Programme

13 International Congress on the Archaeology of the Ancient Near East

22 May

09:00 - 10:00 **Registration - University of Copenhagen South Campus**

10:00 - 12:15 **Opening ceremony**

Ceremonial Hall, University of Copenhagen, Frue Plads – Central Copenhage
10 am – 12.15 pm

Welcoming address by

Prof. Dr. Kirsten Busch Nielsen , dean Faculty of Humanities, University of Copenhagen

Prof. Dr. Marie Louise Nosch , president, The Royal Danish Academy of Science and Letters

Prof. Søren M. Sindbæk , Centre for Urban Network Evolutions (UrbNet), Aarhus University

Greetings from the field and the 12ICAANE by **Prof. Dr. Nicolò Marchetti,** University of Bologna

Speech of the chairperson, the international scientific committee, and organizer of the 113ICAANE **Dr. Ingolf Thuesen** , University of Copenhagen and the Danish Institute in Damascus

Traditional Middle Eastern music performed by Bilal and Bakri

Key notes 11:00 – 12:00

Dr. Laith Majeed Hussein , chairman, State Board of Antiquities and Heritage, Iraq: The Archaeology of Iraq.

Prof. Dr. Susan Pollock , Freie Universität Berlin: Perpetuating Inequalities

Prof. Dr. Iman Saca , vice president, Bethlehem University: Community Engagement: A Critical Approach to Doing Archaeology

Traditional Middle Eastern music performed by Bilal and Bakri

13:00 - 14:00 **LUNCH**

14:00 - 14:30 **1.a (ROOM:15A.0.13) Bec Drelon et al. - Multiscalar analyses of pre- and protohistoric megalithic funerary monuments in the Khaybar Oasis (northwestern Saudi Arabia): first results.**

Bec Drelon *(CNRS - UMR 5133 Archéorient, Lyon), M. Poulmarc'h (CNRS - UMR 5133 Archéorient, Lyon), R. Crassard (CNRS - UMR 5133 Archéorient, Lyon), M. Mushawh (Royal Commission of AlUla), K. Guadagnini (CNRS - UMR 8167 Orient & Méditerranée, Paris), O. Barge (CNRS - UMR 5133 Archéorient, Lyon), E. Regagnon (CNRS - UMR 5133 Archéorient, Lyon)*

Since 2020, the Khaybar Longue Durée Archaeological Project documents archaeological sites in the Khaybar region, in northwestern Saudi Arabia. The study and understanding of pre- and protohistoric funerary monuments are ones of the main challenges of this research programme. Excavations on several types of monuments are being carried out (i.e., cairns, tailed tombs, megalithic monuments). Their study provides significant data on construction techniques, architecture, location in the landscape, funerary practices and chronology.
In parallel, a global inventory of funerary monuments is being carried out on a Geographic Information System. It is now possible to start a spatial analysis at the scale of the region, based on a total of more than 14,000 tombs. Various cases of spatial organisation have been already identified. For instance, while the majority of the tailed tombs are organised along funerary avenues, other tower tombs are implanted and pooled according to remarkable elements of the landscape: along a ridge, on the edge of a cliff or surrounding the bottom of a hill. The aim of this research is, in the long term, to understand the dynamics and evolution of these immense necropolises, along the protohistoric times and beyond.

14:00 - 14:30 **1.a (ROOM:21.0.54) Giulia Ragazzon - Investigating deathways at Early Neolithic Bestansur: new developments and future approaches.**

Giulia Ragazzon (University of Reading; University of Exeter)

Since 2012, archaeological investigations at Bestansur (Iraqi Kurdistan) have brought to light extraordinary evidence of lifeways in an Early Neolithic community of the Eastern Fertile Crescent. Ongoing excavations at the site have exposed occupation levels spanning over 600 years (c. 7700-7100 BCE), revealing patterns of activity and space use in large built environments, as well as a striking complexity in mortuary and funerary behaviours. The co-existence of multifaceted responses to death has been further explored during recent fieldwork, with the excavation and integrated assessment of new funerary deposits. This paper aims to present the preliminary results of archaeothanatological analyses carried out at Bestansur, offering new perspectives on deathways and depositional histories. The synthesis and broader contextualisation of relevant data lay the foundations for future interdisciplinary work seeking to disentangle the intersections between life and death at the site.

14:00 - 14:30

2.a (ROOM:15A.1.11) Giulia Iacobucci et al. - Geoarchaeological and archaeological setting of the Lower Mesopotamian Plain: the case study of Tell Zurghul and its human-environmental interaction

Giulia Iacobucci (Sapienza University of Rome), Andrea Titolo (Sapienza University of Rome)

The landscape of the Lower Mesopotamia Plain has been moulded by water-related processes, and its Holocene geomorphic evolution has been strictly connected to the fluvial processes and the anthropogenic water management since 8000 BC. During the maximum marine ingression (6000 years ago), the Persian Gulf coastline was close to modern cities of Nasiriyah and Al-Amara, and its shore was an ideal location for many well-known archaeological sites. Successively, the Tigris and Euphrates developed two wide delta systems, that prograded south-eastward developing a divergent fluvial network. Remote sensing investigations using satellite imagery and topographic analysis revealed the surficial expression of these deltaic bodies and several terminal distributary channels, typically connected with tidal-influenced river-dominated deltas. Together with remote sensing, historical and archaeological analysis of landscape provided new insights and future perspectives for the region of Tell Zurghul.

14:00 - 14:30

2.d (ROOM:15A.1.13) Ellen Belcher - Masking the Halaf, Imagery of Transformation and Mutability.

Ellen Belcher (John Jay College of Criminal Justice/CUNY)

This paper will present imagery masks and masking practices in 6th Millennium B.C.E. Mesopotamia and Anatolia with material culture evidence including figurines, ornaments and pottery motifs. As we have all experienced since March 2020, masks provide barriers of protection from harm but also trigger visceral reactions. Masks are used to obscure, exaggerate, standardize, or mutate identity to the viewer. Ethnographic studies tell of masks transforming the wearer into other persons as well as non-human creatures from spiritual, animal and plant worlds. In this paper I shall consider how modern and historic masking can be used to interpret late Neolithic masks imagery and what it may reveal and obscure about social identity in the Halaf

14:00 - 14:30

2.f (ROOM:23.0.49) Wendy Matthews et al. - Aligning Archaeology to Sustainability Indicators: Early sedentary communities in the Zagros.

Wendy Matthews (University of Reading), Roger Matthews (University of Reading), Amy Richardson (University of Reading), Alessandro Guaggenti (University of Reading), Kate Dudgeon (University of Reading), Sam Walsh (University of Central Lancaster), Giulia Ragazzon (University of Reading) and Kamal Raeuf Aziz (Sulaimaniyah Directorate of Antiquities and Heritage, Sulaimaniyah, Iraq KRG).

This paper examines how archaeological approaches and data can be aligned to cross-disciplinary investigations of sustainable development. The focus is on the indicators of sustainable settlement and communities highlighted in UN Sustainable Development Goal 11. UN SDG 11 indicators include assessment of the sustainability of housing, planning, accessible networks and public areas, cultural and natural heritage, environmental impact and disaster resilience. The case-studies are drawn from Late Pleistocene-Early Holocene settlements in the Zagros region. They include examination of a new open-air settlement opposite Zarzi cave- Zawi Chemi Razan and the sustainability of early settlement in the context of emergent social inequality and settlement shock and disruption *c.* 7600 BC at Bestansur, Iraq.

14:00 - 14:30

3. (ROOM:15A.2.13) Martin Gussone and Martina Müller-Wiener - ‘Then he set out for al-Hira and established himself there’. Early Islamic al-Hira and its architecture in supra-regional context

Martin Gussone (Technische Universität Berlin) – Martina Müller-Wiener (Museum for Islamic Art Berlin)

Arabic literary sources testify that the twin settlements of Hira and Kufa were the venue of significant events, integrated into supra-regional networks in the 8th and early 9th centuries. Of particular importance is the reign of Harun al-Rashid, who had residences built near al-Hira and allocated land to his retinue before establishing his residence in al-Raqqa in 796/180. This phase has not yet been adequately considered by either historical or archaeological research. For the palaces of al-Mutawakkil in Samarra (847/232–861/247), allusions to the architecture of al-Hira represent also an essential frame of reference. So far, however, this topic has only been discussed without a material basis of its actual architectural remains. With the results of a survey (2015–2018) and further documentation work (since 2021), a comprehensive database is now available. This paper will consider the archaeological evidence of Early Islamic al-Hira in the supra-regional context of late Umayyad and early Abbasid architecture.

14:30 - 15:00

1.a (ROOM:15A.0.13) Mathilde Jean, et al. - Bisya in the Early Bronze Age of the Oman peninsula: results from survey and excavations (2022-2023).

Mathilde Jean (UMR 7041/VEPMO), Martin Sauvage (CNRS, UMR 7041/VEPMO) Olivia Munoz (CNRS, UMR 8215), Tara Beuzen-Waller (Tübingen University)

Abstract (400-1000 characters): Bisya is one of the most important Early Bronze Age (EBA) sites in the Oman peninsula where the development of the first sedentary sites, probably oases, may be observed. The French Archaeological Mission in Central Oman (FAMCO) investigates monumental architecture, organized settlements and funerary structures from the Hafit and Umm an-Nar periods through survey and excavations. This paper presents the results of two seasons of fieldwork at Bisya (ad-Dakhiliyah, Oman) in 2022-2023. The regional survey evidences the extension and organisation of the EBA occupation. Excavations focus on al-Dhabi 2 to reveal the organization of the site and uncover parts of the tower, of the settlement and Hafit-type tombs. The material culture testifies to the development of crafts and trade during the Umm an-Nar period, shedding new light on the evolution of local societies in the Oman peninsula during the Early Bronze Age.

14:30 - 15:00

1.a (ROOM:21.0.54) Takahiro Odaka et al. - Investigating the Late Neolithic in the Shahrizor Plain, Iraqi Kurdistan: excavations at Shaikh Marif, the first season (2022).

Takahiro Odaka (Kanazawa University, Japan), Osamu Maeda (University of Tsukuba, Japan), Takehiro Miki (University of Tokyo, Japan), Yuichi S. Hayakawa (Hokkaido University, Japan), Perween Yewer (Directorate of Antiquities in Slemani, Kurdistan Regional Government), Hussein Hama Gharib (Directorate of Antiquities in Slemani, Kurdistan Regional Government)

The Shahrizor Plain is located in a mountainous basin in the eastern part of the Sulaymaniyah Governorate, Iraqi Kurdistan, where its local prehistory has gradually come into view through various ongoing investigations. As to the chronology of its late prehistory, however, there are some ill-defined archaeological gaps yet to be filled in, of which the most critical one lies in the early 6th millennium cal. BC. In order to approach this issue, new excavations have begun at Shaikh Marif in 2022, following the investigations at Shakar Tepe in 2019. Our 2022 season's work successfully uncovered cultural deposits which yielded artefact assemblages typical to the Late Neolithic period. The dates of the site can be estimated to be around 6000 cal. BC and thus fill a part of the chronological gaps in the archaeological records of the late prehistory in this region.

14:30 - 15:00

2.a (ROOM:15A.1.11) Margareta Tengberg et al. - The Neolithic diffusion of agropastoral economies across the Iranian Plateau

Margareta Tengberg (CNRS - UMR 7209 MNHN, Paris), Marjan Mashkour (CNRS - UMR 7209, MNHN, Paris), Benjamin Mutin (CNRS - UMR 8167, Collège de France, EPHE, Université Paris 1 Panthéon-Sorbonne)

In the last few years the origins and chronology of the eastern diffusion of the Near Eastern Neolithic has received increased attention, with several articles dealing either with human migration or the eastward spread of raw materials and artefacts during this pivotal period. The present paper focuses on the diffusion of agropastoral economies across the Iranian Plateau from the 8th to the 6th millennia BCE. On the basis of a large corpus of recently studied zooarchaeological and archaeobotanical remains, we will expose and discuss various types of Neolithic trajectories with different timings and contents against their cultural and biogeographical backgrounds. In addition to reflecting on the possible origins of domestic plants and animals in this area, we will address the questions of the potential existence of local domestications and of the adaptation of crops and livestock to local climatic and environmental conditions as production economies spread into new regions.

14:30 - 15:00

2.d (ROOM:15A.1.13) Sarah Lange-Weber - Ivory and Bone Objects from the Middle Bronze Age Tomb VII in Qatna, Syria Stylistic Elements and Origin, Function in Daily Life and in the Realm of the Dead.

Sarah Lange-Weber (University of Tübingen)

The excavations of Tomb VII below the Royal Palace of Qatna revealed more than 100 bone and ivory objects, including figurines, combs, figurative inlays and even worked elephant tusks. Coming from an undisturbed context, the Tomb VII ivory assemblage constitutes a remarkable corpus of objects whose stylistic elements can in part be ascribed to MBA Syro-Levantine traditions. While some objects reveal a mundane function, others most likely served as decorative elements or as prestigious items in their own right. Their respective functions in daily life, and the way in which these changed once the objects entered the realm of the dead, is one of several issues discussed in this paper.

14:30 - 15:00

2.f (ROOM:23.0.49) Rana Özbal et al. - Pottery and Dairying in Neolithic Anatolia: The Case of Barcın Höyük, Turkey

Rana Özbal (Koç University), Adrià Breu, Hadi Özbal, Laurens Thissen, AylaTürkekul-Bıyık, Fokke Gerritsen (NIT, Laiden University)

Using a well-dated seventh millennium BCE pottery sequence to assess the relationship between pottery shapes and pottery contents and to diachronically explore the modifications to both the foods cooked, and the shapes used enables us to go beyond ceramic vessels as physical containers and to explore how they were employed by inhabitants in the daily activities of cooking, serving, storage and other tasks. The site of Barcın Höyük in Northwest Anatolia, which presents the earliest evidence for a developed dairy economy offers a unique opportunity to address these issues through a long-standing program of organic residue analyses. The robust dataset is based on an unprecedented study of over a thousand analyzed pottery sherds. Combined with the study of the triacylglycerol profiles and the presence of long chain ketones arising from the thermal degradation of the lipids, this paper attempts to assess the type of vessels used to process milk and compares them with vessels in which animal adipose fats were more prevalent, thus gaining key insights into the processes which lead to the widespread adoption of secondary products.

14:30 - 15:00

3. (ROOM:15A.2.13) Amin Moradi and Marco G. Brambilla - The Construction Process of the Alī Shāh Building; The Final Word.

Amin Moradi (Otto-Friedrich-University) and Marco G. Brambilla (University of California in Los Angeles)

According to historical testimonies, Alī Shāh, the distinguished vizier of the Ilkhanid court (1256-1353 CE), built an impressive structure in the Mongol capital of Tabriz, located in contemporary Northwest Iran. Chronicles confirm his megalomania by inviting architects to submit their design proposals considering the impressive dimensions of *Tāq i Kasrā* (242-272 AD) in Ctesiphon which was roofed with a huge parabolic vault. Despite the clarity of historic accounts in reflecting Alī Shāh's ambition, too often historians assigned the current U-Shaped structure in Tabriz to one phase of this construction project. The most recent studies by the authors led to the conclusion that this particular structure belongs to post-Ilkhanid architecture. Hence, a gap still exists between the historical reports and archaeological evidence to visualize the architectural appearance of the Alī Shāh's monument. This paper aims to explore the fundamental question of the general composition and architectural requirements of the construction sponsored by Alī Shāh. The results indicate that not only Alī Shāh was not successful to build a larger arch than *Tāq i Kasrā,* but the proposed dimensions of the dome chamber in his project also failed to rival the contemporaneous large-scale buildings.

15:00 - 15:30

1.a (ROOM:15A.0.13) Piotr Bieliński and Agnieszka Pieńkowska - Bilt, a small Umm an-Nar culture settlement in Northern Oman.

Piotr Bieliński, Agnieszka Pieńkowska (Polish Centre of Mediterranean Archaeology, University of Warsaw)

The site of Bilt is situated at the western outskirts of the Qumayrah micro-region in the mountains of Northern Oman on a hill dominating a deeply cut wadi near a village of the same name. The site was first spotted over 15 years ago, while regular archaeological investigation in this region have been carried out in recent years by the Omani-Polish Archaeological Mission. Besides badly preserved remains of a huge Umm an-Nar tomb, there are ruins of at least three large, multi-roomed houses located in its vicinity. They are accompanied by the remnants of several installations. It seems that the site represents a typical rural settlement from the Umm an-Nar times. The size of the tomb, which is erected of carefully dressed blocks of white stone, suggests that the settlement may have been bigger and had a larger population than implied by the number of houses registered so far. A relationship between the Bilt settlement and the much larger Umm an-Nar settlement of QA located about only 10 km away is very probable.

15:00 - 15:30

1.a (ROOM:21.0.54) Johnny Samuele Baldi et al. - At the origins of the Ubaid world: recent insights from Tell el-'Uwaili (southern Iraq).

Johnny Samuele Baldi (CNRS - UMR 5133 Archéorient, Lyon), Emmanuel Baudouin (CNRS, UMR 7264 CEPAM, Nice), Régis Vallet (CNRS-IFPO - UMR 8068 TEMPS, Nanterre)

After many decades, field activities were resumed at Tell el-'Uwaili. The site presents a complete sequence of the cultural entity known as Ubaid. Recent work is attempting to reveal that sequence on the north-western flank of the tell, in the continuation of the excavations undertaken in the 1980s, up to Ubaid 5 (5th millennium BC). The bulk of the efforts of the 2019 and 2021 campaigns focused on the so-called Ubaid 0 phase, the oldest ever documented for the Ubaid entity (7th millennium BC). A quite large area (600 sq.m) has been brought to light, which now makes it possible to read a substantial part of the settlement layout, with granaries, food ovens and storage areas, arranged in well-organised blocks neatly separated by roads. The extensive excavation also resulted in the discovery of large quantities of materials related to the everyday life of a prehistoric village: fine and plain pottery, spindle whorls, ploughs and lithic tools. Nevertheless, these new findings also raise a fundamental question: from a technical and material-cultural point of view, are the premises of the Ubaid world really "Ubaid"?

15:00 - 15:30

2.a (ROOM:15A.1.11) Adrià Breu et al. - Biomolecular analyses revealing the connection between pottery and natural resources in Anatolian and Northern Mesopotamian settlements

Biomolecular analyses revealing the connection between pottery and natural resources in Anatolian and Northern Mesopotamian settlements from the 7th and 6th millennium cal BC

Adrià Breu (Koç University), Ayla Türkekul-Bıyık (Boğaziçi University), Sidar Gündüzalp (Independent Researcher), Pınar Özükurt (İstanbul University), Rana Özbal (Koç University)

We report the results of an ongoing study assessing differences in the way pottery was used to prepare food across Neolithic Anatolia and Northern Mesopotamia by exploring the social dynamics which may have promoted the development of dairying in the region. The successful recovery of lipid residues in significant amounts of vessels from 12 archaeological sites previously unpublished has been the basis to explore relations between different ecological regions and trends in the biochemical characteristics of the lipid pottery contents. This presentation will discuss patterns in the use of vessels to store and transform commodities such as marine, plant, terrestrial and dairy products geographically in a territory going from the western Zagros to the Bosphorus.

15:00 - 15:30

2.d (ROOM:15A.1.13) Alessandra Gilibert et al. - The discovery of the earliest monumental art of the South Caucasus: dating high-altitude relief steles from Armenia to the late fifth Millennium BCE.

Alessandra Gilibert (Università Ca' Foscari Venezia), Pavol Hnila (Freie Universitaet Berlin), Arsen Bobokhyan (Armenian Academy of Sciences)*

This paper discusses the first secure dating for the South Caucasian standing stones known as "vishaps," or "dragon stones." Vishaps are megalithic monuments decorated with animal reliefs distributed in the mountain pastures of modern Armenia and neighbouring countries. First recorded at the beginning of the 20th century, these steles have long stayed off scientists' radar because of their remote locations and insecure dating. Absolute dating has particularly proven a tough nut to crack, with proposals built on vague arguments, ranging from the Neolithic to the Late Bronze Age. Archaeological research at Karmir Sar, a high-altitude site on Mount Aragats, Armenia, is now providing a fieldwork-based avenue to dating and contextualising vishaps, among other advances. Stratigraphic excavations and rigorous sampling unambiguously indicate a date to the late fifth Millennium BCE, making vishaps the earliest monumental art of the South Caucasus and opening new perspectives in the anthropology of images.

15:00 - 15:30

2.f (ROOM:23.0.49) Gaia Babolin - The transition from the Neolithic to the Chalcolithic in the Southern Caucasus: a macrolithic perspective.

Gaia Babolin (Ca' Foscari University of Venice)

Despite the recent intensification of field research, the transition from the Neolithic to the Chalcolithic in the Southern Caucasus is still poorly understood. The paper shows how ground stone tools, an often neglected class of finds, can provide important information regarding changes in subsistence patterns, the exploitation of the environment, etc. The comparative morphological study of published ground stone tools from about 20 sites of the two periods in different countries of the Southern Caucasus (Georgia, Armenia, Azerbaijan) highlights how the technical evolution of the macrolithic toolkit reflects the main changes occurring from one to the other and their cultural meaning. The ongoing analysis of the unpublished macrolithic tools from Tsiteli Gorebi 5 in Georgia, a site dated to the earliest phase of the Chalcolithic, confirms the general results of the study, thereby enriching them by the use of new methodological tools (use-wear analysis, residue analysis etc.).

15:00 - 15:30

3. (ROOM:15A.2.13) Katie Campbell - The Impact of the Mongol Conquest on Earthen Cities in Central Asia.

Katie Campbell (University of Cambridge)

This paper discusses the use of mud as a building material in the cities of Central Asia with reference to its role in perceptions of the Mongol Conquest in the early decades of the 13th century. Outlining patterns of construction, maintenance and reconstruction in earthen architecture, I consider how an event such as the Mongol Conquest would have impacted urban occupation in cities constructed of this material with a focus of the examples of Merv in Turkmenistan and Otrar in Kazakhstan. Given the constant need for maintenance of mudbrick architecture to prevent its decay and the difficulties of reversing this process once it has begun, I argue that depopulation as a result of the conquests would have a far more significant impact on the urban fabric than any active demolition by the Mongol armies. Additionally I discuss the practicalities and difficulties of the reuse of mud as a building material and show that the abandonment of buildings and even entire cities can be a conscious, pragmatic response to erosion or water supply rather than a catastrophic event such as the Mongol Conquest. Following these themes, I suggest that historical accounts such as those of Juvaini and Rashid al-Din which describe urban devastation and demolition may be reconsidered to include the impact of erosion and the difficulties of reviving large, earthen cities following the flight of their population.

15:30 - 16:00

Coffee Break

16:00 - 16:30

1.a (ROOM:15A.0.13) Jérôme Rohmer and Abdulrahman Alsuhaibani - The Dadan Archaeological Project: results of three excavation and survey seasons at an ancient North-Arabian capital.

Jérôme Rohmer (CNRS - UMR 8167 Orient & Méditerranée, Paris), Abdulrahman Alsuhaibani (King Saud University, Saudi Arabia)

Located in the oasis of modern al-ʿUlā (AlUla), in northern Hejaz, the ancient city of Dadan was a major political and commercial hub in ancient northwest Arabia. It was settled from the late 3rd or early 2nd millennium BCE and flourished during the 1st millennium BCE with the development of long-distance trade along the "Incense Road". During this period, it was the capital of two successive kingdoms: the local kingdom of Dadan (early/mid-1st millennium BCE) and the larger, tribal kingdom of Liḥyān (second half of the 1st millennium BCE). In 2020, a new program, the Dadan Archaeological Project (CNRS/AFALULA/RCU), was launched to carry out a comprehensive archeological investigation of this major site. It includes large-scale excavations, a systematic survey of the site and its mountainous hinterland, and a wide array of specialised studies (epigraphy, ceramology, archaeozoology, archaeobotany, study of rock-carving techniques). This paper will present the results of the first three field seasons, which shed critical new light on the organisation, chronology, political history, religious life, and material culture of the site.

16:00 - 16:30

1.a (ROOM:21.0.54) Takehiro Miki and Kazuya Shimogama - A new Ubaid ceramic assemblage in the Shahrizor Plain, Iraqi Kurdistan.

Takehiro Miki (University of Tokyo, Japan), Kazuya Shimogama (Chiba Institute of Technology, Japan)

The Shahrizor Plain, Iraqi Kurdistan, lies between the Mesopotamian lowlands and the Zagros highlands. The location of this intermontane plain is significant in discussing the expansion process of the Ubaid black-on-buff ceramics into the Zagros Mountains and the subsequent regionalization from the Late Ubaid (c. 4900-4500 BCE) to LC1 (c. 4500-4200 BCE). However, the number of excavated Ubaid sites in the Shahrizor Plain is still limited compared to the northern part of Iraqi Kurdistan. Even though previous studies found Ubaid layers from excavations in the southern part of Kurdistan, the ceramic information during the Late Ubaid is largely preliminary. This presentation reports the first assessment of a new Ubaid ceramic assemblage discovered from Shakar Tepe (SSP24) in the Shahrizor Plain, southern Iraqi Kurdistan, focusing mainly on its ware types, vessel forms, and petrographic groups. Through the detailed ceramic analyses and intersite comparisons, we examine the relative chronology of the Ubaid layers at Shakar Tepe and discuss the regional interactions and settlement dynamics in the Ubaid period of the Shahrizor Plain.

