daily life and economy at Tel Shimron.

One goal of this project is to study the agricultural economy of the site across time, and towards this goal, we investigate the agricultural economy of the Byzantine/Islamic village through the combined analysis of microbotanical and macrobotanical remains along with associated artifacts and architecture. Paired phytolith and flotation samples were systematically collected across the site through a blanket strategy. Through statistical and contextual analyses, we investigate the major economic crops present at the site, investigate the potential for mixed agriculture, and investigate the distribution of plant remains across the neighborhood in effort to identify discrete activity areas of plant-use such as cereal grinding. This multidisciplinary intrasite approach strengthens our interpretations of the spatial organization of the agricultural economy, while at the same time overcoming differential preservation of organic plant remains.

2nd Millennium Agriculture in Cyprus: New Evidence from the Sites of Pyla, Agios Sozomenos- Ambelia

Evi Margaritis, Kyriaki Tsirtsis, Carly Henkel

Cyprus Institute, Cyprus

The exploitation and exchange of natural resources has been a key parameter in the survival and evolution of past and modern societies. Subsequently, specialization and control of these resources constitutes a major indicator of increasing social complexity. In the Mediterranean, aspects of social change such as urbanization, technological sophistication and agricultural diversification,

intensification and extensification are evidenced from the later fourth into the second millennia BC but also during the late Iron Age and the Archaic period. Although these developments have been extensively studied in the past, archaeobotanical approaches – and so a whole swathe of crucial evidence – have not been brought to bear on these questions, with notable exceptions. This paper will explore these aspects of research in Cyprus, focusing on the 2nd millennium, through the study of the archaeobotanical remains from the sites of Pyla, Agios Sozomenos-Ambelia, and Erimi.

SESSION: 10E. Archaeology of Anatolia II

Chair(s): James Osborne, Oriental Institute, University of Chicago

Ceramics in the Making: The *Chaîne Opératoire* Approach Applied to the Alişar IV Pottery from Uşaklı Höyük (Turkey)

Marta Doglio

University of Pisa, Italy

This paper discusses the Alişar IV pottery evidence from the site of Uşaklı Höyük (Yozgat), located in central-northern Anatolia, in the heart of the Anatolian plateau. This production spread in a very circumscribed geographical and chronological context, that is the Middle Iron Age Anatolia. The specific aim of this paper is to employ a technological reading of the pottery manufacturing process, that goes under the definition of “*chaîne opératoire* approach”. In archaeology, the *chaîne opératoire* is described as a series of operations that transform the raw material into the finished product. Applying this approach to Uşaklı Höyük and its ceramic horizon might shed new light on the Alişar IV pottery and its social dimension. The ceramic manufacture can be read in its cultural context, with specific attention to contacts with the neighbouring regions. In particular, the assemblage brought to light on this site contributes to add some interesting observations about the elements of variability involved in the production, from the different fabrics to the various styles of the painting. These aspects point to the possible existence of different workshops, and to a trade network that could imply both pottery and potters’ mobility. The different pictorial features and the variable degree of stylization in the decoration might be evidence of a progressive development of the Alişar IV style, from both a chronological and spatial point of view.

Understanding Use of Space in Ancient Cities: Further Modeling and Simulation of Kerkenes, Central Anatolia

Jessica Robkin

University of Central Florida, USA

During the late 7th to the first half of the 6th century BC a large urban center existed atop the Kerkenes mountain in central Anatolia. After a brief occupation that ended in a fiery blaze, the site saw only minimal activity until archaeological work began at the site in the 1990s. Since this time, the project has generated impressive datasets through remote sensing and traditional excavation that have identified the foundations of this once impressive city. These datasets prove ideal when applied to modeling and simulation methods aimed at understanding the social organization that existed at Kerkenes. Using techniques to understand urban growth and connectivity within the built environment, the current research seeks to apply well-plied methods in modern urban planning towards understanding this ancient urban space. This paper reviews the application of these approaches at Kerkenes, sharing the intriguing results being generated

that hold great promise for furthering the understanding of social organization within this late Iron Age city.

Reassessing Neo-Assyrian Urban Structure

Timothy Matney

University of Akron, USA

This paper examines broadly the planned and unplanned elements of Neo-Assyrian cities by considering those elements seen in common, as well as those particular to individual sites, across both the imperial capitals and major provincial urban centers. Such an undertaking requires consideration at several scales. A “pan-empire” perspective might look at the administrative, economic and other functional roles played by urban sites in the core and at the edges of the empire, and the effect of non-Assyrian spatial and cultural traditions on the urban fabric. A regional perspective considers the physical constraints and resource needs of the city’s inhabitants, roads and canals, access to agricultural and pasture land, and defensive needs. Finally, at the scale of the individual cities, existing topographies such as pre-Assyrian höyüks and tells, city gates, major thoroughfares, specialist precincts, and domestic housing stock are considered as both part of city planning and resulting from unplanned growth at the neighborhood or household level. Comparisons of satellite and aerial imagery, geophysical surveys, pedestrian surface surveys, and open area excavation are used. In particular, case-study data from the Neo-Assyrian urban center of Tuşhan (Ziyaret Tepe) located in the Upper Tigris region at the northern imperial frontier are presented, including new analyses of magnetic field gradiometry and electrical resistance survey data collected between 1998 and 2013.

The 2022 Season of the Kerkenes Project

Scott Branting¹, Joseph W. Lehner², Sevil Baltalı Tırpan³, G. Bıké Yazıcıoğlu-Santamaria⁴, Dominique Langis-Barsetti⁵, Tuna Kalaycı⁶, Sarah R. Graff⁷, Nilüfer Baturayoğlu Yöney⁸, Amanda Groff¹, Soran Avcı⁹, Jessica Robkin¹, Alain Goupil¹⁰, Étienne Beaulac¹⁰, Rana Özbal¹¹, Fokke Gerritsen¹²

¹University of Central Florida, USA. ²University of Sydney, Australia. ³Istanbul Technical University, Turkey. ⁴Simon Fraser University, Canada. ⁵University of Toronto, Canada. ⁶Leiden University, Netherlands. ⁷Arizona State University, USA. ⁸Hatay Mustafa Kemal University, Turkey. ⁹Kerkenes Project, Turkey. ¹⁰Université du Québec à Trois-Rivières, Canada. ¹¹Koç University, Turkey. ¹²Netherlands Institute in Turkey, Turkey

For 30 years the Kerkenes Project (kerkenesproject.org) has sought to understand the very large late Iron Age city located in Yozgat Province of central Turkey. This report will detail the results of the planned excavations and geophysical survey as part of the 2022 campaign. It will also detail ongoing work in material science, cultural heritage monitoring, modeling and simulation, artificial intelligence, and augmented reality.

Divine Ladies of the Syro-Anatolian Kingdoms: Conceptualization of the Divine and Local Hypostases

Nathan Lovejoy

Institute for the Study of the Ancient World (ISAW), New York University, USA

During the Iron Age, several goddess emerge in preeminent positions among their local panthea. Some of these, like Kubaba in northern Syria and Anatolia or Ba’alat in the central Levant, reflect local and regional developments stemming from Late Bronze Age

traditions. While others, like the Divine Queen of the Land and even local hypostases of Kubaba and Ba'alat, appear in specifically local contexts, cultic innovations of Iron Age communities. In this paper, I argue that a regional conceptualization of a divine lady, often positioned at or near the top of many local panthea, existed throughout a region spanning from south-central Anatolia to the Upper Euphrates and perhaps as far south as Byblos. At the same time, local communities worshipped different hypostases of this concept of the divine lady, which attest to several likely trajectories for their development. While these goddesses were surely considered distinct deities among their communities of worship, certain shared functions, divine associations, appellations, and iconographic repertoires suggest a significant level of cultic translatability between communities, thus illustrating a shared understanding within a diverse cultic landscape.

SESSION: 10F. Dialogues Across Landscapes: New Challenges to Practicing Landscape Archaeology in Western Asia

Chair(s): Jenni Bradbury, Bryn Mawr College | Claudia Glatz, University of Glasgow | Ömür Harmanşah, University of Illinois at Chicago | Dan Lawrence, Durham University

Belligerent Conifers: Archaeological Survey in the Pine Monoculture Mountains of Northern Turkey

Peri Johnson

University of Illinois at Chicago, USA

As the planet starts to experience the consequences of climate change, many landscapes are at their least resilient. The exodus of mountain village populations to cities in the second half of the 20th century in northern central Turkey led to national pine monoculture reforestation projects in abandoned fields and pastures, and the narrowing of the biosphere to plantations. Publicity promotes the reforestation as sustainable management by the forestry department, a publicity that is similar to that of new legislation abolishing village pastoral commons on the grounds that provincial governments manage landscapes more sustainably. Consultation with locals, both residents and transient workers, and insistence on their status as stakeholders during archaeological survey, therefore, is a step towards not being complicit in the legal undermining of local stakeholders. This paper discusses how the implementation of sustainable management cuts landscapes into bounded areas where resources are extracted: heritage, mining, industrial agricultural, or forestry resources. The reforestation trenches contour the landscape and cut through archaeological settlements and cemeteries. Trenching and associated looting cleanse the heritage from the bounded forestry areas. Without local human stakeholders, heritage belongs to the rooted memory of the pines (the narrow extent of the biosphere in forestry plantations). However, sustainability's undermining of local stakeholders does not transfer agency from the local to the provincial or national level; rather agency remains rooted in the pine plantations, and their accelerating fires and infestations. Landscape archaeology must embrace the ecological and political implications of documentation, mapping, and advocacy on a planet of plantations.

On the Case of Rural Worlds: Comparability, Particularism, and Resolution in the Archaeology of Landscapes

Catherine Kearns

University of Chicago, USA

This talk posits that landscape archaeologies of western Asia have analytically trapped the small, rural site somewhere between the

particular and general. We often treat the rural site as a case study, hovering at the interface of exemplar of daily life and banal dot in mappings of urbanized settlement and economy, but we seldom give it comparative scope. While we continuously improve our vocabularies and approaches to premodern urbanism, and while we refine our technologies for examining place-making at multiple scales, the small site awaits more theorization. In the twenty-first century, moreover, our archaeological practice in ruralized landscapes proximate to the disturbances of industrial development, resource extraction, pollution, and climate change additionally demands introspection, especially in fracturing assumptions of passive rural sedentism. Through a comparison of recent investigations of rural lifeways, temporalities, and landscapes, this talk addresses the many limitations of studying and interpreting rural worlds: issues of spatial and temporal resolution in survey methods, the lack of longitudinal data, and the assumed yet relatively untested commensurability of small sites. Reinstating the small site as an archaeological locus of inquiry makes space for a new kind of comparative research of co-constituted rural and urban landscapes that takes advantage of richly textured, diachronic archives across western Asia.

Mountain Methodologies: Archaeological Practices and Future Possibilities for Levantine Upland Landscapes

Jennie Bradbury¹, Stephen McPhillips²

¹Bryn Mawr College, USA. ²The French National Centre for Scientific Research (CNRS), France

Whilst the majority of surveys and landscape investigations in the Levant have often focused on lowlands, river valleys and coastal plains, the past decade or so has also begun to reveal a wealth of evidence attesting to the rich and diverse modes of exploitation and inhabitation present in upland regions. Methodological and theoretical developments have also enabled archaeologists to explore and conceptualize mountains not as static backwaters or irrelevant peripheries but as active and dynamic landscapes that form an integral part of ancient lives. Despite this progress, mid to high altitude archaeological surveys are often hampered by a lack of artefactual assemblages, difficult terrain, and (substantial) vegetation cover, all of which highlight the significant limitations of material and traditional tell based survey strategies. Drawing upon current fieldwork from the foothills of the Lebanese mountains, this paper will explore the different practices and approaches towards landscape archaeology in Levantine mid to high altitude regions. It will address some of the implicit biases that we have as archaeologists studying these regions and explore alternative modes of habitation, interaction, and communication in such landscapes. Ultimately, through our discussions we hope to suggest potential methodologies for future work in the mountainous regions of Western Asia, emphasizing the need for adaptable, collaborative, flexible, and multivocal practices.

Min(d)ing One's Business: Limitations to Scholarly Research in the Kyzylkum Desert, Uzbekistan

Mariana Castro

Institute for the Study of the Ancient World (ISAW), New York University, USA

Owing to its remoteness, political barring, and extreme climatic conditions, the Kyzylkum desert of modern-day Uzbekistan has received little scholarly attention, especially when compared to other areas of Western Asia. This desert steppe is punctuated by several mountainous features that break the landscape into smaller regional

centers where, among others, turquoise, gold, uranium, copper, lead, and silver deposits can be found. Most of these resources have been extracted since prehistoric times, as attested by immense traces of mining activity and archaeological remains in the desert. Still, as noted by Sverchkov, “many areas ... lack a high-grade of knowledge concerning the kinds, levels and periods of mineral exploitation, but none of them can be compared to the ... Kyzylkum – the principal ‘white spot.’” Today, the Kyzylkum continues to be exploited for its mineral resources, threatening its archaeological landscapes and thwarting field research in areas dedicated to intensive mining activity. This is particularly true with the increasing difficulties in accessing Soviet-era records in Russia. This paper considers the recent work conducted in the Kyzylkum concerning the extraction and exchange of turquoise stones in pre-modern Central Asia and centers its discussion on the ancient and modern local dynamics of movement, resource exploitation, and knowledge production.

SESSION: 10G. Understanding Power in the Ancient World: Approaches, Manifestations, and Responses

Chair(s): Shane M. Thompson, North Carolina Wesleyan College | Jessica Tomkins, Wofford College

Emar 775: A Misguided Attempt at Promoting Hittite Power Through Kingship

Shane M. Thompson

North Carolina Wesleyan College, USA

The Late Bronze age town of Emar exhibits distinctly local traditions unique to the ancient Mediterranean. While under Hittite rule, intrusions were made into the local religious and cultural fabric of society. One of these intrusions, the office of the diviner, has been discussed at length in recent decades. In this presentation I will note an additional intrusion seen in the text, Emar 775, known as A Prayer for the King, and also extant in a more expansive version of the text from Ugarit. I argue that this text from the royal hymn genre represents a Hittite mistake in understanding the office of kingship at Emar. In addition, this Hittite royal hymn promotes notions of kingship not seen in the region whatsoever in several centuries. I argue that this presents an interesting case of a failed attempt by the Hittites to promote their own king in a way native to the Emarites as the version presented in Emar 775 is not a version of kingship recognizable to the Emarites. This intentional, yet misinformed, attempt by the Hittites represents a fascinating example of attempts at cultural domination within the ancient Near East.

Arabian Stereotypes and Power Displays on Republican Coinage

Anna Accettola

Bucknell University, USA

Manifestations of power are multidimensional - for they can be overt, implicit, or even by-products of other acts of victorious display. When one entity, however, seems to display their perceived power over another in a public forum, modern historians are left to try to understand its depth and intentionality. Such a public display includes the supplication coins minted in the first century BCE Roman Republic, which depict defeated kings on their knees before the conquering general. One example, the “Rex Aretas” coin minted by aedile Marcus Aemilius Scaurus in 58 BCE, depicts Aretas kneeling with a camel in the background. Not only is Aretas supplicating, supposedly following his defeat at the hands of Pompey and Scaurus, but the camel acts as a confirmation of his foreign and exotic nature. Coins, as a public

artifact, were handled by many populations, including elite, common, military, and civilian, allowing their imagery to reach a broad audience, though their impact remains under debate. In this contribution, I argue that Roman power manifests in two ways on this coin and those like it. First, Romans use the image of the supplicating king to fortify their own military superiority, even in cases when victory was diplomatic. Second, ethnographic stereotyping, such as through the camel iconography for a formerly nomadic Arabian kingdom, reinforces the boundaries between “Roman” and “other” in an attempt to solidify a hierarchy with Rome sitting supreme.

The Assyrian Reorganization of Vassal Territory in the Southern Levant

Roan Fleischer

University of Toronto, Canada

The Southern Levant had been a target of Assyrian imperialism since the reign of Tiglath-pileser III. While the region was strategically important, it was prone to rebellion and not particularly rich in resources outside of foodstuffs. Therefore, the Assyrian Empire preferred to rule this region indirectly through vassal kings rather than through provincialization. While portions of the Southern Levant were provincialized, this was not the ideal scenario for the Assyrian Empire and occurred only after continued revolts. Although Israel had been fully incorporated into the Assyrian provincial system under Sargon II, the rest of the Southern Levant remained nominally independent. Following his 701 BC campaign, Sennacherib claimed to have confiscated much of Judah’s territory and divided it amongst Ekron, Ashdod and Gaza. By partitioning vassal territories, the Assyrian Empire protected its economic interests in the region (specifically access to maritime trade routes). Also, by leaving the region independent, it acted as a buffer zone as well as a staging ground for campaigns against Egypt. While the foodstuffs produced in the Southern Levant were not used to feed the Assyrian heartland, they were useful in supplying the army as it passed through the region. Therefore, the Assyrian Empire protected its military and economic interests in the Southern Levant without provincializing it. Also, by confiscating territory from rebellious vassals, the ability for that vassal to rebel in the future was diminished. The confiscated territory could then be used to reward a loyal vassal and ensure its loyalty in the future.

Gods in Vogue: Appropriations of Babylonian Religious Trends in Neo-Assyrian Propaganda

Zachary Rubin

Hebrew University of Jerusalem, Israel

This paper investigates the incorporation of Babylonian high deities and important mythological works into the propaganda of the Neo-Assyrian empire. It argues that the Assyrians’ renewed push for hegemony over Babylonia facilitated the introduction of more recent innovations in Babylonian religion north into Assyrian heartland, providing salient new images for the Assyrian royal family to exploit as expressions of their authority, while rendering some older symbols within their propaganda program obsolete. As a case study, this paper will focus on the rise of the Babylonian gods Marduk and Nabû in Neo-Assyrian royal iconography at the expense of the older Sumerian god Ninurta. Drawing some modern parallels, it argues that the reception of contemporary Babylonian religious movements among the Assyrian administrative classes prompted the Assyrian royal family to reinvestigate their relationship with the southern gods. As such,

Assyrian royal iconography shifted to match its Babylonian competitors, potentially covering up for perceived weaknesses in their authority.

The News at Ebla: Insights into Logistics, Intelligence Collection, and Assessment of Sources

Eric Aupperle

Harvard University, USA

Access to reliable information is vital to running a successful government, and ancient states long recognized the importance of intelligence collection. To meet its military and diplomatic goals, and to keep track of its administrative functions in the countryside, the central administration at Ebla appears to have benefited from the constant influx of travelers to Ebla. In addition to returning officials, passing travelers of different geopolitical backgrounds and social statuses were asked to provide information about subjects of interest to the administration, and received gifts in return that seem to be proportionate to their status and to the importance of that information. In comparison with later corpora, namely the Girsu and Urusagrig messenger texts of the Ur III state and the royal archives of Old Babylonian Mari, two details are remarkable about the Ebla archives: 1. at Ebla, the content of the news that was brought is often briefly described, and 2. in contrast to classic “messenger texts,” the individuals bringing news and reports in the Ebla archives are often not messengers, but rather merchants, travelling officials, or “private” residents from the area reported on. At the same time, like other governments, Ebla also used a stable network of officials and their agents to collect information about the internal and external business of the state, including its military, political, religious, and economic activities. Through these terse references to news-bringers in administrative records of state expenditures, one sees the shadow of a sophisticated and multifaceted system of intelligence collection and assessment.

SESSION: 10H. Archaeology of Lebanon

Chair(s): Hanan Charaf, American Society of Overseas Research (ASOR), Lebanese University

The Northern Lebanon Project (NoLeP): Results of the 2022 Archaeological Campaign. Italian - Lebanese Joint Mission of the University of Udine and Lebanese University in the Regions of Koura and Zgharta

Marco Iamoni¹, May Haider²

¹University of Udine, Italy. ²Lebanese University - 3rd Branch Tripoli, Lebanon

The Northern Lebanon Project (NoLeP) encompasses two major research areas – Koura and Zgharta – and aims at understanding the relations of the sites with their surrounding environments, their mutual social and/or economic interactions, the local connection with other ancient settlements on the coast and the regional and supra regional contacts.