16:00 - 16:30

2.a (ROOM:15A.1.11) Troels Pank Arbøll et al. - Revealing the secrets of a 2,900-year-old clay brick: discovering a time capsule of ancient DNA

Troels Pank Arbøll (Copenhagen University), Sophie Lund Rasmussen (Oxford University, Aalborg University), Nadieh de Jonge (Aalborg University), Anne Haslund Hansen (National Museum of Denmark), Cino Pertoldi (Aalborg University, Aalborg Zoo) 4,6 and Jeppe Lund Nielsen (Aalborg University)

The recent development of techniques to sequence ancient DNA has provided valuable insights into ancient civilisations. However, the full potential of these methods has yet to be realised. We extracted ancient DNA from a recently exposed fracture surface of an unburned clay brick deriving from the palace of king Ashurnasirpal II (883-859 BCE) in Nimrud (ancient Kalḫu), Iraq. We detected 34 taxonomic groups of plants. With this research we have made the pioneering discovery that ancient DNA, effectively protected from contamination inside a mass of clay, can successfully be extracted from a 2,900-year-old clay brick, allowing us to describe the biodiversity in an ancient, and once flourishing, city. We encourage future research into this subject, as the scientific prospects for this procedure are substantial. Furthermore, our research illustrates how the approach can be strengthened by combining the fields of Assyriology, archaeology, and ancient genomics.

16:00 - 16:30

2.d. (ROOM:15A.1.13) Setareh Ebrahimiabareghi - Potter’s marks of Tepe Sadegh, Sistan Plain.

Setareh Ebrahimiabareghi (Bern University)

In this paper, will be tried to find out about the meaning and function of the potter’s mark, through the similarities in different sites and if they could be considered as trademarks, and similarities between the marks on different sites indicate a trading connection? Is there any Similarities between potter’s mark and writings systems like Proto–Elamite and Pre–Harappan writing? Different marks and symbols have been seen on different parts of the pottery. These symbols on the pottery, remained undeciphered and known as potter’s mark in archaeology. These marks have been found in Shahr–i Sokhta in Sistan and other ancient settlements in eastern part of Iran plateau. 20 potter’s mark have been found at Tepe Sadegh, which were mostly on the body of the pottery, handmade, coarse, and engraved.

16:00 - 16:30

2.f (ROOM:23.0.49) Alice Vinet - Characterizing cultural groups in the Early Chalcolithic on the Anatolian plateau through the techno-functional study of the obsidian toolkit.

Alice Vinet (Aix-Marseille University ; UMR 7269 Lampea)

From 6500 BCE, during the Late Neolithic, changes take place in central Anatolia and impact several aspects of the daily life of the local communities and demonstrate an increase in social competition. Central Anatolia, with its sources of obsidian exploited throughout the near east and the Mediterranean, is a key region to question the development of communities through the exploitation of raw materials, the economy and techniques. This communication will highlight the behaviors related to the production, use and abandonment of the obsidian industry of Tepecik Çiftlik (Cappadocia) and Çatalhöyük-west (Konya plain). The results contribute to the definition of two cultural groups in central Anatolia during the Early Chalcolithic (6000-5500 BCE) by providing new data on the production and use of obsidian from domestic and ritualized contexts.

16:00 - 16:30

3. (ROOM:15A.2.13) Irini Biezeveld - From forts to field systems: New data from five Islamic sites in central Oman.

Irini Biezeveld (Goethe University)

“The last corner of Arabia”, or in other words, the Sultanate of Oman during the 20th century CE. The common narrative tells us that far into the 20th century, the country was almost untouched by events that occurred elsewhere in the world. But was Oman during the previous centuries so isolated as historical sources make us believe? This paper focuses on central Oman; the interior region which is bordered by sandy deserts, dry gravel plains and high mountain ranges. Here, the archaeological landscape is dotted with over a thousand traditional villages and towns that were inhabited during *ca.* the 17th to 20th centuries. Five of these sites were studied through archaeological survey and excavation. This paper presents new data on the regional material traditions of this so far widely neglected area. The evidence of ceramic wares, coins, glass, and other materials, confirm that this “isolated” region indeed had its rural traditions, but also tapped into the developments that were evident throughout the Gulf region and the wider Islamic world at this time.

16:30 - 17:00

1.a (ROOM:15A.0.13) Paula Gómez Sanz et al. - Al Khudairah Necropolis (Sharjah, UAE): Results after the Second Season of Work (2023)

Paula Gómez Sanz, Carmen del Cerro Linares, Carlos Fernández Rodríguez (Universidad Autónoma de Madrid)

The necropolis of Al Khudairah is located at the Central Region of Sharjah emirate (UAE). During the first archaeological season, (2020) the team of the Spanish Archaeological and Archaeobiological Mission at Sharjah (Autonoma University of Madrid) surveyed two small mountains in al Khudairah: Akh1 and Akh2. At least 69 tombs and 5 rock shelters with different chronologies were identified. In January 2020 the team excavated one of the tombs of Akh2, Tomb 20, which is part of a group of three cairns (Tombs 18, 19 and 20) and apparently presents a typical Hafit structure. The goal of the 2023 season is to dig and study the nearby tombs. Furthermore, we intend to excavate another structure of Akh2 including a rock shelter that could be dated to the Iron Age. This study will increase our understanding of the site and enable us to continue our investigations regarding the Southeastern Arabian funerary world.

16:30 - 17:00

1.a (ROOM:21.0.54) Luca Volpi - The “Ubaid” mound at Tell Zurghul: a reappraisal in the light of new evidence from expeditions 2021 and 2022

Luca Volpi (Sapienza Università di Roma)

Since 2015, the Italian Archaeological Expedition at Tell Zurghul/Nigin is involved in the excavation of the lower Mound of the site, where a late ‘Ubaid’ settlement (Ubaid 4) appeared immediately below the surface. The present paper is dedicated to the presentation of the results obtained in the excavation campaigns 2021 and 2022. The 2021 excavation has focused on the excavation of a “Step Trench” on the northern side of the mound, with the aim to comprehend the extent and dating of the earlier occupation of the mound. The 2022 excavation has resumed the excavation of the top of the mound, where three architectural phases have already been detected. The aim of the excavation was to clarify the nature of the second architectural phase (Phase II), as well as investigating in detail the third architectural one (Phase III). The results of the new excavations, together with a detailed pottery analysis, have contributed to expanding the knowledge of the “Ubaid” settlement at Tell Zurghul.

16:30 - 17:00

2.a (ROOM:15A.1.11) Julia Rummel - Landscape and environment of the Phoenician homeland (southern Lebanon) in regard to Late Iron Age agriculture: preliminary results of the ongoing research.

Julia Rummel (Heidelberg University)

In this paper, I will present the methodology, data, and preliminary results of my ongoing PhD project which aims to assess the agricultural possibilities and limitations of the late Iron Age central Levant. Within Phoenician Archaeology exists the widely accepted assumption that the Phoenician city-states were unable to provide enough foodstuff due to insufficient land suitable for cultivation. This assumption, however, is mainly based on textual sources and was never critically analysed on the basis of empirical data. My research aims to challenge this narrative by conducting an extensive analysis of environmentally and archaeologically tangible data using a landscape analysis approach. The results will enable us to assess the actual land potential, agricultural and economic processes, and estimations regarding potential population sizes based on a methodology derived from natural sciences rather than textual sources.

16:30 - 17:00

2.d (ROOM:15A.1.13) Yitzhak Paz and Itai Elad - New Vistas on Administrative and Ritual Performances Reflected in Glyptic Art in the Southern Levant during the Late 4th Millennium BC.

New Vistas on Administrative and Ritual Performances Reflected in Glyptic Art in the Southern Levant during the Late 4th Millennium BC– A View from 'En Esur

Yitzhak Paz (Israel Antiquities Authority) andItai Elad (Israel Antiquities Authority)

Southern Levantine trade routes were the main apparatus through which economic systems operated during the 4th-3rd millennia BC. But not less important, they were also employed as local or inter-regional communication networks in which information and ideas were transmitted, incised in the shape of ‘potmarks’ or of geometric designs and figurative scenes rolled by cylinder seals on pottery vessels. Some of these ideas were open and accessible to the observers, others were encrypted and were to be decoded by the end users alone. Most noticeable are ideas that can be assigned to cultic and ritual activities, that were well-known in archaeological research by themes like ‘the sacred marriage’ with its multiple scenery. The current paper will focus on new data and vistas on the iconography of sacred ideology, ritual performances and possible administrative activity, as reflected in southern Levantine glyptic art from the late 4 th millennium BC (Early Bronze IB) city of 'En Esur. The paper will also relate to encoded geometric designs that, as will be demonstrated, were not mere decorative motifs but rather encompassed and conveyed meaningful ideas that were widely acknowledged by southern Levantine communities and that should be extracted from glyptic art.

16:30 - 17:00

2.f (ROOM:23.0.49) Magda Batiashvili et al. - Understanding the Metal Production through Micro and Macro Levels. According to the Primary results of Ashkelon-Agamim, and Fazael's plethora artifacts.

Understanding the Metal Production through Micro and Macro Levels. According to the Primary results of Ashkelon-Agamim, and Fazael's plethora artifacts, Southern Levant.

Magda Batiashvili (Ben-Gurion University of the Negev), Yotam Asscher (Israel Antiquities Authority), Prof. Yuval Goren (Ben-Gurion University of the Negev)

The Chalcolithic period in the Southern Levant is a crucial period for understanding the developments of metallurgy in the region. This period is marked with peculiar recoveries of numerous alloy copper artifacts, known as hoards or prestige objects, with evidence of unique craft motifs. In addition to metal artifacts, the Chalcolithic period is distinctive through its remnants of metallurgical workshops. On this basis, research will focus on defining workshops and examining refractory ceramics, which have been utilized during metal production at two sites: Ashkelon-Agamin, and Fazel. The paper will thereby discuss the advancement and use of analytical techniques i.e., the use of portable and benchtop labs in the field and for the initial, directly using non-destructive techniques to acknowledge archaeological context of Ashkelon-Agamim, and Fazael sites.

16:30 - 17:00

3. (ROOM:15A.2.13) Yasmin Kanhoush et al. - Living within a palm grove during the 20th century AD: study of Al-Ula oasis' vernacular architecture (Hijaz, Northwestern Saudi Arabia).

Yasmin Kanhoush (Archaïos, UMR 5133 Archéorient, Lyon), Pascale Clauss-Balty (Archaïos, UMR 7041 APOHR, Nanterre), Sarra Ben Bader (Archaïos), Valentin Koszarek (Université Paris 1_Panthéon-Sorbonne), Anne Leschallier (Archaïos), Julien Charbonnier (Archaïos)

Oasian houses from Arabia, particularly sub-contemporary ones, still remain neglected in scientific research. Yet, they reflect the ingenuity of the local population to adapt to their arid environment, poor in water and plant resources. In order to fill this gap in our knowledge, the vernacular architecture of the Al-Ula oasis (KSA) is since 2019 the subject of a thorough study conducted by the Al-Ula Cultural Oasis Project (UCOP), which is led by Archaïos, funded and steered by the French Agency for AlUla Development (AFALULA), on behalf of the Royal Commission for AlUla (RCU).The palm grove of Al-Ula stands out as a densely built-up area. Indeed, about four hundred complexes, called "farms", established in the oasis before the oil boom, in the early 20th century AD, have been identified. They are distinguished by the presence, within the agricultural plot, of at least one dwelling and other annexes with well-defined functions.A definition of Al-Ula oasis farms and their components will first be addressed along with the materials and construction techniques used. Then, the layout of the houses and their spatial distribution within the oasis will be assessed. This study is intended to be a major advance in our understanding of rural architecture in Arabia.

17:00 - 17:30

1.a (ROOM:15A.0.13) Josselin Pinot et al. - A South-Arabian sanctuary far from home: the Minaean 'high place' of Jabal al-Khuraybah (north-west Arabia).

Josselin Pinot (Université Paris 1 Panthéon-Sorbonne, UMR 7041 - ArScAn-VEPMO, France), Irene Rossi (Consiglio Nazionale delle Ricerche – ISPC, Italy), Fokelien Kootstra (Leiden University and Ghent University, Netherlands), Abdulrahman Alsuhaibani (King Saud University, Royal Commission for AlUla, Saudi Arabia), Jérôme Rohmer (CNRS, UMR 8167 Orient & Méditerranée, France)

Located on the eastern flank of the al-ʿUlā valley, in north-west Saudi Arabia, Jabal al-Khuraybah overlooks the ancient city of Dadan, which was settled from the 3rd millennium BCE to the early 1st millennium CE. In 2020, a systematic survey of this mountain was undertaken as part of the Dadan Archaeological Project (CNRS/AFALULA/RCU). During the first two seasons, a large religious complex was identified at its southern edge. It consists of a very long path, half carved, half built, which links four peaks and leads to the top of the highest one. The path is lined with nearly 400 Ancient South-Arabian inscriptions, suggesting that it was a processional path associated with the community of Minaean merchants settled at Dadan in the second half of the first millennium BCE. This paper will discuss the organisation, frequentation and chronology of this sanctuary in relation with the epigraphic finds and in the light of other mountaintop sanctuaries from North-west Arabia, the Southern Levant and South-Arabia.

17:00 - 17:30

1.a (ROOM:21.0.54) Davide Nadali and Andrea Polcaro - The Third Millennium BC at Ancient Nigin, Iraq: New Evidence from Recent Excavations (2021-2022).

Davide Nadali (Sapienza Università di Roma) and Andrea Polcaro (Università degli Studi di Perugia

Tell Zurghul, the ancient Sumerian Nigin in the ancient State of Lagash, is currently being excavated by a joint Italian archaeological expedition of Sapienza University of Rome and the University of Perugia since 2014. The paper presents the results of the two last recent excavation campaigns carried out in autumn 2021 and 2022, with a focus on the occupation of the ancient city during the third millennium BC (Early Dynastic Period and transition to Akkad), showing the archaeological evidence from operations in Area F in the Lower City and in Area E on the southern slope of Mound A.

17:00 - 17:30

2.a (ROOM:15A.1.11) Daniel J. Hill et al. - Climate change, landscape and human influences on the 4.2kyr event in Mesopotamia

Daniel J. Hill, Michelle de Gruchy, Katleen Deckers, Valentina Tumolo and Dan Lawrence

The 4.2kyr event saw major changes in civilizations across the world, often attributed to climate change and widespread drought. In Mesopotamia, settlements were abandoned, agricultural practices shifted and the Akkadian Empire ended. However, the evidence for hydrological change is largely external to Mesopotamia and susceptible to non-hydrological and anthropogenic influences. Here we simulate the climate 5000-3000 years ago using computer models to show that, unlike some other regions, the annual mean rainfall in Mesopotamia at 4.2kyr is similar to the adjoining millennia. There are significant droughts simulated, but these are within the range seen both before and after. However, prior to this time the population of Mesopotamia grew rapidly and expanded into drier regions. We suggest that an unexceptional drought, combined with a large population and anthropogenic impacts on the landscape contributed to significant societal change in Mesopotamia at 4.2kyr.

17:00 - 17:30 **2.d (ROOM:15A.1.13) David Mulder - Seals and Sealings from Area C at Tell al-Hiba (Lagash),**

David Mulder (University of Pennsylvania)

Area C at Tell al-Hiba (ancient Lagash), excavated during the 1970-1971 New York University/Metropolitan Museum of Art campaign at the site, comprised an extensive and irregularly planned building complex with evidence of craft production and administrative activities, including around 160 seals and seal impressions. This glyptic corpus provides a valuable source of evidence for both the imagery and functions of seals during the Early Dynastic IIIb period in southern Mesopotamia. In the half-century since its discovery, however, it has not yet received a comprehensive publication. As part of the Al-Hiba Publication Project based at the University of Pennsylvania, the archival records of the Area C glyptic corpus have been reexamined and reanalyzed for the purpose of producing a final publication, revealing new insights and interconnections with materials of the same period at other sites in the region. The paper to be presented focuses on questions emerging from this research, concerning regional variation in iconography and the roles of seal images in administrative practice.

17:00 - 17:30 **2.f (ROOM:23.0.49) Vanessa Perissinotto - How do the Tsiteli Gorebi sites contribute to the general interpretation of the Chalcolithic period of the Southern Caucasus? A ceramic perspective.**

Vanessa Perissinotto (Ca' Foscari University of Venice)

The Chalcolithic period (ca 5000-3500 BC) is a still poorly understood phase of the late prehistory of the Southern Caucasus. While a large amount of materials from old excavations remains un- or only partially published, recent discoveries all over the region have called into question traditional definitions of cultural (esp. ceramic) traditions ("Sioni", "Tsopi", "Chaff-faced Ware", etc.) and their chrono-spatial distribution. New investigations by the Georgian-Italian Archeological Project firmly anchored the Tsiteli Gorebi 5 site to the Early Chalcolithic phase (5000-4800 cal. BC). The paper will present the ceramic material from the settlement and the material from old Georgian excavations at other sites of the same cluster studied in 2022 by the GILAP team at Gurjaani Museum, with the aim to contextualise them within a new attempt by the author to develop a general synthesis of the spatial distribution and chronological development of the different ceramic traditions of the region.

17:00 - 17:30 **3. (ROOM:15A.2.11) Julia Maczuga - Formation of the Islamic sacred landscape on the territories of modern Jordan – the study of spatial distribution of votive graffiti.**

Julia Maczuga (Bonn University) Jordanian desert abounds in the rocks, which bear votive graffiti written in Arabic.

Some of the boulders where part of the Early Desert Mosque constructions. The study of spatial distribution of religious graffiti can result in understanding of how the sacred landscape of the region was shaped. Some scholars believe that the establishment of the mosques seem to be connected to the seasonal occupation of the site by Arab tribes, during the winter times, when wadi was green and became a source of food for the livestock. Therefore, desert mosques were a religious places for local Bedouins. Others, hold the opinion that mosques have functioned as a small seasonal waystation 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 Arabic graffiti clusters 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 was continued till Middle Islamic period. However, it is also known from the Mamluk official inscriptions that new mosques were established, which were located on the burial places of the *Companions of the Prophet. Such holy places seems to originated clearly from Islamic tradition.*

17:30 - 18:00 **1.a (ROOM:15A.0.13) Julien Charbonnier et al. - Archaeological investigations in the Islamic oasis of Al-Ula (Kingdom of Saudi Arabia): preliminary results.**

Julien Charbonnier (Archaïos), Yasmin Kanhoush (Archaïos & UMR 5133 Archéorient), Mathias Haze (Archaïos), Sarra Ben Bader (Archaïos), Sofian Boudia (Université Paris 1 Panthéon-Sorbonne),Pascale Clauss-Balty (Archaïos), Arthur Defauconpret (Archaïos), Cassandra Furstos (Archaïos), Gaël Gourret (Archaïos), Julie Gravier (UMR 8557 EHESS), Maureen Le Doaré (Archaïos), Anne Leschallier de Lisle (Archaïos), Céline Marquaire (Archaïos), Maria Paola Pellegrino (Archaïos), Ali Othman (Archaïos), Jean-Daniel Ricart (Archaïos), Alexia Rosak (Archaïos & Université Paris 1 Panthéon-Sorbonne), Salomé Sepeau (Université Paris 1 Panthéon-Sorbonne),David Serres (Université Paris 1 Panthéon-Sorbonne), Francelin Tourtet (Archaïos & Freie Universität Berlin),Jessica Giraud (Archaïos)

Funded and steered by the French Agency for AlUla Development (AFALULA), on behalf of the Royal Commission for AlUla (RCU), the Al-Ula Cultural Oasis Project (UCOP), carried out by Archaïos, aims at understanding the history of this well-known oasis located in the northern Hejaz region (Kingdom of Saudi Arabia). The project's multidisciplinary methodology combines a systematic pedestrian survey of all past and present cultivated spaces, in order to establish their archaeological map, with detailed studies of water systems and vernacular architecture, as well as the photo-interpretation of archive imagery and spatial analyses at different scales. In this presentation, we aim at filling the gaps in our knowledge of the understudied Islamic and pre-modern Arabian oases by presenting and proposing a preliminary analysis of the archaeological map. For this purpose, we will delineate the "historical oasis", i.e. the set formed by the Old Town of Al-Ula and the associated gardens and fields, from their foundation in the middle Islamic period to the mid twentieth century AD. A first analysis of the historical oasis' spatial organization will also be provided, as well as preliminary hypotheses regarding its spatial development during the last 800 years.

17:30 - 18:00

1.a (ROOM:21.0.54) Luca Peyronel and Agnese Vacca - Excavations at Helawa and Aliawa in the Erbil Plain, Iraqi Kurdistan (2021-2022).

Luca Peyronel and Agnese Vacca (University of Milan)

The Italian Archaeological Expedition in the Erbil Plain (MAIPE) of the University of Milan is investigating the sites of Helawa and Aliawa in the south-western Erbil Plain. The paper presents the 2021-2022 excavation results, focusing on the earliest phases of the occupation at Helawa, where Halaf and Ubaid buildings were discovered, and on the sequence of the 3rd millennium BC at Aliawa, characterised by a large workshop for pottery manufacture with more than fifty kilns, a monumental building, and an area of storage facilities. The evidence of the 2nd millennium BC at both sites will be also presented, as well as the later historical occupation at Aliawa, including a large complex dating from the Seleucid period.

17:30 - 18:00

2.a (ROOM:15A.1.11) Michal Artzy et al. - Coastal Ecology, Habitation and Urbanization: The case of Akko/Acre.

Michal Artzy (University of Haifa), Amani Abu-Hamid (University of Haifa, Israel Antiquities Authority), Matthieu Giaime (University of Haifa, ASM UMR5140, Université Montpellier 3, CNRS, MCC)

Coastal changes affected anchorage locations and in turn habitation patterns in Akko/Acre, an area. The site is positioned on the northern side of the Haifa Bay, in modern Israel. While the Causes of this evolution are linked to geomorphological evolution of the coastline, human intervention and geopolitical contributed to the habitation patterns as well. Akko/Acre is a UNESCO World Heritage Site, one of the oldest continuously inhabited sites in the area. Despite attempts to change its name over the Millennia, it remained similar for at least 4000 years, when it was urbanized causing ecological changes. We chose three periods of habitation of Akko/Acre to show changes in habitation patterns due to environmental, geomorphologic, political and economic elements. The three: The Middle Bronze Age, the beginning of the 2 nd Millennium BCE; the Persian/Phoenician period in the mid-1 st Millennium BCE and the Crusader period in the 12th -13th centuries CE. Each of the three has its own and diverse context which contributed to the setting of the habitation pattern.

17:30 - 18:00

2.d (ROOM:15A.1.13) Vera Gonçalves et al. - Reading “Presentation scenes” of the Diyala Glyptic - the various layers of Mesopotamian religiosity.

Vera Gonçalves (CHAM & DH, FCSH, Universidade NOVA de Lisboa), Isabel Gomesde Almeida (CHAM & DH, FCSH, Universidade NOVA de Lisboa) & Maria de Fátima Rosa (FLUL-Centro de História)

The ancient Mesopotamian religious thought has been mainly examined through literary sources which inevitable express the beliefs of restricted social groups. Hence, the “official” conceptions frequently overshadow other religious expressions, like the popular, the domestic, and/or the familiar ones. However, the cylinder seals, a polyvalent tool which was transversally used in this civilization, allow an insightful examination of different aspects and levels of its religiosities. Through the variety of images depicted, especially in the so-called “presentation scenes”, it is possible to identify not only the official layer, but also the personal/domestic ones. Continuing the work we have been developing together for the past years, we propose to study some seals of the Diyala glyptic, intertwining the archaeological apparatus with the one of the Studies of Religion, in order to produce a combined analysis of ancient Mesopotamia’s different layers of religiosity.

17:30 - 18:00

2.f (ROOM:23.0.49) Atila Turker - A Unique House Model from Devret Höyük.

Atila Turker (Ondokuz Mayis University)

As number of prehistoric excavations increase, we encounter findings that make it necessary to update and reinterpret our current knowledge. One of them is a fragment of a “House Model” that we found during the excavations at Devret Höyük in North-Central Anatolia (Amasya, Turkey). During the southern sounding of the mound, it was unearthed in the debris destroyed by a pithos burial pit, along with a few sherds. Although the bottom half is broken, it is understood that the model is a box-shaped container. Only the upper part of the handmade very pale brown colored piece of terra-cotta is preserved (7.3 x 6.1 cm). The gable roof box has a horn-shaped pediment on the front and continues towards the rear half of the apex-beam, which is made in the form of thick relief. The roof surface and apex are adorned with deep and irregular carvings. The apex integrated with the horn evokes a stylized theriomorphic shaped similar to the salamander. House Models has only a few examples, seen in Near East, although they can be seen since Aceramic Neolithic period. The context of the Devret’s sample is dated to the second half of the 5th millennium BC, according to radiocarbon analysis. These types of findings are much more seen in Southeastern Europe, in different forms, with various decorations and additions, within a wide spectrum. In this study, we discussed the so-called House Model findings in terms of origin, chronology, function and cultural relations and questioned why this sample was found in a small settlement in North-Central Anatolia. Miniature plastic models of three-dimensional architecture made of clay are not only prototypes of the simple dwelling house. Thus, some findings were interpreted as tabernacle, buildings or storeroom. There is no doubt that some samples represent the Sanctuary or the Temple and the Altar, and there are rightful reasons for having a religious concept. Apart from these, it is known that they were used as oven, lid, jewelry box, urn and brazier. Therefore, the authors asked the question, which needs do these models fulfill the first, but they could not agree on a simple and clear answer. The function of House Models is quite complex. Most of them have motives that are either groove/incision or paint, or both. The ones with attachments are not few, and some of these add-ons contain fantastic and some anthropomorphic/ theriomorphic elements. The context in which they are found is a matter of separate discussion. It is interesting that none of the known specimens have been burial gifts so far. Because they are small and portable, there is no doubt that they add a decorative element to the place and reflect the taste of the householders. It also has a mixed function, and regardless of its context, its cultic aspects are evaluated in a wider contextual background, including *domus* and *agrios* and *geistigen Paket* in this discussion. The unique House Model found in Devret, located in the center of Anatolia, which is relatively far from Eastern Europe and Near East cultures, has been discussed by comparing all these determinations.

17:30 - 18:00

3. (ROOM:15A.2.11) Negin Alsadat Tabatabaei - Women and Power in Safavid Iran: A Study of the Role of Women in the Court of Abbas II in Promoting Shia Islam with an Emphasis on Cultural Materials.

Negin Alsadat Tabatabaei (University of Tehran)

Shah Safi (1038–1052 AH / 1629–1642 AD), the grandson of Abbas I, was the first Safavid king to spend all his youth in the harem in line with his grandfather's policy to maximally limit the royal men. He had no contact with the world outside the harem before he came to power. Accordingly, during the said time, women and eunuchs from the harem made up the majority of the Safavid Shah's courtiers. From the accession of Shah Safi to the fall of the Safavid dynasty, noble women, particularly the queen mother and the harem eunuchs, gained prominence, paving the way for the formation of a faction led by them. As harem women and eunuchs grew in power, they not only had an impact on important decisions for the Safavid territory but also on government appointments and removals. They also directed the construction of public buildings. Furthermore, Shia scholars gained more clout in the court, emphasising Shia teachings even more than before. This prompted women and eunuchs to join forces with Shia scholars to construct schools and mosques in strategic areas of the capital in order to promote Shia Islam. They thus formed a new powerful class during the Safavid rule. Shah Safi's son, Sultan Mohammad Mirza, ascended the throne as Abbas II (1052-1077 AH/1642-1666 AD) after him, and the policies boosting the power of women and eunuchs continued. On the other hand, this new class profited by art to achieve its goals. Arts have always been employed by empires, dynasties, and authorities to propagate their religious, and/or ideological discourses throughout the history of mankind. This new class have also greatly benefitted from such method to promote their Shi'a agenda to consolidate Shi'a identity among the Iranians, and also to gain further legitimacy. This study used a desk study and field observations to examine the architecture and epigraphs of a number of prominent works in the Safavid capital during Abbas II's reign. Accordingly, the locations of the buildings in relation to Isfahan's historical context were examined, and the promotion of Shia Islam by women and eunuchs as well as how these two groups were able to advance their relationship with the ruling class were studied.

18:00 - 18:30

1.a (ROOM:15A.0.13) Modwene Poulmarc'h et al. - First data on the protohistoric funerary practices in the region of Khaybar (Saudi Arabia).

Modwene Poulmarc'h (Université de Lyon, Archéorient (UMR 5133 CNRS/Université Lyon 2)), Noisette Bec-Drelon (Université de Lyon, Archéorient (UMR 5133 CNRS/Université Lyon 2)), Rémy Crassard (Université de Lyon, Archéorient (UMR 5133 CNRS/Université Lyon 2)), Munirah A. AlMushawh (Royal Commission for Alula)

The landscape of the Arabian Peninsula is spotted by hundreds of thousands of dry-stone megalithic funerary structures. Our study region in northwestern Saudi Arabia, near the modern city of Khaybar, and covering 56 sq. km, has yielded more than 14,000 of them. Despite there huge number and density, the lack of excavations in the region refrains from understanding their refined chronology and funerary practices. Through our research started with the Khaybar Longue Durée Archaeological Project, our first excavations confirmed a high proportion of the tombs has been looted, disturbed, and reused, from the very ancient times until most recently. Nevertheless, some well-preserved structures have yielded human remains in primary deposit. Our approach is based on archaeothanatology, and have led to new results. Coupled with a systematic architectural analysis of the different types of tombs, the funerary practices are now better understood during protohistory and beyond.

18:00 - 18:30

1.a (ROOM:21.0.54) St John Simpson - Kobeba: new evidence for resource procurement, production and exchange in southern Iraq from the Jemdet Nasr to early Islamic periods.

St John Simpson (British Museum)

Two seasons of investigations have been conducted at the site of Kobeba, near ar-Rifa'i in Dhi Qar governorate, in 2021 and 2022. The site measures 425 m across, and was first recorded in 1975, but has not been previously investigated. One sounding reveals the earliest occupation to date to the Jemdet Nasr period, and a second sounding on the summit has produced a rare sequence spanning the Sasanian and early Islamic periods. Throughout its history, the settlement was engaged in procurement and manufacturing. Flint nodules were imported and worked on-site to produce sickle blades. Unfired pottery thrown on the hump, ring scrapers and other potters' tools were found with Jemdet Nasr pottery in deep ash layers interpreted as kiln rake-out. Glazed pottery wasters prove on-site pottery production during the Sasanian period, and glass droplets, chunks and ingots attest the working of imported glass in the early Islamic period. During this period, Kobeba was also manufacturing large rotary querns from high-fired blocks of clay: this so-called 'synthetic basalt' production has been attested from the early second millennium BC and from much more recent periods in Afghanistan and eastern Iran, but this is the first time that the chaîne opératoire can be reconstructed and the continuity of this industry proven from within Iraq.

18:00 - 18:30

2.a (ROOM:15A.1.11) Claudia Ludovica Minniti - Ordinary and symbolic animals exploited at Kültepe, Central Anatolia: some results from a Middle Bronze Age monumental stone building.

Claudia Ludovica Minniti (University of Salento)

The paper focuses on the results from the study of the animal remains assemblage of the Middle Bronze Age (18th century BC) monumental stone building excavated at Kültepe, in Central Anatolia in 2020-2021 and located in the south-western part of the mound. The abundance of animal remains, their excellent state of preservation, the variety of identified species, the presence of particular animals associated with a particular building that is located in highly significant area of the site point towards something previously unknown at Kültepe, allowing a updated outline of primary economy and adding important data to the knowledge of animal exploitation at the site.

18:00 - 18:30 **2.d (ROOM:15A.1.13) Valérie Matoïan - The diffusion of the Epic of Gilgameš in the Levant : the contribution of the iconographic documentation from Ugarit.**

Valérie Matoïan (Centre National de la Recherche Scientifique)

The Epic of Gilgameš, a major work of the ancient literary repertoire that narrates the story of a mythical king of Uruk, a royal figure par excellence, was a great success among the intellectuals of the ancient Near East, as attested by the discovery of tablets outside the Mesopotamian world. While the textual documentation of Ugarit is well known, few studies have focused on the iconographic repertoire, although several images significantly renew our knowledge of the imagery that can be compared with the Epic of Gilgameš. These representations will be presented - the pictorial version of several moments of the literary work have been identified - and decoded according to a contextual approach and in a regional and diachronic perspective.

18:00 - 18:30 **2.f (ROOM:23.0.49) Tatsundo Koizumi et al. - A Preliminary Study on the Locality of the Northern Ubaid Pottery by Prompt Gamma-ray Activation Analysis.**

Tatsundo Koizumi (Research Institute for Ancient Japanese Studies, Meiji University), Hitoshi Ojima (Freelance Chemical Analyst),Takeshi Matsukawa (Frontier Research Center for Applied Atomic Sciences, Ibaraki University),
Ingolf Thuesen (University of Copenhagen), Takahito Osawa (Japan Atomic Energy Agency Nuclear Science Research Institute), Hideaki Matsue (Japan Atomic Energy Agency Nuclear Science Research Institute)

We present a preliminary report on the quantitative trace heavy-elemental evaluation of the pottery in the Ubaid to terminal Ubaid periods from Salat Tepe, southeastern Turkey and Tell Mashnaqa, northern Syria by neutron induced prompt gamma-ray activation analysis (PGAA). The tentative analysis has revealed that both of main compartment elements (Silicon, Calcium, Iron etc.) and rare heavy ones (Gadolinium, Samarium, Titanium etc.) within the pottery fabric can be differentiated clearly. As a remarkable result it is to be said that the PGAA method is available to distinguish between the Salat Tepe and Tell Mashnaqa pottery groups which might have been produced by indigenous clay respectively.

18:00 - 18:30 **3. (ROOM:15A.2.11) Hagit Nol - Early Mosques and Islamization: An Archaeological Independent Narrative**

Hagit Nol (Goethe-University Frankfurt)

Islamization has been defined by modern scholars diversely as a process related to religion, administration and elites, or culture and economy. Mosques are one of the best markers for the former: the spread of Muslim faith as the result of conversion or immigration. Dating mosques is thus essential for identifying the earliest presence of Islam in a region or on a site, for understanding the width of the spread of Islam in different periods, and for detecting the directions of that diffusion. Unfortunately, the dating of mosque remains is too often based on historical texts and not on independent dating tools such as 14C, pottery, or coins. Several decades of excavation projects now enable the creation of a dataset based solely on archaeological dates. This dataset draws a very different picture on the spread of Islam than the one we knew before.

18:30 - 20:30 **Welcome Reception**

23 May

09:00 - 09:30

1.a (ROOM:21.0.54) Hermann Genz and Margarete Van Ess - 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 Genz (American University of Beirut), Margarete Van Ess (Deutsches Archäologisches Institut, Berlin)

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 1m 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 6.3m by 5m 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 seven 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.

09:00 - 09:30

1.a (ROOM:22.0.11) Berthold Einwag - The 2022 excavations at Fara - Shuruppak.

Berthold Einwag (LMU Munich)

A joint Iraqi-German team from LMU Munich and the University of Qadissiyah (Prof. Abbas al-Hussainy) undertook the first excavation campaign at Fara in the spring of 2022. Although this site is one of the mounds most severely disturbed by looting, good results were obtained in Early Dynastic levels in the lower town and on the main mound. In the lower town near the city wall, Fara period dwellings were excavated. In the city centre, geophysical surveys and excavations were used to investigate the nature and dating of the large building. On the northern edge of the city, the location of a large waste pit was sought, where Walter Andrae's team had already found a large quantity of discarded Mesilim-style seal impressions in 1902. Since these sealed clay closures must have been remnants of a centralised administration, the associated building was suspected to be nearby and was indeed found.

09:00 - 09:30

1.b (ROOM:15A.2.13) Scott Haddow and Leore Grosman - Gather your bones: the use of 3D photogrammetry to record human burials and interpret funerary practices

Scott D. Haddow (Copenhagen University) , Leore Grosman (Hebrew University of Jerusalem)

The use of three-dimensional digital recording techniques to produce models of archaeological features and objects has become increasingly common over the last decade. While much of this work has focused on producing material for documentation, visualization and public outreach, these techniques have the potential to directly assist in the interpretation and analysis phase of archaeological research. In this paper we present a case study of the application of structure from motion (SfM) 3D recording techniques to the study of complicated site formation processes associated with the disposal of human remains at the Late Natufian site of Nahal Ein Gev II (NEGII) (ca. 12,000 cal BP), located near the Sea of Galilee in northern Israel. The site is unique among contemporary sites in the southern Levant due to cultural features typical of both Natufian and Pre-Pottery Neolithic A cultures. NEGII contains the remains of a well-defined “communal burial site” located in direct association with the settlement itself. The majority of burials recovered here have been primary in nature but during the 2019 excavation season the upper level of a large burial pit was exposed that contains the completely disarticulated skeletal remains of several adult and subadult individuals. By producing three-dimensional models at regular intervals during the excavation process, we hope to better understand the sequence of events that led to the creation of this complex burial feature.

09:00 - 09:30

2.a (ROOM:15A.1.11) Ella Kempf et al. - Agriculture and plant use in a semi-arid environment: archaeobotanical study of Bronze and Iron Age sites in southern Uzbekistan.

Ella Kempf (CNRS - UMR 7209 MNHN, Paris), Margareta Tengberg (UMR 7209 MNHN-CNRS, Paris), Johanna Lhullier (CNRS - UMR 5133 Archéorient, Lyon), Julio Bendezu Sarmiento (CNRS - UMR 7206 MNHN, Paris)

Archaeological investigations conducted for 15 years by French-Uzbek teams in the Surkhan Darya province of southern Uzbekistan have revealed important settlements dating to the Bronze and Iron Ages (2nd mill. BCE). The study of plant remains systematically collected during the excavations at Tulki Tepa, Burgut Kurgan and Kayrit Tepa in the Kugitang Tau piedmont as well as at Dzharkutan in the Surkhan-Darya valley provides insight into the adaptation of these communities to a semi-arid environment and the organisation of local plant economies. This paper discusses crop production in terms of chosen species, cultivation practices and water management. It will also consider the presence of wild plants from the surrounding lowland and piedmont where cultivated spaces co-existed with natural plant communities. Finally, special attention will be given to changing patterns of plant husbandry over a period of political and cultural transition, with the possibility of the introduction of new annual and perennial crops.

09:00 - 09:30

2.d (ROOM:15A.0.13) Elisabeth Wagner-Durand - Realities and Visual Narratives in Mesopotamia: Organizing the World via Images.

Elisabeth Wagner-Durand (IAW/University of Freiburg)

In the academic discourse, visual (and written) narratives from Ancient Mesopotamia have often been categorized either as mythical or historical concerning the accuracy and the truthfulness of their actual content, as is the case for example with the Stele of Vultures. This paper proposes a different approach in turning to the reconstruction of potential underlying concepts of the world (or ontologies acc. to Philippe Descola). It argues that most visual narratives (or abbreviated narratives, or references to narratives) in the visual media of Mesopotamia are not about a distinction between fictional and factual or between historical and mythical but that these narratives visualize different layers of reality according to the emic perception of the world and the beings existing within. Therefore, they visualize narratives that have been deemed important to the societies in question at a certain moment in time, because these narratives aimed to explain and order the world for those living in it. Hence, the paper also addresses the question of which visual narratives endured time from the 3rd to the 1st Millenium B.C. and which meta-narratives distill from them.

09:00 - 09:30

2.e (ROOM:14.2.80) Aroa Garcia-Suarez and Marta Portillo - Building continuity and social complexity at the dawn of sedentism: insights from Kharaysin, Jordan.

Aroa García-Suárez (Spanish National Research Council, Milà i Fontanals Institute for Humanities and University of Reading,), Research,and Marta Portillo (Spanish National Research Council, Milà i Fontanals Institute for Humanities)

The rebuilding of structures on the same location is one of the most striking features of the Near Eastern Neolithic, often resulting in deep sequences of superimposed built environments. This process comprises several major events, including the abandonment of the house, the collapse of walls and roofing, and the levelling of the area with fills. Ephemeral activities, such as penning, defecation and discard were likely performed within the shells of domestic structures, but these are frequently difficult to identify at the macroscale. In this contribution, we present the micro-geoarchaeological and plant microfossil analysis of PPNA/B (ca. 9th millennium cal BP) building occupation sequences at Kharaysin (Quneya, Zarqa), in northwestern Jordan. Our results provide new insights into the complexity and variability of Neolithic rebuilding strategies, shedding light into the formation of social identities in early sedentary societies.

09:00 - 09:30

2.f (ROOM:23.0.49) Roger Matthews and Amy Richardson - 'Drought, Debt, and Bureaucracy: 10,000 Years of Counting, Sealing, and Writing in Iran'.

Roger Matthews (University of Reading) and Amy Richardson (University of Reading)

In this paper we take a long-term perspective on the administrative practices of counting, sealing, and writing in Iran from the Neolithic to the Iron Age, ca. 10,000-300 BCE. Drawing on a data-base of excavated bureaucratic objects from sites across Iran, we investigate patterns of administrative behaviour through time. We situate the rise and fall of systems of counting, sealing, and writing within the context of environmental and climatic shifts that directly impacted upon early societies of Iran, in particular the desire of their elite groups to record debt and thereby to sustain structures of control through challenging times.

09:30 - 10:00

1.a (ROOM:21.0.54) Felix Höflmayer and Katharina Streit - The Austrian expedition to Tel Lachish 2017–2022.

Felix Höflmayer (Austrian Academy of Sciences) & Katharina Streit (Austrian Academy of Sciences)

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. In Area P, current excavations expanded the eastern wing of the Middle Bronze Age palace further. Radiocarbon dating indicates that the palace was destroyed in two episodes in the early and mid-16th century BC. A monumental wall in similar orientation found beneath the plastered floors suggests the existence of an even earlier palace structure (P-5). The Middle Bronze Age palace is cut by a sunk, stone lined, oval structure, 8 m wide and at least 13 m long, excavated currently to 2.6m depth. The structure has been tentatively dated to the Iron Age IIA. In Area S, a large early Late Bronze Age building was uncovered, radiocarbon-dated to the 15th century BC. Finds include among other an early alphabetic inscription and a hieratic ostracon bearing a ration list with west-Semitic names, attesting to remarkably early administrative activity at the site. This lecture summarises and discusses the results of the project in light of the findings from previous excavations.

09:30 - 10:00

1.a (ROOM:22.0.11) Régis Vallet and Antoine Jacquet - Preliminary results of the XVIth excavation campaign at Larsa, Iraq (2021)

Régis Vallet (CNRS-IFPO), Antoine Jacquet (Collège de France)

The excavations undertaken at Larsa in 2019 continued in 2021 during a 16th campaign on the site. Three trenches were carried out, devoted respectively to a supposed bridge visible in geophysics (Trench PZ), to the large temple B50 (Trench B50), and to the sector of sumptuary habitat further north (Trench B48-49). In the new Trench PZ (for "Pont de la Ziggurat") in the center of the city, a baked brick pier of the bridge crossing the Grand Canal in front of the Ziggurat was discovered and dates (inscribed brick) to the reign of King Sin-iddinam (1849-1843 BC). In B50, the exact area of the temple (7400 m2) and part of its plan were determined. It yielded inscribed bricks of King Sin-iddinam, which invites one to interpret it as the Gipar that this king had built for his daughter, an entum priestess of Shamash. In B48-49, work concentrated on the extensive clearing of B49. The residence covers 1480 m2 and had several courtyards. A small room (1598) yielded the private archives of the owner's family, Etellum, grand vizier of kings Gungunnum (1932-1906 BC) and Abi-sare (1905-1895 BC). The violent destruction of the building sheds new light on the end of the latter's reign.

09:30 - 10:00

1.b (ROOM:15A.2.13) Sahar al Khasawneh et al. - Dating Neolithic rubble layers from Neolithic sites in southern Jordan using Luminescence.

Sahar al Khasawneh (Yarmouk University, Irbid), Andrew Murray (Aarhus University), Warren Thompson (Technical University of Denmark, DTU)

Many of the 7th millennium settlements in Jordan preserve widespread thick rubble and gravel layers in the occupation areas. They have been identified at the Neolithic sites (from north to south) ‘Ain Rahub, Wadi Shu‘aib, Ain Ghazal, es-Sifiya, Ghwair, Ba‘ja, Beihda, al-Baseet, Basta and ‘Ain Jammam. The layers are described as accumulations of depositional debris covering architectural structures, and consist mainly of angular or rounded stones, larger than fist-sized (Gebel, 2009). Cultural materials, such as flint tools, plasters, and other artefacts, have also been found within the layers. Various interpretations have been put forward to explain these layers, based on both anthropogenic and natural mechanisms. Previous studies have been based on associating these layers with conflict damage and destruction of Neolithic sites, and with climate change in the Levant and Eastern Mediterranean (Migowski et al., 2006; Weninger et al., 2009). Factors related to the geomorphological setting of the site, such as flash floods and tectonic events, have been also considered. Some scholars identify these as a product of the “Yarmoukian landslide” and they seem to occur mostly in the time interval 8.6- 8.0 ka (Weninger et al., 2009). The most widely accepted explanation relates these layers to the Rapid Climate Change (RCC) that took place during the Holocene and is associated with torrential episodic rainfall and flash floods in the region, although Gebel (2009) has argued that an acceptable interpretation is not necessarily “mono-causal”. To improve our understanding of these widespread layers, an interdisciplinary approach should include an archaeological, chronological and stratigraphical description of the layers, and relate this to a climatic and seismic analysis of the region. As a contribution to this approach, here we study the timing of the deposition of the rubble layers at two archaeological sites in Southern Jordan: Ba’ja and Basta, using luminescence dating. It is anticipated that demonstrating synchronicity, or lack thereof, will give insights into the origins of the deposits. It is also expected that the new ages will improve our understanding of cultural change occurring at this time and the destruction of the Neolithic settlements. In this study, we used quartz OSL and feldspar IRSL signals to date accumulative rubble layers at the two sites. By comparison with the OSL ages, the IRSL ages demonstrate that most of the quartz samples were sufficiently well bleached at deposition to provide accurate ages. Quartz ages show that deposition of the rubble layers took place in different episodes starting around 8.5 ka and 6.0 ka. Especially the latter results are younger than the archaeological expectations, which are based mainly on architectural style and stratigraphy.

09:30 - 10:00

2.a (ROOM:15A.1.11) Daniele Morandi Bonacossi et al. - Wine for the King: wine production for the Assyrian imperial elite at Khinis, ancient Khanusa.

Daniele Morandi Bonacossi, Francesca Simi, Costanza Coppini, Carolyne Douché, Luca Forti

Neo-Assyrian written and iconographic sources show that wine production and consumption played a relevant role in the life of the imperial court. However, archaeological data from the empire’s core are lacking. Our paper fills this void by presenting the Khinis Wine Press Area, the first investigated intensive Neo-Assyrian wine production area in the empire’s heartland. Identified in 2012 by LoNAP close to the Khinis Archaeological Complex (Kurdistan Region of Iraq), the sizable KWPA consists of 15 wine presses investigated with a multidisciplinary strategy. The results demonstrate that the installations located in the immediate environs of Tell Khinis, Assyrian Khanusa, at short distance from the Khinis canal head and impressive rock-reliefs, were engineered and used for intensive wine production in the Neo-Assyrian period and were part of an effectively exploited agricultural landscape feeding Khorsabad and Nineveh. From the Early Islamic period onwards, the Christian community living in Tell Khinis reused the installations for wine production. This emphasises the long durée exploitation of an agricultural landscape that was devoted to vine cultivation over centuries.

09:30 - 10:00

2.d (ROOM:15A.0.13) Amir Golani and Gulia Tucci - Ancient jewelry as a cultural marker – The added dimension of visual representation.

Amir Golani (Israel Antiquities Authority) and Giulia Tucci (Tel Aviv University)

Jewelry can be seen as a cultural marker. In archaeological research, cultural identity is often defined through various aspects of material culture, yet surprisingly, is seldom distinguished in personal adornments. Jewelry as a cultural marker can be suggested when a distinctive form, decoration and mode of use has a clearly defined geographical and chronological dispersion related to a specific cultural entity. Jewelry's visual representation, whether used by that culture or by a neighboring contemporary culture in order to characterize the “Other”, offers an additional dimension to identify jewelry as a cultural marker. Levantine peoples, generically termed as "Canaanites" during the Late Bronze and Iron Ages, made and wore a distinctive circular pendant, often decorated with a cross or a star. According to recent research, the molds and the matching pendants made from them are found in the same geographical area, where such pendants are also depicted on figurines. Egyptian depictions of Syro-Canaanites or "Asiatics' clearly feature circular pendants, showing the choice of this jewelry form by the Egyptians as representative of a specific cultural identity.

09:30 - 10:00

2.e (ROOM:14.2.80) Maria Guagnin - Neolithic settlement patterns in the Jubbah oasis, Saudi Arabia.