The paper will present the results of the 2022 investigations: the joint Italian and Lebanese team carried out excavations and surveys in order to complete the archaeological reconnaissance of the area of Koura under study. Excavations concentrated in three sectors: two of these investigate key areas identified at Amioun during the survey; a third operation is located at Kefraya and aims at defining in more detail the characteristics of ancient settlement (in particular of the Bronze and Iron Age levels). The survey concentrated on the inner

plain of Koura and the area around Bziza, so as to better understand the connections between the Amioun Plain and the hills where important Roman sites (e.g. Bziza and Ain Akrin) are located.

In the second part of the paper, we will discuss a second major goal of NoLeP, i.e. the dissemination of the results of the research to a wider audience by means of the development of a sustainable management of the local heritage and the valorisation of the local monuments (e.g. the Roman Temples of Bziza and Qasr Naous /Ain Akrine) via digital techniques such as 3d scanning and photogrammetry.

Baalbek in the Bronze Age: Results from the Excavations of a Sounding in the Courtyard of the Temple of Jupiter in 2012 and 2019

Hermann Genz¹, Margarete Van Ess²

¹American University of Beirut, Lebanon. ²German Archaeological Institute, Germany

While the fact that the Jupiter Temple in Baalbek was erected on an ancient tell site is well known, very few details about the site underlying the Roman structures are known so far.

The Eastern Sounding in the courtyard of the Temple of Jupiter was excavated in the 1950s to early 1960s by the Direction Générale des Antiquités, and re-examined by the Mission of the German Archaeological Institute in 2004-2005. While finds indicate an occupation ranging from the Neolithic to the Hellenistic Period, the stratigraphy unfortunately was heavily disturbed.

The Western Sounding, equally in the courtyard of the Temple of Jupiter was excavated by the Direction Générale des Antiquités in the 1960s. The excavations had exposed two rows of Middle Bronze Age buildings, separated by a 1 m wide street.

In 2012 and 2019 the German Archaeological Institute and the American University of Beirut resumed work in this area. Work focused on a 6.3 by 5 m area inside one of the Middle Bronze Age rooms exposed in the 1960s near the eastern end of the trench. We encountered a series of at least 7 successive Middle Bronze Age floors inside the room. While the upper two floors were partly disturbed by the earlier excavations, the lower floors were very well preserved. In addition to various installations related to food preparation and storage, three intramural burials were encountered.

In this paper, we will present the main results obtained in the sounding in 2012 and 2019.

The Sapienza/Lebanese University/DGA Archaeological Project in Tyre: Preliminary Results of the 2022 Campaigns

May Haider¹, Marta D'Andrea², Ali Badawi³

¹Lebanese University, Lebanon. ²Sapienza Università di Roma, Italy. ³Directorate-General of Antiquities, Lebanon

The Lebanese-Italian Archaeological Project in the Region of Tyre is a collaboration between Sapienza University of Rome, the Directorate General of Antiquities of Lebanon (DGA) of Tyre and the Lebanese University, for archaeological investigation and cultural heritage protection, sustainable valorization, and promotion. The project – started in 2019 and now in its third season – focuses on the investigation of the regions of Tell Mashouk, Shawakeer, and Ras el-Ain, to the east and south of the present-day Tyre peninsula, aiming at a better understanding of the developmental trajectory of this important maritime landscape from prehistory to modern times.

In this paper, we will present the results of the continuation and extension of the project through a study season and a major field season in 2022 in terms of fine-tuning the chronological outline and

interpreting patterns of settlement, economic activities, and urban/rural/maritime interactions in this area through time. We will also present our work on a preliminary catalogue of Cultural Heritage sites and monuments in the survey region to use as a research tool and to prevent threat factors and discuss our vision for a “low-impact” development of the Project’s areas for sustainable tourism.

Assessing the Middle Bronze Age in Lebanon: Confronting Old Tales with New Evidence

Hanan Charaf

Lebanese University, Lebanon

The Middle Bronze Age (2000-1550 BCE) in Lebanon is a period of continuous development that started already at the end of the third millennium BCE. The international peaceful conditions that characterized this period allowed for increased old and new contacts with the rest of the Levant and the eastern Mediterranean. The coastal site of Byblos renewed extensive contact with Egypt - which had been severed during the First Intermediate Period - as witnessed by the opulent royal tombs found in that site containing a large amount of gifts sent by the Middle Kingdom pharaohs. Although the unique exception of Byblos was not replicated at any other Lebanese or even northern Levantine site, other cities in Lebanon thrived during this period. Tell Arqa (ancient Irgata), Beirut, Sidon, and Kamed el-Loz (ancient Kumidi) yielded architectural (fortifications, palaces, and temples) and material evidences (jewelry, pottery and metal objects) attesting to flourishing settlements engaged in international trade with northern Syria, Crete, Cyprus, and Egypt. However, the paucity of excavated sites and the unfortunate lack of published data from different excavations in Lebanon do not allow to draw a conclusive synthesis of the Middle Bronze Age period. But the available archaeological material culture displays enough common elements to integrate Lebanon in the cultural *koinè* of the Middle Bronze Age Levant.

SESSION: 101. Interdisciplinarity at SIMUR - the Shiraki International Multidisciplinary Undergraduate Research Project (Workshop)

Chair(s): Misha Elashvili, Ilia State University

International STEM Collaborations Expand Undergraduate Students’ Understandings of Scientific Research

Nicole J. Glen, Jennifer Aizenman, Polina Sabinin

Bridgewater State University, USA

SIMuR - Shiraki International Multidisciplinary undergraduate Research Project is funded by the National Science Foundation. Three large public universities are collaborating on the SIMuR project: Bridgewater State University, Massachusetts, USA; University of California - San Diego, USA; and Ilia State University, Tbilisi, Georgia. In addition to field-specific research goals, SIMuR seeks to develop science content, research, and technical skills of undergraduate STEM students, and to develop leadership skills of students in STEM fields. SIMuR Undergraduate Fellows participate in a year-long research program including an 8-week fieldwork experience (in Shiraki, Georgia, when public health and geopolitical conditions allow). Throughout the year, SIMuR Fellows participate in service learning in underserved communities in rural Georgia and the USA. Researchers used Fellows’ surveys and written reflections to assess the impact on scientific content knowledge, understanding of the scientific process, attitudes and beliefs toward scientific research, and the impact on leadership skills. Their reflections show that the Fellows had expanded their

content knowledge in their own field of science and in other disciplines, learned ways of communicating across language, cultural, and interpersonal differences, became aware of their personal work ethic, and learned that scientists must adapt their project goals and research steps due to changing circumstances. Overall, our data supports our broader implications that SIMuR Fellows become globally competent and engaged young STEM researchers with leadership skills to thrive in the rapidly changing field of interdisciplinary scientific research.

Holocene Paleoenvironmental Evolution of a Shiraki Plain (south-eastern Caucasus) in Connection with Late Bronze to Early Iron Age Settlement Activity

Mikheil Elashvili¹, Giorgi Kirkitadze¹, Tiiu Koff², Markus L. Fischer³, Rosa M. Poch⁴, Azra Khosravichenar⁵, Birgit Schneider⁵, Bruno Glaser⁶, Susanne Lindauer⁷, Levan Navrozashvili¹, Mikheil Lobjanidze¹, Levan Losaberidze¹, Hans von Suchodoletz⁵

¹Ilia State University, Georgia. ²Tallinn University, Estonia. ³University of Tübingen, Germany. ⁴Universitat de Lleida, Spain. ⁵University of Leipzig, Germany. ⁶Martin-Luther University Halle-Wittenberg, Germany. ⁷Curt-Engelhorn-Zentrum Archäometrie gGmbH, Germany

Due to its location between Mesopotamia and the Eurasian steppes, the southern Caucasus occupies a distinctive place in Old World archaeology. In the frame of the current global climate and environmental change that are strongly linked with human influences, naturally fragile drylands represent so-called tipping points where environmental changes can show sudden reactions towards external controls. One of such regions is the Shiraki Plain in the semi-arid south-eastern Caucasian lowlands that is largely devoid of settlements today. Here, Late Bronze to Early Iron Age city-type fortified settlements belonging to the so-called Lchashen-Tsitelgori tradition were discovered and studied during the last years, showing the highest activity during ca. 3.2 – 2.5 ka with early state formation. However, this regional phase of intensive settlement activity abruptly ended around 2.5 ka, and only minor human activity seemed to have continued during later periods. Currently, the mostly unsettled region suffers from ongoing aridification processes.

Our study aimed to study and reconstruct the Holocene regional paleoenvironmental and paleohydrological conditions to explain human-environmental interactions linked with intense regional settlement activity during the Late Bronze to early Iron Age. We applied a multi-disciplinary approach that combined geomorphological, sedimentological, geochronological, paleoecological, remote sensing and hydrological modelling data. The goals of our study were to (i) trace regional Holocene paleoenvironmental and paleohydrological changes, and (ii) identify possible natural and anthropogenic triggers of these changes.

Ground Penetrating Radar of Key Archaeological Features on the Shiraki Plain

Chelsea Carpenter, Christine Brandon

Bridgewater State University, USA

Ground penetrating radar (GPR) is a non-destructive imaging technique in which electromagnetic waves are refracted by different subsurface materials. There are many types of archeological features that can be identified using this technology, including (but not limited to) burials, metallic objects, building foundations, and old roadways. Here, we will present the results from GPR surveys of several sites on the Shiraki Plateau, Georgia. The data were collected during the

summer of 2019 using a GSSI SIR-4000 survey system and a 270 MHz antenna.

Geochemical Analysis of Obsidian Samples from the Keli Highland, Georgia

Justin Bennett-Cohen, Christine Brandon
Bridgewater State University, USA

Obsidian is a prized archeological material for the creation of tools through lithic reduction, due to its near razor-sharp edges. As such, it was often an “exotic” material, transported far from its source location to distant human settlements. However, trace elements in obsidian can vary in chemical composition and abundance, meaning that obsidian carries a “fingerprint” of the area from which it came (i.e. its provenance). In this talk, we will present geochemical analyses of obsidian samples obtained from the Keli Highland, Georgia. Trace element abundances were determined using X-ray fluorescence (XRF), which is a common technique for provenance studies. We will compare these results with obsidian artifacts found in archeological sites on the Shiraki Plateau to assess the likelihood of the Keli Highland as the provenance.

Elucidating Paleoenvironmental Change from Lake-bottom Sediments from Shiraki Plateau

Moescha Jackson
Bridgewater State University, USA

Lacustrine sediments are valuable archives of environmental changes during the lifetime of the lake. Climatological and hydrological information can be gleaned from the mineralogy, grain size, and organic matter present. Here, we present the results from analyses of a sediment core collected from the paleolake location on the Shiraki Plateau, Georgia. In particular, changes in the characteristics of the sediments through time correlate with changes in the hydrology of the lake as it dried out. This record is corroborated by the fossils identified in the same core.

Petrography and Archaeometry of Pottery Samples from the Shiraki Plateau

Edward Lopez, Michael Zimmerman
Bridgewater State University, USA

In the study of archaeological pottery, there are generally three modes of analysis: typology (classification through visual inspection of physical attributes), characterization (the examination of artifacts by which unique properties of the constituent materials of that artifact can be identified, and possibly sourced), and absolute dating by chemical means. This study focuses on the first two of these three modes, focusing specifically on pottery from pedestrian surveys on the Shiraki Plain. These samples were subjected to petrography, or thin-section analysis, in which a very thin slice of material is removed for the purpose of examination under a petrological microscope, to determine the details of crystals and other structures, making it possible to identify the source of the raw materials from which the pot was made. These samples were also subjected to XRF, or X-Ray Fluorescence Analysis, for the purpose of chemical fingerprinting. This section of this workshop will present the results of these analyses.

SATURDAY, NOVEMBER 19, 2022 | 12:45pm-2:00pm (EST)

Initiative on the Status of Women in ASOR: Mentoring Lunch
Boylston Room, 2nd Floor

Poster Session, Sarah Wenner, Presiding

Chair(s): Sarah Wenner, University of Cincinnati, Cincinnati Art Museum

American Sudanese Archaeological Research Center (AmSARC): Working to Support Archaeological Collaboration in Sudan

Michele R. Buzon¹, Mohamed Faroug Ali², Kari A. Guilbault¹

¹ Purdue University, USA. ² International University of Africa, Sudan

AmSARC is the American Sudanese Archaeological Research Center, a US registered non-profit organization in 2017. Our mission is to encourage American and Sudanese archeological research and collaboration in Sudan and provide the network and support for success. The center facilitates research and nurtures scholarly ties between institutions and individuals in both countries as well as conducting its own archaeological research in Sudan. AmSARC also organizes outreach on public archaeology throughout the two countries. This poster highlights the accomplishments and challenges of the organization over the last five years as we have built membership and organized programs. Major activities include board of directors and advisory panel, institutional memberships, individual membership base, 3-year joint workshop at ASOR annual conference (Reintegrating Africa in the Ancient World), several virtual lectures including Sudanese scholars, Sudanese Graduate Scholarship, Graduate/Postdoctoral Research Fellowship, physical office plans in Khartoum, archaeological concessions for field projects in Sudan, and Fulbright specialist funding for bioarchaeology workshop (International University of Africa with Purdue University). Current challenges include maintenance of membership base, internet connection issues for colleagues in various locations, COVID/political disruptions to university and research activities, building relationships with larger research center networks, and workload for organizers. This poster serves as a way to broadcast information about the center and its activities to interested meeting attendees as a means of bolstering the main source of support for the organization, funding of programs through membership fees.

The Academic Genealogies of Near Eastern Scholars (AGNES)

Project: Preliminary Results

Diane Harris Cline¹, Eric H. Cline¹, Rachel Hallote²

¹ George Washington University, USA. ² State University of New York College at Purchase, USA

This poster is intended to supplement our paper presentation of the same title, which will be in the History of Archaeology session. That presentation will describe the pathways taken by scholars of the ancient Near East based on the results of the survey we conducted recently and looks specifically at the history of previous generations. Our poster concentrates on the survey data about academic mentors and survey data relating to excavation experiences. It consists of several full-size sociograms, which allows conference attendees the opportunity to look more closely at the graphics than will be possible during our paper presentation when images will be on the screen only briefly. The poster includes three sociograms presenting data derived from the AGNES survey: a sociogram showing all reported results of “academic family trees” which have at least four links between

scholars; a sociogram of excavations and participants; and a sociogram showing the top three “academic family trees” from the AGNES survey. In addition, we have created a QR code which has been placed on the poster and which will allow attendees to leave us comments and add information about people or relationships based on their own knowledge, as a way of supplementing our data with real-time feedback.

Digitally Cleaning the Section: Using Archived Photographs to Reconstruct Stratigraphic Sections in Faynan, Jordan

Brady Liss¹, Matthew D. Howland², Anthony Tamberino¹, Mohammad Najjar³, Thomas E. Levy¹

¹ University of California, San Diego, USA. ² Tel Aviv University, Israel. ³ University of California, San Diego, Levantine and Cyber Archaeology Lab, USA

At ASOR 2019, we presented a novel method for generating a 3-D model of previous excavations in the Faynan region of Southern Jordan using archived excavation photographs. Using photogrammetry, it was possible to produce a photorealistic 3-D model of the slag mound excavation (Area M) at Khirbat en-Nahas, the largest Iron Age copper smelting site in Faynan. Critically, this area had collapsed since its original excavation. Here, we build on these results by using this 3-D model to digitally “reconstruct” the stratigraphic sections. During the excavation, it was impossible to capture complete, perpendicular photographs of the sections due to their depth of over 6.5 meters. Thus, the only records of the stratigraphy are the drawings. While invaluable, they are limited to simple lines and lack photorealism. Moreover, the radiocarbon and slag samples collected from these sections have played a critical role in recent publications and discussions concerning the history and archaeology of the region, contributing to their significance. As such, creating orthophotographs of these sections could contribute to ongoing discussions in allowing archaeologists to “revisit” the original contexts. This poster presents the methods and results of generating these orthophotographs to digitally “clean the sections” of this excavation.

The Pharmacopeia of Ancient Egyptian Alabaster Vessels: A Transdisciplinary Approach Utilizing Legacy Artifacts from Yale and Penn

Andrew J. Koh¹, Agnete W. Lassen¹, Alison M Crandall²

¹ Yale University, USA. ² Cambrex, USA

Approximately twenty years ago, the first organic residue samples were taken from vessels excavated by Flinders Petrie in New Kingdom Tomb 254 at Sedment, Egypt and now in the Penn Museum. The same project today has been analyzing the contents of an intriguing Egyptian alabaster vase housed in the Yale Babylonian Collection and inscribed in four languages (Akkadian, Elamite, Persian, hieroglyphic ancient Egyptian) to Xerxes, the Great King of the Early Achaemenid Empire. It includes an addendum in the demotic Egyptian script that notes the capacity of the vessel in a Persian unit of measurement.

While the YBC vase dates centuries later than the less elaborate alabaster vessels from Sedment, their organic contents bear strikingly similar chemical fingerprints. Considered together with the large, elaborate alabaster vessels found in the tomb of King Tutankhamun, which were apparently filled to the brim with opiates fit for a royal afterlife, they suggest a long history of life management attached to these types of containers, from a modest burial in Sedment to a lavish tomb in the Valley of the Kings and, finally, centuries later, with a vessel

inscribed with the major scripts of the Persian Empire filled with a medicinal concoction deemed worthy of the Great King of Persia.

These ongoing studies seek to elucidate the role of these vessels, and the medicinal contents attached to them, using a transdisciplinary approach that simultaneously considers all data sets as they unfold, from the chemical to the textual and everything in between.

The Adaptation of Panofsky’s Approach to Ancient Elamite Art Studies

Sara Hajinezhad

L’Orientale University of Naples, Italy

In 1955, Panofsky became the most eminent representative of the iconographical/iconological approach created by Aby Warburg by publishing *Meaning in the Visual Arts*. Later, in the 1990s, Winfried Orthman applied it to Hittite art historical studies. Moreover, Oskar Bätschmann developed an art-historical hermeneutics approach. The Freiburg School, represented by Othmar Keel and his successors, accomplished studies in the field of biblical exegesis with methodological changes with respect to Panofsky’s model. Considering the diversity of correlations between images and texts case-by-case, the Freiburg School members brought up the idea of the interpretation of images in the absence of supporting textual sources. These methodological reassessments have not been taken into account in the field of ancient Iranian art studies, so, considering the requirement of the larger area of humanistic studies, a new adaptation of Panofsky’s approach specifically to Elamite art studies is being proposed and divided into six strata by the present author. In order to cope with the lack of related textual sources in many case studies from the past, all the other auxiliary sources, such as archaeological data, ethnozoological and ethnobotanical in tandem with textual sources, historical and socio-economic context, religious beliefs and shared cultural knowledge etc., are essential tools for the interpretation of artworks and the decipherment of the meaning. In this new approach, as far as we become close to the intrinsic meaning, all the related sources should be regarded at the same level of effectiveness regardless of being images or texts or other kinds of data.

Urban Form and Structure at Middle Bronze Age Kurd Qaburstan, Iraq

Andrew T. Creekmore III

University of Northern Colorado, USA

This poster explores urban form and structure at Kurd Qaburstan, a 100 hectare Middle Bronze Age (2000 – 1600 B.C.E.) city in northern Iraq. Geophysics survey and excavations over several seasons reveal over 50 ha of buried streets, structures, and features. These discoveries permit analysis of urban organization and growth at an unprecedented scale for Middle Bronze Age cities in the region. Contrary to some models that posit that Middle Bronze Age cities were much less dense than their Early Bronze Age predecessors, data from Kurd Qaburstan illustrates high to medium density settlement across the site. Street patterns indicate a mix of coordinated and ad-hoc planning as the city grew. The location and orientation of public buildings, including possible storage structures, a palace, and temple, provide important clues to the role of such structures in shaping urban space. Details of the city wall show coordination and variation in essential details and spatial variables, while isolated open spaces provide gaps in the urban fabric. Taken together, these characteristics show considerable continuity in planning principles between Early and Middle Bronze Age cities, despite socio-political difference across

these periods. This analysis is significant because it takes us directly to the empirical evidence necessary to unpack urban processes, agency, and change in the Bronze Age.