Maria Guagnin (Max Planck Institute for Geoanthropology) and Faisal Jibreen (Heritage Commission, Saudi Ministry of Culture)

Recent research in the Jubbah oasis in northern Saudi Arabia identified two Neolithic sites with short-lived hearths, reflecting a highly ephemeral occupation. Fireplaces were in use for hours at best, although some more substantial hearths may have been used for several days. Similar sites are also known from other desert areas in the Arabian interior. This raised the question if hearth sites represent an extremely ephemeral occupation of arid landscapes, or short-lived temporary camps that are part of a more divers settlement pattern which includes more substantial dwellings. Fieldwork in 2022 identified a single location in Jubbah, where multiple circular dwellings had been built next to a mustatil, partly re-using this earlier structure to help elevate the walls of their dwellings. The dwellings were partly constructed with double ringed walls and upright stones, presumably allowing repeated and perhaps semi-sedentary occupation of a base using a removable superstructure. The re-use of a sacred space for these dwellings indicates that they were likely more than just shelters and may have been important markers in the landscape.

09:30 - 10:00

2.f (ROOM:23.0.49) Émilie Badel - Bituminous mortar in the Ancient Near East: from its origins to the Uruk Period.

Émilie Badel (UMR 7041 of CNRS, équipe Vepmo - MSH Mondes, Nanterre)

The first use of bitumen in construction dates to the Neolithic period in the Ancient Near East. Indeed, the oldest vestiges date to the end of the 6th Millennium (Ubaid 3) and have been discovered in various places: in the Upper Euphrates Valley, in the Middle Tigris Valley and in Khuzestan. Depending on the site, the bitumen may have been gathered from deposits nearby or imported from tens or even hundreds of kilometres away. During this period, bitumen is still only used in thin layers for waterproofing, consolidating, and protecting from erosion the roofs, floors, and doors of houses. It was not until the Late Chalcolithic 1-2 and Susa I periods, that is, from the middle of the 5th Millennium at the beginning of the proto-urban period, that a real bitumen-based mortar is produced. This mortar is made by mixing bitumen with organic materials and minerals as filler. It has low compressive strength. It softens at very low temperatures, which can be reached by masonry exposed to the sun, a characteristic that may have been an impediment to its use. Its utilisation did not supplant that of other types of mortars based on lime, plaster or clay in Mesopotamia and Khuzestan. As far as bitumen mortar use is concerned, it is a specialised craft that appears at the beginning of the urban revolution. From then on, it is used to make masonry joints, to cover water-related fixtures and
to build the foundation levels of large public buildings. Over time, higher and higher quantities are used, which requires a large workforce that could only be mobilised by a ruling elite, with the regular supply of raw materials through better-organised trade networks. Susa's Haute Terrasse, built during Susa I and certain developments of level VIII at Tepe Gawra are very interesting examples of this. The use of bituminous mortars flourishes during the Late Chalcolithic 3-5, between 3850 and 3100 B.C. with the expansion of the Urukean culture. Thereafter, they are not only used in Lower Mesopotamia in the construction of numerous public buildings in Uruk, but also in the upper Euphrates valley, at Habuba Kabira-Süd, for example.

09:30 - 10:00

3. (ROOM:15A.1.13) Asa Eger - Rediscovering Medieval and Islamic Antioch: Urban Transformation and Legacy Data from the Princeton Excavations of 1937.

Asa Eger (University of North Carolina at Greensboro)

The first new publication, based on the Princeton excavations of Antioch (1932-1939), is now in press. Sector 17-O, excavated in 1937, was a pilot study of the larger project and chosen as it was never published, had no mosaics, and was located at the crossroads of the classical city, just off the main *cardo*. The 17-O project uses legacy data to recreate the stratigraphic context of all objects usingarchival notes and collections spread over multiple museums. 17-O began as a public space in the 2nd century CE and with a nymphaeum. In the 5th century, following an earthquake, a courtyard house on a side street with shops was built and lasted past the Islamic conquests. Its residential function continued, change in the 8th century, with two to three courtyard houses of different plans with an attached shop on the side streets. During the Middle Byzantine and Crusader occupations, these houses were reused and subdivided becoming more industrial as a potter's quarter, with kilns for ceramic production. 17-O, over 1,000 years of occupation, acts as a microcosm of larger urban transformations of a classical to medieval city.

10:00 - 10:30

1.a (ROOM:21.0.54) Karin Kopetzky and Hermann Genz - Investigations at the site of Tell Mirhan (Northern Lebanon) and its hinterland 2016-2022.

Karin Kopetzky (Austrian Archaeological Institute), Hermann Genz (American University of Beirut)

Tell Mirhan, located on the coast of Northern Lebanon in the modern town of Chekka, has been under investigation by a combined mission from the American University of Beirut and the Austrian Archaeological Institute since 2016. From the originally 6 ha site, less then ten percent are still preserved today. Work there has uncovered a massive MB fortification, with the remains of larger buildings of the Iron Age II squeezed between it and the sea. Dominating the Bay of Chekka, this site played an important role in the International trade of the Bronze and Iron Ages, as evidenced by imports from Egypt, Cyprus and the Aegean. Accompanying the excavations is a survey in the hinterland of Chekka. In 2022, based on a LiDAR scan conducted in 2018, core-drillings for geoarchaeological and archaeobotanical investigations were taken for environmental reconstruction of the area and a survey for possible timber transport routes was conducted together with a forest technician. First results will be presented here.

10:00 - 10:30

1.a (ROOM:22.0.11) Amaury Havé - Houses divided: hypothesis on the stratigraphy of Khafajeh residential neighbourhoods around the Oval Temple.

Amaury Havé (Université Paris 1 Panthéon-Sorbonne)

The site of Khafajeh, excavated by the Oriental Institute of Chicago's team in the 1930s, constitutes until today the backbone for the periodization of central Mesopotamia for the 3rd millennium BC. However, the archaeological levels of the Houses quarter have been the subject of intense debate since the 1980s, especially both from an urbanistic and a regional periodization perspective. Over the last 15 years, new chrono-stratigraphic interpretations of the site and Houses quarter as well have been possible thanks to the unpublished plans and excavation notebooks provided by the DiyArDa database of the Oriental Institute. This set of new data and its interpretations make it possible to propose a new global solution to the four major stratigraphic problems raised by the ensemble constituted by the oval temple and the residential neighbourhoods that surround it.

10:00 - 10:30

1.b (ROOM:15A.2.13) Catherine Scott and Christina Luke - Gods and the Machine: Structure-from-Motion Recording in the Excavation and Analysis of Ritual Caches from Kaymakçı, Western Turkey.

Catherine B. Scott (ANAMED, Koç University) and Christina Luke (Koç University)

In 2019, excavations at the 2nd millennium BCE citadel of Kaymakçı identified two ritual caches, deposited in small stone-lined pits. These deposits represent some of the only clear evidence for ritualized activity at the site and were duly excavated with great care. This included capturing the components of each feature in minute detail using structure-from-motion (SfM) recording, the result of which is a wealth of digital data including orthophotos, DEMs, 2.5D models of different layers/parts of each feature, and 3D “context volumes,” georeferenced digital representations of the material removed in each unit of the excavation. While these methods allow us to capture more data on archaeological remains than would be possible otherwise, they invariably shape the way we perceive those remains. What impact does this digital lens have on our engagement with the past, particularly with respect to ritual behaviors that are already so removed from our own experiences? In this paper, we will reflect on how we have used digital methods to record and study the ritual caches from Kaymakçı, and examine how these methods mediate our engagement with the ancient past.

10:00 - 10:30

2.a (ROOM:15A.1.11) Elena Maini and Eleonora Serrone - The beasts of Nineveh: a preliminary zooarchaeological assessment.

Elena Maini (La Sapienza, University of Rome), Eleonora Serrone (University of Bologna)

Zooarchaeological studies were carried out during the different field seasons of excavation in the city of Nineveh (Nineveh East, Mosul, Iraq) within four campaigns by the Iraqi-Italian Archaeological Expedition led by N. Marchetti (University of Bologna, Italy) in collaboration with the State Board of Antiquities and Heritage (SBAH), and with the financial support of the Italian Ministry for Foreign Affairs and International Cooperation. The main scope of such analyses is to reconstruct the faunistic environment to show how the inhabitants of the city of Nineveh exploited the available food resources to obtain proteins throughout the consumption of meat or derived products. Almost 4000 osteological animal remains, collected from the various excavated sectors, were preliminarily studied. Their chronology range from the beginning of the 2nd mill. BC. to the 7th cent. BC and to the Hellenistic/Parthian period (between the 3rd cent. BC and the 2nd cent. AD). The preservation state of animal remains is quite differentiated depending on contexts, the degree of fragmentation being often high. Most of the determinable remains are sheep/goat bones or teeth, followed by pigs and cattle remains. Among the domestic animals, camelids (both camel and dromedary), horses, donkeys and dogs are also present, while game animals are scarce. Other exploited wild resources are related to humid environments, in particular fish, tortoise and crab remains are also to be recognized at the site.

10:00 - 10:30

2.d (ROOM:15A.0.13) Renate Marian van Dijk-Coombes - Reconsidering the Warka Vase.

Renate Marian van Dijk-Coombes (University of Pretoria)

The Warka Vase (IM 19606), from the Eana Precinct of Uruk, is one of the most famous objects from ancient Mesopotamia. This large (roughly 1 metre tall) alabaster vase is decorated with relief carvings and may be the earliest example of official narrative art in ancient Western Asia. It was broken in antiquity when a fragment was lost from the upper register. Next to the break, a foot and part of a netted skirt survive, indicating that originally the Urukean ruler, the ‘net skirt man’ or so-called ‘priest-king’ figure was depicted. By analyzing contemporary visual culture, the present paper will discuss and provide a new reconstruction of this upper register.

10:00 - 10:30

2.e (ROOM:14.2.80) Nikoloz Tskvitinidze - Out of the cave and back into it: Changes in settlement patterns in west Georgia during the Neolithic and Chalcolithic eras.

Nikoloz Tskvitinidze (Javakhishvili Tbilisi State University)

In terms of settlement patterns, Neolithic people of western Georgia favored open-air dwellings. Only a few early Pre-Pottery Neolithic sites have been discovered in caves and other natural shelters, and they reflect the earliest stages of Neolithic society development. Humans gradually exit the cave and continue to live in open-air villages during this same period of evolution, known as the Pre-Pottery Neolithic era. A excellent example of this is the Khorshi settlement, where a PP Neolithic site and building fragments were unearthed. The neolitization process required access to large open fields and fertile soils. As a result, the pattern of living altered from caves to open-air societies. In fact, no Late Neolithic sites have been recorded in a cave or natural shelter in western Georgia. However, for various reasons, humans returned to natural shelters throughout the Chalcolithic period, and as a result, both open-air and cave sites may be observed at this time. This raises a variety of problems and conundrums which yet to be resolved.

10:00 - 10:30

2.f (ROOM:23.0.49) Natalia M. Handziuk and Lisa Briggs - Early Bronze Age Ceramic Vessels and Olive Oil Production.

Natalia M. Handziuk (University of Toronto) and Lisa Briggs (Cranfield University)

A specialized Early Bronze 1B (3100 BCE) site in wadi Ziqlab, northern Jordan, indicates that pottery is used in different stages olive processing and oil production. We reconstruct the olive oil production processes including the rock-cut features, ceramic vessels and potential unpreserved organic items, such as baskets. Organic Residue Analysis by Gas Chromatography – Mass Spectrometry (GC-MS) is conducted on a diversity of vessel types including large kraters, bowls, and jars to elucidate how different pottery types were used in the production of olive oil. Pottery is the most portable aspect of olive processing and by associating vessels with specific stages of production we highlight how olive oil can be identified in other archaeological contexts. Furthermore, we discuss the relationship between the ceramic assemblage, arboriculture and surplus accumulation throughout the Early Bronze Age (3700-2000 BCE), when oil was used both as a staple and luxury commodity across the Levant.

10:00 - 10:30

3. (ROOM:15A.1.13) Ignacio Arce - Urban Topography of Early Islamic Mosques in Decapolis Cities. Identification and Analysis of some Relevant Cases Study.

Ignacio Arce (German-Jordanian University)

The aim of this paper is to analyse the urban context and the recurrent patterns of construction and location of early Islamic Mosques within the urban fabric of cities from the Decapolis, and the role they played in the Islamisation of the Levant / Bilad es-Sham and the symbolic takeover of these cities and the surrounding territories. The patterns identified in the urban settings of new mosques at cities from the Levant with a strong presence of population of Hellenistic background (like those from the Decapolis), and those where the non Hellenized population was majority, is the first main focus of the analysis conducted. The study of the specific resulting patterns of location of the Congregational Mosques in the urban fabric of these cities, and its relation with other key elements of the Islamic Urban Topography, like the market (*Souq*) or the palace (*Dar al-Imara*) is the second goal of the research conducted. Thirdly, it will be studied the evolution of the location of congregational Mosques from Umayyad to Abbasid period, focusing on the changes in the significance and location of the new mosques built in this period, when Bilad as-Sham loses its central and pivotal role in political terms. Finally the application of the preliminary conclusions gained from this analysis to some Decapolis cities, and their specific analysis using this approach, has given as a result the identification of the location of the congregational mosque of some of them, a location which will be fully confirmed in upcoming excavation campaigns foreseen for the next future.

10:30 - 11:00

1.a (ROOM:21.0.54) Konstantinos Kopanias et al. - New light on LBA-EIA Cypriot burial customs: two new burials from Palaepaphos (Kouklia-Marchello, Cyprus).

Konstantinos Kopanias (National and Kapodistrian University of Athens), Artemis Georgiou (University of Cyprus), Maria Iacovou (University of Cyprus), Angelos Hadjikoumis (Cyprus Institute), Lina Kassianidou (University of Cyprus), Evi Margariti (Cyprus Institute), Efthymia Nikita (Cyprus Institute), Dimitris Papageorgiou (National and Kapodistrian University of Athens), Georgios Papasavvas (University of Cyprus)

Earlier excavations at the site Kouklia-Marchello (first by J.H. Iliffe and T.B. Mitford, then by F.-G. Maier and lastly by M. Iacovou) unearthed part of a monumental gate and defensive wall. Nevertheless, the architectural remains have not been revealed in their entirety and there are still unresolved issues concerning their chronology and function. A new scientific program including archaeological excavations was initiated by the Department of History and Archaeology of the National and Kapodistrian University of Athens in 2021 (K. Kopanias), carried out in close collaboration with the existing Palaepaphos Urban Landscape Project of the University of Cyprus (M. Iacovou). The excavations in 2021 and 2022 brought to light exciting new finds, among which two graves dating to the early 12th century BC. Both burials belong to the “pit cave” type, which is known from the Aegean during the Late Bronze Age. Grave 1 contains the inhumation burial of a young female person with luxurious and exotic offerings. Grave 2 contains the inhumation burials of a male and a female person, again with very rich offerings. The study of the human, animal and plant remains, as well as of the other finds offers valuable new information about the burial customs of the 12th century BC in Cyprus.

10:30 - 11:00

1.a (ROOM:22.0.11) Ivana Puljiz - The extra-urban Mittani temple at Muqable: report on the 2021–2022 excavations.

Ivana Puljiz (University of Freiburg)

The site of Muqable is located in the Selevani Plain in present-day Duhok Province (Kurdistan Region of Iraq). It is a non-urban site which is being excavated extensively since 2017 in order to examine the site’s function and diachronic development. Recent investigations at Muqable revealed a long sequence from the Ninevite 5 to the Middle Assyrian period. Of special interest is the transition from the Middle Bronze Age to the Mittani period. Several layers with well-stratified material document the gradual development between the two periods. The excavated remains include two successive temples, both dating to the Mittani period, which are an important testimony of extra-urban sanctuaries in LBA Northern Mesopotamia. This paper will focus on the diachronic development of Muqable during the second millennium BC, presenting the stratigraphic sequence with a focus on the remains of the extra-urban temples of the Mittani period.

10:30 - 11:00

1.b (ROOM:15A.2.13) Michael Rummel - Pottery from motion – a refined methodology for the large-scale documentation of pottery using the 3D capture approach structure from motion.

Michael Rumme (Freie Universität Berlin)

Conducting quantitative studies requires a great number of objects which correlates with longer campaigns in – most of the time - politically unstable countries and higher costs to do so. In this paper I will present the results of a field study conducted in March 2022 where we tested a new large-scale documentation approach for pottery sherds, using the 3D capture method *structure from motion*, which significantly sped up the documentation process and ultimately lowered costs and campaign time on site. I will explain in detail what workflow was conducted, how it was conducted, and which problems can occur or have to be considered while doing so. Furthermore, will I present the technological background of both, structure from motion, and 3D processing in order to create the 3D models and critically discuss the differences of this approach in comparison to the traditional method. Lastly, I will present which kind of studies can be conducted further, using the generated 3D models on an example of a currently ongoing research project. Using this forum, I want to share our research and results in order to contribute and facilitate future research projects with the necessity of documenting a great number of sherds.

10:30 - 11:00

2.a (ROOM:15A.1.11) Pavol Hnila et al. - Earliest evidence for pastoralism in the high mountains of the South Caucasus.

Pavol Hnila (Freie Universität, Berlin), Alessandra Gilibert (Università Ca'Foscari, Venice), Arsen Bobokhyan (National Academy of Sciences, Yerevan)

In the Caucasus, the pastoralist exploitation of the high mountains is attested from the Middle Bronze Age onward. Earlier exploitation lacked direct evidence. Geophysical prospections and targeted excavations on Mount Aragats, Armenia, suggest that pastoralism in the high mountains of Caucasus developed in the Chalcolithic period and that it was not continuous, but cyclical. This paper illustrates the point by discussing three aspects: embedment of Chalcolithic steles in ritual contexts connected with domesticated animals, aggregated-cells architecture from the Early Bronze Age, and radiocarbon dates spanning over four millennia. We identify the correlation of long-term vertical pastoralism cycles with major cultural developments in the plains as a key challenge for future research.

10:30 - 11:00

2.d (ROOM:15A.0.13) Alexander Symons and Nathaniel Erb-Satullo - Serpent imagery in the Bronze Age South Caucasus.

Alexander Symons (Cornell University) and Nathaniel Erb-Satullo (Cranfield University)

We propose to investigate the use of serpent symbolism in the Bronze Age South Caucasus. Serpents are a frequent design on metal objects, along with a select number of other animals. However, they also occur on ceramics associated with metal production, such as tuyeres. We will present a survey of serpent imagery from the South Caucasus, including the artefacts on which they are found, what regions they are found in, and the level of abstraction with which they are depicted. Some hypotheses for a relationship between serpents and metal include the recyclability of metal corresponding to the figural “rebirth” of the snake as it sheds its skin, as well as the association of both snakes and metal with the underground as a site of transformation.

10:30 - 11:00

2.e (ROOM:14.2.80) Catherine Marro et al. - Reflecting on the occupation patterns of the South Caucasus between the Neolithic and the Bronze Age (ca. 6200-1100 BCE): the significance of mobility.

C. Marro (CNRS, Archéorient, UMR 5133, Lyon), R. Berthon (Museum National d'Histoire Naturelle, AASPE, UMR 7209, Paris), A. Vautrin (Museum National d'Histoire Naturelle, AASPE, UMR 7209, Paris)

The Neolithic-Bronze Age time span in the South Caucasus is characterized by a number of ruptures in the historical-material sequence, which in certain cases led to the collapse of the agro-pastoral system and the appearance of mobile camps. The first rupture is illustrated by the 400-year hiatus perceptible between the end of the Neolithic (ca. 5300 BCE) and the beginning of the Chalcolithic (ca. 4900 BCE): whether it be in the mountains or in the valleys, very few sites dating to this period have so far been found in either the Kura or the Araxes basins. A second rupture is perceptible at the beginning of the 4th millennium BCE (3900-3500 BCE), where many valley settlements are replaced by mobile camps that flourished in the foothills. Again at the beginning of the 2nd millennium (ca. 1900-1700 BCE), most valley settlements were abandoned, while the number of cemeteries and kurgans sharply increased in the uplands. A few hill-top fortresses were found in certain regions, as in Nakhchivan, but subsistence strategies and land occupation were clearly organised along mobile life styles. This settlement pattern prevailed until the beginning of the Late Bronze Age ca. 1450 BCE, when hill-top fortresses became ubiquitous. South Caucasian occupation patterns thus followed some kind of sinusoidal curve from the Neolithic onwards, when periods of fairly dense occupation alternated with sparselypopulated phases, in which mobility was a key-feature of the social and economic fabrics. But it must be stressed that even when more permanent settlements flourished in the low steppes, valleys, or on hilltops, mobility remained central to Caucasian subsistence strategies and social structures, albeit in different ways. After reviewing the available evidence, this paper will focus on the different forms taken by mobility in the South Caucasus between the Neolithic and the Late Bronze Age, and try to unravel the mechanisms at work in the evolution of settlement patterns in the period under consideration.

10:30 - 11:00

2.f (ROOM:23.0.49) Claire Padovani - Pyrotechnological Innovations in the Ceramic Industry throughout the 3rd Millennium BCE in South-West Asia.

Claire Padovani (Paris 1-Panthéon Sorbonne)

During the 3rd millennium BCE, the urbanisation process transformed the way of inhabiting and consuming as well as the access to resources. Cities expand, population grows and needs in ceramic commodities proportionally increase. In that respect, pottery becomes the most consumed type of good after agricultural products. On one hand, manufacturing technics improved and the artisanal specialization increased. On the other, potters had to find enough resources (water, clay, various materials) and energy (fuel, workforce) to supply the ceramic industry and make a living. Sustainability is about balance between available and spent resources and energy. Clay is widely accessible. However, firing is the most energy-intensive, time-consuming and polluting activity of the ceramic *chaîne opératoire.* At the same time, cities are confronted with several challenges: clean water and field availability to sustain their population as well as management of rubbish and pollution. Then, what innovations did the potters set up in firing to face the intensification of the production? And how were they integrated in the urban network?

10:30 - 11:00

3. (ROOM:15A.1.13) Pietro Caciagli et al. - Research on traditional architecture of AlUla Old Town (Saudi Arabia): Methodology and Preliminary Results.

Pietro Caciagli (Archaios), Maxime Bonnal (Lyon University), Piero Gilento (University of Paris1 Pantheon-Sorbonne), Manon Torre-Guibert (Archaios), Apolline Vernet (University of Paris1 Pantheon-Sorbonne)

The AlUla Old Town (northwest of Saudi Arabia) lies on the west of the valley al- Qurā (or AlUla) and is gathering approximately 900 buildings arranged around a hill called Umm Nāsir which preserves traces of occupation dating back at least to the Nabataean era. The site spans over 59000 m2 and was gradually abandoned since the 1980's. The Old Town is studied since 2020 through a research project named MuDUD and driven by the company Archaïos. The MuDUD (Multiscalar Documentation for Urban Dynamics) project, steered by Afalula (Agence française pour le développement d'AlUla) in partnership with the Royal Commission for AlUla, intends to trace the history of the Old Town and to highlight its cultural potential in order to locate the site within the broader framework of the rich historical and natural heritage of the region. In order to reach this objective, an interdisciplinary approach was put in place, which led to the creation of distinct research teams focussed on the collection and interpretation of heterogeneous data. In this regard, particular attention was paid to the recording and analysis of local architecture through the establishment of two research groups. These are composed of archaeologists and architects who work in tandem and who have developed a dedicated fieldwork methodology that brings together architectural survey techniques and archaeological stratigraphic analysis. The plurality and complexity of the field data is made comprehensive through a spatial database (QGIS 3.16 Hannover) which allows researchers to collect data on the field quickly and more effectively through a tablet. This work of recording and analysing the architecture becomes even more important in the current context in which a part of the buildings of the Old Town is the subject of a vast activation project to reopen the site for new activities. On the one hand, the information collected can be used to answer the scientific questions of the project as settlement dynamics and patterns, social and spatial organization, etc. On the other hand, they will constitute a documentary source of primary importance to preserve the memory of a built landscape in profound change. Firstly, the presentation aims to introduce the working methodology used on the field, showing the importance of synergy between different disciplines. Secondly, the GIS recording process will be presented through a specific case study. Finally, the first results obtained will be discussed, showing how complementary approaches linked to the detailed study of the still-standing building stratigraphy can help to unveal complex urban dynamics.

11:00 - 11:30

Coffee Break

11:30 - 12:00

1.a (ROOM:21.0.54) Shira Bloch-Lifshitz and Peter Fabian - A Jewish settlement from the Second Temple Period in Be'er Sheva, Israel and its place in the rural layout of southern Judea.

Shira Bloch-Lifshitz (Israel Antiquities Authority), Peter Fabian (Masaryk University)

Two excavation seasons in 2018-2019 north of Be'er Sheva (Rakafot 54) revealed an important Jewish settlement dated to the first and early second centuries CE. Of the 10,000 square metres settlement, 2,000 square metres were excavated. The architectural finds include a square watchtower made of chalk limestone blocks and mud bricks, surrounded by courtyards, outbuildings, cooking installations, trash pits, and underground systems quarried into the loess soil. The underground systems at this site were used as storehouses and basements of the upper structures. They are the first in the Be'er Sheva Valley to be associated with Jewish settlements of the first and second centuries CE. The material culture includes a rich variety of pottery, chalk and glass vessels, zoological and botanical materials, metal fragments, and coins. The site is unique, and since very little is known about Jewish settlements from this period on the southern border of Judea, it is important. The excavations open up new possibilities for mapping and understanding the nature of the Jewish settlements in this unexplored region in the first and early second centuries CE.