Bab edh-Dhra': Landscape Inquiries into an Early Bronze Age Mortuary Setting

Tucker A. Deady

University of Toronto, Canada

Over 50 years of survey and excavations of Bab edh-Dhra's walled town and cemetery complexes have delineated patterns of land usage from the EB IA through the EB IV periods. The present study draws upon notions of place-making, kinship, and mortuary behaviors while maintaining a link to quantitative spatial analysis methods to address questions about the Bab edh-Dhra' landscape and what inspired a community to use the space repeatedly for burials, eventually settling nearby. Using a multi-scaler approach through the application of cost distance and visibility analyses, this project examines Bab edh-Dhra's roll in spatial and social relationships within central Jordan during the Early Bronze Age. The resulting least cost pathways display possible spatial links between Bab edh-Dhra' and contemporary sites from the Faynan to the Madaba plateau. Site-level viewshed models demonstrate higher intervisibility between the cemeteries and the resulting plotted paths than between the townsite and the cemeteries, suggesting the cemeteries were fully integrated into the movement and viewshed of travelers on possible routes of passage between points of interest. The tombs may not only have served as a landmark for travelers, but also as a claim to space by the most powerful means accessible, ancestry, acting as an heirloom for generations to come. These results help establish the potential in the collaboration of quantitative and qualitative methods, particularly as we expand our knowledge of the social and spatial connections between sites of the southern Levant.

Looting at Balu'a: An Update from the 2022 Field Season

Sarah J. Richardson

University of Manitoba, Canada

The primarily Iron Age site of Khirbet al-Balu'a, located on the southern edge of the Wadi al-Balu'a in the Karak region of central Jordan, has had constant looting, both before and after the baseline GPS survey was done during the 2019 season. This baseline included 201 disturbances, 113 of which were deep looting pits and 88 were shallow pits or metal detector scrapes.

As preparations began for the 2022 field season there were two main goals for the site. The first was to see if there was a correlation between the number of new looting sites and the location of the roads installed on-site at the end of the 2019 season. The second goal was to understand the number of looting occurrences that transpired between excavation seasons.

In addition to the prior two goals, new mapping took place outside of the city walls. This occurred because of the opening of an Islamic period village excavation area outside of the Iron Age city walls for the 2022 field season. Subsequently, this required a systematic mapping of the looting between the Iron Age city walls and the extent of the Islamic period village.

Evidence of Pottery Reuse and It's Second Life During the Persian Period in Tell el-Hesi.

Larra M. Diboyan¹, Benjamin L. Hatfield²

¹ Mississippi State University, USA. ² Lipscomb University, USA

Secondary use, or reuse, of pottery is not always examined due to the item in question having a non-typical appearance after the intended use. These items in their second life take on a differing role within their cultural context. As Schiffer said in his 1987 book, "The prevalence of reuse, a principal means for conserving sometimes scarce resources, is not difficult to understand: reuse is often less costly than securing new items or changing one's activities." First life of ceramic items comes from typical uses such as storage vessels, serving platters, and cups to name a few. Secondary use of what may seem like discarded pottery can take many different forms and functionality. With this in mind, we want to understand why and how a juglet from Tell el-Hesi was reused and what that says about the ancient settlement's inhabitants. With this project, we hope to help fill in gaps in the literature for the Southern Levant region when it comes to the secondary use of pottery. Using examples from areas such as Egypt, where there is concrete evidence for the secondary use of pottery, we will be able to generate information about our subject to continue the conversation of secondary use in the Levantine world.

Tell Kheleifeh at the Crossroads

Jeff Howry

Harvard University, USA

Tell Kheleifeh is situated at the northern-most point of the Gulf of Aqaba, at the crossroads of land routes extending east across Saudi Arabia, north to Jordan and the heart of the Levantine region and west across the Sinai to Egypt. To the south, maritime trade routes stretch to the Red Sea, Africa and Asia. The poster will present the strategic position of Tell Kheleifeh through maps and aerial imagery so that the viewer will understand the unique geographic position of this site. Plans from the Tell's 1938-40 excavations will illustrate the site's features and structure. Trade routes and seaport destinations will be highlighted that provide the context for understanding the diversity of wares, food goods and fauna found in previous investigations of this site whose occupation spans key periods in the region's history. The poster will support two papers presented by Harvard Museum of the Ancient Near East collaborators at the ASOR 2022 conference: Nelson Glueck's 1938-1940 Excavations at Tell el-Kheleifeh, Jordan: A Further Reappraisal – Qurayyah Painted Ware (Glueck's "Midianite Pottery"), by Marta Luciani and Joseph Greene and Nelson Glueck's 1938-1940 Excavations at Tell el-Kheleifeh, Jordan: A Further Reappraisal – The Paleobotanical Remains, by Wilma Wetterstrom and Joseph Greene.

Visualizing Jezebel Against the Grain

Sarah Cook^{1,2}, Nandini Gokhale¹, Sophie Hannah³, Alex King¹, Winston Mavraganis¹, Shawna Dolansky¹, Sarah Malena³

¹ Carleton University, Canada. ² The University of Georgia, USA. ³ St. Mary's College of Maryland, USA

A harlot and a sorceress. An evil, manipulative woman. Such is the legacy of Jezebel, queen of Israel that the biblical historians crafted and later interpreters have expounded upon. It is possible, though, that behind this reputation lies a formidable Phoenician princess turned Israelite queen. How credible is the story of Jezebel, reconstructed within the context of what we know about the 9th century BCE in Israel? And if there is an historical figure buried in the narrative, what can we know about her? The Women of the Ancient World (WOAW) project aims to produce critically informed graphic reconstructions of the material circumstances of the elite women of the ancient Near East. Reconstructing Jezebel and her material environment involves

archaeological, epigraphic, and iconographic evidence from Byblos, Israel, Nimrud, and Nineveh. The Batnoam funerary inscription, a balustrade from Ramat Rahel, the jewelry from the queens' tombs excavated at Nimrud, and reliefs from Nineveh all offer important clues as to the material realities surrounding this elite woman in the context of the 9th century BCE ancient Israelite court. In addition to the material culture evidence, we consider the political tensions of the region at this time as well as existing trade routes that would make goods available. The synthesis of this evidence creates an image of Jezebel as a powerful ancient Israelite queen, clothed in the colours of her Phoenician homeland and Assyrian-inspired ornamentation that proclaims her royal status even in the face of a hostile usurper.

Archeo-Ornithology and Environmental Reconstruction at Medieval Tell Qarqur, Syria

Dillion E. Cartwright¹, Kathryn Grossman¹, Jesse Casana²

¹ North Carolina State University, USA. ² Dartmouth College, USA

This poster presents data from an avifaunal assemblage in Northwest Syria, at the site of Tell Qarqur, situated along the Orontes River ~50 km to the Southeast of Antioch. The objective of this study is to reconstruct the environment surrounding Tell Qarqur during the Mamluk Sultanate (1268-1516). This will be achieved by integrating avifaunal data with other existing environmental data (e.g., pollen, etc.). The primary data set for this project consists of 211 avifaunal elements collected at Tell Qarqur in field seasons dating from 2006-2010. The preliminary analysis only distinguishes 2 of 211 elements to any taxonomic level lower than Bird; however, further research currently being conducted seeks to classify elements to a lower taxonomic category (e.g., Class and/or Species). As birds are excellent proxies to determine ecological and environmental conditions of an area, distinguishing which species are present will aid in our understanding of vegetation, water quality, and which season the assemblage was likely formed.

Cultural Heritage and Marine Protected Areas in the MENA Region

Nick M. Ray¹, Julia S. Nikolaus¹, Colin P. Breen¹, Sophie Tews¹, Crystal El Safadi², Lucy K. Blue², Kieran L. Westley¹, Georgia Andreou², Rodrigo Ortiz-Vazquez²

¹ Ulster University, United Kingdom. ² University of Southampton, United Kingdom

Over the past two decades Marine Protected Areas (MPAs) have emerged as one of the primary legislative initiatives used to protect the marine environment, recognised as an integral management mechanism used to address climate change and as a driver for sustainable community development. To date, these areas have been used primarily to protect the natural environment. However, there is a clear justification and need to integrate cultural heritage into this MPA network. The integration of both tangible and intangible cultural heritage into these frameworks would support enhanced social cohesion, and a strengthening of place-making. The Maritime Endangered Archaeology project (MarEA) has recently started to develop a model that would allow for a more inclusive and meaningful integration of MCH to MPAs.

The main task of the MarEA is to rapidly and comprehensively document and assess threats to the maritime and coastal archaeology of the Middle East and North Africa (MENA). Through quantifying the nature and extent of the cultural resource it is anticipated that the project's digital platforms will provide readily available, open access data to MPA managers and will encourage

deeper engagement with the heritage resource. This poster will discuss how to actively consider the integration of Marine Cultural Heritage (MCH) into existing individual protected area plans. This will pave the way for us to consider ways in which existing boundaries could be extended to facilitate greater inclusion of coastal heritage, and to consider the potential for future designation and protection.

A Multi-Method Survey of the Early Bronze Age Lower City at Tell el-Hesi, Israel

Kara Larson¹, Tony Boudreaux^{2,3}, Shawn Lambert^{2,3}, Bill Isenberger⁴, Anna Luurtsema¹, Allison Densel¹, India Pruette¹

¹ University of Michigan, USA. ² Mississippi State University, USA. ³ Cobb Institute of Archaeology, USA. ⁴ Digital Mapping & Graphics LLC, USA

This project addresses a critical lack in understanding of the nature of the Early Bronze Age domestic living at Tell el-Hesi, Israel. While most excavations in the Levantine region have traditionally focused on large, Tell-like settlements, the surrounding domestic settlements off the tell and in the hinterlands of these sites have been neglected. This bias has resulted in a gap in understanding past human daily life during the dawn of urban living. In an effort to begin addressing this gap, survey fieldwork in the summer of 2022 was conducted in the proposed lower city of Tel el-Hesi and its surrounding environs. This project employed a multi-method survey approach, including 5x5 meter pedestrian survey, ground penetrating radar, and magnetic gradiometry, to discover and document potential Early Bronze Age domestic dwellings at Tell el-Hesi. This poster provides a report of our 2022 field findings and an update on the exploration into Early Bronze Age domestic settlements during the rise of urban living in the Hesi region.

An Experimental Archaeological Approach to Persian Period Mortaria Construction Through the Lens of Tell el-Hesi

India Pruette

University of Michigan, USA

Mortaria are vessels associated with kitchen pottery, particularly in the Persian period (approx. 550-330 BCE), and are often overlooked for flashier finds. In the 1970s, during excavations of Tell el-Hesi, a site located on the edge of the northern Negev in modern-day Israel, questions regarding vessel construction arose about recovered fragments of mortaria. Based on lack of wheel marks and a curious igneous temper, potters on the team proposed that mortaria were not wheel-made as previously assumed.

In 1973, potter Richard Fineman created a mortarium nearly identical to those recovered, using a slab of clay and a jigger mold (shaping tool) with the correct internal dimensions. Later, in the early 1980s, Bill Glanzman examined the Hesi mortaria with x-ray of a flat piece as well as a cross-section. Both of these studies were in concurrence with the theory that these mortaria were not wheel-made.

Since Glanzman's research, little more has been done to understand the process of creating this vessel so popular in the Persian-period kitchen. Therefore, for this poster, I plan to employ experimental archaeology and recreate my own mortaria using Fineman's proposed method of construction and the recorded composition. Then, drawing on Glanzman's method of study, I will examine my own sherds and compare my images with his.

Through this recreation and comparison, I intend to either refute or support the hypothesis that Persian period mortaria were not

wheel-made and shed light on a type of pottery often overlooked in modern archaeology.

Creating 3D Solids with LiDAR to Record Small Scale Archaeological Activity

Trevor S. Gilkerson¹, George A. Pierce², Daniel M. Master¹

¹ Wheaton College, USA. ² Brigham Young University, USA

Light detection and ranging (LiDAR) is widely used in archaeology for architectural mapping and wide scale surveying as part of a 3D GIS workflow. The Tel Shimron project employs this technology to develop a system which measures daily changes in field excavation. Unique from conventional, hardware mounted LiDAR operations, the Tel Shimron team has developed a mobile, handheld system that generates daily LiDAR terrain models of the excavation areas. The team compares each day's scan to that of the previous day, isolating the areas that have experienced change through algorithms developed in the field and at Wheaton College. These indicated locations are subsequently represented as precise 3D solids capable of representing boundaries, surfaces, and volumes of removed material. Using database and traditional 2D GIS records, such solids are connected to identifications of units or pottery buckets made by the field archaeologists. In addition to precise volumetric measurements, the 3D models generated by our method can reconstruct any combination of material - from individual loci to entire phases and enable analyses of past and present surfaces or structures.

An Examination of Gaza Gray Ware Infant Jar Burials at Tell el-Hesi, Israel

Allison E. Densel

University of Michigan, USA

The study of Gaza Gray Ware represents an important opportunity for understanding lifeways in Ottoman-era Palestine. Despite this, the tradition remains poorly understood, its chronology frustratingly elusive. Produced in multiple locations in the Southern Levant, chiefly Gaza, this ceramic industry was present during the 400 years of Ottoman occupation in the region (1516-1918), continuing to a lesser extent into modern times. Favored for their high quality relative to their price, these vessels were manufactured in large numbers and widely exported across the Levant, including into Bedouin territories. The historical popularity of Gaza Gray Ware among the Bedouins is evident in the ceramic assemblages from Tell el-Hesi, Israel. While the site is most widely known for its Bronze Age city and Iron Age tripartite buildings, a sizable Bedouin cemetery is located at the site. The burials contain significant amounts of Gaza Ware vessels, including ibriq water jugs and large water storage containers. The latter type is of particular interest, as all of these vessels were found to contain the remains of infants. Burying infants in jars is an uncommon practice among the Bedouins who populated the cemetery at Hesi. This begs the question: why were some individuals buried in jars while others were not? What follows is a discussion of the human remains interred at the cemetery, with a particular focus on the age of the individuals found in jars. From this, conclusions are drawn about the function of these unique burials, and possible meanings are suggested.

A Comparative Spatial Analysis of Wild and Domesticated Faunal Remains from the Early/Middle Uruk and Late Uruk Periods in Tepe Farukhabad, Iran

Anna Luurtsema, Kara Larson, Alicia Ventresca Miller, Henry T. Wright
University of Michigan, USA

Located in southwest Iran on the Deh Luran Plain, Tepe Farukhabad is a prime example of an early Mesopotamia town. It was initially occupied in the fourth millennium BCE, and its location between the highlands and lowlands facilitated cross-cultural exchange. Dr. Henry Wright's 1968 excavation uncovered pottery, lithics, and buildings dating to a span of over three thousand years, increasing our knowledge of early settlement patterns and interregional trade in Mesopotamia. Extensive collections of faunal remains were also recovered, including those from wild animals, such as gazelle and horses, as well as from domesticated sheep, goats, and cows. Interestingly, between the Early/Middle Uruk and Late Uruk periods, there was a marked decrease in the density of wild, hunted animal bones found in comparison to domesticated animal bones. This finding strongly correlates with increased sedentism and a reliance on domesticates over hunted animals for subsistence. To offer insight into this transition, this poster will contrast the spatial distributions of wild and domesticated faunal remains between the Early/Middle Uruk and Late Uruk periods. Differences in use of space will also be determined by examining the frequencies of wild and domesticated remains in relation to the locations of the mud brick buildings. Altogether, this poster will build on our understanding of Tepe Farukhabad as an early Mesopotamian town in the midst of the transition to sedentism.

Digital Cuneiform Intertextuality: A Clustering Approach for Non-fixed Windows

Jason Moser

University of California, Berkeley, USA

Identifying linguistic connections between documents can aid scholars in discovering more about their corpora of interest, including literary influences, facts about text transmission and common themes or motifs. Computational tools can assist these scholars in locating such potential connections in a faster way and also provide a quantitative basis for any further inferences they make. Some computational tools of this nature already exist for areas outside of the cuneiform world, like the Tesseræ project for Greek and Latin literature. This project attempts to provide a similar tool for cuneiform corpora, but through the use of DBSCAN, a density based clustering algorithm. Such a technique can prove useful for texts whose linguistic units do not have natural delimiters like line breaks and paragraphs. As a whole, the goal of this project is to create a user friendly interface for scholars to examine the linguistic connections between two bodies of cuneiform texts.

The Butcher Shop at Tell Hisban

Isabel Viola Srouf, Colton James Hodges
Andrews University, USA

In the 2022 season at the Tell Hisban dig, a new square (M.13) was excavated to find the south wall of a barrel-vaulted chamber that was previously discovered to the north of square M.13 in square M.9 during the 2018 and 2019 seasons. The discovery of many animal bones in square M.9 led the team to hypothesize that the barrel-vaulted chamber was an animal stable most likely built during the Mamluk period. During the 2022 season at Tell Hisban, we found the southeast corner of the chamber discovered in square M.9. This corner consists of the walls M.13.6 and M.13.8. We also discovered another possible wall, M.13.7, which could lead into another room of the same chamber. While excavating, we also discovered 4 coins and a bone fragment with a hole chiseled through it. If this was not an elite living space, which it

was not, the coins tell you that this space was most likely a market space. The bone was discovered inside the extension of the building. This hole was most likely used to hang meat. This leads us to our point that the barrel vaulted chamber is also a butcher shop and is not fully excavated yet. I propose that we continue this excavation and excavate to the south to fully uncover the butcher shop at Tell Hisban.

Geoarchaeology and Soil Micromorphology of Destruction and Site Formation at Kourion, Cyprus

Amanda M. Gaggioli

Brown University, USA

Previous work at the site of Kourion in Cyprus has focused on types of architectural damage to evaluate the factors of earthquakes on site destruction and abandonment. Excavations in recent years on the first to fourth century CE remains of Building 4 by the Kourion Urban Space Project (KUSP) have begun to address the dynamic factors involved in different phases of destruction and post-occupational site formation. Using the methods and techniques of geoarchaeology and soil micromorphology, this paper investigates the timing and factors involved in phases of destruction and site formation of Building 4. Geoarchaeology integrates subjects of earth sciences in order to inform interpretations of archaeological excavations and explore geological aspects of the human past (Ghilardi and Desruelles 2009). Soil micromorphology is the study of features and structures of undisturbed in situ soils in thin section at the microscopic level. The technique extends on-site studies of stratigraphy in order to enhance interpretations of post-depositional processes and paleoenvironmental changes on the one hand and anthropogenic soil formation and disturbance, land management, and social uses and structuring of space on the other (Karkanis and Goldberg 2017). Preliminary results reveal that Building 4 experienced at least three major phases of destruction and site formation that involved combined anthropogenic and geogenic factors. Future work will continue to evaluate destruction and site formation processes at the microscopic scale and further evaluate the factor of earthquakes in the form of seismically triggered soft sediment deformation structures (SSDS) below and through foundation levels of Building 4.

Patterns of Juvenile Burials in Byzantine Monasteries

Cecelia Chisdock

University of Notre Dame, USA

Monasteries were a common sight in the “Holy Land” of the southern Levant during the Byzantine period (4th-7th centuries CE), as Christianity fueled pilgrimage to the region, built monasticism as a new lifeway, and offered prestige in the form of religious patronage. It is not unusual for the remains of monks to be found within or near the monasteries in which they lived. Yet a not insignificant number of monasteries also contain juvenile burials in contexts ranging from tombs on the grounds to admixed with the monk’s bones– unusual especially as juveniles typically could not become oblates until after puberty. Through a survey of these reported burials, we explore the possible relationships between the juveniles and the monasteries in/near which they were entombed. Across the range of sites, this relationship could include familial patronage, unusually young oblates, a practice of *depositio ad sanctos* (burial near holy bodies) by neighboring communities, and/or the monastery functioning as a school, orphanage, traveler’s hostel, or infirmary/hospital for the juveniles– all of which are attested historically. With these numerous reasons for juvenile life and burial at Levantine monasteries, we aim to

untangle some of the commonalities and differences between monasteries where juveniles were buried and those where they are absent. Utilizing ArcGIS and multiple correspondence analysis we analyze the relationships between the burial of juveniles, the burial of other individuals, burial context, artifacts/inscriptions, monastery type/tradition, proximity to lay communities, and geographical location to infer patterns of association.