11:30 - 12:00

1.a (ROOM:22.0.11) Adelheid Otto - The 2022 excavations in Area 5 at Ur.

Adelheid Otto (LMU Munich)

The LMU Munich 2022 excavations took place as part of the Penn Museum's new Ur project. They aimed to fully excavate the large Old Babylonian house of the temple intendant Sîn-nāda and his wife Nuṭṭuptum, which was only partially excavated in 2019. The new investigations now offer new clues for dating the house and for the function of the rooms. The second objective was the investigation of the structures immediately below. They turned out to be part of a building of the Ur III period. However, it was not a residential building, but based on the finds can probably be interpreted as an architectural office where construction projects were planned.

11:30 - 12:00

1.b (ROOM:15A.2.13) Mathias Bellat et al. - Can soil information add value for the archaeological predictive model?

Mathias Bellat (CRC 1070 Resource Cultures, University of Tübingen, Department of GeosciencesUniversity of Tübingen), Benjamin Glissmann (CRC 1070 ResourceCultures, University of Tübingen, IANES University of Tübingen) , Ruhollah Taghizadeh-Mehrjardi(CRC 1070 Resource Cultures, University of Tübingen, Department of Geosciences University of Tübingen) Tobias Rentschler (CRC 1070 ResourceCultures, University of Tübingen, Department of Geosciences University of Tübingen, DFG Cluster of Excellence "Machine Learning: New Perspectives for Science" University of Tübingen, Digital Humanities Center University of Tübingen) Paola Sconzo (University of Palermo, DFG Cluster of Excellence "Machine Learning: New Perspectives for Science" University of Tübingen), Peter Pfälzner (CRC 1070 ResourceCultures University of Tübingen, IANES University of Tübingen), Thomas Scholten (CRC 1070 ResourceCultures University of Tübingen, Department of Geosciences University of Tübingen, DFG Cluster of Excellence "Machine Learning: New Perspectives for Science" University of Tübingen)

Soils are an important environmental factor (Duchaufour et al., 2020) and influenced human occupation through time (Fritzsch et al., 2022). Soil variables (e.g., texture, acidity, and soil organic carbon) gather information on water capacity, geomorphological landscape, geological substratum, vegetation, precipitation, and temperature. Many regions of the Near East have been inaccessible last two decades for political reasons (Ur, 2017), accordingly, remote sensing, geographical information system (GIS), and other technics have been widely used to remotely access these areas. Prediction maps of archaeological settlements and features are a useful tool for such specific contexts, they are allowing a remote overview of wide areas based on small but intensive surveys. These archaeological predictive models (APM) use many different layers of environmental covariates from different scales and different surveys, which results in high inaccuracy of the models (Nicu et al., 2019). Therefore, soil maps are an interesting solution to gather multiple data at one level of observation only. By using a unique condensed map instead of multiscalar data, the precision of the information should be higher and the models more precise. This presentation will show that, for APM, soil maps can easily replace several other strata with the same precision in the models. Our study area covers 337 sites from the Palaeolithic to the Islamic period (Sconzo et al*, in print*) over 800 km2 in the Selevani plain (Kurdistan, Iraq), from the Bek'hair anticlines toward the Tigris and Mosul dam lake. 550 soil samples from 101 locations have been taken during the summer of 2022 and analysed. The data collected from this survey helped to compute different maps for each soil property (Shahabi et al, 2022), and also to create an index from these properties the soil quality rating (SQR), which is giving an overview of the fertility of soils. We then tested different soil variables and the SQR index for the APM and compared their efficiency to more environmental covariates (geomorphological map, geological map, precipitation, temperature…). We used the frequency ratio (FR) to classify the relevance of the variable and produce an index of probability (Nicu et al., 2019) for our prediction models.More broadly the results from this prediction model provided information on the underlying mechanism of settlement patterns in the Selevani plain. The specific uses of soil for unique cultural practices are a common human phenomenon, it could be seen as part of a Resource Complex (Scherer et al, 2021; Miera et al, 2022) where the soils are a specific element of cultural practice. Human settlement's location and patterns can be explained by several environmental proxies and these archaeological predictive models will be the first step to identify them. More detailed interpretations of the link between settlements and their environment will be made after analysing other data from the close site environment.

11:30 - 12:00

2.a (ROOM:15A.1.11) Abra Spiciarich et al. - Strategies of animal exploitation in Late Iron Age IIA Ḥorvat Tevet (Jezreel Valley) reveal patterns of royal economy in early monarchic Israel.

Abra Spiciarich (Ludwig Maximilian University of Munich), Omer Sergi (Tel Aviv University), Karen Covello-Paran (Israel Antiquities Authority) and Lidar Sapir-Hen (Tel Aviv University)

Faunal remains from Ḥorvat Tevet, a site located in the rural hinterlands of the Jezreel Valley, reveal patterns of a complex redistributive apparatus during the Late Iron Age IIA (late tenth – ninth centuries BCE). Recent excavations of a large, monumental building on the terraces of Ḥorvat Tevet indicate the site functioned as the administrative centre of a royal estate, where agricultural commodities were collected and stored before they were further redistributed. This paper assesses a large assemblage of animal bones within inter- and intra-site comparative analyses. Inter-site comparisons to contemporary urban and royal sites in the northern valleys of the southern Levant demonstrate that the agricultural production of grain and animal by-products at Ḥorvat Tevet is unprecedented and went far beyond the sites' local needs. Further, an intra-site comparison reveals a hierarchical distinction in the consumption patterns between elites and the labour force. These results further reinforce the conclusion that the Late Iron Age IIA Ḥorvat Tevet was an administrative centre of a royal Israelite estate in the Jezreel Valley.

11:30 - 12:00

2.d (ROOM:15A.0.13) Marta Doglio - Investigating deer. The Alişar IV repertoire from Uşaklı Höyük (Turkey).

Marta Doglio (University of Pisa)

This paper discusses the Iron Age Alişar IV pottery repertoire from the site of Uşaklı Höyük, in central-northern Anatolia. The representation of deer in the painted decoration is the most distinguishable element that characterises the Alişar IV ceramic horizon. A double level of interpretation is here proposed. The first one is the description of the decorative techniques. It takes into consideration the decoration itself on the vase, its general structure and style. The Alişar IV repertoire from Uşaklı Höyük, specifically, shows different elements of variability concerning the quality of the painting, the style of the decorative elements, the depiction of the animals, that can be interpreted as clues of the existence of different workshops and numerous artisans within the same workshop. The second level of investigation explores the iconography of the Alişar IV style. The imagery of deer is known from the Early Bronze Age, particularly from the Alaça Höyük standards. During the Hittite Period deer were strictly associated with hunting and their tutelary god. A cultural transformation took place in the later phases, and by the Iron Age deer were no longer associated with a specific religious symbolism. This paper will therefore attempt at redefining the role of the Alisar IV ceramics within the mutated socio-cultural dynamics of post-Hittite Anatolia.

11:30 - 12:00 **2.e (ROOM:14.2.80) Margherita Andrea Valsecchi Gillmeister - Oymaağaç Höyük (Samsun, Türkiye) in the late prehistoric landscape of the Central Black Sea region (late 5th – 3 rd millennium B.C.),**

Margherita Andrea Valsecchi Gillmeister (Freie Universität Berlin)

The interpretation of the archaeological landscape of the Central Black Sea region during the prehistoric metal ages (late 5th– 3 rd millennium B.C.) is mainly based on the finds from a few excavated sites on the Black Sea coast, above all on the evidence from Ikiztepe, and on the information from the sites investigated in North Central Anatolia. Yet very little data is available for the buffer zone connecting the Black Sea with Northern Central Anatolia. The analysis of the Chalcolithic and Early Bronze Age pottery from the archaeological investigation at Oymaağaç Höyük (Vezirköprü, Samsun), located at the crossroad between these two regions, contributes to widen our understanding of the prehistory of the Central Black Sea region. Combined with the reassessment of the data already available for the region, the prehistoric material from Oymaağaç Höyük is the starting point for a revaluation of the archaeological landscape of this, so far only poorly explored, transition area.

11:30 - 12:00 **2.f (ROOM:23.0.49) Juliette Mas - Pottery Material from Bash Tapa (Kurdistan Region of Iraq): Some Highlights from the Bronze Age Levels.**

Juliette Mas (Universität Bern)

Bash Tapa is a ca. 5 ha settlement located about 30 km South of Erbil in the Kurdistan Region of Iraq. The site is explored since 2013 by a French archaeological mission led by C. Nicolle (CNRS Paris). The excavations carried out at the site allowed us to deeply investigate Bronze Age levels of the site: more specifically Early Bronze Age and Late Bronze Age levels. In fact, we could excavate the remains from the complete Ninevite 5 sequence along the Southern slope of the tell (Area 1) and buildings dated to the Middle-Assyrian and Mittanian periods at the summit of the site (Area 3). This paper will present some key pottery assemblages from the 3rd and 2nd millennia BC levels, discuss their significance for chronology and for the definition of the archaeological material culture of the Kurdistan
Region of Iraq.

11:30 - 12:00 **3. (ROOM:15A.1.13) Mustafa Ahmad - Late Sasanian or Early Islamic? Honeycomb Pottery Reconsidered.**

Mustafa Ahmad (German Archaeological Institute)

Honeycomb pottery was and is still a matter of debate among scholars. The term considers a decorative pattern applied to a specific type of large-size jars. It was first mentioned by Robert Adams in the mid-60s. in his publications about Diyala plain survey in Iraq. However, this type of pottery has been published earlier by others but uses different terminology. For a long time, honeycomb pottery was a chrono-type of the Sasanian period. This fact has been debated and revised by St. John Simpson in the 90s. He has argued that honeycomb didn't occur in any well-dated Sasanian context, and it should therefore rather be considered a diagnostic type of the early Islamic period. The current paper presents the Problématique of terminology of honeycomb in the publications, the production centers/areas and the chronological range of production, and its distribution. Furthermore, it deliberates the classification of its decorative patterns and the associated forms and types. Finally, its dating is reconsidered based on the recently discovered
materials from recent excavations and surveys in Iraq and the Gulf countries.

12:00 - 12:30 **1.a (ROOM:21.0.54) Ann E. Killebrew - Phoenician Akko (Israel): the results of ten (2010–2019) seasons of excavations.**

Ann E. Killebrew (The Pennsylvania State University)

This paper presents the results of the 2010–2019 excavations at Tel Akko, a major Phoenician commercial and industrial harbour town located in the central Levant. The excavations, co-directed by Ann E. Killebrew and Michal Artzy under the auspices of the University of Haifa and the Pennsylvania State University, focused on the Iron II through Persian periods (ca. 10th–4th centuries BCE) in Area A at the summit of the tell. Our findings, combined with the unpublished results of earlier excavations at the site by Moshe Dothan (1973–1989), reveal that first millennium BCE Akko served as a bronze-working and iron smithing centre. Cultic installations and artifacts suggest a close relationship between metalworking and Phoenician ritual. Additionally, the stratigraphic sequence uncovered in Areas A and Z provides new insights into the ceramic assemblages of the 7th through 6th century BCE.

12:00 - 12:30 **1.a (ROOM:22.0.11) Aline Tenu - The 8th excavation campaign in Kunara (Iraqi Kurdistan): main results.**

Aline Tenu (CNRS - UMR 7041 ArScAn, Nanterre)

Kunara is located near the modern city of Suleymaniyeh. The site covers just under 10ha and consists of an upper town to the west and a lower town to the east. So far, we have discovered levels ranging from the mid-3rd millennium to the modern period. The paper will present the results of the October 2022 excavation campaign. Four areas have been opened: one in the upper town (Area A) and three in the lower town (Areas B, C and E). On Areas A, C and E, we continued the extension excavations of the remains dated to the main level, around 2200-2100 bce. On Area B, a level dated to the Middle Bronze Age was excavated, which yielded several vases with very unusual complex decoration.

12:00 - 12:30

1.b (ROOM:15A.2.13) Marek Nowak et al. - Methods of chronological and cultural identification of Levantine chipped stone inventories. The case of Neolithic Chalcolithic and EB in southern Jordan

Methods of chronological and cultural identification of Levantine chipped stone inventories. The case of Neolithic Chalcolithic and Early Bronze in southern Jordan.

Marek Nowak, Agnieszka Brzeska-Zastawna, Justyna Zakrzeńska, Michał Wasilewski, Piotr Kołodziejczyk (Jagiellonian University)

In the paper, the chipped stone inventories from southern Jordan, discovered during the investigations carried out by the Jagiellonian University team in recent years, will be presented. An even more important goal will be to make some observations about methods of examining flint inventories aimed at chronological and cultural identification. The basic
method is typology, which allows distinguishing basic forms of cores, blanks, and tools, diagnostic for particular periods and/or archaeological units. However, the variables considered, the typological terms used, as well as the classification systems based on them, are heterogeneous and ambiguous. In addition, forms considered commonly to be distinctive of a particular archaeological entity are very often found in other entities as well. Thus, to evaluate absolute and relative dating, it is important to bear these dangers in mind. Furthermore, it is vital to make greater use of analyses of technological features and raw materials.

12:00 - 12:30

2.a (ROOM:15A.1.11) Lidar Sapir-Hen - Urban Nature: wild animals in the Iron Age of the southern Levant.

Lidar Sapir-Hen (Tel Aviv University)

By the Late Bronze and Iron Ages in the southern Levant livestock animals were the dominant meat source, and wild animals constituted a very small supplementary proportion of the economy. As a result, wild animals often receive limited attention in studies of these periods. 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? Based on a large body of published zooarchaeological data, the study tracks the local diminution in several wild species; reveals a clear preference for hunting deer in sites of the Iron Ages, regardless of changes in local landscape; and shows that various other wild animals can be correlated to assemblages that are identified with Egyptian presence. 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.

12:00 - 12:30

2.d (ROOM:15A.0.13) Matthias Lange - More than the Moon God: Iron Age Religious Iconography in the Şanlıurfa-Harran- Region.

Matthias Lange (Humboldt University)

The Iron Age reliefs and sculptures found around Şanlıurfa and Harran are numerous, but most of them are rarely mentioned in the scholarly discourse. If they are, it is often only those monuments with a relation to the moon god Sîn, whose famous temple stood once at Harran. However, there exist many more reliefs (as well as some sculptures) in this area which could contribute greatly to the study of the culture and religion of this region in the Iron Age. Their
analysis indicates that the local storm god(s) seems to have played a more significant role than Sîn and that the grave stelae were heavily influenced by Syro-Hittite conceptions. In general, a mutual influence of Luwian and Aramaean and, due to the relatively early Neo-Assyrian expansion into this region, Assyrian religion in this region can be hypothesized.

12:00 - 12:30

2.e (ROOM:14.2.80) Felicitas Ruschel - Reassessing Early Urbanism in North-Eastern Mesopotamia: Evidence from spatial and scientific analyses of households at Gir-e Bassetki, Kurdistan.

Felicitas Ruschel (Durham University, Newcastle University, Eberhard Karls Universität Tübingen)

Ancient Mesopotamia is important for understanding early urbanism. In comparison to the irrigated south, urbanism in the dry farming north is more episodic, with several sites emerging and declining in the Late Chalcolithic before a more general urban phase in the second half of the Early Bronze Age (EBA). The opening up of fieldwork in Iraqi Kurdistan can contribute to a better understanding of the processes related to early urbanism in northern Mesopotamia in the first half of the EBA. This paper analyses early EBA excavation data of Gir-e Bassetki to investigate the organisation of households in urban contexts through time at a variety of different scales, from micromorphological, phytoliths and geochemical samples to site level spatial analysis, all incorporated within a Geographical Information System. The main goal is to unveil distribution patterns and spatial associations for the identification of functional areas and related activities, and to infer processes associated with urbanism, such as centralisation of production and standardisation.

12:00 - 12:30

2.f (ROOM:23.0.49) Maura Sala - From Clay to Kiln: Preliminary Multi-Analytical Study of Early Bronze I–II Pottery from Tell el- Far'ah North (West Bank).

Maura Sala (Lugano University)

Tell el-Far'ah N has long been recognized as a key site in documenting the passage from the EB I village-based organization to the first EB II urbanized society in the southern Levant. This transition is reflected in material culture, including pottery production. The paper presents the results of the in-progress multi-analytical study undertaken on the pottery from the EB I and EB II settlements of Tell Far'ah N, which integrates macroscopic, petrographic, mineralogical and technological data. Analyses by OM, SEM-EDS and XRPD carried out on a selection of representative samples have made it possible to obtain a thorough fabric characterization, investigate aspects of the production technology, and ultimately recognize different industries present at the site, considered within the wider setting of the central hill country, and more generally the southern Levant. A comparison between the ceramic material from the two phases has also allowed to get insights into the material and technological knowledge reached by local potters, which reveals a pattern of both continuity and innovation throughout the EB I–II.

12:00 - 12:30

3. (ROOM:15A.1.13) Yona Waksman and Asa Eger - Archaeometric investigations of Islamic pottery production from Antioch and its region.

Yona Waksman (CNRS UMR 5138 "Archéologie et Archéométrie", Maison de l'Orient et de la Méditerranée, Lyon) and Asa Eger (University of North Carolina)

The reconsideration of the material excavated at Antioch in the 1930s by an international group of scholars working with Princeton University is a great opportunity to study pottery production at the site. The characterization of ceramics manufactured at Antioch in the Islamic period is based on evidence of local production such as kiln rods, and on chemical analysis carried out in Lyon (France). In parallel, analyses of 8th-12th c. pottery from recent excavations at Ḥiṣn al-Tīnāt (SE Turkey) may help recontextualize this ancient material, and provide insight into consumption patterns in the region.

12:30 - 13:00

1.a (ROOM:21.0.54) Laura Zanazzo - Mishrifeh (Syria) in the Iron Age: new results from the study of the pottery of the Italian Excavations.

Laura Zanazzo (Ca'Foscary University of Venice)

Mishrifeh, ancient Qatna, is a site located in the mid-Orontes Valley in central-western Syria and was excavated by a Syro-Italian-German Expedition from 1999 to 2010. The Italian mission excavated various areas of the upper and lower town, exposing a stratigraphic sequence from the Early Bronze Age III to the Iron Age III. The Iron Age occupation stretches from the late Iron Age I (end of the 10th century BC) to Iron Age III (7th century BC). The Iron Age II (9th – 8th centuries BC), was the most prosperous period and the variety of contexts (productive, domestic, funerary) found indicates the economic liveliness of the site in that moment. The paper will propose a cultural-historical reconstruction of Mishrifeh in the Iron Age and its relations with other centres in the Levant on the basis especially of the newly analysed pottery from the Italian excavations. The results highlight how Mishrifeh embodied an administrative and economic stronghold in the Kingdom of Hamath, with connections which went beyond central-western Syria and reached even northern Israel (especially Hazor).

12:30 - 13:00

1.a (ROOM:22.0.11) Matteo Merlino - Tell Shemshara before Kuwari.

Merlino (University of Amsterdam), C. Coppini (Free University, Berlin), J. Eidem (University of Pisa)

The site of Tell Shemshara (Rania Plain, KRI) is foremost associated with the 18th cent. archives of cuneiform texts found in the palace of Kuwari (Level V) by Danish and Iraqi archaeologists 1957-58. The new investigations carried out by The Pisa (- formerly NINO) Project on the Rania Plain, however, have revealed substantial earlier Bronze Age occupation at the site, spanning some 400 years before Kuwari and his archives. The best preserved occupation is that of Level VIII (ca. 2000 BC), which features a large complex destroyed by fire, occupying the same area as the later Kuwari palace. The paper will present a preliminary assessment of the architecture, finds, and historical context of this level, dating to an otherwise poorly known period in the history of NE Iraq.

12:30 - 13:00

1.b (ROOM:15A.2.13) Tucker Deady - Southern Levant Database (SLeD) Project: Goals, Methods, and Progress.

Tucker Deady (University of Toronto)

Archaeological research in the southern Levant has a rich legacy of data collection but is marked by countless chronologies, typologies, vocabularies, and recording methods. This variability makes conducting comparative temporal and spatial research difficult. Likewise, gaps in archaeological documentation due to unpublished excavation reports and widespread concern about data sharing make it hard to build projects. The Southern Levant Database (SLeD) addresses these issues by creating an archive into which records can be entered and utilized for research. SLeD falls under the Computational Research on the Ancient Near East (CRANE) Project and shares its objectives to create a collaborative, adaptable platform to discuss long term human-environment interactions and ethical means of data sharing and reproducibility. This paper reviews methods of SLeD data collection, terminologies and chronologies, project progress, future goals, and the importance of this work in a global community.

12:30 - 13:00

2.a (ROOM:15A.1.11) Kathryn Grossman and Lubna Omar - Entangled lives at Petra: human-animal Interactions on the edge of empire.

Kathryn Grossman (North Carolina State University) and Lubna Omar (Binghampton University)

In this paper, we present new zooarchaeological data from two localities at Petra, Jordan – The Petra North Ridge and the Temple of the Winged Lions – to explore human-animal relations at the site. These localities were excavated with very different methods, and so we begin by engaging with issues surrounding the use of legacy data for contemporary analysis. Then, our zooarchaeological analysis will answer two questions: First, what was the nature of the animal economy at Petra during the first through sixth centuries AD? Second, what can a close examination of animal lives tell us about the boundary between the human and animal world at Petra? By examining animal remains from these two localities, we construct an account that not only considers how humans used animals as economic resources but also how the lives of humans and animals were intertwined in other ways and contributed to the ongoing development of complex, multispecies communities.

12:30 - 13:00 **2.d (ROOM:15A.0.13) Izak Cornelius - “Carnival of the Animals” The Symbolism of the Animal Imagery on the Small Orthostats from Tell Halaf.**

Izak Cornelius (Stellenbosch University)

Mitchell (Image Science, Chicago, 2015) emphasised what has been called the “pictorial turn,“ moving from texts to images, to images as meaning-bearing objects. Material images were not merely illustrations or ‘high art’ in the modern sense of the term, but served a specific function and could serve as a medium of communication. Through material culture and especially material imagery world views, ideologies and values could be communicated. This will be applied to the material from Tell Halaf by looking at a specific corpus of material images. The visual imagery from Tell Halaf reflects great variety and has been described as enigmatic, even as naïve. This is also true of the motifs on the small orthostats (about 200, of which 120 survived) from the back or southern side of the “Tempel-Palast” at Tell Halaf with its great variety. Among these motifs are the animals. Various types of animals are depicted on the reliefs: horses with riders, a camel rider, animals which are hunted (which include lions and bulls), men fighting with lions and birds, the slaughtering of a goose, lions, bulls, cervidae, caprids, pigs, cows, birds, a donkey, and maybe a bear. Some animals are easily identifiable, while other are not. Unique are two scenes (one not so clear) of animal musicians (so-called Tierkapelle). Special attention will be devoted to this scene because some of the animals are in dire need of proper identification. It seems that there is a lion playing a harp, an ass (or horse?) “misbehaving,” dogs and other animals. Knowledge from
Zoology and consulting experts are included in the research.
Which animals are represented and what is the symbolism behind these scenes?
The following questions will receive attention:
• What kinds of animals occur?
• What development of visual traditions can be identified?
• Which “influences” are there (Hurrian, Levantine, Mesopotamian, etc.)?
• What are the typical characteristics of the animal scenes?
• What is the contribution of the animal scenes to the overall visual culture of the Aramaean
world and also that of Western Asia?

12:30 - 13:00 **2.e (ROOM:14.2.80) Claudia D’Orazio et al - Palatial architecture in Northern Syria during the Late Bronze II: New evidence from area AA at Karkemish**

Claudia D’Orazio (University of Bologna), Michael Campeggi (University of Milan), Federico Zaina (Polytechnic University of Milan)

Following the Hittite conquest of North Syria at the beginning of LB II, the urban layout of cities like Emar, Alalakh and Karkemish was largely reorganized. Recent archaeological research conducted by the Turco-Italian expedition at Karkemish has brought to light a monumental building on the western edge of the acropolis, characterized by two structural phases. Despite the scarcity of finds within it, its prominent location and architectural layout organized in three sectors suggest a possible public function. In light of this new discovery, this paper discusses the building within the context of LB II monumental architecture in Northern Syria and Anatolia.

12:30 - 13:00 **2.f (ROOM:23.0.49) Samar Shammas - Tell el-Yahudiyeh Ware: A view from Jordan.**

Samar Shammas (Columbia Global Centers - Amman)

Tell el-Yahudiyeh Ware vessels are widely distributed in Middle Bronze Age sites in the Levant and the Nile Valley. Sites in Transjordan such as Pella, Amman Tomb, Irbid Tomb, and many sites of the Jordan Valley, mainly Jericho and Beth-Shean, yielded a significant corpus of Tell el-Yahudiyeh Ware, including several vessels that have no parallels elsewhere so far. However, this material has never been the focus of intensive research. Therefore, this paper presents the results of an investigation of the corpus of Tell el-Yahudiyeh Ware discovered in the Jordan Valley and Transjordan. It discusses the newly gained insights regarding the typology, chronology, and the production of Tell el-Yahudiyeh Ware in the southern Levant as well as its impact on the emergence and development of the Syro-Palestinian branches of the ware.

12:30 - 13:00 **3. (ROOM:15A.1.13) Piotr Makowski - Provenances and production techniques of the so-called Islamic Cream Ware (mid-8th-11th centuries): the case study of Transjordan.**

Piotr Makowski (Jagiellonian University)

Islamic Cream Ware is a remarkably capacious category of pottery characterized by off-white to pale yellow fabric, being recognized as one of the most common chronological markers of the Abbasid and Fatimid occupation in Transjordan. What is important is certainly that its appearance in the local repertoire of material culture marks a significant break with the patterns developed during the Late Antiquity. Moreover, it clearly demonstrates the changing aesthetic taste of the Levantine society and the impact of new influences brought to the Bilād al-Shām probably from the territories of Iraq. This paper intends to show the preliminary results of archaeometric project aiming to recognize the issues of provenance and technological characterization of ICW. The combination of multiple methods (XRF, FE-SEM-EDS, XRD) allows to reveal the similarities and differences between northern and southern Transjordanian assemblages as well as to observe the variability between various types of ICW.

13:00 - 14:00 **LUNCH**

14:00 - 14:30 **1.a (ROOM:21.0.54) Michel Al-Maqdissi and Eva Eshak - Nassib Saliby's excavations at the temple of the healing god in Amrith (1955-1960).**

Michel Al-Maqdissi (Musée du Louvre), Eva Eshak (Université de Paris I – Sorbonne)

The study of the archives of the Syrian excavations of Amrith brings new elements on the last period of use of the temple of the healing god in Amrith. Excavations carried out in the basin indicate that the three levels of accumulation are dated between the arrivals of Alexander the Great around 333 B.C. and the earthquake of 150 B.C. The material from this excavation is of major importance for the site and gives fabulous details on the disappearance of a Phoenician city within the framework of the Hellenization of the Levant and the Near East.

14:00 - 14:30

1.a (ROOM:22.0.11) Timothy Matney - Salvage Excavations at Gird Qalachogan, Erbil Plain, 2022.

Timothy Matney (University of Akron), Petra Creamer (Emory University), Kyra Kaercher (Cambridge University) & Glynnis Maynard (Cambridge University)

Gird Qalachogan (EPAS Site #545) is a 62ha mounded settlement 3km north of the Erbil airport with occupation ranging from the Middle Bronze Age to the Islamic period. The site is being damaged by construction projects in the village of Qalachogan where the mound is being cut to level the area for new housing. These uncontrolled excavations have exposed baked brick walls, possible tombs and cremation burials, pebble floors, and well preserved stratigraphy. The western edge of the mound now presents as a near continuous profile running 125m from north to south with a preserved height between 4m and 5m. At the request of the Erbil Directorate, we conducted a brief emergency salvage excavation in August. The Qalachogan project documented the archaeological importance of the site in the Middle and Late Bronze Ages and generated recommendations for future work, including cultural preservation measures.

14:00 - 14:30

1.b (ROOM:15A.2.13) Michael Lewis - The Uruk Conundrum in Iraqi Kurdistan. Cultural Connections and Pottery Traditions.

Michael Lewis (University of Cambridge)

The 4th millennium BCE Uruk Phenomenon is characterised by the presence of a distinctive suite of southern Mesopotamian material culture (namely pottery, architectural styles and accounting devices) across wide swathes of Greater Mesopotamia. Using a multidisciplinary approach combining ceramic petrography, FTIR and pXRF to reconstruct the ceramic manufacturing process, this paper will present the results of the author's PhD to explore the Uruk Phenomenon's effects upon three different sites in south-eastern Iraqi Kurdistan occupied before, during and immediately after the Uruk Phenomenon. Within this presentation, I will demonstrate that the Uruk Phenomenon is detectable via subtle, yet important changes in the production of pottery, and conclude by highlighting the nuances in, and possible reasons for its transmission and maintenance within the study region.

14:00 - 14:30

2.a (ROOM:15A.1.11) Nadeshda Knudsen - Reviewing the herd: analysis of Early Bronze Age donkey figurines from the southern Levant.

Nadeshda Knudsen (Tel Aviv University)

This presentation will give a holistic account of the technical, typological, and stylistic aspects of an augmented corpus of ceramic donkey figurines derived from secure contexts. Diminutive, freestanding animal figurines have long since featured within the coroplastic repertoire of the southern Levant as part of an integrated aspect of creative and symbolic expression. The addition of donkey figurines to the material culture assemblage at the dawn of the EBA (ca. 3600 – 2400 BCE) reflects an enduring tradition, highlighting the importance of replication in miniature as well as signalling wider social changes in the region. By exploring the specific and practical choices of donkey figurine production, integrated with a comprehensive analysis of contextual, subsistence and economic data, new insights and an extended narrative is emerging regarding the role and use-life of donkey figurines during the rise and decline of urbanisation in the Early Bronze Age.

14:00 - 14:30

2.d (ROOM:15A.0.13) Natalia Skrzypek - Me/parṣu as a cosmological principle for creating Neo-Assyrian depictions on the surface.

Natalia Skrzypek (Adam Mickiewicz University Poznan)

Can the visual arts of the Neo-Assyrian period be considered as a reflection of the cosmological world order? Did the rulers and their advisors select the subjects of the representations based on the Sumerian MEs known from the myth of Inanna and Enki? What was the determinant of the selection of illustrations decorating Neo-Assyrian palaces? There is some evidence that the rulers of Assyria used the Sumerian concept of ME to manifest their power over the entire universe. Therefore how might the idea of ME have manifested itself in the reliefs, metal decorations and wall paintings of the rulers from Ashurnasirpal II to Ashurbanipal? One can point to specific depictions that overlap with the ME list, but not in all cases. Hence this presentation will reflect on this issue and attempt to answer the research question of whether Me/parṣu constituted a cosmological principle for the creation of images on the surface in the Neo-Assyrian period.

14:00 - 14:30

2.e (ROOM:14.2.80) Frances Pinnock - The Urban Pattern of Old Syrian Ebla: Landscapes and Soundscapes in the town of Middle Bronze I-II.

Frances Pinnock (Sapienza University of Rome)

I will deal with the spatial organization of Ebla, and I will highlight the functional differences among the spaces singled out in the town and I will try to identify specific urban landscapes and the relations between inside and outside the buildings and inside and outside the city. I will also try to identify specific soundscapes that may be associated with them, in the attempt at reconstructing the general "aspect" of Ebla in Middle Bronze I-II.

14:00 - 14:30

2.f (ROOM:23.0.49) Nancy Highcock and Yağmur Heffron - Work Hard, Play Hard: Gameboards and the Merchants' Way of Life in Middle Bronze Age Anatolia.

Nancy Highcock (The British Museum) and Yağmur Heffron (University College London)

The study of gameboards in ancient West Asia has been revitalized by approaches foregrounding the social connections and new interactive spaces created by games such as Senet, 20 Squares, and 58 Holes. Often played between two people, these games can help explore the intimate rituals of social bonding and negotiation, particularly in diverse communities in which boundaries of class, gender, language, and geographic origins are continuously set, negotiated, and broken. Taking games as social lubricants (Crist *et al* 2016) this paper will consider their role specifically within the diverse communities of the *kārum* network in Anatolia, where all extant boards are variants of the Game of 58 Holes. Egyptian in origin and prolific throughout ancient West Asia, the presence of boards used for 58 Holes at settlements within the *kārum* network is clearly associated with foreign presence. Integral to mercantile modes of being, gameboards represent a special category of material culture that carried a specific set of meanings and affordances and can therefore illuminate previously unconsidered dimensions of the encounters between Anatolians and Assyrians.

14:00 - 14:30

3. (ROOM:15A.1.13) Marie-Odile Rousset - The medieval levels of Hama citadel.

Marie-Odile Rousset (CNRS, Archéorient, Maison de l'Orient et de la Méditerranée, Lyons)

The final publication of the *fouilles et recherches de la Fondation Carlsberg (1931-1938)*about medieval levels of Hama citadel remains an irreplaceable reference for Islamic archaeology. The 3 tomes published by the Copenhague Nationalmuseet (Poul Jørgen Riis and Vagn Poulsen, *Les verreries et poteries médiévales*, 1957 ; Gunhild Ploug, Evelyn Oldenburg, Erling Hammershaimb and Poul Jørgen Riis*Les petits objets médiévaux sauf les verreries et poteries*, 1969 ; Peter Pentz, *The medieval citadel and its architecture*, in 2 volumes, 1997) are of exceptional quality and scientific rigour. On the occasion of this ICAANE, which is taking place in Copenhagen, I think it is useful to underline the contribution of Danish researchers to the knowledge of the material culture of Central Syria and revisiting *Hama: fouilles et recherches de la Fondation Carlsberg (1931-1938), IV*.

14:30 - 15:00

1.a (ROOM:21.0.54) Shay Bar - Summary of the renewed Tel es-Samak (Shikmona) excavation project.

Shay Bar (University of Haifa)

Tel es-Samak (Shikmona) is a small tel and an adjacent Byzantine town, located at the northern end of the Carmel coast, on the outskirts of the city of Haifa, strategically located in the 300 m-wide pass between the Mediterranean shore and Mount Carmel. Elgavish excavated the site between 1963 and 1979, exposing 17 strata from the Late Bronze Age (LBA) through the Byzantine period, however, only some of the Persian to Roman period strata have been partly published. In 2011 excavations were renewed to re-evaluate Elgavish's stratigraphy and dating, modifying the earlier results. The results of the new project will be presented in my lecture focusing on stratigraphy, dates, function and historical-geography of this intriguing site.

14:30 - 15:00

1.a (ROOM:22.0.11) Cinzia Pappi - The Archaeological Survey of Koya Project: excavations at Qala Shila (Iraqi Kurdistan).

Cinzia Pappi (FU Berlin, EC-Chronoi), Nyaz Azeez (Antiquity Service Koi Sanjaq, Erbil, Iraq), Costanza Coppini (FU Berlin), Matteo Merlino (University of Amsterdam)

The archaeological Survey of Koi Sanjaq/Koya (ASK) project, conducted since 2016 with the support of the University of Innsbruck and the Freie Universität Berlin, has been primarily aimed to an assessment of the archaeological landscape of the entire district of Koi Sanjaq/Koya (Erbil, Iraq), located between the plains of Erbil and Raniya in Iraqi Kurdistan. The first phase of the project has been mainly focused (1) on the record of large sites in sampled areas, (2) to systematic investigations in areas along the valley of the Lower Zab and in the Plain of Koya, (3) on chronologic and typological analysis of the settlement patterns and the material culture of the region. Systematic investigations in the plain of Koya highlighted the role of this plain within the socio-economic system of this area. The concentration of settlements marks a limited but continuous land-use of this plain. The typological analysis on the surface materials revealed a strong local component in the ceramic production, requiring further stratigraphic investigations. For the establishment of a regional chronology, the ceramic sequence excavated at Satu Qala, identified with the ancient Idu, represented, so far, the only existing chronology from the region. This sequence, benefitting from closed contexts and C14 dating, is a valuable base for the Iron Age, but it lacks stratified data dating to earlier periods. Beyond the investigated settlement of Satu Qala, the surface investigations revealed a small number of multi-phases sites, persisting in the region. The site of Qala Shila, located a few kilometres south of the modern city of Koya, has been recognized as a prominent regional centre from at least the end of the 4th millennium BCE to the Early Islamic Period. Diachronic analysis of the surface materials, revealed that among the other periods, the settlement has been largely in use in the Middle and Late Bronze Age periods. The site seems to be particularly extended also in the 3rd millennium and during the Chalcolithic. This paper, mainly focusing on the preliminary results of recent stratigraphic investigations conducted at Qala Shila in Spring 2022, will discuss the stratigraphic sequence, consisting of a sequence of Iron Age fortifications and Late Bronze Age productive areas. The analysis of the collected data will also provide insights into (1) evidence of Late Bronze Age local ceramic production and (2) into the urban developments of the settlement in the Middle and Late Bronze Age.

14:30 - 15:00

1.b (ROOM:15A.2.13) Samuel Atkins et al. - A comparative quantitative approach to the materiality of Egyptian-Levantine encounter between desert and sown environments of the Early Bronze Age I period.

Samuel Atkins (Hebrew University of Jerusalem) and Yuval Yekutieli (Ben-Gurion University of the Negev, Beer Sheva)

Anthropological and ethnographic research in the last forty years has pivoted towards a view of pastoral nomadic society as essentially integrated within broader socio-economic systems and developmental trajectories. Archaeological researchers are increasingly cognizant of this shift and the importance of what have often been viewed as 'fringe' societies with low material visibility in ancient contexts. Localized shifts in their internal structure and external relations are key considerations in formulating accurate projections of ancient social environments, as well as regional and interregional transformations over time. This paper takes a quantitative approach to the materiality of Early Bronze Age desert-sown connectivity, during a period of heightened interregional entanglement between Egypt and the southern Levant.Towards the end of the 4th millennium BCE, there was an apparently sudden incursion of Egyptian communities into the coastal plain of the southwestern Levant. Large quantities of Naqadan ceramics appear in archaeological strata dating to the final phase of Early Bronze I period (hereafter EB Ib2) at Levantine centers alongside new foundations of expressly Egyptian character, and most scholars agree that evidence of Egyptian presence seems to fade in scale with distance from a core sphere of encounter. The role of nomadic pastoral tribes in the Egypto-Levantine interaction sphere of the late 4th millennium southwestern Levant has been often acknowledged, but little examined. Investigation of new data from recent Ben-Gurion University excavations at Mitzpe Sde Hafir and Israel Antiquities Authority excavations at Yeroham – Nahal Avnon, two late EB I sites in the Western Negev and Central Negev Highlands respectively, has revealed two zones of complex and transformational nomadic encounter with sedentary society at a pivotal phase of Egyptian-Levantine connectivity. The profiles of the ceramic assemblages from both desert sites were analyzed in comparison to late EB I layers at Tel Erani, Area D3-H, where an Egyptian community apparently lived alongside the local population. Tel Erani was selected as the frame of reference for material profiles of Egypto-Levantine interaction due to its complex stratigraphy, prolonged Egyptian habitation alongside a local Levantine population, and evident evolution in the form relations between groups across archaeological layers. Ceramic assemblages from all three sites were profiled and compared using a coding system that quantifies 6 categories of typological variation. Variance in ceramic assemblages from different stages of Egyptian-Levantine interaction at Tel Erani was employed to model signatures of materialities of diverse scenarios of cultural contact between Egyptians and Levantines. These signatures were then employed as a chrono-cultural yardstick by which to compare the materials remains of interactions at Mitzpe Sde Hafir and Yeroham –Nahal Avnon. This comparative multivariate analysis revealed unexpected correlations, with consequent chronological and social-evolutionary implications. Viewed within a holistic frame that considers the overall material morphology of these sites, the interplay between Nomadic agency and Egyptian socio-economic and cultural influence in the region was evidently stimulative in the formation of new structures of desert-sown interaction.

14:30 - 15:00

2.a (ROOM:15A.1.11) Ruben Davtyan - Some remarks on Iron Age horse harnesses in the highlands: a comparative study

Ruben Davtyan (Martin-Luther University Halle-Wittenberg / Max Planck Institute for Social Anthropology)

The Taurus, Zagros and Caucasus have served as a contact zone for the influenced nomadic groups from the Eurasian steppe in the north and the Near Eastern civilization in the south. One of the main significant cultural roles it played for Mesopotamia was that the introduction of horses to Mesopotamia and further parts of the Near East took place through this mountainous area (after the domestication of horses in the Eurasian steppe).

This paper focuses on the archaeological context of horse skeletons on one hand and horse harnesses on the other hand. The distribution of horse harnesses and decorative items (bits, torques, bosses, toggles, bells, frontlets, head adornments, strap plaques and adornments) in the Iron Age likewise reveals a similar pattern in the mountainous areas between the South Caucasus, modern-day Turkey, Iran and Iraq. In my contribution I will try to argue that along with the horses and horse-related objects, also "equestrian" knowledge, technologies and design were introduced to Mesopotamia.

14:30 - 15:00

2.d (ROOM:15A.0.13) Tiffany Ftaimi - Between ritual and iconography: Stylized tree on Neo-Assyrian and Neo-Babylonian glyptic.

Tiffany Ftaimi (Ruprecht-Karls-Universität Heidelberg)

Ritual practices, veneration of deities, mythological scenes as well as further illustrations of the Neo-Assyrian period enriched the knowledge about the pictorial repertoire of Southwest Asia, in addition to the Neo-Babylonian artworks. These depictions have been oftentimes portrayed on rock reliefs, temple-and palace reliefs, and seals. On seals, the most branched depicted ritual custom is the representation in front of several types of stylized trees. The trees were flanked by worshippers, hybrid creatures, and human-like figures with common body gestures. This study is based on full documentation of almost all published adoration- and ritual scenes on Neo-Assyrian and Neo-Babylonian seals. Furthermore, it proposes the distribution of tree types in scenes as well as the classification of the various types of representations in front of a stylized tree from both periods. Finally, the results of the statistical analysis not only reveal new insights into the explication of this special emergence but also aim to clarify the correlation between portrayed figures and tree types.

14:30 - 15:00

2.e (ROOM:14.2.80) Holly A. Winter- Life and Death in the City: Rethinking MBA Urbanism in the Southern Levant.

Holly A. Winter (The University of Sydney)

Herein it is argued that the Courtyard Palace form, typical of the MBA southern Levant, has as its primary function the housing of elite/royal burials and their associated and ongoing mortuary and memorial practices. These complexes are known from numerous sites across the Southern Levant, having a likely northern origin in the Western Palace at Ebla. Taken together with the acknowledged significant funerary role for the monumental Symmetrical Fortress temple complexes, this suggests that death and its commemoration played a larger part in MBA urban life than previously acknowledged. These 'houses for the dead' were permanent and prominent fixtures in the city landscape and formed the physical locus for the ongoing commemoration and honouring of the elite dead, to ensure stability, wealth, and fertility for the city and its ruling elite lineages. The term 'Funerary Palace' is suggested as an alternative identifier for the Courtyard Palaces, given their purpose and ongoing role in court ceremony. This paper will outline the key concepts central to this thesis, illustrated with examples drawn from Courtyard Palaces of the southern Levant, and their northern exemplars.

14:30 - 15:00

2.f (ROOM:23.0.49) Dalila M. Alberghina - Reconstructing Metallurgical Horizons in LBA western Anatolia. Procurement Networks and Technological Strategies at the citadel of Kaymakçi.

Dalila M. Alberghina (ANAMED Research Center)

Archaeometallurgical research targeting the complex socio-political and cultural horizons of 2nd millennium BCE western Anatolia is still rather limited. This contribution presents new archaeometric data stemming from the combination of isotopic, compositional, and metallographic analyses carried on the copper-alloy metal assemblage from the LBA citadel of Kaymakçı (modern- day province of Manisa). It offers a comprehensive analysis of the local practices adopted in terms of metal procurement, alloying, and in situ manufacturing strategies. Published datasets from contemporary sites, within and outside the region, are considered as well in order to propose an alternative interpretation of the adaptive mechanisms behind western Anatolian metal industries in a period of claimed political instability and constant exposure to contacts with the neighboring regions.

14:30 - 15:00

3. (ROOM:15A.1.13) Micaela Sinibaldi - Settlement in Crusader Transjordan (1100–1189): a Historical and Archaeological Study.

Micaela Sinibald (University of Warsaw)

The Lordship of Transjordan, part of the Latin kingdom of Jerusalem during the 12th century, is usually assumed to have had more or less the sole function of serving as the southeastern frontier of the kingdom of Jerusalem, and to have been rather isolated from the rest of it. Through the detailed analysis and combination of all available sources, including documentary evidence and recent results from archaeological projects, this study shows that this
image of a series of castles in a largely deserted area originates primarily from a scarcity of research, and that it does not reflect the evidence offered by the sources, which indicate that the region had a much more complex identity. The conclusions from this research have provided very rich information on the dynamics, variety and timing of settlement in the region, on socio-economic aspects, and on the overall significance for Transjordan to the Latin kingdom of Jerusalem.

15:00 - 15:30

1.a (ROOM:22.0.11) Nicolò Marchetti - Nineveh East 2021 and 2022: the third and fourth seasons of archaeological excavations and conservation activities of the Iraqi-Italian Expedition.

Nicolò Marchetti (University of Bologna)

The third and fourth campaigns of renewed archaeological excavation and conservation at Nineveh East (Kuyunjiq and Nebi Yunus, Mosul) took place in 2021 and 2022 under the joint auspices of the University of Bologna and the Iraqi State Board of Antiquities and Heritage with funding also from the Italian Ministries for Foreign Affairs and for Universities and Research, the J.M. Kaplan Fund and the Volkswagen Foundation. Thirteen excavation areas were investigated, with results ranging from the Middle Bronze age (area P), the later Middle Assyrian and early Neo-Assyrian periods (areas E Bottom and M, in the pre-Sennacherib lower town around the acropolis) to several different features of the 7th century BCE city, belonging to the fortification system (areas D-Adad gate, N with its new gate, L-Shamash gate, T-Halzi gate) and the water tunnel under them (area G), to domestic architecture (areas B, H), elite residencies (areas A, E Top) and sub-palatial buildings (area C), in addition to detailed sequences for subsequent periods as well. A library of dozens of literary texts, many of which are unique manuscripts, dated to the last king Sinsharishkun has been found in area C, next to what is probably a scriptorium. Conservation activities were carried out in all areas as well as on limited parts of the acropolis, geomagnetic investigations were continued in the plateau West of area H, bioarchaeological research included the study of a sizable sample of human skeletons (some were found in the destruction debris of 612 BCE). Close-range photogrammetry was performed on all classes of small finds.

15:00 - 15:30

1.b (ROOM:15A.2.13) Sergio Taranto - New developments to investigate the function of ceramic forms through use-alteration analysis: the case of 'husking trays'

Sergio Taranto (ANAMED/Koç Universty)

The communication will deal with some of the results of a doctoral research on the function of a pottery shape from the Late Neolithic Near East: the so-called 'husking tray'. Through the adoption of a series of methodologies (ethnography, experimental archeology and use-alteration analysis) the research makes it possible to suggest on solid bases that the husking trays could have been used as pans for baking bread. Attention will be focused in particular on use-alteration analysis performed by comparing traces and residues on experimental replicas and archaeological artefacts. New techniques have been adopted for the development of the wear in accelerated experiments. Furthermore, the analysis combines evidence at different degree of magnification (macro and micro trace).

15:00 - 15:30

2.d (ROOM:15A.0.13) Glynnis Maynard - Does the hair make the man? Contextualizing Neo-Assyrian laḫmu clay figures.

Glynnis Maynard (Cambridge University)

In the Neo-Assyrian period, palaces and private houses could be armed against evil and disease with various combinations of apotropaic clay figures. One of the most common examples is a figure holding a spear, sometimes depicted with a six-curled hairstyle and/or an inscription ordering the expulsion of harmful intent and the invitation of beneficence. It is unclear, however, which creature(s) these figures are supposed to be, particularly since their depiction has not remained stable over space and time between the 8th and 7th centuries BCE. The vast majority also remain unpublished in European and Iraqi museum collections. This paper will examine the extant corpus as a whole, focusing on the depiction of hairstyles as a possible aid in creature identification. In comparing these clay figures with examples from relief art and cylinder seals, in addition to re-evaluating their history of use at Assur and Nimrud, this paper intends to shed new light on these enigmatic figures.

15:00 - 15:30

2.e (ROOM:14.2.80) Barbara Chiti - The emergence of urban landscapes in Northern Mesopotamia during the 3rd millennium BC. New data from the site of Kunara (Iraqi Kurdistan).

Barbara Chiti (ArScAn, UMR 7041, CNRS, France)

Based on the discoveries made at the archeological site of Kunara (Iraqi Kurdistan), this paper aims to shed new light on the urban practices that developed during the Early Bronze Age in a region usually considered "on the margins" of Mesopotamia. The urban layout and the construction techniques acknowledged at Kunara will be discussed and related to the regional settlement trends in order to apprehend the specific structuring of the space of these small sites in the Zagros foothills – which are distinctive from the large urban centers of the Mesopotamian plain – and whose urban character is the subject of debate. Thus, this paper will focus on the emergence of urban landscapes in Northern Mesopotamia, their specific features, their territorial dynamics, and their interconnections within the Mesopotamian cultural area.

15:00 - 15:30

2.f (ROOM:23.0.49) Sarah Vilain - From imitation to innovation: An insight on copies and local productions inspired by Cypriot wares in the Eastern Mediterranean during the 2nd millennium BCE.