The Intersection of Identity and Animal-Human Relationships in a Petra North Ridge Community

Emma L. Wagner, Kathern M. Grossman

North Carolina State University, USA

Social status and identity are important aspects of how people and communities operate on a daily basis. These traits can be better understood through examining daily life activities, how people rely on animals, and how communities manage their resources. Animals are an important component of daily life activities, as they supply food, textiles, tools, and a variety of other secondary products. Additionally, people use animals in specific ways to navigate the circumstances of social status and class influence. Studying the remains of animals recovered at a domestic structure from Petra’s North Ridge, which dates to the late Roman- Byzantine periods, is developing our understanding of how local households utilized animal resources. The faunal remains from Area C of Petra’s North Ridge provides evidence of many animal-human interactions: trade in fish from the Red Sea, specialized herding of sheep and goats, and intensive processing of large mammal bones. These animal-human interactions demonstrate the human reliance on animals in the North Ridge’s community resource systems. This analysis highlights aspects of trade, animal management systems, and foodways of populations during this period. This is being done to balance our knowledge of Petra, which has typically favored research on the monumental remains of the ancient city. By presenting a primary analysis of faunal remains from a North Ridge domestic structure, future works can more effectively be performed on how social status and class intersect with, and impact, a community’s ability to navigate their local and regional environments.

Cranial Injury at Bab adh-Dhra’: Patterns of Cranial Depression Fractures and Injury Recidivism from the A22 Charnel House (EBII-III)

Sarajane Smith-Escudero^{*1}, Keri Porter^{*1}, Susan G. Sheridan¹, Anna J. Osterholtz^{2,3}, Sara Berumen⁴, Julia Prince-Buitenhuys⁵

¹ University of Notre Dame, USA. ² Mississippi State University, USA. ³

Cobb Institute of Archaeology, USA. ⁴ University of South Florida, USA.

⁵ California Department of Water Resources, USA

The presence and purpose of violence in the Early Bronze Age (EBA) Southern Levant is a current debate in archaeology of the Near East for which bioarchaeological investigations are essential to fully understand. Located in present-day Jordan, Bab adh-Dhra’ was continuously occupied throughout the EBA. During the EBII-III (3100-2300 BCE), Bab adh-Dhra’ was an example of town life resulting from agricultural intensification, sedentism, increasing population density, and the construction of a walled community. Previous investigations into traumatic injury at Bab adh-Dhra’ showed a high rate of cranial depression fractures (CDFs) (Gasperetti & Sheridan 2013). This project builds on this work by examining the zonal locations of CDFs and the frequency of multiple cranial traumatic injuries from individuals interred in the A22 charnel house (EBII-III). Results showed females and males received CDFs to the frontal and left parietal, but females

were significantly more likely to receive CDFs to the posterior right parietal while males were significantly more likely to have larger CDFs. Additionally, of the individuals with cranial trauma from A22, nearly half exhibited evidence of injury recidivism with more than one identified CDF. These results speak to the possible functions of interpersonal violence in this community and potential for repeat violent conflicts. The patterns of traumatic injury observed may be related to rising conflict within the community due to social stratification, a lack of centralized power, domestic violence, attempts at social control, or conflict with other groups in the region.

The Waste of a City: The Archaeology of a Sam'alian Refuse Pit

Laurel A. Poolman¹, Maarten Praet¹, Doğa Karakaya², Sebastiano Soldi³, Timur Demir⁴, Virginia R. Herrmann⁵

¹ Johns Hopkins University, USA. ² Eberhard Karls Universität Tübingen, Germany. ³ University of Florence, Italy. ⁴ Gaziantep University, Turkey.

⁵ University of Pennsylvania Museum of Archaeology and Anthropology, USA

When it comes to archaeology, garbage pits, refuse dumps, and other concentrations of waste are invaluable troves of information about ancient human activity. During the 2021 field season, the Chicago-Tübingen Expedition to Zincirli Höyük, Turkey, in cooperation with Gaziantep University, uncovered a thick, ashy, refuse deposit on the site's citadel in a newly opened excavation trench, Area 2C. This multi-purpose refuse pit, which dates to the first half of the 8th century BCE, represents a rapidly deposited dumping ground for animal carcasses, plant remains, ceramic materials, and slag associated with a wide range of citadel activities in the decades immediately preceding palatial expansions under Sam'al's kings Panamuwa II and Barrākib. This distinctive context provides a snapshot of the processes of production, consumption, and deposition at Sam'al's fortified city center as the site's kingship negotiated its own position on the regional and international political stage, particularly in relation to an expanding Assyrian Empire. This poster will present preliminary archaeological, zooarchaeological, palaeoethnobotanical, and ceramic evidence from this context, offering initial interpretations as to what this collection of urban debris might tell us about these activities of manufacture, feasting, consumption, and deposition in the citadel of Iron Age Sam'al at this politically significant moment in the site's history.

Sustainable Heritage Experiences Through Global Virtual Access to Ancient Manuscripts

Lynn Dodd, Sabina Zonno, Mats Borges
University of Southern California, USA

Protection and access stand in tension in domains of heritage, including ancient books and manuscripts. These often command wide audience engagement and appreciation because of the allure of their tangible form and the content they purvey. The curatorial and conservation imperatives restrict touching by inexperienced hands and provoke regimes of rotation for manuscripts, so that they appear only occasionally in public view, typically behind glass. Whichever page is shown can be read on any given day.

A pioneering digital humanities project, developed at the University of Southern California and funded by the National Endowment for the Humanities enables any institution to create immersive experiences of reading any ancient manuscript in any virtual space. Using a widely available virtual reality headset, people can encounter an aural and spatial environment that evokes original contexts of use for each book.

People can explore and interact with ancient manuscripts, turning pages, reading in the original or in translations in any language. The VR experience affords us all the extraordinary, "off-limits" experience of handling an ancient, fragile manuscript, while learning in a manner that encourages support for preservation thinking. Feedback on rough handling is provided.

This flexibility brings with it wide prospects and concerns, and we engage this tension of sustainability (Campion and Rahaman 2019) in the virtual domain. A customizable template can be used repeatedly and globally to expand engagement and exploration without wear and tear to parchment, with low carbon footprint, and encouraging agency in heritage sustainability and discoverability.

Sustainability 2019/11:2425

The Dura-Europos Synagogue Ceiling Surveyor

Claire Campbell¹, Revannt Kantamneni², Pathid Liamtrakoolpanich², Brian Li², Jun Park²

¹ Yale Divinity School, USA. ² Yale University, USA

The Synagogue of Dura-Europos housed wall paintings and decorative elements of significant importance for the study of Jewish art in Late Antiquity. The ceiling of the synagogue was decorated with 450 painted tiles, but only 234 were recovered and their spatial context remains undocumented. Therefore, there is no physical way for scholars to determine how the tiles may have been arranged spatially.

In my poster, I present a digital humanities project of an open-access website for users to explore how the ceiling tiles may have been arranged by moving high-quality photos of the artifacts across a screen while providing the catalog information from the Yale University Art Gallery (YUAG). The platform displays 36 tiles from the YUAG collection with 17 recurring images of flora and produce, mythical and human representations, as well as inscriptions. The interactive platform was created by a team across computer science, museum studies, art history, and Jewish studies allowing users to engage with the material culture from the Dura-Europos synagogue in a novel way.

Future development of this project includes integrating tiles outside of YUAG's collection and building new features, such as sharing and comparison capabilities, to promote further research. The Dura-Europos Synagogue Ceiling Surveyor is a tool allowing users across disciplines to collaborate in the study of Jewish art and archaeology by exploring new thematic ideas through tile arrangement and spatial interaction.

Khufu's First Boat: Transportation from Giza plateau to Grand Egyptian Museum, Egypt

Atef Mofteh Saleh, Nagmeldeen Morshed Hamza, Eissa Zidan, Shaaban Rajab Al-Tuni Alyan, siefeldein Mohamed Youssef
Grand Egyptian Museum, Egypt

Khufu's first boat, also known as the solar boat is the oldest and largest wooden boat discovered in Egypt. The aim of the transportation is to protect and preserve the biggest and oldest organic artifact made of wood in the history of humanity for the future generations. The project design for Ancient Egypt King Khufu's 4,600-year-old ship which traveled from its longtime home near the Giza Pyramids to a dedicated building within the Grand Egyptian Museum (GEM), a state-of-the-art venue set to open outside the capital Cairo in late 2022. The 8-kilometre-long relocation journey was part of efforts to preserve the world's oldest, biggest intact made-of-

wood artifact in the history of humanity. The reasons behind the transportation of King Khufu's first boat was its old museum structure which not equipped to house this magnificent artifact whose organic structure began to decay, also the old building marred the beauty of the southern side of the great pyramid of king Khufu and finally the lack of facilities, services and display methods which presented to visitors. Thus, the transportation of the boat to a new venue was imperative. The transportation of King Khufu's first boat (also known as Solar Boat) as one of the most important, challenging, and unique archaeological and engineering projects.

Conservation of Decayed Garment: Conservation Role in Discovering New Evidence for Tutankhamun's Parents

Nagmeldeen Morshed Hamza, Abd Elghany Mohamed Rehab, Mohamed Ragab Elshorbagy
Grand Egyptian Museum, Egypt

Carter's record indicates that garment was entirely bunched together and sprayed with a solution of cellulose nitrate (recorded as celluloid by Carter) in acetone. From its arrival at the Egyptian Museum in 1933, the garment was kept inside storage room no. 55 until 2015, when it was moved to GEM-CC.

The synthetic polymers held the fragmented pieces together and it was difficult.

To separate them, as they had consolidated into a mass. first decision was not to risk opening the fabric. However, after carefully experimenting with humidification using acetone and water vapors with an ultrasonic humidifier, the cellulose nitrate was found to soften and the fragments could be successfully separated. This treatment led to a surprising discovery on the inscriptions woven into the garment that opened up a new interpretation of King Tutankhamun's familial relationships, in that the cartouche did not belong to him but perhaps to another king or even a queen, providing new evidence concerning his parents. This demonstrated that records of past treatments can help construct a conservation methodology. Although the cellulose nitrate could not be removed from the object, it played a certain role in its preservation. Our current approach used this past treatment and devised a laboratory practice using modern tools and scientific principles in which the cellulose nitrate could be reactivated by acetone. Hence, this case study showed that past conservation activity is integrated into the present approach, and through experimentation challenges can open new doors to better understand our heritage.

Transportation and Conservation of the Tutankhamun Collection: Strategy of Conservation Decision-Making in the Grand Egyptian Museum (Gem)

Seifeldein Mohamed Youssef¹, Anwar Rashed², Abdelghany Mohamed Rehab¹, Nagmeldeen Hamza¹, Shaaban Rajab Al-Tun Alyan¹

¹ Grand Egyptian Museum, Egypt. ² Projects Sector - Ministry of Tourism and Antiquities, Egypt

Although the new Grand Egyptian Museum (GEM) near the Giza pyramids is not yet open, the Conservation Centre (CC) is operational and the employees are working full time to prepare the objects for permanent exhibition in the GEM.

The discovery of the tomb of Tutankhamun in 1922 by Howard Carter is celebrated as one of the biggest archeological discoveries of all times. For the first time, humankind could see the wealth Egyptian kings were buried with. Among the many thousands of finds, were the Arrows, 'sewn sandals' and footstool (hassock) of the king.

The present paper explains the conservation work done in order to exhibit them properly and preserve them for future generations and allows a glimpse into the work (methodology of treatment and conservation) at the GEM-CC.

Early Byzantine Zoara and Medieval Islamic Zughar in the Ghor as-Safi, Jordan

Konstantinos D. Politis
Ionian University, Greece

An Interdisciplinary Research and Study of the Discoveries of Zoara, an Early Byzantine and Zughar, a Medieval Islamic Commercial City in Palaestina Tertia/southern Bilad ash-Sham.

The site is located in modern Ghor as-Safi in Jordan, situated on the south-eastern Dead Sea littoral in the soil-rich and well-watered alluvial fan of the biblical Zared River (modern Wadi al-Hasa). It was known from Roman and Byzantine sources as an important commercial metropolis based on agricultural products such as wheat, dates and balsam. It also was said to exploit local sources of copper ore, salt, bitumen and sulphur.

During the early Byzantine period (4th - 7th centuries AD) it was the Seat of a Bishop in Palaestina Tertia represented at Nicaean Councils. The city is accurately located on the 6th century AD mosaic floor map in Madaba (in modern Jordan), in Al-Idris's AD 1154 'map of the world', on the 13th century Tabula Peutingeriana and mentioned prominently in other ancient and medieval texts.

From 1997 to 2019 intensive archaeological surveys and systematic excavations were conducted in the Ghor as-Safi bringing to light many significant discoveries. They include two large church complexes adorned with a series of highly decorated and inscribed mosaic pavements; 500 ornate funerary stelae inscribed in Greek and Aramaic dating from the 4th-7th centuries AD; industrial presses for olives, dates and sugarcane, indigo processing vats, pottery kilns, glass-making and iron smelts; and an extensive hilltop fortress, guarding the city below, as is cited in the 5th century AD Notitia Dignitatum.

SATURDAY, NOVEMBER 19, 2022 | 2:00pm-4:05pm (EST)

SESSION: 11A. The Amorites: Culture, History, and Archaeology

Chair(s): Gojko Barjamovic, Harvard University | Adam E. Miglio, Wheaton College

Original Amorite “homelands” or Pastoral Nomadic Expansion – The Semitic Speaking Populations of Dilmun and Magan

Steffen Terp Laursen

Moesgaard Museum, Denmark. Aarhus University, Denmark

The archaeological records from Bronze Age Dilmun and Magan dating to the third and early second millennium BC demonstrate that these two ancient domains evolved as sui generis entities with distinct cultural expressions. The two cultures are among others clearly distinguished by contrasting pottery styles, burial systems, and subsistence economy. Their social organizations also assumed widely different forms. Magan society was distinctly “tribal” with fortification-tower-settlements as focal points of social units clustering in larger oases settlements that organized farming, copper mining and exchange. In contrast, Dilmun relied extensively on long-distance maritime trade and its degree of social stratification waxed and waned considerably with Dilmun’s changing position in the networks of trade. Before 2000 BC a trade-fueled Dilmun kingdom and state had emerged on Bahrain island. Investigations by the Danish team at the Royal mounds of A’ali in Bahrain - A dynastic cemetery of fourteen monumental royal tombs, dating c. 1900-1700 BC – have documented that the kings of Dilmun used Amorite names. This new data is striking because it supplements an already overwhelming number of preexisting attestation of Amorite names and references to Amorites in Dilmun and Magan.

In tandem it raises the question whether the situation was the result of:

- 1) Local aristocrats appropriating the new and prevailing Amorite identity?
- 2) Conquest by outside Amorite groups?
- 3) An ancient indigenous population of Semitic speakers?

The Amorites among Iron Age Traditions in the Ancient Near East

Aaron A. Burke

University of California, Los Angeles, USA

The reception of many sources employed in the study of Amorites in Near Eastern history reveal a wide range of traditions related to Amorites that persisted well into the first millennium B.C. Whether through the Assyrian King List or Neo-Assyrian references to a region in the northern Levant still identified as Amurru, these and other traditions were well known to Iron Age scribes. In addition, long-distance mobility, whether through imperial warfare and foreign alliances, as well as trade, placed individuals from Iron Age societies in contact with others at considerable remove from their homelands. This meant exposure not only to foreign places, some with very archaic names, but likewise brought them into contact with foreign traditions, vestiges of which can be sometimes identified among other traditions. Such circumstances may not only explain the persistence of and importance placed on earlier traditions associated with notable Amorite figures, but may also shed light on the basis for direct references to Amorites in texts such as the Hebrew Bible. In the absence of proper historical sources, such traditions appear to have animated the inclusion of references to Amorites in biblical texts, which lent an archaic quality to the text by reference to a widely-known people from ages past.

Emulating ‘Amorite’ Sculpture: A Stone Wig from Knossos Re-identified The Stone Wig at Knossos

Robert B. Koehl

Hunter College, City University of New York, USA

The stone wig that Arthur Evans discovered in the palace at Knossos is still the largest carved sculptural element known from Minoan culture. If, as Evans proposed, the wig was originally part of a human body, its total height might have been over 100cm, or approximately 2/3 life size. Indeed, it is the only artifact that Gesell accepted as belonging to a cult statue. While this paper does not challenge this identification, and rather argues in support, it does challenge Evans’ belief that the wig originally was attached to a statue of a sphinx carved in the Hittite style. The hairstyle of the Hittite sphinx is a bouffant ending in spiral curls with open centers, like that of the Egyptian goddess Hathor. By contrast, the hair of the Knossos stone wig swells towards the bottom as thick, rounded locks; the top of the scalp is flattened rather than bouffant.

While Evans was surely right to look outside of Crete for the wig’s source of inspiration, since its scale and hairstyle are alien to Minoan culture, it is suggested here that rather than Hittite Anatolia, it derives from an iconographic type known from the Middle Bronze Age Amorite sphere. Indeed, the closest comparison to its hairstyle and scale of carving is the stone statue of a “goddess with flowing vase” from the palace at Mari, on the Euphrates, now in modern Syria. This hairstyle is also familiar from mold-made terracotta plaques and cylinder seals, especially from the Old Babylonian/Old Syrian period dating to the 19th-18th centuries BCE, including the imported cylinder seal from the tholos tomb at Platanos.

That the hairstyle of the Knossian statue emulated a type known at Mari, if not the statue itself, is not surprising. There are texts from Mari which attest to trade relations and gift giving between Minoans and the court at Mari. Furthermore, several years ago, the present author suggested that the podium in the vestibule leading into the throne room at Mari was painted by visiting artists from Crete. Interestingly, the statue of the goddess with flowing vase, perhaps one of a pair, is thought to have originally been located in the same room as the podium. Thus, the stone wigs from Tel Mardikh/Ebla and Tel Atchana/Alalakh demonstrate that sculpture with stone wigs, most likely attached to wooden cores, was a widespread tradition in the Near East – possibly Amorite – and provides the most likely artist source for the idea of carving separate stone scalps for Minoan acrolithic sculpture, as most clearly witnessed by the chryselephantine statue from Palaikastro.

On the Linguistic Nature of Amorite

Gonzalo Rubio

Pennsylvania State University, USA

It has been speculated whether Amorite was a Central Semitic language, a dialect within a specific Semitic language continuum, or perhaps even a pidgin or a creole of some sort. The distinctive features that are subsumed under the label Amorite appear attested in a corpus of personal names, which is well documented in texts from Mari. Otherwise, the language of these texts corresponds to the Babylonian dialect of Ešnunna, from which essential elements of this onomastic repertoire clearly depart. The difficulties posed by any attempt to define Amorite are those inherent to the study of so-called *Trümmersprachen*: dialectal boundaries seem murky and language continua become syncopated. Throughout the Bronze Age, Syria constituted a thickly woven tapestry of overlapping

languages, dialects, and scribal traditions, as evidenced in texts from Ebla, Mari, Tuttul, and Qatna. It is in the intersection between scribal traditions and crisscrossing linguistic realities that the materials labeled as Amorite should be reexamined.

SESSION: 11B. Style and Identity in Ancient Near Eastern Art I

Chair(s): Kate Justement, Institute for the Study of the Ancient World, New York University | Elizabeth Knott, Institute for the Study of the Ancient World, New York University

The Aesthetics of Archaism: Reconsidering Representation during the Kushite ‘Renaissance’

Peter M. Johnson

The Institute of Fine Arts, New York University, USA

Kushite Art of the Napatan Period, ca. 700-300 BCE, has been broadly characterized by its Egyptianizing influences. Visual culture from this period is called archaistic due to Egyptian representational conventions which have been heralded as a revival, or renaissance, of classical forms. This appraisal overlooks the innovations and irregularities found in Kushite visual culture which are distinctly non-Egyptian and clearly identify a representation as Kushite. This presentation poses the question of what we mean, and from whose perspective are we looking, when we label these works as examples of archaism. Categorizing a work as archaistic relies on positioning a piece temporally in relation to another by identifying survivals and revivals of styles, iconographies, and forms, most often for dating purposes. Yet, this temporal comparison assumes that Egyptians and Nubians shared the same concept of temporality. A distinctly Kushite temporality will be presented to propose an analysis that instead focuses on how Kushite representations leveraged a preexisting visual lexicon as evidence for a critical engagement with an expanded environment of socio-political control. Textual and archaeological evidence from this period suggest a unique process of Nubian signification. Interrogating this process of representational meaning-making offers a new context to consider the significance of Kushite images beyond a similitude to Egyptian art and instead as a reflection of a unique worldview.