Sarah Vilain (CNRS, UMR 7041 ArScAn, Nanterre)

Located at the crossroads of major sea routes, the island of Cyprus played a central role in trading connections during the Middle and Late Bronze Ages. Looked for both their content and their aesthetic, Cypriot ceramics broadly circulated within the Eastern Mediterranean (Egypt, the Levant, the Aegean). The local populations quickly developed a vivid interest for these exogenous vessels, resulting in the creation of imitations of Cypriot wares in the different local traditions of the regions where imports occurred. Far from being substitutes for imports, these artefacts were valued for themselves, triggering completely new productions of “entangled objects”. Ultimately, transpositions of Cypriot shapes occurred in various materials, such as stone, faience, and glass. While the presence of imports provides insights into trading connections and social practices, the development of imitations and transpositions provides a much more complex and multi-faceted picture of cultural interactions in the Eastern Mediterranean during the 2nd millennium BCE.

15:00 - 15:30

3. (ROOM:15A.1.13) Juan Álvarez García - Searching for the origins of the Arab Nation. The “nationalization” of archaeology during the first years of the Syrian Arab Republic (1946-1963).

Juan Álvarez García (Universidad Autónoma de Madrid)

During the French Mandate in Syria, the key institutions that managed the archaeological sites along the colonial period were established. However, after Syrian independence in 1946, these same structures remained operational. Therefore, the aim of the paper is to understand the changes and continuities in the management of archaeological excavations
during the early years of independence until the Ba’athist period. To this end, we will focus on the documentation provided by the archives of two specific archaeological projects: Ras Shamra/Ugarit and Tell Hariri/Mari, which were initiated during the Mandate period and remained virtually uninterrupted until the outbreak of the civil conflict in 2011. In this way, we will be able to understand how the nationalisation of Syrian archaeology took place at a time when the country is taking its first steps as independent state.

15:30 - 16:00

Coffee Break

15:59 - 16:29

3. (ROOM:15A.1.13) Linoy Namdar et al. - Between cities and villages: The Islamic and Ottoman Animal Economies.

Linoy Namdar (Tel Aviv University, The Steinhardt Museum of Natural History) Yuval Gadot (Tel Aviv University), and Lidar Sapir- Hen (Tel Aviv University, The Steinhardt Museum of Natural History)

By combining historical sources and zooarchaeological material, this study aims to understand the Islamic and Ottoman economies in Palestine. We recorded the livestock abundance and herd demography from historical sources including the British Mandate tax files and historical Ottoman texts. These sources were chosen as no former tax files were preserved, and as these files contain information regarding Arab livestock enumeration, used as an ethnographic source. We further analyzed the recorded data in relation to types of urban and rural settlements, from three districts (north, center, and south). Results show that various types of settlements engaged in herding and agriculture at different levels, determined their economy as specialized or generalized. We used this “model” to study two large Umayyad assemblages, from Tel Beth Shemesh (East) and Mt. Zion. We found economic variations between the two, that fit with the criteria found in the urban and urban-rural settlements model.

16:00 - 16:30

1.a (ROO:22.01.11) Aaron Schmitt - First results of the renewed excavation at Ashurbanipal’s North Palace at Nineveh.

Aaron Schmitt (Heidelberg University)

In the summer of 2022, a team from Heidelberg University started excavations in the area of the North Palace at Nineveh as part of the larger Nineveh project based at Heidelberg University. The palace had been excavated by several missions during the second half of the 19th and in the early 20th century. In 2011, a team from Mosul University worked there for four consecutive seasons. With our work, we aimed at reaching three different goals:
1. Geo-referencing the published plan of the North Palace also in relation to the remains excavated by the Mosul University team.
2. Cleaning, documentation and interpretation of the remains excavated by the Mosul University team.
3. Opening test-trenches within the area of the North Palace to familiarize ourselves with the conditions and characteristics of the site as well as to identify already excavated building remains which would allow for a more precise localization of the published plan.
The work in the already excavated areas led to a better understanding of the extant building remains also in relation to the palace. In the new excavation areas, building remains of the North Palace were reached and uncovered. Associated with them, fragments of sculpted wall reliefs were found. In this paper, I will give an overview of our work by presenting the previously and newly excavated remains as well as the artifacts associated with the palace contexts.

16:00 - 16:30

1.b (ROOM:15A.2.13) Maria Gabriella Micale - The terracotta figurines from the Persian settlement at Tell Mardikh (Syria): agency, marginal communities and imperial networks.

Maria Gabriella Micale (Freie Universität Berlin)

The Persian period settlement in Tell Mardikh is one of the last occupational levels at the site. On the top of the high mound (once the Royal Citadel of Ebla), after some centuries of scattered occupation, and approximately contemporary with the beginning of the Persian rule of the region, a relatively large building was constructed together with some domestic units. In this area, a large number of terracotta figurines were found. An examination of the stratigraphy and deposition allows for a distributional analysis in both synchronic and diachronic dimensions across diverse contexts, but especially permits the investigation of the relationships between materials and specific spaces. The examination of the terracottas' association in both synchronic and diachronic perspectives contributes to the decipherment of material culture elements as signifiers within social structures, cultures and belief systems, and sheds new light on the life of the settlement as well as on particular social actors. This new understanding brings to the fore the way in which the arrival of the Persian Empire impacted local material culture and its function within local (?) and marginal communities at the site and in the region.

16:00 - 16:30

2.d (ROOM:15A.0.13) Margaux Spruyt - The case of orthoptera in Assyrian reliefs: identification and interpretation.

Margaux Spruyt (UMR 8167 – Orient et Méditerranée)

The case of orthoptera has been raised both through the study of one of its iconographic occurrences (Albenda 1977) and from a textual point of view (notably Nevo 1996, Radner 2003). The aim of this paper is to reopen the issue of orthoptera representations in the Neo-Assyrian period in an attempt to identify more precisely the species depicted –
grasshopper, cricket, locust - and to compare biogeographical and behavioural data in order to better understand the images in which the insects appear. There are few reliefsthat feature orthoptera: the most famous is undoubtedly its occurrence in the Banquet Scene of King Ashurbanipal, but it is also depicted in banquet preparation scenes dating notably from the reign of Sennacherib. Thus, by confronting the various iconographic occurrences as well as textual and biogeographical data, we will attempt to give new interpretative hypotheses on orthoptera in the Neo-Assyrian period.

16:00 - 16:30

2.e (ROOM:14.2.80) Peter Pfälzner - Bassetki/ ancient Mardaman – from a Ninevite 5 urban center to a Middle-Assyrian provincial capital.

Peter Pfälzner (Uniersity of Tübingen)

Seven seasons of excavations at Bassetki in the Dohuk region of Kurdistan-Iraq brought to light the history of an urban center in the Selevani Region from the Early to the Late Bonze Age. Due to the discovery of a Middle-Assyrian archive, the site can now be securely identified with ancient Mardaman. A city-wall with gate and an industrial building outside of the fortifications were exposed for the early part of the Ninevite 5 period. A large communal building can be attributed to the Akkadian period. Mardaman reached its largest extension during the Middle Bronze Age. A large economic building dating to this period was detected in the lower city near the outer city wall. Of particular importance is the palace of a Middle-Assyrian governor, in which numerous cuneiform tablets and other interesting objects were discovered.

16:00 - 16:30

2.f (ROOM:23.0.49) Metoda Peršin - Potmarks in Sidon: At the crossroads of Bronze Age potmarking practices.

Metoda Peršin (Freie Universität Berlin)

Potmarks in Lebanon have been largely unexplored in the past and the region in general represents a large gap in understanding potmarking practices. The site of Sidon, located to the south of Lebanon, yielded hundreds of potmarks that are examined in this paper. They were found in diverse archaeological contexts dating to the Early, Middle and Late Bronze Ages. The assemblage offers a unique insight into potmarking practices not only throughout the span of the entire Bronze Age, but also in various settings. Sidon - an important trading port - stands at the crossroads of transregional potmarking practices, but at the same time exhibits a long local marking tradition. With the use of various marking techniques, innovation and a continuation of marking, Sidon represents a core site to understanding potmarking practices in Lebanon and provides fresh information on many aspects of potmark interpretations that arose in the past.

16:29 - 16:59

3. (ROOM:15A.1.13) Alexia Rosak et al. - An unprecedented network of qanats from the Abbasid period in the Al-Ula Valley (Kingdom of Saudi Arabia)

An unprecedented network of qanats from the Abbasid period in the Al-Ula Valley (Kingdom of Saudi Arabia): insights into the territory of the city of al-Qurh (al-Mabiyat).

Alexia Rosak (Université de Paris 1-Panthéon Sorbonne - Archaïos), Maureen Le Doaré (Archaïos), Cassandra Furstos, (Archaïos), Maria Paola Pellegrino (Archaïos), Francelin Tourtet (Freie Universität Berlin - Archaïos), Yasmin Kanhoush (Archaïos & UMR 5133 Archéorient), Julien Charbonnier (Archaïos)

The Al-Ula Cultural Oasis Project (UCOP) led by Archaïos, steered by the French Agency for AlUla Development (AFALULA) on behalf of the Royal Commission for AlUla (RCU), is investigating since 2021 a hitherto unknown network of qanats surrounding the well-known city of al-Qurh, today known as al-Mabiyat, in the Al-Ula region (Northwestern Saudi Arabia). Well documented in medieval sources, al-Qurh was situated on the pilgrimages routes and described as a main power center in the region until the end of the 12th c. CE/6th c. AH. As a first step, remote sensing and photo-interpretation survey were combined with a systematic pedestrian survey to identify the qanats. Chronological evidence were then obtained using spatial analysis of the hydraulic systems and studies of the ceramic and glass assemblages collected during the survey. Our preliminary results thus suggest that these qanats supplied with water the hinterland of al-Qurh and were abandoned at the same time than the city. This ongoing study will thus highlight the role played by water management in urban development and growth of trade in the northern Hijaz during the Abbasid period.

16:30 - 17:00

1.a (ROOM:22.0.11) Bernhard Schneider - Project RuBab: rural settlements in southern Babylonia during the early "Age of Empires" (ca. 720-150 BC).

Bernhard Schneider (University of Wroclaw)

The rural area in the hinterland to the Southeast of Nippur will be examined through a combination of survey and excavation of sites from the early imperial periods (Neo-Assyrian, Neo-Babylonian, Achaemenid, Seleucid) which were documented by the surveys conducted by Robert McC. Adams in the 1960s and 70s and the recent work under the direction of Nicoló Marchetti in 2016-18 (QADIS). Also, in the textual evidence is seen a considerable rise in the number of sites as well as canals, triggered by investment through the consecutive Empires. As in the study area the main research period (ca. 720-150 BC) is still heavily under-researched, it is the aim of the project RuBab to fill this gap. In this talk also early results of the project will be presented for the first time. This concerns the planned field season of March 2023 in Iraq.

16:30 - 17:00

1.b (ROOM:15A.2.13) Azar Jannati-Mehr et al. - Multidisciplinary approaches for the Study of Bedrock Ground Stone in the Bawa Yawan Rockshelter.

Multidisciplinary approaches for the Study of Bedrock Ground Stone in the Bawa Yawan Rockshelter, Nawdarwan Valley, Kermanshah Region, West Central Zagros Mountains

Azar Jannati-Mehr (*University of Mazandaran, DiyarMehr Paleolithic Research Institute),* Rahmat Abassnezhad (*University of Mazandaran)*, Saman Heydari-Guran (*DiyarMehr Paleolithic Research Institute, Stiftung Neanderthal Museum, Mettmann)*

During the Palaeolithic archaeological research in Nawdarwan Valley in Kermanshah Region in the framework of the “Human evolution in the Zagros Mountains" (HEZM) project, a large number of Bedrock Ground Stone (BGS) were found. In this article, we have focused on the Bawa Yawan Rockshelter (1380 masl) where 24 non-mobile cases of BGS are discovered. Bawa Yawan is a known archaeological site to its long sequences of hominin occupations from the Middle to Epipaleolithic periods and more specifically its Neanderthal physical remains. The site is a wall-shaped rock around 50 meters high and 250 m long, formed in the relative direction of west and east on the edge of the flat plain of Nawdarwan. Here we examine BGS by using different geochemical methods to understand their functions. The preliminary results of this analyses show that:

1) Based on the morphometric analysis, several types of BGS are identified in the Bawa Yawan rockshelter: bedrock metate (BMT) and bedrock mortars (BM), the BM themselves are classified into regular shape and deep and unregular and shallow.

2) The geochemical studies of the residue collecting and microfossil identifications analysis (RCMIA) on the GMS in the Bawa Yawan Rockshelter resulted into recognised starch, phytolith, vegetable fibbers and pollen, diatoms and traces of red mud (probably ochre).

Since in these analyses, we did not see the trace of wheat, barley, or legumes remains, we hypothesize that GBS in the Bawa Yawan may have been applied for other uses such as medicinal materials, seed dyes, and even for the production of poisons. Our studies are in progress to have a better understanding of the functions of GBS in Bawa Yawan and Nawdarwan Valley.

16:30 - 17:00

2.d (ROOM:15A.0.13) Alessandra Cellerino - “Children of my Heart”. Terracotta large size sitting boys from Seleucia on the Tigris between Greek and local traditions.

Alessandra Cellerino (University of Turin)

The excavations at Seleucia on the Tigris brought to light a large number of terracotta figurines that highlight the encounter and exchange between Greek and Mesopotamian culture and reflect the multifaceted cultural context generated by the Alexander’s conquest and Seleucid domination over the ancient Near East. The representations of seated or squatting children, unknown to the Mesopotamian traditional iconographic repertoire, attest to the influence of Mediterranean models on local production. Although they are known in the archaeological literature as "squatting gods", none of the terracotta figures found so far actually have attributes that could identify them as deities. The seated children find parallels with a series of figures, the so-called “temple boys”, produced in Cyprus and Aegean region between the 5th century BCE and the Hellenistic period. Within the Near Eastern context, the terracotta versions of the type is likely connected with the sacral sphere of fertility and healing and served as votive offerings dedicated to obtain divine protection.

16:30 - 17:00

2.e (ROOM:14.2.80) Emily Hammer - Neighborhoods, Suburbs, and Urban Form at the Early Southern Mesopotamian Cities of Ur and Lagash.

Emily Hammer (University of Pennsylvania)

Survey projects at Ur and at Lagash have yielded data on suburbs, neighborhoods, and urban structure—topics that have been relatively neglected in the study of early Sumerian cities. At Ur, historical imagery analysis, UAV photogrammetry, and surface survey reveal the changing extent of extramural areas over five millennia. The distribution of pottery by period suggests that Ur may have been founded in the fifth-fourth millennium BCE as a pair of separate settlements that grew at different rates; that more distant suburbs formed by the third millennium; and that intensity of occupation of various suburban zones shifted throughout the third-first millennia. At Lagash, UAV photogrammetry, magnetic gradiometry, and surface survey reveal that the third millennium BCE Early Dynastic city was composed of discontinuous, functionally different sectors, separated by empty spaces, and bounded by city walls and water features. The evidence is suggestive of a watery or even marshy environment at Lagash. These new results indicate that early Sumerian cities may have been multicentric—and less compact, spatially contiguous, and uniform than has often been assumed.

16:30 - 17:00

2.f (ROOM:23.0.49) Pellegrino et al. - Five thousand years of human occupation in Al-Ula valley: preliminary study of the pottery collected by the Al-Ula Cultural Oasis Project

Maria Paola Pellegrino (Archaïos), Francelin Tourtet (Freie Universität Berlin and Archaïos), Cassandra Furstos (Archaïos), Anne Leschallier de Lisle (Archaïos), Yasmin Kanhoush (Archaïos and UMR 5133 Archéorient), Julien Charbonnier (Archaïos)

Within the framework of the Al-Ula Cultural Oasis Project (UCOP) led by Archaïos, funded and steered by the French Agency for AlUla Development (AFALULA) on behalf of the Royal Commission for AlUla (RCU), the archaeological remains in the Al-Ula valley (Saudi Arabia) were systematically recorded during a systematic pedestrian survey (2019-2022), from Hegra to Al-Mabiyat. Beyond identifying and dating both local and imported pottery productions, this contribution focuses on the continuities and changes in the pottery assemblage (fabrics and morphology). Concurrently, a diachronic analysis of the various wares' spatial distribution enables to reconstruct the human occupation in the valley, from the Bronze Age to the present day. Within a broader historical framework, this case study eventually contributes to better understanding variations in the regional standing of this oasis, balancing between major station on trade and pilgrimage routes and small town of lesser economic importance.

16:59 - 17:29

3. (ROOM:15A.1.13) Nolwenn Guedeau - Smoking at the border of the Ottoman Empire.

Nolwenn Guedeau (University of Bonn, Germany and University of Aix-Marseille)

The aim of this paper is to present different collections of Ottoman pipes from various excavations and surveys in iraqi Kurdistan. Tobacco was a particularly important resource in the Ottoman Empire, a central actor in a large imperial and international economy. The plant arrived at the beginning of the 17th century, first affecting an urban elite, then spreading to all classes of society by the end of the century. Tobacco was first banned, then legalised and heavily taxed. The use of pipes, chibouk, according to the Ottoman term, stopped at the beginning of the 20th century, when cigarettes were democratised. The different pipes present in the region show a small presence of Levantine imports with a coarse white clay whitout slip, and Turkish with an intense red clay and slip, coming from the district of Tophane, one of the biggest pipe makers of the 19th century. However, the most important pipes found in the region are local production, with the « poppy » pipes, black clay and black slip and the « siebel » type, beige clay and red slip, both in a very uncommon shape. The interest is then to compare these different types, as well as the techniques of production and thus to highlight the economy and exchanges of iraqi Kurdistan and its autonomy of production in the tobacco industry and consumption vis-à-vis the Ottoman imperialism.

17:00 - 17:30

1.a (ROOM:22.0.11) Gianni Marchesi et al. - A new library at Nineveh?

Anmar A. Fadhil, Enrique Jiménez, Gianni Marchesi, and Jonathan Taylor

During the 2021 campaign of the Iraqi-Italian Expedition of the SBAH and the University of Bologna at Nineveh, several dozen scholarly texts were found in a room of a palace building near the Adad Gate. The discovery, in the same place, of a writing stylus and a large block of pure clay (which could have been used to make tablets), together with the presence of various benches covered with bitumen in an adjacent room connected by a staircase, might suggest the existence of a sort of scriptorium, where texts were copied and/or drafted. A preliminary presentation of this remarkable epigraphic find from the time of the last king of Assyria, Sin-sharru-ishkun, is offered here for the first time.

17:00 - 17:30

1.b (ROOM:15A.2.13) Radmehr Kazemi et al. - Microbial deterioration of Persepolis; Isolation and Inhibitory treatment

Radmehr Kazemi (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Ameneh Faravani (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Kazem Kazemi (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Yasaman Shafieirad (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Roya Esfandiaribaghnavi (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Behnam Esfandiaribaghnavi (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Mohammad Haghparast (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran), Esmaeil Freidouni (Islamic Azad University, Marvdasht Branch, Marvdasht City, Iran)

Conservation of cultural heritage (ancient identities) is a critical duty of nations.Biodeteriorationis one of the irreversible damagesonart works caused byMicroorganisms, lichens andinsect pests.The aim of this study was isolation, identification and inhibitory treatment ofmicroorganisms(bacteria and fungi)from carbonate monument of Persepolis.12 Samples were collected from different ports of the Persepolis(Hundred Column Hall,International Gateand XerxesPalace). Sampleswere immediately taken to the laboratory for more studying. Isolation, biofilm formation, identification and inhibitory treatment ofmicroorganisms were done respectively.Several bacteria and fungi were isolated. After passing biofilm formation test, microorganism were identified. Inhibitory treatment ofmicroorganism's *in vitro* experiments was done through direct methods. All of these bacteria and fungi and have an extremely slow growth rate.Results of this study will be presented in this conference.

17:00 - 17:30

2.d (ROOM:15A.0.13) Mari Yamasaki and Sonja Speck - Like fish in the water. Fish representations as means to understand spatial concepts.

Mari Yamasaki (Polish Centre of Mediterranean Archaeology, University of Warsaw) and Sonja Speck (University of Mainz)

According to cognitive psychology, humans experience the world in terms of movement in space, understanding and conceptualising it via spatial abstractions. These abstractions determine how humans organise and express their ideas about spaces. This can be done by means of gestures, through the arrangement of objects in space or the position of pictorial elements in representations. As land creatures, human experience is bound by gravity, while fish are seemingly free to move in all directions. Ideas about their mode of movement find their way into representations: humans for example need to stick to a “ground line”. But what about fish? How are spatial properties employed in their representation and what can these abstractions tell us about how the types of space these animals inhabit have been understood in the past? The goal of this paper is to investigate underwater spatial concepts in the Ancient Near East and the Eastern Mediterranean. This will be done through the analysis of a selection of fish representations including decorated pottery, reliefs, seals and ichthyomorphic vases from the Bronze and Iron Ages through the lens of cognitive psychology.

17:00 - 17:30

2.e (ROOM:14.2.80) Jessica Giraud and Mathilde Mura - Tell Shenkereh-Larsa intra-site survey: a crossing of survey methods for new results

Jessica Giraud (Archaïos and UMR 7041 – ArScAn Vepmo) and Mathilde Mura (Archaïos and UMR 7041 – ArScAn Vepmo)

Within the framework of the French Archaeological Mission of Larsa-Uwaili, (MAFLU) directed by R. Vallet, two field seasons were allocated to the systematic pedestrian survey of Tell Shenkereh-Larsa. Using the classical method of grid survey and borrowing from the concepts of the topographic survey developed in Iraqi Kurdistan, an innovative survey method was developed and yielded unprecedented results on a site of this scale (200ha). Despite the heavy looting that occurred at the site, the survey, dating of the ceramic material and study of other materials collected (lithics, shells, metallic finds and slags, small finds, and raw material) made it possible to consider the occupation of the site
diachronically and to identify specialized spaces. In addition to a maximum extension of the occupation from the Early Bronze Age to the Late Bronze Age, it appears that the site was partially occupied before and after these periods in located, yet still specialized areas of the site. This paper will address the opportunities of this new approach and present the results of this type of survey.

17:00 - 17:30

2.f (ROOM:23.0.49) Mustafa Kibaroğlu and Dirk Paul Mielke - Archaeometric investigations on the production and distribution of Hittite pottery.

Mustafa Kibaroğlu (Eberhard Karls Universität Tübingen) and Dirk Paul Mielke (Westfälische Wilhelms-Universität Münster)

In this large-scale research project, pottery finds from selected sites in the Hittite core area in central Anatolia are being investigated for the first time on a supraregional comparative chemical and mineralogical-petrographic basis. The samples come from important archaeological sites such as the Hittite capital Boğazköy/Ḫattuša, the royal residence town Ortaköy/Šapinuwa, the cult center Oymaağaç Höyük/Nerik, the border town Maşat Höyük/Tapikka and the provincial center Uşaklı Höyük. The focus will be on the entire spectrum of Hittite ceramic wares and forms. In addition, reference clay samples from the vicinity of the respective sites are also included to compare with ceramic analysis. The project will provide for the first time a solid scientific database for questions concerning the production and distribution of pottery in Hittite Anatolia, which in turn will form the basis for further research in cultural and economic history.

17:30 - 18:00

1.a (ROOM:22.0.11) F.J. Kreppner et al. - The 2021 and 2022 excavation campaigns of the Peshdar Plain Project in the lower town of the Iron Age Dinka settlement complex.

Florian Janoscha Kreppner, Jens Rohde, Ellen Coster and Tarik Willis (University of Münster)

The Peshdar Plain Project has focused its excavation activities in 2021 and 2022 on the lower town of the Iron Age Dinka Settlement Complex. The site is located approximately 5 km south of the district town of Qaladze in the Peshdar Plain in the Zagros Mountains on the upper reaches of the Lower Zab River in the Sulaymaniyah Province in Iraqi Kurdistan immediately adjacent to the border with Iran. The heyday of the multi-period site begins in Iron Age I (1250-1050 BC) and reaches its largest settlement extent of c. 60 ha in Iron Age II (1050-800 BC) already before the Assyrian annexation of the Peshdar Plain and settlement. The target of the 2021 and 2022 excavations was a complex of several buildings situated on the edge of the lower town somewhat apart and separated by an open space from the small-scale residential houses. The 700 sqm Building L and the 335m2 Building K provide important new insights into the living environments of people in the early first millennium BC in the northern Zagros Mountains, their social organisation and material culture.

17:30 - 18:00

2.d (ROOM:15A,1,11) Jessica Schellig - Small changes on small change? The eclectic iconography of the Artaxiad coinage of Armenia.