Under the Shadow of the Great Kings: Personal Seals as Community Makers in Hittite Syria

Serdar Yalcin

Macalester College, USA

In art historical and anthropological literature, style is considered to be instrumental in group definition and boundary maintenance, and viewed as a vehicle for a social group to communicate its values. Communities and class subcultures may wield style as a tool to identify their members and conversely those who do not belong to their groups. Hence, the stylistic make-up of an art object could mark its owner as a member of a community, professional group, and so on. Grounded on this understanding, this paper will look into the glyptic practices in Western Syria under the Hittite rule (ca. 1340-1180 BCE), and investigate how the stylistic choices made by seal owners marked their membership to exclusive communities. It will maintain that the ownership of the Syro-Hittite style cylinder and Hittite style stamp seals, engraved with hieroglyphic Luwian inscriptions and the images of Anatolian divinities, were parts of the material practices that defined an elite community in Hittite Syria, the members of which were mostly affiliated with the Hittite administration (i.e. royals and officials at different levels) based in

Carchemish and Hattuša. Local elites and people with no connection to the Hittite administration, by contrast, typically used Syro-Mesopotamian types of seals (e.g. Mittanian style). The ownership of the Syro-Hittite and Hittite types of seals by individuals whose connection to the Hittite kingdom was based on vassalage (e.g. Šaušgamuwa of Amurru and Amanmašu of Egypt) should be regarded in this context as a claim to membership of the kingdom’s administrative elite.

The Assyrian Beard: Style, Decadence and Faked Realities in a Semiotic Perspective

Dominik Bonatz

Freie Universität Berlin, Germany

Following the depictions in Neo-Assyrian visual arts, the elaborated beard was a hallmark of Assyrian male identity. With exception of the eunuchs, every Assyrian man is wearing a long and stylish beard as sign for his masculinity and ethnic affiliation. Not only humans but also gods and other supernatural beings are fashioned in the same way with the typical Assyrian beard. However, there are differences in the elaboration of the beards, which mirror different positions in the social hierarchy of the depicted actors.

The questions addressed in this paper aim for a semiotic analysis of the Assyrian beard style. What stands behind the pictorial reality of these beards? Who, in reality was able, to afford such a lavished beard fashion? A closer look on the visual evidence indeed leads to the suspicion that the images construct a reality that was perceived as realer than real. Hence, the Assyrian beard style will not be considered as simple matter of male identity but as complex artificial by-product of intentionality that shifts between decadence and faked realities.

From Subsistence to Social Life (Status, Identity, Ritual): Exploring Style in the Ancient Near Eastern Jewellery Inspired by Nature

Silvana Di Paolo

Istituto di Scienze del Patrimonio Culturale, Consiglio Nazionale delle Ricerche (ISPC-CNR), Italy

In ancient Near Eastern archaeology, style was conceptualized as a taxonomic tool with two meanings: the style of a group, period or school, and the distinctive style of some talented personalities, thereby assuming that there is a direct link between style and a specific culture (aspects summarized recently by A.C. Gunter). More recent novel insights and perspectives have instead focused on style as a social, ideological and technical ‘construction’, or as shared practices and artistic languages that can extend or contract over time and space (as in M.H. Feldman’s work). This paper explores the relationship between style and identity via a specific perspective. The development of post-processual approaches opened up spaces for the investigation of materiality and identity, as well as the dialectic of things and people (an aspect also explored by S. Di Paolo). Furthermore, in this interpretive perspective the role played by plants in the palaeoeconomy, and the consumption practices are embedded within a specific ideological framework: therefore, plants are used to access interpretations of society and social practices (for food, building, funerary rites, etc.), as already showed by N.F. Miller. By drawing on different case studies based on cuneiform texts and material culture, this paper investigates the meaning and value of style concept in ancient Near Eastern jewellery reproducing plants (namely fruits and flowers). In studying the archaeological and historical contexts, technological choices, and socio-political

environment, it concludes by highlighting the nexus between people and nature as facilitator of social dynamics and communication with divinities.

SESSION: 11C. Protecting Libyan Cultural Heritage II

Chairs(s): Ahmad Emrage, University of Benghazi, ASOR Cultural Heritage Initiatives | Aida Ejroushi, Texas Tech University, ASOR Cultural Heritage Initiatives

The Libyans and Cultural Heritage: Years of Negative and Positive Interaction

Khaled M. A. Elhaddar

University of Benghazi, Libya

The Libyans have not only known their cultural heritage for many years, but even centuries ago, when their lives were near or inside archaeological sites and cities, and then they exploited it for their living in the shadow of ignorance and lack of knowledge of its value and in the absence of any deterrent from the ruling authority, which often does not realize the importance of this cultural heritage. At first, they were not interested in the archaeological artifacts that they were finding in those sites, especially statues and pottery. But this situation differed later when they noticed the interest of foreign travelers and consuls in it and that it is desirable to them.

This opened the door for negative interaction with the antiquities to obtain and sell them, and this phenomenon is still continuing until now for some Libyans, but it became deliberate after they knew their material value, where they obtain them through illegal digging or stealing them from museums and stores to smuggle and sell them outside Libya. This happened in the absence of deterrent sanctions and the weakness of guarding archaeological sites which resulted from negative circumstances and political, security and war problems that occurred in Libya in the last decade.

There is another group of Libyans who knew the cultural value of that heritage and that it is part of their identity, so they dealt with it positively and when they obtained the archaeological artifacts, they handed them over to the competent authorities.

Documenting and Evaluating the Impact of Rising Sea Waves on the Northern Side of The Archaeological Site of Tocra-Libya

Naser Alhrari

Department of Antiquities of Libya, Libya

The phenomenon of high waves crashing into archaeological sites represents one of the most dangerous natural threats, which naturally led to the destruction of many coastal sites in Libya. This paper summarizes the documentation and evaluation process that I conducted during January and February 2022 of what this phenomenon has caused to the archaeological remains located on the northern side adjacent to the sea in the city of Tocra.

In this study, in addition to what is available in the archives of the city of Tocra, I relied on field survey data and analysis of satellite images from 2002 to 2021. The results will be highlighted by producing digital maps using GIS software and three-dimensional images using photogrammetry programs. The study covered the entire northern side of the city of Tocra, which is 760 meters, and identified the most damaged places, which amounted to about 245 meters and clearly shows soil erosion and wall collapses whose extension inside the northern edge of the city reached about 16 meters during the period between 2002-2021. This paper will also present many achievable

recommendations that may be taken as an action plan by the responsible authorities to save this site.

The Role of The Scouting Movement in Libya in Preserving the Cultural Heritage: From 2016 to 2022 as a Model

Talal M. Bariun

Libyan Museum Suitcase Project, Libya. ASOR Cultural Heritage Initiatives, Libya

The Scout Movement was founded in Libya in 1954, and during its life of 68 years so far, this movement in Libya formed a broad and wide base of volunteers, distributed in 25 cities in Libya and 112 villages, more than a million volunteers have passed through it in a period of their life spans. The movement in Libya has always been one of the largest and most powerful civil society. This enabled it to play a major role in the civil attempt to preserve the rich and diverse Libyan cultural heritage.

Since 2016, some leaders in the scouting movement have been aware of the urgent need to increase activity and training awareness workshops to form a generation of citizens who can be more interested in preserving cultural heritage. A very wide campaign of interactive, interesting, and enthusiastic activities was organized in which children, youth and parents can participate. The issues, through various types of awareness activities, some for a period of only one hour, some lasted for five continuous days, and some are directed at young and adult scouts, and some are directed at children and students of primary, middle, and secondary schools, others are it is directed even to university students and higher institutes. Even created specialized workshops for policemen and customs guards.

It has been truly a tumultuous and active journey that spanned over six years, real and tangible results were achieved, increased, and expanded over large geographical areas, a strong team was formed included Scout leaders, teachers, university professors, researchers, and ordinary citizens. We have already started a new stage to transfer our experience, which we consider successful, to neighboring countries. In this paper, we will get acquainted in detail with this experiment, according to data and statistics that are closer to accuracy.

The Cyrenaica Coastal Survey Project – Recording and Protecting Maritime Archaeology in Libya

Julia Nikolaus¹, Ahmad Emrage², Fouad El-Gumati³

¹Ulster University, United Kingdom. ²University of Benghazi, Libya. ³Department of Antiquities, Libya

This paper will present the results of the Cyrenaica Coastal Survey (CCS), a collaborative project between the Maritime Endangered Archaeology project (MarEA, UK) and the Department of Antiquities (DoA) Cyrenaica in partnership with the Universities of Benghazi and Al Beyda, Libya.

A team of Libyan heritage professionals recorded the current conditions of, and threats to, onshore, intertidal, and submerged sites between Apollonia and Tocra. The focus was particularly on lesser-known sites where little intensive fieldwork has been conducted previously and, as a consequence, we still know relatively little about what role these places played within local and wider economic and socio-political networks.

The steady loss of these under-documented coastal sites creates an ever-growing gap in our understanding of how local and Mediterranean-wide maritime networks developed, functioned, and changed over the centuries. The many production sites documented

during the survey, including farm estates, vats, basins, and kilns as well as dense pottery scatters, pressing and grinding equipment, speak of an area that was heavily involved in local and wider economies during the classical period.

This paper will present the results of the CCS and will provide a snapshot of the damages and threats that coastal heritage faces Libya across Libya, most notably (often unregulated) building activities, clearance, sand mining, and coastal erosion. Furthermore, it will highlight the importance of remote collaboration between UK institutions, in-country partners, and heritage authorities, especially in countries where the discipline of maritime archaeology has been established more recently.

SESSION: 11D. History of Archaeology

Chair(s): Nassos Papalexandrou, The University of Texas at Austin, Art and Art History

The History of the Archaeology of Cyprus: Between Treasure-hunting and Academic Excellence

Giorgos Bourogiannis

National Hellenic Research Foundation, Greece

The island of Cyprus holds a unique position in the archaeology of the Mediterranean. Its strategic location and rich resources shaped a unique and complex cultural identity that is reflected on the island's archaeological and epigraphic record. Cyprus managed to retain and exploit its uniquely favourable environment for human mobility, the exchange of ideas and the spread of technologies and thus offers exceptional conditions for the archaeological investigation of such phenomena. Moreover, the island has been extensively excavated and published, resulting in a rich academic literature and, therefore, provides solid ground for further research.

An independent academic discipline today, Cypriot archaeology was shaped with some delay, in comparison to the archaeology of its surrounding areas, including the Levant, the Aegean and Egypt. The start of true scholarly interest in the remote past of Cyprus and its material manifestation was bumpy and reluctant. The paper aims to discuss aspects of the history of Cypriot archaeology from the 19th century to the modern era, by highlighting specific incidents of its long and fascinating course: from a series of rather infamous and morally questionable digs, to scholarly excellence and one of the most successful stories in the archaeological discipline of the Mediterranean as a whole.

The Academic Genealogies of Near Eastern Scholars (AGNES) Project: Preliminary Results

Rachel Hallote¹, Diane H. Cline², Eric H. Cline²

¹State University of New York College at Purchase, USA. ²George Washington University, USA

The development of the archaeology of the southern Levant is usually presented through several standard narratives. For American scholars, it frequently begins with Albright and his students, while in Britain it includes figures like Petrie and, somewhat later, Kenyon. There are also multiple permutations deriving from early European scholars.

A similar phenomenon is in play for the history of excavation in the southern Levant. Certain "big digs" of the second half of the 20th century became well known to generations of students, including the projects at Gezer, Tell el-Hesi, Lachish, Tell Miqne, and Ashkelon. The

oral traditions that formed around these projects implied that they were especially influential.

But neither of these narratives has ever been properly analyzed or questioned.

In fact, our preliminary results indicate that there is much more diversity in the development of the discipline, and in the pathways taken by scholars of the ancient Near East, than has been previously suspected. Certainly, a portion of active archaeologists and biblicalists trace their academic lineage directly back to Albright, and others back to Petrie and Kenyon, but these represent only a small minority—the vast majority have come through other paths of descent, previously unexplored and undocumented. There is also significant diversity in fieldwork experiences, with fewer scholars being associated with the well-known excavations than anticipated, and covering a larger geographical territory than expected.

Archaeological Image-Making in Early 20th Century Mesopotamia

Lisa Cooper

University of British Columbia, Canada

This paper investigates the intent, meaning and impact of images found in excavation reports from Mesopotamia in the first half of the 20th century. Its particular focus are the British archaeological excavations undertaken at the Syrian site of Carchemish between 1911-1914 and 1919. Carchemish produced some of the earliest publications rendered in a new 'scientific' format by English-speaking missions working in Mesopotamia, and served as the standard after which subsequent excavation reports such as those from Ur and Nippur in Iraq, were modelled. The reports, which included numerous illustrations, endeavored to convey the scientific character of the archaeological enterprise, with an aim to convey full, evidentiary documentation of the findings and underline the careful, systematic nature of the archaeological process. Despite this drive towards greater scientific objectivity, however, the reports' visual representations were far from objective records of an undisputed 'reality' nor were they comprehensive in scope. On the contrary, the images within these reports reveal constant manipulation and selectivity to fashion many kinds of 'realities' and 'objective' recordings. The images were at the service of a particular vision and never free of the interests and prejudices of the person who produced them. Ultimately, it is hoped that this examination will force one to look more critically at how images have been manufactured within the practice of archaeology, and then proceed in new directions, inviting alternative, de-colonized perspectives and interpretations that greatly augment and enrich one's understanding of how people lived in the past in the ancient Western Asia.

The Chariot Drivers of Troy: The Workers of the Cincinnati Troy Expedition

Jeffrey L. Kramer

University of Cincinnati, USA

The leaders of the University of Cincinnati Expedition to the Troad – Carl W. Blegen, Marion Rawson, and John L. Caskey – have their names emblazoned on the covers of all four volumes of the final publication. Yet like the chariot drivers in the *Iliad*, little is written about the scores of local workers who conducted the actual excavation, even though more than 100 served at several points between the 1932 and 1938 seasons. Blegen does briefly thank them in the introduction of the first volume, and he singles out by name Kâni Barin, who participated in all seven seasons, the last five as foreman.

The workers also appear in several photos, but only as incidental figures. A single published photo – showing pot washers – is specifically about them.

This paper seeks to highlight the contributions of these workers by analyzing archival photographs, notebooks, and film clips. Furthermore, financial records for each of the seven seasons list the names of every person paid in connection with the dig. After a brief discussion of the possible background of these workers, I attempt to identify the key players, such as Kâni Barin. Finally, I intend to examine the workers' roles in the wider context of the excavation.

Lost in Translation: The Consequences of the Double Burden of Translation Work on the Time and Work of Local Archaeologists on Anglophone Projects in Turkey

Yağmur Heffron

University College London (UCL), United Kingdom

Archaeologists who do not speak the language(s) of the countries in which they conduct fieldwork must rely on translators. This paper considers the ethical implications of transcending the language barrier informally, through the invisible labour of local archaeologists and archaeology students. Taking Turkey as a case study, the focus of the paper is on the circumstances and consequences of Turkish-speakers on Anglophone projects being routinely tasked with translation jobs over and above their regular archaeological activities. I have previously described the translation services undertaken by native-speakers as a second shift or double burden, terms coined originally in feminist literature to highlight unequal divisions of domestic labour.

In this paper, I highlight the problematic hierarchies which result from unequal divisions of archaeological labour. Where the professional and educational activities of trained archaeologists and students in training are regularly interrupted or suspended to facilitate the work of non-native-speakers, the implicit message is that the time and work of one particular group is of lesser value, and can be sacrificed to preserve the time and work of another.

Based on the preliminary results of interviews conducted with Turkish-speaking archaeologists, this paper will propose workable strategies of tackling such problematic labour relations, starting with making translation work visible, and adequately accounted for. The need for linguistic and cultural mediation in multinational teams is not necessarily a drawback to be managed but can be an opportunity to discover unique means of communication and understanding.

The Secret Life of the Archaeological Field School: Are We Doing Enough?

Ian Cipin

University of Haifa, Israel

Archaeological field schools have been an integral part of excavation projects in the Southern Levant for many years now, having evolved and developed since William Dever invited students to earn credit for taking part in archaeological fieldwork at Gezer in 1966. An essential source of funding for many excavations, archaeological field schools in the region attract hundreds of students each year who are eager to earn credits while also gaining valuable fieldwork experience. Archaeology has changed tremendously since Dever's first field school, and this paper asks whether or not archaeological field schools in the region have kept pace with these developments. Using the Jezreel Expedition in Israel as a case study, I argue that the innovative approach to the archaeological field school adopted there, while challenging to implement, offered students the opportunity not only

to obtain credit, but also to achieve a broader understanding of the archaeological process and solid preparation for a career in archaeology. It is hoped that this paper will serve to open a dialogue among ASOR members on the roles and responsibilities we have toward this essential, educational, right of passage for students, ensuring that the highest standards of education and best value for money are given.

SESSION: 11E. Landscapes of Settlement in the Ancient Near East

Chair(s): Jesse Casana, Dartmouth College | Emily Hammer, University of Pennsylvania

Landscape Archaeology and the Cultural Memory of the Land of Magan: Geographical Information Systems and Artificial Adaptive Systems for the Study of the Archaeological Landscape and Human Mobility in South-Eastern Arabia during the 3rd Millennium BC

Marco Ramazzotti, Guido Antinori

Sapienza Università di Roma, Italy

The archaeological landscape, understood as a complex artificial system, is a matrix on which culture and identity are imprinted and transmitted, thus becoming itself a means cultural memory dissemination through the ages. This research sought to analyze the relationship between landscape and memory: how ancient people sealed their culture in their territory, making the landscape itself a witness and bearer of that culture. The historical and cultural dimension that best represent and express the envisioned relationship between landscape and memory were identified in the mobile communities emerged in southeast Arabia during the Early Bronze Age period. In these cultures, the processes of memory transmission must be sought in the man-made landscape built around places of memory, often monuments that still characterize the territory. The case study selected is the Bronze Age archaeological landscape of central Oman, where a semi-nomadic dimorphic structured society emerged at the end of the 4th millennium BC, a complex mobile culture that will transform its territory forever, through a long and irreversible process of monumentalizing of the landscape. With this project, we propose Geographic Information Systems and Artificial Adaptive Systems for the documentation and reconstruction of the cultural landscape in its broadest sense, reconstructing the network of complex relationships that allowed its genesis. The outcome of this analytic process would allow to study the relationships between human mobility and settlement patterns with the cultural expressions of the Land of Magan, highlighting the ways in which the man-made landscape becomes the bearer of a thousand-year-old cultural memory.

Simulating Settlement Persistence within the Ancient Near East

Katherine A. Crawford¹, Georgios Artopoulos¹, Iza Romanowska²

¹The Cyprus Institute, Cyprus. ²Aarhus University, Denmark

The project 'EIDOS of a city: simulating the collapse and resilience of ancient Eastern Mediterranean urban environments via agent-based modelling' aims to identify some of the mechanisms that contributed to urban decline or resilience within the region. This is being achieved by 1) analyzing settlement persistence using settlement data and paleoclimate data compiled from Cyprus, the Levant, and the Orontes Watershed (CRANE), 2) the development of a general 'urban settlement' agent-based model to identify specific mechanism contributing to a settlement's growth or decline, and 3) testing the agent-based model with a specific Cypriot urban case study. This paper will discuss the methodological approaches taken within this

project and will present the preliminary simulation results which aim to contribute to our understanding of specific urban factors that indicate a settlement's level of resilience.

The Erbil Plain Archaeological Survey, 2012-2022

Jason Ur¹, Nader Babakr², Rocco Palermo³, Petra Creamer⁴, Mehrnoush Soroush⁵

¹Harvard University, USA. ²Directorate of Antiquities, Erbil Governorate, Iraq. ³University of Pisa, Italy. ⁴Dartmouth College, USA. ⁵University of Chicago, USA

This presentation summarizes ten years of landscape archaeology on the Erbil Plain, in the Kurdistan Region of Iraq. It will highlight the most significant findings of the Erbil Plain Archaeological Survey and it will discuss critically how the project's methodologies have evolved, especially its use of mobile GIS, historical remote sensing, drone photogrammetry, and local collaboration.

Settlement Patterning in Northern Iraq Under the Neo-Assyrian Resettlement Regime

Jack Bishop, Jason Ur

Harvard University, USA

Forced migration is a dramatic and brutal practice with a prominent place in the histories of modern and ancient states. The Neo-Assyrian policy of mass deportation and resettlement of conquered populations is well-attested in inscriptions and primary records. In addition to serving as soldiers and laborers, deportees were placed in agricultural settlements to meet the increasing grain demands of the empire's administrative centers and standing army. The state also undertook major construction projects that included the expansion of irrigation systems into these farmlands. The purpose of this paper is to examine the impact of this policy on settlement patterning by comparing the Mitanni and Middle Assyrian patterns of the Late Bronze Age period to the Iron Age Neo-Assyrian pattern.

I will present the results of statistical analysis of data produced by the North Jazira Survey (Wilkinson 1986-1990) and the Erbil Plain Archaeological Survey (Ur 2012-present). To test the premise that deportee resettlement was a top-down project targeting underexploited agricultural territory in an otherwise bottom-up settlement landscape, this analysis focuses on settlement distribution patterns and proximity to natural water sources. The expansive chronological coverage of both surveys also allows the transition from the Mitanni/Middle Assyrian period to the Neo-Assyrian period to be analyzed within the context of the longer settlement histories of the north Jazira and Erbil plains.

Con-SUMER-sites: A Multi-disciplinary Approach to the Study of Food Production in the Mesopotamian Hinterland

Tina L. Greenfield

University of Saskatchewan, Canada

Cuneiform texts from southern Mesopotamia suggest that the early 3rd millennium is a time of international, regional, and local trade, especially between and within Early Dynastic mature city-states (2900-2350 BCE). While it is known that trade existed amongst the citizens and state from the heartland and hinterland within each city-state, what is less understood is how the smaller settlements interacted with the larger cities. More specifically, what role did these smaller settlements play in provisioning the urban settlements? Textual documents from Tello and Ur and refer specifically to some hinterland settlements and their particular roles regarding food production.

Further, information is gleaned from texts on the use of these products, such as providing food for the temples, sacrifices to the Gods, and/or feeding the general populations. Through the integration of data from satellite images to determine "hollow ways", cuneiform texts, and bio-archaeology (i.e. animal isotopes), a pattern of food provisioning within the city-states that links food producer and food consumer sites emerges. The integration of a variety of traditional and non-traditional data sets provides a broader picture of the economics of Early Dynastic city-states and sheds light on the little understood 'special producer settlements' throughout the Mesopotamian hinterland.

Tracing Greco-Roman Caravan Routes in the Egyptian Western Desert Using Least Cost Paths

Julian Thibea

Center for Ancient Middle Eastern Landscapes, USA

The settlements of the oases of the Egyptian Western Desert and the Nile Valley were connected by an expansive network of roads, generally no more than tracks through the desert. Many routes used by caravans in antiquity and later periods are still known, which will provide a dataset to compare to routes generated using least cost paths. I will adapt the least cost model recently developed by Louis Manière, Maël Crépy, Bérangère Redon (2021) for Hellenistic and Roman camel caravan travel in the Eastern Desert of Egypt to the significantly different landscape of the Western Desert. Using known caravan departure points from the Greco-Roman period as nodes and adapting the model previously mentioned, I will generate least cost paths between the oases and between the oases and settlements in the Nile Valley known to trade with them in this period. Least cost paths will be compared to known routes to check the accuracy of the model. Some roads clearly visible in satellite imagery have been mapped, but it is likely that many Greco-Roman routes have been overlooked due to the fainter traces left by camels as well as the movement of sand dunes across the landscape. The least cost paths generated by this research have the potential to predict the location of unrecorded routes taken by caravans through the desert and will be compared to satellite imagery to determine whether there are traces of ancient roads following the ideal routes generated using least cost paths.

A Wall or a Road?: A Remote Sensing-based Reassessment of the Roman Limes of Syria

Jesse J. Casana, David Goodman, Carolin Ferwerda

Dartmouth College, USA

Throughout the eastern Syrian Desert lie hundreds of small, square buildings, generally thought to be the remains of Roman and late Roman forts, the so-called "Roman Limes," guarding against military incursions from the east. Many of these sites were first documented in the 1920s by Antoine Poidebard's pioneering biplane survey of the region, but today, most have been obscured or destroyed by modern development. Using both "brute force" and object-based automated detection methods, this study employs 1960s-1970s CORONA and HEXAGON satellite imagery that predates the most intensive land use changes to map these unique sites across a vast region. Our results have documented hundreds of previously unknown forts or caravanserais, while morphological analysis suggests both a date and function for many of them. Importantly, rather than forming a north-south line marking a political and military boundary, the distribution of forts instead trends east-west, suggesting they have more to do with

transport, communication, and trade, and thereby stressing the connectivity among past communities across the ancient world.

SESSION: 11F. Investigating Ancient Societies: Challenging Assumptions, Exploring Approaches I

Chair(s): Nadia Ben-Marzouk, University of Zurich | Danielle Candelora, State University of New York College at Cortland | Kara Cooney, University of California, Los Angeles

The Nature of the Beast: A Multispecies Approach to Urban Development in the Ancient World

Christine A. Mikeska

University of North Carolina at Chapel Hill, USA

In this paper, I reconsider traditional understandings of urbanism by reimagining early cities as multispecies landscapes composed of, and produced by, diverse human-animal interactions. Despite the tendency of modern scholarship to sanitize both modern and ancient cities of their non-human occupants by emphasizing an anthropocentric perspective, archaeological, historical, and ethnographic evidence clearly demonstrate that the co-existence of humans and animals is an intrinsic characteristic of urban life. Furthermore, a multispecies approach recognizes that the world's first cities, in particular, were composed of diverse human and animal communities interacting at an unprecedented scale. Whether designated as "wild," "domestic," or temporarily "tamed," non-human animals were ubiquitous in and around early urban landscapes. Within this multispecies framework, the urban landscape becomes a more realistic and inherently complex environment where social life and the physical landscape is shaped by the specific needs of, and relationships between, humans and animals. Drawing together archaeological, historical, and iconographic evidence, I apply this multispecies approach to Boğazköy-Hattuša (ca. 2000 – 1200 BC), located in central Anatolia, and investigate the ways in which human-animal interactions impacted urban development of this Bronze Age city. I suggest that diverse and multifaceted human-animal relationships fundamentally shaped the city's physical and social landscapes.

Urban versus Village Society: Challenging Assumptions about Egypt's Non-urban Past

Nadine Moeller

Yale University, USA

In this paper I would like to address the issues concerning the prevalent discussions in current scholarship about Egypt's urban / non-urban past and society. Past and current studies have presented a variety of arguments based on the available evidence for both visions, the urban as well as village horizon.

Back in 1958 John Wilson chose the (rather unfortunate) title for a response he gave at a conference on ancient urbanism in which he called 'Egypt: A civilization without cities'. This was strongly refuted in the 1970s highlighting the existence of urban features and a complex settlement system based on new archaeological fieldwork. However, more recently, there have been some scholars who conceptualize Egypt foremost as a village society through most of its pharaonic period history (e.g. Eyre 1999, Tavares 2011, Bussmann 2014). Therefore, I believe it is time to take a closer look at these definitions, the challenges in the archaeological and textual record and how we could understand Egyptian society with regard to the presence or absence of urban features. The aim is to provide a more nuanced vision of Egypt's settlement system and its evolution throughout the

pharaonic period and what 'urban' could mean for ancient Egypt as a whole. I would like in particular to critically evaluate the arguments that describe the settlement system as being largely a village horizon and lacking urban features.

Shifting Boundaries, Conflicting Perspectives: (Re)establishing the Borders of Kemet through Variable Social Identities

Danielle Candelora

State University of New York College at Cortland, USA

The concept of an eternal, unchanging Egypt has been challenged on the chronological front, yet our assumptions about Egypt's geographical boundaries are themselves unchanging. But what is Egypt? Despite the fact that the king of "Egypt" is the lord of the two lands, which are separately referred to as Upper and Lower Egypt, these titles do not actually share a word which means "Egypt." Even Kemet actually refers to the Black Land, meaning the agriculturally fertile silt left behind by the Nile inundation. Regardless, the concept of Egypt and its borders has been accepted since the decipherment of hieroglyphs allowed scholars to understand what the Egyptian sources considered their own boundaries. This paper will examine these issues by taking a long durée approach to identity in different, often overlooked regions, as well as the titles employed in and applied to these areas.

Orientalizing the Ancient Egyptian Woman

Jordan Galczynski

University of California, Los Angeles, USA

This paper problematizes traditional scholarship discussing the ancient Egyptian display of nudity and tattooing on "dancing girls," especially in regard to the Orientalist view held by these early scholars (Daressy 1893; Winlock 1923; Keimer 1948). Orientalist scholarship labels these women as lower-class, functioning as servants, dancers, or even as prostitutes and concubines. Such notions were so ubiquitous that these portrayals still pervade the modern literature on the topic (Hall 1986; Watterson 1991; Tyldesley 1995). I present a more nuanced view of the function of nudity and tattooing in Ancient Egypt focusing on the cultic role many these individuals held as members of *khener*-troupes. Despite the pervasive notion that they were lower-class women, evidence from their burial assemblages and titulary demonstrates that they held an elite position. This study ultimately aims to advance the discussion of these "dancing-girls" past misogynistic Western and Orientalist ideas to a more complete, refined understanding of the role these individuals played within Egyptian society.

SESSION: 11G. Fostering Dialogue Using Educational and Occupational Datasets (Workshop)

Chair(s): Stacy Davidson, Johnson County Community College | Julia Troche, Missouri State University

The Egyptology State of the Field Project: From Idea to Implementation

Stacy Davidson

Johnson County Community College, USA. Egyptology State of the Field Project, USA

Trends in higher education coupled with societal changes have prompted a phase of introspection into the nature of academic fields, their role in historical and current injustices, and sustainability. Many fields, spearheaded by professional organizations, have been collecting

pertinent data and using that data to revise curricula, mentorship, and professional development opportunities over the past few decades. However, within Egyptology, the answers to even the most basic of these questions are non-existent.

The Egyptology State of the Field project (www.egyptologystats.org) was established by a team of volunteers in 2020 to confront this lack of data. The project's primary goal is to create a baseline understanding of the field of Egyptology and its participants in the United States. The first stage of the project collected both survey and interview data. Our analysis of the data will identify: (1) the demographics of the field of Egyptology and the inequities faced by historically marginalized 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. The data collected will provide crucial information to potential and current Egyptology students, Egyptology programs, job seekers, and those currently in Egyptology and Egyptology-adjacent professions. This paper provides an introduction to the project, its formation, team members, goals, and methodologies of data collection.

Are you an Egyptologist? Results from an International Survey on the State of Egyptology

Carl Walsh

Barnes Foundation, USA

In September and October 2017 the authors designed and implemented an international survey to gauge the state of Egyptology from the point of view of PhD students and early career researchers. The aim of this survey was to determine how these individuals perceived the scope and role of Egyptology, its prospects as a discipline, its integration in the humanities and social sciences, and the role of their own research and experience. Some of the survey results are discussed in relation to the challenges on how PhD students and Early Career Researchers have identified with the discipline, what issues they have identified with the discipline, and how they have navigated these. The authors also consider how this data can be used in current and future surveys, and add to the burgeoning dialogues on how to improve the reflexive development of Egyptology.

Socioeconomic Diversity amongst Ancient Near Eastern Archaeology Student Cohorts in UK Higher Education

Neil Erskine

University of Glasgow, United Kingdom

Though many initiatives seeking to quantify, qualify, and improve equality, diversity, and inclusivity in archaeology courses have been undertaken or are ongoing in the UK, these have understandably prioritised protected characteristics, particularly gender and ethnicity. Little work has sought to assess or address the socioeconomic background of archaeology students, and very little of either has been conducted with a view to identifying patterns in students of ANE archaeology specifically.

This paper will present the results of a pilot study collecting data concerning the socioeconomic backgrounds and course-choices of students studying ANE-specific archaeology degrees, students studying ANE-courses as part of general archaeology degrees, and students undertaking general archaeology degrees but who opt not to undertake any elective ANE courses.

Combining this data will identify relationships between the socioeconomic background of students and their degree programme decision-making, and provide the basis for a more comprehensive research project addressing ANE archaeology's socioeconomic diversity (or homogeneity), its pedagogical consequences, and potential solutions.

Two Indicators for the Downward Trend in Ancient Studies in the USA

Valeria F. Zubieta Lupo

Save Ancient Studies Alliance, USA

Many involved in Ancient Studies academic fields perceive a downward trend in enrollment in and university support for Ancient Studies. 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 that over the 10 years (2006–2016), language enrollment among the major ancient languages dropped.

Similarly, our analysis of Ancient Studies degree completion data shows a decline. Over a period of 10 years (2007–2017), the number of completions in undergraduate and graduate degrees, as well as the number of programs, dropped by over 50%. 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 lawmakers and institutions in finding solutions.

Comparing Gender and Occupational Data in Egyptology

Julia Troche

Missouri State University, USA

In this presentation, I present some initial results of the 2021 survey conducted by the Egyptology State of the Field (ESotF) Project, of which I am a member (PI S. Davidson), as they relate to gender and occupational data. Nearly 200 respondents provided quantitative data regarding a wide range of identity markers and experiences, including sex and/or gender identity and occupational status and history. There are few other extant datasets that have collected such data from ASOR-related fields, and no other dataset exists for Egyptology in the U.S.. Informal, anecdotal conversations surrounding gender inequities, discrimination, and harassment in Egyptology (but insert many other fields here as well)—especially as it relates to completing a PhD, participating in field projects, job procurement, and job retainment—abound over drinks in the late hours of any given conference. The goal of this talk is to describe our processes of categorization, as it relates to sex/gender and occupation, to present the results, and in doing so provide a quantitative basis for future discussions regarding the qualitative experience of those within the field, the identification of barriers, and the development of tangible solutions to create a more equitable field.

SESSION: 11H. Defining Provenance (Workshop)

Chair(s): Morag M. Kersel, DePaul University

Meaning of Provenance and Provenience under the Law

Patty Gerstenblith

DePaul University College of Law, USA

While provenance research has become increasingly prevalent, the purposes for which such research is done must guide the research itself. Determination of the legal status of artifacts at a particular time and in a particular place is necessary to disrupt the market in questionable artifacts and thereby disincentivize the looting of archaeological sites. The definitions of the terms “provenance” and “provenience” must effectuate this purpose.

Different disciplines use the terms “provenance” and “provenience” in different ways. In art history, the term “provenance” means the history of ownership of a work of art, preferably back to the hands of the artist. In the discipline of archaeology, “provenance” means the history of ownership and possession of an archaeological artifact to the point of its removal from the ground and does not refer to its pre-deposition history. “Provenience” is the findspot of an artifact in modern times.

One of the main functions of these terms is to enable determinations of legal status for law enforcement purposes. From this legal perspective, while the archaeological definition of provenance is suitable, the definition of provenience that should be adopted for legal purposes is less demanding in terms of physical location but adds the dimension of time. This purpose does not require knowing the exact findspot of an artifact but rather the country within whose modern borders the object was discovered and when it was discovered. This allows determinations of what laws, such as State ownership laws and import and export controls, apply to the object.

Why Archivists Research Provenance

Sarah A. Buchanan

University of Missouri, USA

Unlike the fixity archaeologists have attached to the term provenience, neatly referring to an object’s precise geolocated findspot, their glossary definition of provenance is much more expansive: “the origin, or history of ownership of an archaeological or historical object.” Provenance, if it appears arguably in most archaeological literature in a secondary manner (to literally surface-level object characteristics, or in discussing the peripheral work of curators, dealers, and critics), has nonetheless stood paramount in the archives field for the past century. Archival provenance emerged in contrast to stricter chronological or format-driven approaches to organizing collections, as its successful application preserves the material bonds among related items. Given its conceptual origins in 1841 France, the globalization of provenance in the long century since is seen, today, as inextricably tied to colonizing histories and restitution futures even if it remains remarkably multi-dimensional (internal and external) and multipurpose (itemizing to politicizing) in scope. Though some current efforts – such as the “provenance in place,” “archival dynamics,” and “crip provenance” concepts – problematize the archival profession’s longest-standing commitment as a valorizing, colonial, or analog relic, robust replacements for it have yet to take hold. Thus its continuing broad influence on archival practices in particular necessitate the creation of an open, extensible set of resources showing how provenance information (pieces) may be put to work by archaeologists among others to achieve any number

of goals related to transparency or creative storytelling. We will introduce such a resource at <https://provenanceinfo.wordpress.com/> to support everyday provenance engagements.

Provenance Research and American Museums

Victoria Reed

Museum of Fine Arts, Boston, USA

The Museum of Fine Arts, Boston, was the first art museum in the United States to endow a Curator for Provenience position. What, exactly, does this job entail? Researching and documenting the provenance—the history of ownership of a work of art from the time of its creation to the present—is critical for any collecting institution. Not only does an object’s biography help us to understand its place in the history of art, it is also essential in determining legal ownership and ethical collecting practices.

Over the past twenty-five years American museums have been called upon to redress breaks in the chain of ownership of their works of art and increase transparency with their record-keeping. Achieving these goals requires careful provenance research and documentation. To steward our collections responsibly, we must tease out what is reliable information from what is uncertain in our provenance records, and then share what we know. To evaluate the legitimacy of restitution claims, we must place transactions and other events of the past into their historical context, expanding our research beyond an object’s ownership history. To make decisions about acquisitions, we must look at the provenance data we have assembled and assess the relative risk to the institution that is involved, making informed leaps of faith. In short, museums must prioritize provenance research in order to be accountable to the public, our governing bodies, our staff, and the art world as a whole.

Defining Provenance in the Cincinnati Art Museum’s Ancient Middle East Gallery

Ainsley M. Cameron¹, Sarah E. Wenner^{2,1}

¹Cincinnati Art Museum, USA. ²University of Cincinnati, USA

The Cincinnati Art Museum’s recently installed ancient Middle East gallery serves as a test case for museum transparency. While provenance histories are not always the primary subject within this thematic telling, they are deeply embedded within the gallery’s visitor-centered approach. The past and present lives of objects are explored within their original context, secondary art markets, their physical presence within the museum, and their broader connections to Cincinnati communities. These histories are further communicated through gallery texts that forefront the team’s research and critical approach as well as through extensive docent training and public tours. Other engagement methods include physical transformations to the gallery space, monumental drawings to convey dynamic interactions, and active and passive digital interactives to explore alternative object narratives. Produced alongside was an 80-page catalogue with three commissioned essays that explores an expanded critical engagement with select object histories while also retelling the biography of the Nabataean Khirbet et-Tannur temple through key individuals responsible for its 20th-century life. Offered free in the gallery and widely distributed to regional and global libraries, this catalogue takes the conversation about provenance beyond the museum’s walls. A monumental commission by the artist Shahzia Sikander of painted and laminated glass occupies the clerestory windows and creates visual, emotional, and aesthetic connections between past archaeological and museological practices and the 21st-

century world. Together these retellings of provenance histories make the narratives, complexities, and legacies of the ancient Middle East in the American Midwest more tangible to a museum-going public.

The Spaces in Between the Nodal Points: Another Approach to Provenance

Elizabeth Marlowe

Colgate University, USA

The recent work on “object itineraries” by scholars such as Rosemary Joyce, Susan Gillespie, and Alexander Bauer has revealed that the traditional, instrumental use of provenance, which I advocated for in my 2016 article, is missing an important dimension. I advocated for the rigorous assessment of provenance information based on its ability (or not) to get us back to the moment an ancient artifact came out of the ground. This is important information for those who would use museum artifacts as a lens onto the ancient world and its social and artistic practices. Provenance, of course, is also important for those looking to assess an artifact’s legality on the market, or who its rightful owner or steward should be. But Joyce, Gillespie, Bauer and others have shown that provenance is equally valuable for those who would use museum artifacts as a lens onto the modern world and its social practices. Rather than focusing on the moments the object changed hands (e.g. sold at Drouot, Paris, August 1965), what happens if we examine the interstices? What happened during the object’s “life” at each of these stops? Why was it acquired? Who valued it? What was it displayed alongside? What was said about it? Why was it sold? Such questions can help us understand how the meanings of artifacts shift over time. They also foreground new kinds of data, such as oral histories from the modern users of ancient things.

SATURDAY, NOVEMBER 19, 2022 | 4:20pm-6:25pm (EST)

SESSION: 12A. Perspectives on Chalcolithic Surezha (Kurdistan, Iraq) from the 2013-2019 Field Seasons

Chair(s): Samuel Lee Harris, Purdue University

Fuel, Farming, and Food: Archaeobotanical Results from the 2013–2019 Field Seasons at Surezha, Iraqi Kurdistan

Lucas Proctor

Johann Wolfgang Goethe-Universität Frankfurt am Main, Germany

This presentation reports on the results of archaeobotanical analysis conducted on samples collected between 2013-2019 at the site of Surezha in order to consider both the various plant-based activities visible at the site and the broader agricultural landscape of the Erbil Plain. Results of this analysis focus primarily on the Ubaid and Late Chalcolithic 1 and 2 levels of the site. Seeds, processing debris, and wood charcoal data from Surezha provide information on a wide range of human-plant relationships, as well as on agronomic decision-making, risk management strategies, and the provisioning of food and raw materials. The present study discusses evidence for/against agricultural intensification, environmental degradation, and integration with regional pastoral economies. Results from Surezha indicate an emphasis on the cultivation of staple crops, including hulled wheat, barley, and lentils. Other important plant resources at the site included flax, bitter vetch, and figs. The archaeobotanical data also provides considerable evidence for the burning of dung fuels, and thus can also speak to aspects of livestock management strategies and the integration of agricultural and pastoral activities. The archaeobotanical evidence from Surezha is then placed within the broader regional context of Chalcolithic land use and cultivation practices in order to consider trends in food production across northern Mesopotamia.

Microarchaeology at Surezha: Spatial Perspectives on Domestic Economy and Emerging Inequality

Samuel L. Harris

University of Chicago, USA

Exposures of the Late Chalcolithic 1 settlement at Surezha have offered an opportunity for fine-grained spatial analysis. Microarchaeological analysis—the study of the distribution of small debris embedded in ancient surfaces—provides a unique perspective on the organization of activity in the past. Microarchaeological analysis at Surezha has demonstrated distinctive roles of domestic, nondomestic, outdoor, and courtyard spaces in the lives of residents. This analysis supports an interpretation of largely unspecialized and household-based economies in the LC 1 in which courtyards served as centers of production and consumption and shared outdoor spaces were used in common. A large nondomestic building complex, on the other hand, appears to have been a space of tightly controlled activity and access, suggesting that spatial control may be a leading indicator of emerging inequality.

Modes of Late Chalcolithic Ceramic Production at Surezha

John R. Alden

University of Michigan, Museum of Anthropological Archaeology, USA

The goal of the Surezha project is to understand the development of socio-political organization during the Late Chalcolithic, and changes in patterns of ceramic production and exchange provide one window on the process of developing complexity, both at Surezha and within the surrounding region. This presentation will describe changes

in the form and composition of LC ceramic ring scrapers, the typology and composition of LC-3 grayware, and the chronology of LC fine paste ceramics, and relate those data to changes in modes of ceramic production and distribution as evidenced at Surezha. While this is a work in progress, I would at this point suggest that changes in the ceramic economy occur before or contemporaneously with changes in regional socio-political organization, and not subsequent to such developments. We may thus, at least tentatively, think of changing modes of ceramic production as causal or enabling factors in the development of social complexity, and not as consequences of it.

Chalcolithic Ceramic Mullers, ‘Pizza-Crust’ Starch Grains, and Beer Brewing at 5th Millennium B.C. Tell Surezha

Thomas Hart¹, Samuel Harris², Gil Stein³

¹Franklin and Marshall College, USA. ²Purdue University, USA. ³University of Chicago, USA

Ceramic “mullers” are a characteristic feature of the Ubaid and early Late Chalcolithic periods (~6th-5th millennia BCE) in Mesopotamia. They have long been interpreted as grinding tools, but to date clear supporting evidence for this has been lacking. The present study examines starch grains and phytoliths absorbed into the ceramic fabric of mullers from Tell Surezha, an Ubaid/Late Chalcolithic 1 settlement in northern Iraq. Husk phytoliths indicate that mullers were used to grind and mash wheat and barley cereal grains while distinctive starch deformation indicates the likelihood that the mullers were used in domestic production of beer.

SESSION: 12B. Style and Identity in Ancient Near Eastern Art II

Chair(s): Kate Justement, Institute for the Study of the Ancient World, New York University | Elizabeth Knott, Institute for the Study of the Ancient World, New York University

What, if Anything, Does Style in Near Eastern Art Tell us about Identity?

Marian H. Feldman

Johns Hopkins University, USA

Throughout the history of the disciplines of art history and archaeology, the analysis of style has supported and shaped scholarly interpretations of ancient identities. Both style and identity, as analytical concepts, remain vague and contested in their definitions; particularly vexing are the notions of intentionality and self-awareness. This paper closely examines the relationship between style and identity, situating practices of doing at the core of both, and it explores how “doing” is both consciously pursued and unconsciously felt or enacted, thereby enacting both style and identity. Arguing that it is not possible to clearly identify intentionality, the paper proposes that practice theory offers a means of circumventing this uncertainty. As a path forward, the paper maps communities of relations – what can be understood as identities – by means of stylistic practices. A scarcity of textual and archeological evidence for artistic production practices complicates the inquiry. However, close analysis of the products of these practices, including worked ivories, tridacna shells and soft-stone containers, suggests relationships among them and other entities and begins to define a new understanding of identity that is more fluid and less tied to ethno-linguistic boundaries.

Style and Identity at Hasanlu, Iran: The Case for Multivocality

Megan Cifarelli

Manhattanville College, USA

When the Iron II citadel at Hasanlu, Iran fell, the contents of storerooms and halls were sealed by the burning debris of the buildings themselves, preserving vital contextual information about many classes of artifacts. This paper examines the interaction between style and identity in an artifact class represented in the citadel deposits as well as in burials contemporary to the destruction: Decorated sheet metal belts. These armorial dress items appear in Period IVb as imports from the South Caucasus as well as locally produced iterations in both a utilitarian and an elaborated, or courtly, style, and these styles are found in distinct citadel contexts. Local artisans crafted the courtly style belts using complex combinations of metalworking techniques and stylistic features, some of which can be traced to the visual culture of neighbors like the Assyrians. The relationship, however, between the external Assyrian attribution of these visual traits and the construction of local elite identity at Hasanlu is complicated. The local context of production, consumption, and deposition of these objects is brought to bear in framing the integration of Assyrian and other exogenous stylistic and technical features as a deliberate, multivocal, emic strategy for crafting local elite identity.

Cultural Identity in Public and in Private: Style Variation in the Hellenistic Babylonian Miniatures

Stephanie Langin-Hooper

Southern Methodist University, USA

The miniature objects of Hellenistic Babylonia were created and used in a multicultural milieu. Traditional logic used to analyze style would suggest that using Greek-style or Babylonian-style objects would correlate with the user’s cultural identity and family heritage – or, perhaps, reveal broad-scale cultural shifts in society and the replacement of one tradition by another (often labeled “Hellenization”).

Yet the evidence provided by these miniature objects indicates that the use of culturally-specific styles was most strongly correlated not with societal change or personal biography, but rather with the particular type of object being used. Figurines, the most privately used miniatures, show the greatest range of cultural hybridity. At the other end of the spectrum, coinage that was sanctioned by the palace and produced in official mints was the most monocultural (and Greek) in style. Seals and jewelry miniatures occupied a middle ground between these two extremes; this likely reflected their private ownership, but their use in public, often showy and performative, contexts.

This paper will demonstrate that any individual in Hellenistic Babylonia could – and often did – own and use objects with different cultural styles, and yet find those objects nevertheless authentically reflective of his or her “identity”. This seeming incongruity was made possible by the fact that identity is not fixed, but can vary with social context. The agentive properties of style also make such multivalency possible, as style was not a fixed quality with a consistent meaning, but rather played a particular and object-specific functional role.

Stylistic Continuity in the Terracottas of Arabia and Mesopotamia, 1st M. B.C.E. - C.E.: A Prolegomena to Late Antique Interactions?

Anastasia Amrhein

University of Pennsylvania, USA

What does it mean when not only the iconography, but also the style, of clay figurines persists in a region over hundreds of years, over the course of the rise and fall of empires? This talk will investigate the continuity of certain terracotta figurine types—particularly camels and horse-and-rider figurines—in the archaeological records of Mesopotamia, Arabia, and the Gulf from the Neo-Babylonian period into the Parthian period. I will first present a short overview of the known interactions between these regions in the first half of the first millennium B.C.E. before moving on to consider the more robust material and textual records of the later centuries of the first millennium B.C.E. and the early centuries of the first millennium C.E. I suggest that the continuity of terracotta types across these vast regions of West Asia may be indicative of the presence of Arabian caravan merchants or traders. I will be looking closely at the visual and material properties, as well as the archaeological contexts, of figurine examples from various sites in order to determine whether such objects might have been made locally or transported from elsewhere. In particular, this talk is concerned with the question of ‘style’ as something that can (or cannot) transcend technology, or technique, of manufacture—for example, many of the rider figurines under discussion feature distinctive facial features, whether they are mold-made or hand-modeled. In such scenarios, is one technique an attempt to copy the other?

Greek Style and the Problem of Parthian Art

Henry Colburn

New York University, USA. The Cooper Union, USA

One of the enduring difficulties in the study Parthian art has been the inability to identify its essential features. The major reason for this difficulty is that unlike Achaemenid art, for which the ruins of Persepolis provide a basic corpus, there is no capital or core region that can clearly serve as a baseline for what constitutes Parthian art. As a result, style plays a key role in its identification and study.

Yet objects of putative Parthian origin and date are often characterized as Greek or ‘Hellenized’ in respect to their style. Such a characterization implies that Parthian art was either derivative of Greek models or indeed made by Greek craftsmen, thus denying agency to the Parthians themselves and contributing to narratives of their lack of artistic creativity and dynamism.

In this paper I argue that the apparent Greek style of early Parthian art is the result of deliberate and strategic adoption of Seleucid artistic traditions to serve the needs of the fledgling Arsacid imperial elite. This is usefully demonstrated by Parthian coins and rhyta, which, although made in an ostensibly ‘Greek’ style, exhibit a combination of Achaemenid and Seleucid elements that the Parthians used to create their own distinctive royal iconography.

SESSION: 12C. Meaningful Copies: Virtues beyond Originality

Chair(s): Pinar Durgun, Berlin State Museums, Vorderasiatisches Museum | Felipe Rojas, Joukowsky Institute for Archaeology and the Ancient World, Department of Egyptology and Assyriology, Brown University

The Beautiful Salmu: Images —Copies—Originals in Ancient Western Asia

Pinar Durgun

Vorderasiatisches Museum, Germany

The dichotomy between “the original” and “the copy” is a culturally-specific one. In ancient Mesopotamia, a *šalmu* was an image or substitute and had the potential of becoming an entity in its own right, rather than being a copy of the thing or person it depicted. Bahrani calls the concept of *šalmu*, “representation in the real” (2003). The image and the entity it represented were not always differently treated or perceived.

In many contexts copies are considered art. Take the Amarna casts or Roman copies of Greek sculptures. Similarly, contemporary artists use reproductions of ancient objects: Reyyane Tabet’s “Alien Property” rubbings of ancient Syro-Hittite orthostates replicate a method used by early explorers to document and copy reliefs and inscriptions. Michael Rakowitz’s “the invisible enemy should not exist” is a series of copies of ancient Assyrian reliefs and Mesopotamian objects made with date syrup packaging. Fred Wilson’s “Grey Area” is comprised of five copies of the Nefertiti bust that depict her in different shades from beige to dark brown. In these celebrated examples, copies tell a different story than what they are copying. Yet archaeological copies create anxiety in many museum professionals and visitors, even though they also have interesting stories to tell.

This paper questions the value we place on “originals” and “originality” through the discussion of images, objects, and their copies in ancient western Asia and their reception in museums today. If copies can be art, why are we so afraid of displaying them?

What to Do with Fakes?: Teaching with Forgeries in Museums

Carl R. Walsh

Barnes Foundation, USA

Modern productions of Egyptian antiquities (forgeries, fakes, casts, replicas, and restorations) are prevalent in museums across the world. However, how museums approach, present, and use this material can vary dramatically. Rooted in human deception, forgeries and fakes occupy ambiguous roles in museums and are often hidden, destroyed, or showcased as trophies of expert’s deductive victories over the villainous black market. Of these scenarios, their role in museum education is typically discounted. Can these objects be reframed as ethical pedagogical tools for engaging wider audiences on ancient Egypt and the wider ancient world?

In this paper I reflect on the use of a small collection of Egyptian, Greek, and Roman forgeries and restored objects at the Barnes Foundation in Philadelphia for teaching with the general public. I discuss how these objects have been effective tools for exploring issues of authenticity, conservation and restoration, provenance, the consumption of visual culture across time, and the ethics of archaeological and museum practices. Aligned with the Barnes Foundation’s mission of encouraging people to find connections between visual cultures across time and space, students have been challenged to consider critically how these objects can be viewed as bridging the temporal gap between ancient Egypt and the modern world. Importantly, I encourage a more open discussion of forgeries and restored objects, to help disseminate knowledge on forgery

practices and workshops, providing transparency in object provenance and forgery detection, and destigmatizing engagement with modern productions of ancient objects in museums.

Ancient Materiality (and Magic!) in Modern Plaster Copies

Hannah M. Herrick

Simon Fraser University, Canada

Historically, many copies of artwork and artifacts have been cast in plaster. These copies have been made by museums for preservation or display, by private collectors for purposes of wealth and reputation, and by universities for teaching. The enduring use of plaster in these relatively modern contexts is especially compelling when one considers that plaster is likely the first synthetic material to be made by human hands—and therefore, it is likely the first material used in the long tradition of making copies. One such example from antiquity is that of the Neolithic plastered skulls found in funerary contexts throughout the Levant: here, plaster was applied to skulls of deceased individuals to “copy” select facial features as they appeared in life. Contextualizing modern and historical plaster copies within the 12,000-year history of human plaster production offers the opportunity to examine the materiality of plaster across ancient cultures, and to create new modes of connection with extant and future plaster copies. This paper explores the unique, transformative qualities of plaster through a brief history of ancient plaster and its production; the examination of a selection of plaster artifacts; and a discussion of ways in which we can merge ancient conceptions of materiality and transformative creation with modern archaeological and museum practices.

Byzantine Imprint – Bread Stamps as Proto-Icons

Sophie V. Moore

Newcastle University, United Kingdom

The copy in Byzantium is not a shadow or facsimile. Byzantine copies are not fakes, but rather have the potential to proliferate the power of the original (see Belting, Likeness and Presence, and Pentcheva on The Performative Icon). Beginning from the position that within a Byzantine ontology vision and touch produced copies of objects which were just as real, powerful and agential as the objects a modernist might term the ‘original’, this paper will explore the relationship between every-day imprints and the more formal icons of Late Antiquity. Using bread stamps as a central case study I will explore the importance of the act of imprint for communicating sacrality in a Late Antique context, and how the act of stamping bread can be placed alongside other technologies of validation (signs and seals, and icons themselves) to presence divinity/ authority in the quotidian world. This paper will raise the question of whether bread stamps, both Eucharistic and domestic, can be framed as proto-Icons

SESSION: 12D. Preserving the Cultural Heritage of the Madaba Region of Jordan (Workshop)

Chair(s): Douglas Clark, La Sierra University | Marta D’Andrea, Sapienza Università di Roma | Basem Mahamid, Department of Antiquities of Jordan | Andrea Polcaro, Perugia University | Suzanne Richard, Gannon University

Humans as Ecosystem Engineers: Outlines of a Global History Approach to Narrating Jordan’s Past

Øystein LaBianca

Andrews University, USA

The frames of reference that have dominated our gaze into the past as archaeologists working on the historical past in Jordan have, till now, tended to be shaped by civilizational, imperial and even denominational lenses. Given our planet on the verge of ecological catastrophe, the status quo will no longer suffice, and may even retard efforts to address the sustainability challenge in a timely manner. To address this challenge, an approach is needed to archaeological interpretation that focuses attention, in the broadest sense, on humans as ecosystem engineers. As a species, humans have surpassed all other living animals in impacting the ecosphere and in reshaping their own sociosphere as well as those of other living creatures. Indeed, our activities as humans have accelerated in recent years to such an extent that they are overwhelming the great forces of nature—climate, sea level rise, species extinctions, and much more. We have thus entered the era of the Great Acceleration and the Anthropocene—when human activity has become the main driver of environmental changes. The global history story of humans as ecosystem engineers spans all historical eras, from the Paleolithic down to the present while it also engages analytical lenses and perspectives from the natural and social sciences as well as the humanities. The presentation will make the case for the story of humans as ecosystem engineers providing not only a timely, but also a more inclusive approach to narrating the long-term past of Jordan’s history and archaeological heritage.

Narrative Themes from Tall al-`Umayri

Douglas R. Clark

La Sierra University, USA

In keeping with the focus of this year’s workshop on preserving the cultural heritage of the Madaba region, this paper addresses three major narrative themes from Tall al-`Umayri, part of the Madaba Plains Project. Given the proposed use of a “Global History” approach in the Madaba Regional Archaeological Museum with themes embedded in the architectural floorplans of the design, the `Umayri project would identify three major themes with regional implications and with significant overlap with those of the new museum: Cultic Diversity, Agro-pastoral Resilience, and Protection against the Elements. While defined at `Umayri primarily in Bronze and Iron Age contexts, these themes are transtemporal and regional in scope, capturing 1) humanity’s long search for existential meaning during trying times, 2) human resilience and survival strategies under often severe environmental and societal pressures, and 3) ingenuity in the construction of defensive and domestic structures on the tell, built in order to protect themselves against natural and human disruptions.

The Khirbat al-Mukhayyat Archaeological Project

Debra Foran

Wilfrid Laurier University, Canada

The ancient town of Nebo, known today as the site of Khirbat al-Mukhayyat, is located approximately 6 km northwest of the city of Madaba in Jordan. The Khirbat al-Mukhayyat Archaeological Project (KMAP) was established in 2012 to investigate the landscape around the site and explore the economic, strategic, and ritual importance of Mukhayyat across multiple cultural and historical periods.

Four seasons of excavation and survey by KMAP have produced evidence of occupation at Mukhayyat and surrounding area spanning 5,000 years. In addition to Conder’s Circle, several Chalcolithic and Early Bronze Age settlements have been identified to the south of the main site. Excavations on the mound itself have revealed substantial

defensive structures from the Iron Age (8th-6th centuries BCE) that were subsequently reused in the Hellenistic period (3rd-1st centuries BCE). The presence of a Hellenistic ritual bath and associated installations may be an indication that Mukhayyat fulfilled more than a strategic function during this period. During the Byzantine period (5th-7th centuries CE), three churches at the site welcomed worshippers and pilgrims to the town of Nebo.

A Narrative of Sociopolitical Resistance and Resilience at Khirbat Iskandar

Suzanne Richard¹, Marta D'Andrea²

¹Gannon University, USA. ²Sapienza Università di Roma, Italy

A grand narrative for mounded sites in central and southern Jordan in the Early Bronze Age is a pattern of resistance to societal disruption; namely, the so-called “collapse” at the EB III/IV nexus, ca. 2500 BC. As is well known, the EB IV period was for years considered a “dark age,” due to the hundreds of temporary sites in the Negev as well as vast cemetery sites in Cisjordan, seemingly unassociated with contemporary sedentary settlements. In contrast, both excavation and survey have for some time now revealed EB III-IV occupation on mounded sites in Jordan, hinting at the resilience of the population to maintain long ancestral sedentary/urban societal organization while resisting the alternate path to abandonment and pastoral-nomadism or relocation to a new site. Khirbat Iskandar is located on the banks of the Wadi Wala, just north of Dhiban and the Wadi Mujib, the traditional southern boundary of the Madaba Region. The story one can narrate from the stratified profile of the site is a remarkable testament to the uninterrupted recovery, resilience, and transformation from an urban to a rural complex settlement. The datasets supporting such resilience are the continuity in housing, material culture, defenses, cult, and economic underpinnings of the EB IV in its range of cereal and horticultural products, especially olive oil production. The universal message drawn from the stratigraphy and cultural heritage of Khirbat Iskandar is a narrative of adaptation and resilience in the face of disruption and change.

SESSION: 12E. Tracing Transformations in the Southern Levant – New Research in the Chronology and Archaeology of the Middle and Late Bronze Age

Chair(s): Katharina Streit, Austrian Academy of Sciences, Austrian Archaeological Institute

Lachish and the ‘Scribal Turn’ from Egyptian to Canaanite Writing

Stefan J. Wimmer

University of Munich, Germany

Among the exciting finds from the Austrian-Israeli Renewed Excavations at Lachish in the last years were two inscribed sherds: one in Egyptian hieratic and one in the so called Proto-Canaanite or Early Alphabet. The hieratic ostrakon differs from the more numerous, later hieratic inscriptions from the Ramesside administration of southern Canaan in layout, contents and style. It can safely be dated to the late 15th or early 14th century BCE and raises questions about the early Egyptian impact on the scribal practice at Lachish. This, in turn, appears to be related to the rise of the NWS Alphabet, with Lachish emerging as a key site for our understanding of the manifold processes involving a traditional but foreign, and a newly developing, local writing system in the Late Bronze Age Levant.

The Austrian Expedition to Tel Lachish – Preliminary Conclusions after the First Four Seasons

Katharina Streit, Felix Höflmayer

Austrian Academy of Sciences, Austria

Since 2017, four seasons of excavation have been conducted at Tel Lachish on behalf of the Austrian Archaeological Institute at the Austrian Academy of Sciences. This paper summarizes and discusses the results of the project, discussing them in light of results from previous excavations.

In Area P, the current excavations expand the eastern wing of the Middle Bronze Age palace further and uncovered additional set of rooms towards the east. Radiocarbon dating indicates that the palace was destroyed in two episodes in the early and mid-16th c. BC. A retaining wall standing up to 2,6 m high, dating probably to the Iron Age IIA was found built against the Middle Bronze Age debris. It might have served to stabilize the terrain, possibly as preparation for a monumental (Palace A?) structure of the same period.

Noteworthy finds dating to the Late Bronze Age include a monumental building uncovered in Area S (stratum S-3), radiocarbon-dated to the 15th c. BC. Associate finds include a proto-Canaanite inscription, as well as an assemblage of scarabs and decorated bone implements. The building further fills an alleged settlement gap at Tel Lachish, suggested by earlier expeditions and proves substantial activity at the site contemporary to the Papyrus Hermitage 1116A. The following stratum S-2 is marked by enigmatic ashy layers rich in pottery. The stratum also yielded a hieratic ostrakon bearing a ration list with west-semitic names, attesting to the administrative activity at the site.

Synchronising and Nuancing Social Change during the Middle to Late Bronze Age Transition in the Southern Levant Using Radiocarbon Dating

Lyndelle Webster

Austrian Academy of Sciences, Austria

Until recently there was little radiocarbon (¹⁴C) data from the southern Levant pertaining to the pivotal transition from the Middle Bronze Age (MBA) to Late Bronze Age (LBA). Rather, one had to rely primarily on external evidence from distant locations such as Tell el-Dab'a and Santorini, associated with characteristic early LBA pottery – particularly Late Cypriot wares. Recently a number of projects have produced substantial datasets from transitional MBA/LBA horizons at key southern Levantine sites such as Lachish, Gezer, Tell el-Ajjul, Megiddo and Pella. Additionally, numerous new high-precision measurements on single year tree-rings in Europe and North America for the period 1700–1500 BC have led to a small but vital correction to the calibration curve (IntCal20) that can strongly affect calendar dates in the vicinity of the 16th century BC plateau.

These developments open the way for a fresh evaluation of transitional MBA/LBA chronology, and an independent check on synchronisation with Egypt. This should be done in a more nuanced manner than previously attempted: while debate has commonly been oversimplified to a matter of high/middle/low chronologies, multiple processes can be traced and dated in the archaeological record, and these likely occurred at varying paces in different sub-regions. In this paper we examine ¹⁴C data for the southern Levant, along with the impact of IntCal20 and other offsets, in a quest to better elucidate the trajectory of individual urban sites (destruction, abandonment and renewal – or rather, continuity), check synchronisation with Egypt, and reconsider historical reconstructions.

From Independence to Empire: The Transition from the Middle to the Late Bronze Age in the Jordan Valley, with Special Reference to Pella in Jordan

Holly Winter¹, Stephen Bourke¹, Lyndelle Webster²

¹ University of Sydney, Australia. ² Austrian Academy of Sciences, Austria

The transition from the Middle to the Late Bronze Age in the southern margins of the Levant featured widespread destruction horizons at the end of the Middle Bronze Age sequence, and a reduction in Late Bronze Age I occupation thereafter. Further to the north, in the Jezreel and central Jordan valleys, no such horizon of destruction featured. Rather, a gradual transition from Middle to Late Bronze Age strata was typical of major centres in both regions. However, as the Late Bronze I period unfolded, significant internal reorganisation of civic structures is observed, implying far-reaching alterations to circumstance and function.

A recently excavated sequence of Middle and Late Bronze Age palaces at Pella in Jordan allows for a detailed examination of these changes to form and function, alongside a comprehensive radiocarbon sequence that allows for a tight dating of the changing circumstances. As well, the appearance of an early form of the Governor's Residency complex in the Late Bronze Age I gives some further illustration of the driver of the changed circumstances, which we shall argue marks the transition from Middle Bronze Age independence to Late Bronze Age imperial rule.

Towards a New Historical Model for the Late Middle and Early Late Bronze Age in the Southern Levant

Felix Höflmayer

Austrian Academy of Sciences, Austria

Historical models for the violent end of the Middle Bronze Age city-states and the beginning of the Late Bronze Age relied heavily on the assumed concurrency of the end of the Second Intermediate Period in Egypt and the rise of the 18th Dynasty in Egypt, and the transition from the Middle Bronze Age to the Late Bronze Age in the southern Levant. Further, the historicity of the so-called expulsion of the Hyksos and military raids into the southern Levant have generally been accepted, although some scholars have conclusively shown that contemporary textual evidence for this assumption is lacking. The Levant of the Late Bronze Age was usually described as being under Egyptian domination with substantial evidence for Egyptian presence (including locally produced Egyptian-style pottery and the use of hieratic script) in the Ramesside age.

Results of the project "Tracing transformations" call for a new assessment of the end of the Middle and the beginning of the Late Bronze Age. Several new radiocarbon sequences for key-sites in the southern Levant allow for the first time precise dating of this period. Renewed excavations at the site of Tel Lachish in the Shephelah produced new evidence for an emerging Egyptian administration already in the late 15th or early 14th century BC. This paper will summarize the results of "Tracing Transformations" and provide a new view on this crucial period.

The Glyptic Profile of Middle/Late Bronze Age Lachish: New Finds and Research

Stefan Münzer

University of Bern, Institute of Jewish Studies, Switzerland

Tel Lachish is one of the most important sites of the Southern Levant for the study of local stamp-seal assemblages dating to the

Bronze and Iron Ages. To date, the site produced more than 870 documented finds, thus ranking 3rd behind Tell el-Far'ah South (N=954) and Tell el-'Ajjul (N=1244). In contrast to both aforementioned sites that were mainly excavated in the 20ies and 30ies of the past century, the glyptic finds from Tel Lachish – unearthed by numerous expeditions in the past 90 years – are in many cases well-stratified and thus provide a solid sequence of seal types, their iconographic motifs and accompanying contexts.

Besides the presentation of new glyptic finds made by the Austrian-Israeli Expedition to Tel Lachish, the paper attempts to portray the glyptic profile of Lachish and its regional and transregional interconnections during the transition from the Middle to the Late Bronze Age by relying on resources and tools provided by the ongoing SNSF Sinergia project by the Universities of Bern, Tel Aviv and Zurich entitled "Stamp-seals of the Southern Levant – A Multi-faceted Prism for Studying Entangled Histories in an Interdisciplinary Perspective"(www.levantineseals.org).

SESSION: 12F. Investigating Ancient Societies: Challenging Assumptions, Exploring Approaches II

Chair(s): Nadia Ben-Marzouk, University of Zurich | Danielle Candelora, State University of New York College at Cortland | Kara Cooney, University of California, Los Angeles

Reassessing the Value of Autobiographical Inscriptions from the First Intermediate Period and "Pessimistic Literature" for Understanding Egypt's Social History

Ellen F. Morris

Barnard College, Columbia University, USA

Autobiographical texts composed during Egypt's First Intermediate Period and the somewhat later related genre of 'pessimistic' literature both describe a natural world gone awry, people suffering from acute hunger, and a society riven with strife. The trend in modern scholarship has been for these ancient sources to be dismissed, either as tendentious or as purely literary meditations on the theme of theodicy. This contribution argues that these autobiographical and literary texts deserve to be taken far more seriously as sources for understanding Egypt's social history. In the last two decades alone numerous and varied scientific studies have assembled compelling evidence for a centuries-long megadrought, now known as the 4.2-kiloyear BP aridification event. Taking this recent research into account, this contribution draws on records of extreme famines in both Medieval and Ottoman Egypt, as well as on accounts of catastrophic famines elsewhere, to argue that, when contextualized, neither the autobiographical nor the pessimistic texts read as hyperbolic.

A New Proposal to Read the Middle Bronze Age Anra Scarabs

Nadia Ben-Marzouk

University of Zurich, Switzerland

The Middle Bronze Age saw the production and circulation of many scarabs in the southern Levant, decorated with what have been referred to as "pseudo hieroglyphs" as well as signs whose reading is debated. One important group is the so-called anra scarabs, comprising enstatite scarabs with various combinations of what have been traditionally interpreted as the Egyptian hieroglyphs. Previous attempts to interpret these sign sequences have operated under the assumption that they reflect Egyptian hieroglyphs and should thus be read from an Egyptian linguistic perspective. Among others, Alice

Mandell (2021) most recently proposed this corpus demonstrates the importance of scarabs for the transmission of alphabetic literacy. This paper builds on these previous studies by challenging the assumed boundaries between the Egyptian and early alphabetic script by proposing new readings for the formula on these scarabs. The potential significance of these proposed readings will then be explored with a focus on what they reveal about the nature of interaction between local communities in Egypt and the southern Levant during the first half of the second millennium BCE.

A Technological Study of Canaanite Pottery from a Late Bronze Age Cult Enclosure at Tel Burna

Jon M. Ross¹, Itzick Shai¹, David Ben-Shlomo¹, Chris McKinny²

¹Institute of Archaeology, Ariel University, Israel. ²Bar-Ilan University, Israel

Excavations at Tel Burna in the Judean foothills exposed a Late Bronze IIB sanctuary, with a rich cultic assemblage well dated to the 13th century BCE. A technological study of the pottery from this complex was undertaken to investigate the organisation of production. Current chaîne opératoire approaches for classifying ceramic assemblages tend to be heavily reliant on surface features indicative of fashioning techniques from whole vessels. Microstructures identified in petrographic thin-sections confirm macroscopic observations and are used to characterise clay recipes. However, surface features indicative of vessel shaping are not common and the majority of the assemblage is usually excluded from the study sample. Our multi-scalar chaîne opératoire approach draws on a simple ‘mesoscopic’ imaging technique for classifying traces of vessel manufacture on freshly cut and scanned sherds. The results are integrated with thin-section petrography and inspection of surface features to optimise classifications of potting methods on sherd assemblages. Data from the Late Bronze stratum at Tel Burna, Israel, are used to demonstrate the utility of this alternative approach for understanding how a rural Canaanite cultic enclosure was provisioned with pottery.

Dark Age or Transition? Nubia after the End of the New Kingdom Empire

Stuart T. Smith

University of California, Santa Barbara, USA

The Third Intermediate/early Napatan Period in Nubia is typically seen by Egyptologists as a dark age in the aftermath of empire. According to this model, the later Kingdom of Kush emerged out of a period of sociopolitical collapse and isolation only after re-engaging with Egypt in the mid-ninth century BCE. The notion that the former colony fragmented into a series of “chiefdoms” after the “withdrawal” of Egyptian personnel and resources and was isolated from broader political and economic networks is particularly persistent, in spite of the historical evidence to the contrary. Excavation at Tombos and elsewhere in Sudanese Nubia has increasingly shed light on this period, contradicting this earlier model. In particular, archaeological evidence and a series of radiocarbon dates from Tombos documents the continuous import of transport vessels across the period, along with other pottery and goods from Egypt and farther abroad. Instead of collapse, the transition to the early Napatan period was characterized the emergence of new cultural constellations and a cosmopolitan society (1070-747 BCE). A process of cultural and political reorganization in Nubia, building on the old colonial infrastructure and centuries of previous complex political organization, eventually led to the rise of the Kushite 25th Dynasty (747-656 BCE), not a re-

engagement with Egypt sparking a re-“Egyptianization” of Kush. Understanding this complicated transition requires a nuanced approach that avoids longstanding biases against Nubian sophistication in favor of an archaeological focus on the accumulation of subtle shifts in local and inter-regional interactions that contributed to regional change.

SESSION: 12G. Secure Your Data! Security and Data Management in the Ancient Near East

Chair(s): Jacob Lauinger, Johns Hopkins University | Jana Mynářová, Charles University, Prague

What To Do With a Tablet? A Philological Perspective

Jana Mynářová

Charles University, Czech Republic

A clay tablet with text in cuneiform script is a material personification of communication between individuals in the ancient Near East. Over the course of more than three thousand years, its form has changed, just as the languages used. However, the tablet is not only an insignificant carrier of messages, but also an object made by humans for the purpose of writing. The table itself thus represents a key and indispensable element of a functioning communication chain. Ancient written sources, however, give us at least partial information about how the production of these tablets was carried out. In this talk, I will focus on the production of tablets in the light of cuneiform sources, paying particular attention to the question of their protection and the security of the written message.

For Your Eyes Only—Managing and Securing Data in the Palace of Eshnunna

Clemens Daniel Reichel

University of Toronto, Canada. Royal Ontario Museum, Canada

The need to secure classified or privileged data within government institutions remains a diachronic theme throughout times. Bureaucratic data from Ancient Near Eastern state archives—though cuneiform texts and glyptic data—provide ample direct and indirect evidence for mitigating factors that were supposed to prevent data leaks towards unauthorized parties. The Palace of the Rulers at Tell Asmar, Eshnunna’s seat of government between 2,070 – 1,750 BC, offers a remarkable dataset for such a study, providing spatial data that is often lacking for other sites due to a lack of controlled excavations. Several building levels that reflect the palace’s evolution, from its incipient function as the seat of a provincial Ur III governor to residence of a ruler that represented a powerful independent state, have provided evidence for government-controlled measures that were aimed at extending data longevity through tablet baking, for protocols that secured administrative space through door and container sealings, and processes that protected sensitive documents by encasing them in envelopes. The rich archaeological dataset also allows for numerous observations regarding the challenges that were associated with a secure disposal of classified dataset, and the often unconventional remedies that were found in order to accomplish that. Beyond mere empirical observations this paper will also evaluate the question of agency—to what degree do any of these measures represent official government policies versus individualized efforts of bureaucratic agents within the palace?

Singing Dirges in the Dark. Securing and Managing Ritual Data within the Chief Dirge Singer's Archive (Late Old Babylonian Sippar-Amnānum)

Katrien De Graef

Ghent University, Belgium

The overall majority of the documents found in the late Old Babylonian archive of the Chief Dirge Singer of Sippar-Amnānum are of a purely economic and/or legal nature. However, a small group of ca. 140 documents gives us insight in the cultic and ritual activities performed at the Annunitum temple under the auspices of the Chief Dirge Singer, in particular the organization, management and economic implications of these activities.

The majority of these are the so-called *paršum* texts stating the debt of the rest-silver of the rite owed by the performer to the Chief Dirge Singer but often to be paid by a third party (guarantor) to the bearer of the tablet (*naši kanikišu*) or to the *nakkamtum* storehouse of Sippar-Amnānum, as already noted by Tanret and Van Lerberghe (1993). A reappraisal of these documents combined with lists and letters from the Chief Dirge Singer's archive make it possible to reconstruct the rather complex accounting system these ritual performances entailed as well as the way in which all relevant data—performers, commissioners, expenditures, payments, debts, debtors, creditors, guarantors and recipients—were managed and secured by the Chief Dirge Singer, and shed light on the role of all parties involved in these rites, including individuals, Temple and Palace.

Tanret, M. & Van Lerberghe, K. 1993. *Rituals and Profits in the Ur-Utu Archive*, in Quaegebeur, J. (ed.) *Ritual and Sacrifice in the Ancient Near East: 435-449*. Leuven: Peeters.

Securing Data at Middle Bronze Age Alalah: What, How, and Why?

Jacob Lauinger

Johns Hopkins University, USA

In the ancient Near East, a clay tablet inscribed with a legal text did more than just document the licit transfer of property; the tablet often functioned as title to the property as well. For this reason, it was important to keep both the tablet itself and the legal text inscribed on the tablet secure. At Middle Bronze Alalah (Level VII), as at other parts of the ancient Near East at this particular time, securing tablet and text was typically done by encasing the tablet in a clay envelope on which the text of the contract was re-inscribed and which was then sealed. But comparison of the text inscribed on the tablets with the corresponding text inscribed on the envelopes reveals numerous differences, large and small, between the two, such as orthographic variants, additional stipulations, or additional or omitted witnesses. These differences raise questions about the circumstances in which the envelopes were produced and the legal status of the text inscribed on a tablet vis-à-vis that inscribed on an envelope. In this paper, I try to establish the corpus of extant envelopes from Middle Bronze Alalah, including unpublished fragments, and then present a taxonomy of the variants between tablet and envelope as an initial step in revisiting the questions of how and why data was secured at Middle Bronze Alalah.

Keeping Control in Late Bronze Age Emar and Ekalte

Regine Pruzsinszky

University of Freiburg, Germany

This paper seeks to analyze the ways and means of securing data and information on behalf of the Late Bronze Age archival texts discovered at Emar and Ekalte. Both sites, situated in the Middle Euphrates region, have left us a large number of texts of various

genres, which were discovered during regular and illicit excavations by the end of the 20th century. Considering the chronological and socio-historical background, the archives' archaeological context and the intrinsic information drawn from the various clauses of the documents, this paper will take a closer look on the various forms of text preparation and production, the authorities involved, and the deposition and storage of the legal and economic texts. With reference to summaries of original documents or of ownership prepared by the public authorities, that were deposited in the public building M1 in Emar for administrative purposes, this paper will elaborate on some of W.F. Leemans' ideas published in *JESHO* 31 (1998) by including more recent in-depth studies of the past years.

Writing Boards and Data Storage: On An Inventory of Administrative Writing Boards in the Spurlock Museum of World Cultures, University of Illinois (Spurlock Museum 1913-14-1574)

Michael G. Kozuh¹, John P. Nielsen²

¹Auburn University, USA. ²Bradley University, USA

In working with a set of unpublished Neo-Babylonian texts from the University of Illinois collection, John Nielsen (co-presenting) and I came across Spurlock Museum 1913-14-1574 (CDLI No. P421426), which is an inventory of administrative writing boards stored in wooden chests (*Bab: šaddānu*) from the Eanna temple of Uruk. The text adds significantly to our understanding of the administrative use of these boards.

MacGinnis and later Jursa isolated and discussed all the attestations of writing boards in Neo-Babylonian texts, and Jursa drew some preliminary conclusions about them. However, neither of them had access to a detailed "meta-text" about the boards themselves like Spurlock Museum 1913-14-1574. Here we consider what it tells us about data storage and security.

We pursue two arguments. First, we reiterate that writing boards could be used as a durable medium to store and secure data—often, as this and other texts show, for generations. Using the work of Cammarosano and his team, we think through the uses to which generations-old administrative data might remain useful for administrators and authorities. Second, we argue that this process of storing and securing data in reed chests reveals broader native characterizations of that information. For example, one chest has writing boards marking transactions in silver. Another chest is concerned with the temple's livestock "industry." That is, we can use this text to understand broader categories under which first millennium institutions contemplated, sorted, and stored its data.