Jessica Schellig (GPIA Jerusalem)

In my master thesis "The coin images of the Artaxiads. An iconographic analysis of political and intercultural communication" I dealt with the coin imagery used by the Kings of the Greater Armenia from 189 BC to 15 AD and I would like to present some aspects of it at the 13 th ICAANE. In the 2nd and 1st centuries BC the kingdom of Greater Armenia is part of an area with an exceedingly heterogenic coin circulation. Like the Seleucid and Parthian kings, the Artaxiads, their neighboring kings as well as the minting cities follow the reduced Attic standard, which enables their coinage to be used as currency outside of their region of origin. Hoard finds in Armenia show that coins from a wide variety of regions in the eastern Mediterranean were accepted as currency by the population. Since the invention of minted coinage, it was used to convey messages controlled by the minting authority and often seen as a medium for communicating a self-image. Thus, it is not surprising that the coin images of the Artaxiad kings are used as a means of expressing an Armenian identity. But furthermore, they also show Hellenistic and Parthian influences in their iconography during times of political change. Especially in the course of changing alliances, modifications of the king's portrait and the reverse motifs can be recognized. Thus, under Parthian protectorate, the Artaxiads adopted garment components and symbols of the great kings, or during phases of Roman dominion, they adapted their portraits to those of the imperial house. Moreover, they succeed in developing a distinctive Armenian imagery, which is taken up in their coinage. For example, the development of the Armenian tiara is a unique feature of the Artaxiad kings. As an originally Achaemenid headdress the tiara was later modified in its form and adorned with specifically Armenian imagery, for example the six-pointed star between two eagles as seen on the famous Antiochene Tetradrachms of Tigrane II. And even representations of gods, while originally depicted using Greek elements and compositions, are alienated by adding additional attributes and change of posture in such a way that they are seen by the viewer as something distinct yet recognizable. The Artaxiad coinage is thus designed with an eclectic imagery that uses Hellenistic as well as Iranian and later on Roman elements. The imagery on the currency was used by the ruling kings in order to convey changes in their foreign policy as well as their Armenian heritage.

17:30 - 18:00

2.e (ROOM:14.2.80) Sidonia Obreja - Early Dynastic I: the beginning of the third millennium B.C. between the end of the Uruk system and the first dynasties.

Sidonia Obreja (Louvre Museum, ArScAn – VEPMO)

Although initially heralded as a well-defined phase in the Mesopotamian 3rd millennium chronology, with a consistent ceramic and glyptic corpus, the Early Dynastic I architecture remains elusive in the stratigraphic sequences of most of the Mesopotamian sites. While surveys have indicated a significant urban density and an important growth of main cities during this period, little is known of their architectural features and urban layout. In the long, discontinues sequences of multiple-mound urban centres of southern Iraq, Early Dynastic I architecture was mainly exposed in limited areas, mostly inside deep soundings carried out inside temple or palatial sectors. What we intend to examine in this talk is how the Early Dynastic I urban centres really looked like, bordering or actually inside a marshy wetland, very different of the arid southern Iraq as we know it today.

17:30 - 18:00

2.f (ROOM:23.0.49) Andrea Squitieri - Imperial economy and technological innovation: the case of grinding tools under the Empires of the Near East.

Andrea Squitieri (Heidelberg University)

Ancient Empires were particularly concerned with the extraction and management of resources for the production, collection and storage of food. Their food policies left in many cases visible archaeological traces in both material culture and landscape. A less studied change related to imperial food policies concerns grinding tools. These were used to produce flour for bread, which was a fundamental aliment in the ancient diet and often mentioned in written sources as a part of rations, consumption events and religious rituals. During most of the 1st millennium BC, the Near East was ruled by a sequence of large empires, namely the Assyrian, Babylonian, Persian, Parthian and Roman Empires. During this long period, grinding tools underwent several design changes, with innovative tools being introduced such as the Assyrian mill, Olynthus mill, Pompeian mill and the rotary quern. This paper will discuss such design changes and argue that the need of empires to scale up the production of bread flour stimulated the introduction and diffusion of innovative grinding stones. However, not all designs proved to be successful, as some only lasted for a few decades, in contrast to others which lasted for centuries. The reasons for this discrepancy will also be discussed.

17:30 - 18:00

3. (ROOM:15A.1.13) Hashem Khries and Taher Al-Gonmeen - A Mameluke Period Terracotta Oil Lamp from Umm Zweitineh, Central Jordan.

Hashem Khries and Taher Al-Gonmeen

This paper provides a preliminary but a comprehensive examination of a terracotta oil lamp retrieved through a salvage excavation conducted at the Islamic site of Umm Zweitineh in central Jordan. The archaeological site has suffered urbanization and losing its cultural identity as a result. Therefore, a team of archaeologists on behalf of the Department of Antiquities visited the site for conducting a rescue excavation to avoid further damage and saving material culture as much as possible. The campaign for the excavation of the cave took place between 23 June and 19 July 2012. Because of previous construction work at the site, the material cultural remains are mixed with accumulated debris. Therefore, the unearthed archaeological objects from the 12th to the 14th centuries, including the oil lamp being studied, have not been attributed to specific contexts (e.g., rooms), or loci or strata in the archaeological record. This article attempts to shed more lights on the Mameluke period pottery assembly known elsewhere in the Levant. Due to budget constraints, there was no possibility to conduct a petrographic analysis. Instead, the authors set out to explore the fabric and decorative scheme of the juglet by the naked eye and to describe the fabric and decoration colours according to the Munsell Chart. We presented it typologically and dated it based on parallels from well-dated sites, especially Hesban, since its decorative scheme, production technique and shape were commonplace in the region of Syria–Palestine from the 12th through the 14th centuries.

18:00 - 18:30

1.a (ROOM:22.0.11) Francesca Balossi Restelli et al. - At the foot of the hill. Results of the first geophysical campaign in the lower town of Arslantepe.

Francesca Balossi Restelli (Sapienza University of Rome), Marilena Cozzolino (University of Molise), Federico Manuelli (Italian National Research Council, Institute of Heritage Science), Paolo Mauriello (University of Molise)

The site of Arslantepe (Malatya/Türkiye) has been excavated with continuity by Sapienza University of Rome since 1961. This has allowed the reconstruction of a very detailed occupation sequence that stretches from the end of the 5th millennium BCE to the Byzantine period, leading to the recent introduction of this extraordinary place in the UNESCO list of World Heritage sites. However, the lower town that probably developed at the foot of the hill has not yet been focus of research. During the 2022 excavation season, thanks to a collaboration with the CNR and the University of Molise, a geophysical survey has been conducted in an area extending from the bottom of the northern slopes of the mound. The non-invasive electric resistivity survey covered approximately one hectare. The paper will present the results of this geophysical campaign, illustrating its background, methodology, data interpretation, potential impact on the site´s settlement and future perspectives.

18:00 - 18:30

2.e (ROOM:14.2.80) Dorota Ławecka - On Eridu and other Mesopotamian “palaces”

Dorota Ławecka (University of Warsaw)

The only south-Babylonian Early Dynastic building often regarded as a palace is a structure discovered on tell 2 in Eridu. It is still, even in recent publications often considered as a palace without any reservations or comments, and - what is equally important - it serves as a main argument on the function and as a decisive analogy with some currently discovered edifices (Kish, Abu Salabikh). Therefore it seems to be beneficial to assemble and review in detail all arguments for and against the palatial character of this building. In the opinion of the author of the presentation, despite its monumental appearance, it does not display any unequivocal palatial features and there are crucial reasons against such an interpretation, precluding the use of an Eridu building in the discussion on Mesopotamian palatial architecture.

09:00 - 09:30

1.a (ROOM:22.0.11) Yoshihiro Nishiaki - Architecture and household activities of Late Pre-Pottery Neolithic B communities at Tell Seker al-Aheimar, Upper Khabur, northeast Syria.

Yoshihiro Nishiaki (University of Tokyo)

Tell Seker al-Aheimmar, excavated by a team from the University Museum, University of Tokyo, between 2000 and 2010 is practically the only Neolithic settlement in the Khabur basin containing well-documented Pre-Pottery Neolithic B (PPNB) occupation layers. This paper examines its excavation records to characterise the late PPNB-period architecture and household activities of this settlement. A case study conducted on Level 13 of Sector C, dated from about 7000 cal BC, reveals a well-preserved architecture, indicating a unique community life and household activities) in this period of the Khabur basin. This finding deepens our understanding of the emerging regional variability in the cultural traditions of the late PPNB in Upper Mesopotamia.

09:00 - 09:30

1.a (ROOM:23.0.49) Rocco Palermo et al. - Rural archaeology in late 1st millennium BCE Mesopotamia: excavations at Girdi Matrab (Iraqi Kurdistan).

Rocco Palermo (Bryn Mawr CollegeUniversity of Pisa) and Nathalie Brusgaard (Aarhus University)

This paper presents the results of the first field season at the site of Girdi Matrab, in the plain of Erbil, Iraqi Kurdistan. Girdi Matrab represents a unique case in North Mesopotamia, as its excavation focuses specifically on the post-Assyrian period, with a particular attention to the dynamics and socio-cultural phenomena that shaped the settlement and its region in the period between the fall of the Assyrian Empire and the development and consolidation of the Seleucid, Parthian, and Roman rule in the area. Through the analysis of the surface collection, the geophysical investigations, the unearthed remains, and with the aid of targeted zooarchaeological analyses, we aim at interpreting the domestic economy of a rural settlement in the interconnected and globally oriented age of empires of the late 1st millennium BCE and the early 1st millennium CE.

09:00 - 09:30

1.b (ROOM:15A.2.11) Oystein Labianca - Shaping Global History Narratives of the Southern Levant: Lessons Learned from Tall Hisban and the Madaba Plains region in Jordan.

Oystein Labianca (Andrews University)

In their exertions to move beyond the Orientalist roots of much received ANE research, many archaeologists and historians working in the region are today seeking to find a way forward for a post-colonial approach to the region's past. My own exertions along these lines have led to global history as a possible way forward for our field of study. Having traveled down this road for some time, I have by now learned quite a lot about the challenges involved in implementing this new approach. In a recent issue of Archaeological Dialogues (2022), Corina Riva and Ignasi Grau Mira critically examine a major challenge, namely how to connect the macro-scale with the micro-scale. They posit as a way forward a multi-scalar approach that involves ongoing mediation between these two scales of analysis and use as their laboratory for this endeavor the 1st-millennium B.C. Mediterranean. But what does such an approach look like for the Southern Levant? The presentation will interrogate this problem drawing on lessons learned in the course of two decades of effort to situate the multi-millennial past of Tall Hisban in the Madaba Plains region of Jordan within a global history narrative. To this end, the presentation will critically examine certain theoretical constructs that have been tried as a means to a more inclusive, post-colonial narrative of the past of Tall Hisban and its surrounding region. These include the food systems research methodology; the Great and Little Traditions framework; the Endemic Polycentrism Hypothesis and the notion of a Southern Levantine Cultural Paradigm. These constructs will be examined not only in terms of their usefulness in resolving the micro-macro problem highlighted by Riva and Grau, but also in terms of their relevance as means to heighten public awareness of the contribution of archaeology to advancing understanding of the root causes of our planet facing a hot-house future. The presentation will channel a number of related themes recently published in the volume Levantine Entanglements: Cultural Productions, Long-Term Changes and Globalizations in the Eastern Mediterranean (2021).

09:00 - 09:30

2.e (ROOM:21.0.54) Gaia Cecconi - Countdown to urbanization: Tallies and counting tools from the EBA Southern Levant.

Gaia Cecconi (La Sapienza University, Rome)

The aim of this paper is to offer a new perspective of the urban revolution in the Southern Levant during the Early Bronze Age (EBA), through the analysis of tokens and tallies' distribution. Despite the thesis of D. Schmandt-Besserat, several discoveries, recent and not, in Ancient Near East and in Egypt have confirmed the use of tokens after the Neolithic Age until the Neo-Babylonian Empire, although the topic has not yet been addressed for the Levant. On the other side, the latest studies (as for examples researches of L- Bennison-Chapman) offer a new perspective of the use of counting tools in the Neolithic Period, as tools with a "social-symbolic" meaning that is not always connected with administration or urbanization. The EBA Southern Levant offers some case studies, published and not, like Khirbet al-Batrawy, Tell es-Sa'idiyeh, Khirbet Kerak and Jericho, that are perfect to prove this new interpretation and describe a new relationship between urbanization and tokens.

09:00 - 09:30

2.f (ROOM:15A.2.13) Francesco Bianchi - Eastern Anatolia as a pathway between the Southern Caucasus and Northern Mesopotamia in the LBA.

Francesco Bianchi (Ludwig-Maximilians-Universität München)

The study of the communications, exchange and trade between the Southern Caucasus and Northern Mesopotamia
in the Late Bronze Age is presently hindered by a serious dearth of archaeological and textual data regarding Eastern Anatolia, which lies in-between. In fact, Hittite and Middle Assyrian sources only rarely mention the Northern and Eastern parts of this wide region, where the number of excavated LBA sites is also extremely low. While awaiting for new data, this paper tries to bridge the information gap by implementing a Least-Cost Path Analysis to evaluate the possible impact of geographical features on the communication networks between some paradigmatic South-Caucasian sites and Northern Mesopotamia and to locate Least-Cost Corridors through which these relations might have taken place.

09:00 - 09:30

4.a (ROOM:15A.0.13) Pearce Paul Creasman - The American Center of Research & Sharing the History of the Past.

Pearce Paul Creasman (American Center of Research)

This paper will (re)introduce colleagues to the American Center of Research (“ACOR”; formerly American Center of Oriental Research) and its ongoing efforts to address public outreach, scientific networking, and the advancement of knowledge in the region. Since the onset of the pandemic, ACOR has revised its mission statement and strategic plan, initiated several new field and archival projects, expanded the services it offers to the field, and added fellowship opportunities, all of which will be highlighted. ACOR seeks to be a more impactful implementer and supporter of our collective efforts to share the history of the past and will discuss how it plans to do so.

09:30 - 10:00

1.a (ROOM:22.0.11) Salih Kavak et al. - New archaeobotanical evidence from 6th millennium inner west Anatolia: a case study from Kanlıtaş Höyük.

Salih Kavak (Gaziantep University, Turkey), Halil Çakan (Çukurova University, Turkey), Ali Umut Türkcan (Anadolu University, Turkey)

Early Chalcolithic settlement Kanlıtaş which is dated to the early 6th millennium BC, is located in the western part of Eskişehir, adjacent to the southern Marmara region. Excavations between 2014-2019 revealed a hilltop settlement on a rock similar to the sister site Orman Fidanlığı which was also excavated in 1990’s and gave clues on a different cultural region that has affinities with Early Balkan Vinca culture. Although Orman Fidanlığı has been studied in detail, we don't have any archaeobotanical evidence. So until the excavations in Kanlıtaş, there wasn’t any archaeobotanical evidence for inner West Anatolia among southern Marmara and Center Anatolia, which makes this area a bridge in the western part of Anatolia. With the archaeobotanical studies in Kanlıtaş right beginning of the excavations to the end, detailed and complete archaeobotanical perspective of the region in Early Chalcolithic Period is present. In this study, the archaeobotanical materials give detailed insight into the agricultural resources and practices of inner West Anatolia on the coordination of Çukurova University specialists. Samples for archaeobotanical analysis were collected from different archaeological contexts (silo, pithos, hearth, oven, midden, grave). A total of 2669 litres of soil samples (203 samples) were floated and quite a lot of plant remains were obtained.These results show that the people of this period used mainly agricultural products together with gathering life. Especially einkorn and emmer have been the products that have the most important role in nutrition. In addition, barley and legumes grown for both humans and animals are among the plant remains unearthed. Lithic evidence of silica on some flint blades were used in harvesting cereals as well as reeds. This situation also provides important information about the tools used by the people of the period in agricultural activities. Noteworthy are large amount of plant remains which were found in the grave recorded as the earliest human being of Kanlıtaş and Upper Porsuk Valley so far. Considering the diversity of seeds, it is thought that these seeds were deliberately left in the grave and this may be a ceremonial ritual. The teeth analysis also showed depending on carbohydrates with cereals.

09:30 - 10:00

1.a (ROOM:23.0.49)Tim Boaz Bruun Skuldbøl et al. - The Danish Archaeological Expedition to Iraq: a decade of work investigating Late Chalcolitic urbanism in Iraqi Kurdistan,

Tim Boaz Bruun Skuldbøl (University of Copenhagen), Carlo Colantoni (Independent researcher), Mette Marie Hald (National Museum of Denmark), Jill Weber (Independent researcher), Henrik Brahe (Portugal), Attila Király (Eötvös Loránd University)

Beginning in 2012, the Danish Archaeological Expedition to Iraq (DAEI) has undertaken ten seasons of archaeological fieldwork on the Rania Plain, Iraqi Kurdistan. Work consisted of extensive excavations at the sites of Babukur and Girdi Gulak and intensive settlement pattern survey across parts of the plain. DAEI’s investigations have revealed distinct urbanisation processes emerging in the Late Chalcolithic period. These resulted in the development of a complex dispersed urban form driven by a combination of both localised and external forces. Factors include the environmental setting and location of the Rania Plain, local societal organisation, and extensive cross-regional interaction networks at play in the Late Chalcolitic period. DAEI will discuss the implications of localised urban trajectories for wider Mesopotamian urban studies.

09:30 - 10:00

1.b (ROOM:15A.2.11) Katherine Shead - Using and managing problematic data.

Katherine Shead (Macquarie University)

Many older excavation reports are problematic and challenging to use and the archaeology of Southern Mesopotamia is no exception. In many cases archaeologists aim to excavate new sites to access reliable data, but this is not always possible. Opportunities for excavation since 1990 have been limited and many sites were severely looted, impacting future excavation. In these cases it is essential to have robust methods of working with old reports. If they are discarded, these sites will have effectively been destroyed. My PhD thesis strips reports back to a numerical form, processes them statistically, and assesses how reliable any conclusions are. This approach explicitly addresses limitations that remain when the original interpretations are removed, which in turn can identify any usable aspects of the data. By undertaking this method of analysis we can breathe new life into sites that have been ignored due to their problematic reports and make a broader group of sites available for archaeological analysis.

09:30 - 10:00

2.e (ROOM:21.0.54) Cloe Curcio - Miniature Liminal Landscapes: Mesopotamian Gardens and Parks as Case Studies.

Cloe Curcio (“Tor Vergata” University of Rome)

Gardens and parks are known in Mesopotamia from the 3rd to the 1st mill. BCE. I propose to interpret those spaces as designed miniature landscapes and to observe their liminal implications, which have not been considered in previous scholarship, through the lenses of the “liminal landscape” model, subject of my Ph.D. research. For three millennia, gardens and parks were conceived as vehicles for ideological programs and perceived as in-between, marginal areas. The liminal connotation of such places can be traced back to three main, complementary processes: they may materialize a symbolic and/or concrete boundary, thus being conceptualized as liminal spaces themselves; they may be symbolically or physically placed in liminal spaces; they may recreate culturally perceived liminal contexts.

09:30 - 10:00

2.f (ROOM:15A.2.13) Sara Quaggio - Re-analysis of the socio- economic relationship between Mesopotamia and Magan.

Sara Quaggio (University of Pisa)

Between the end of the fourth and beginning of the third millennium BC, societies in south-eastern Arabia may not have only reflected but inspired the development of particular technologies amongst neighbouring communities and supported the evolution of early socioeconomic complexity visible in the Gulf. This paper aims at presenting preliminary results of a re-analysis of the socio- economic relationship between Mesopotamia and Magan through the copper trade.
The methodology applied to the data pool collected involves an ad hoc database, network analysis, and parametric and nonparametric statistical tests to examine the data from a statistical-spatial point of view. From 3100-2500 BC, copper trade between ancient Magan and southern Mesopotamia was not only dependent on a binary system of trade relationships, but it also involved several multi-directional scales of exchange that have not yet been fully understood.

09:30 - 10:00

4.a (ROOM:15A.0.13) Amy Richardson et al . - Heritage and Ecotourism for Sustainable Development in Iraqi Kurdistan

Amy Richardson (University of Reading), Roger Matthews (University of Reading), Wendy Matthews (University of Reading), Ali Al-Makhzoomy (University of Reading), Rozhen Kamal Mohammed-Amin (Digital Cultural Heritage Research Center), Kamal Raeuf Aziz (Directorate of Antiquities and Heritage Sulaimaniyah) and Bushra Namat (Slemani Museum)

The Kurdistan region of Iraq is especially rich in archaeological, historical and ecological sites that have enormous potential for the development of sustainable heritage tourism and ecotourism. The cultural and natural assets in Sulaimaniyah Province are an important resource for local communities and an increasing draw for internal and international tourism. Through co-creation of digital and physical resources linked with collections in the Slemani Museum, we have been developing the cultural and natural assets of Sulaimaniyah province within the context of the UN International Year of the Creative Economy for Sustainable Development. Working in collaboration with heritage and tourism professionals and drawing on our work with the Prehistory Gallery of the Slemani Museum, we have been developing strategies for sustainable development of the ecologically and archaeologically important areas of Bestansur and Zarzi in Sulaimaniyah Province. This paper will address the importance of stakeholder inclusion and multivocality in local development strategies, and the use of technology in supporting virtual and accessible tourism.

10:00 - 10:30

1.a (ROOM:22.0.11) Mohammed Al Khalid - Middle or Late Early Bronze Age graves? New data from Ebla’s rampart .

Mohammed Al Khalid (University of Bologna)

This paper will analyse the graves discovered in the rampart of Ebla between 1995 and 2002 in area AA, V and Z, dated to the Early Middle Bronze Age and published partially by Francesca Baffi. The paper will take into consideration the stratigraphic position of these graves into the rampart layers, the pottery assemblage of each tomb in order to illustrate their chronological phase, putting them within the historical context of Ebla.

10:00 - 10:30

1.a (ROOM:23.0.49) John MacGinnis - The Darband-i Rania Archaeological Project.

John MacGinnis (British Museum)

This paper reports on the 2021 operations of the fieldwork in the Darband-i Rania pass in Iraqi Kurdistan. The season was exceptionally productive, with the completion of excavation of the Parthian monumental building at Qalatga Darband and major progress in mapping and understanding the Assyrian fort at Usu Aska.

10:00 - 10:30

1.b (ROOM:15A.2.11) Susan Cohen - Uses and applications of the "Burial Kit" in analysis of Middle Bronze Age southern Levantine mortuary traditions.

Susan Cohen (Montana State University)

The lack of identifiable systemic organization and order in Middle Bronze Age (MBA) burials in the southern Levant is both well-known and well-documented. Yet, despite acknowledging the range of these diversities, many excavation reports and subsequent analyses of southern Levantine MBA burials also include within them discussions of the "burial kit"—defined as a standardized and identifiable grouping of material culture deposited with deceased individuals—and understand the "kit" as an essential component of MBA mortuary traditions, thus implying a commonality. The variability of burial types, methods, and materials found with the dead, however, calls into question the value of the "burial kit" for understanding MBA mortuary traditions without further qualification of what is meant by the "kit" and the ways in which it may be applied to examining such wildly diverse mortuary remains as those found in the MBA. This paper will analyze different categories and types of burials found at sites throughout the southern Levant together with the different expressions of the "kit" found at them in order to evaluate the uses and applications of the "burial kit" as a means of examining mortuary traditions in the Middle Bronze Age.

10:00 - 10:30

2.e (ROOM:21.0.54) Suzanne Richard - A Question of Monuments and Monumentality in the EB IV Rural Period of the southern Levant.

Suzanne Richard (Gannon University)

The Early Bronze IV period in the southern Levant (2500–1950 CAL BCE) has generally been considered by scholars to be a "dark age," "Intermediate Age" or "pastoral-nomadic age." Monumental architecture is generally considered to be synonymous with urban complex societies proclaiming power and authority, certainly not with a "dark age" or rural period. However, for the rural EB IV, under the rubric of megaliths, one can distinguish multiple types and traditions in the built landscape: dolmens, menhir, circles of stone, cairn, tumuli, open-air sanctuaries, associated structures. Added to this are monuments associated with permanent settlements, such as gates, fortifications, and specialized features or industries, all of which betoken a type of "rural complexity in the EB IV. This survey aims to go beyond the monument as object and investigate monumentality; that is, the intersection between agency and materiality in a rural context. A case in point is Khirbat Iskandar's monumental landscape, perhaps cultic, perhaps reflecting ancestor worship, certainly symbolizing memory and community.

10:00 - 10:30

2.f (ROOM:15A.2.13) Karolina Hruby et al. - Ground stone tools as cultural markers: Technological choices of the Kura-Araxes diaspora in the early urban environment of the southern Levant.

Karolina Hruby (University of Haifa), Sarit Paz (Tel Aviv University), Mark Iserlis (German Archaeological Institut, Berlin), Yael Rotem (Israel Antiquities Authority), and Danny Rosenberg (University of Haifa)

The presentation outlines the main conclusions of our research on ground stone tools in contexts of Kura-Araxes (Khirbet Kerak Ware/KKW) presence in the southern Levant during the Early Bronze Age III (ca. 2,900/2,850–2,600/2,500 BC). The study is focused on typo-morphological and contextual analyses of stone tools from Tel Bet Yerah, Tel Yaqush and Beth Shean (Jordan Valley). The paper discusses the interplay between local and migrant traditions with regards to the technological choices pertaining food processing tools. Following that, we consider the potential of ground stone tool assemblages in identifying processes of migration, marginalization, and assimilation. Our observations suggest certain differences in the technological practices of the two cultural entities that reflect distinct approaches to foods and craft production and reinforce the view of the KKW people as marginalized communities in the social landscape of the southern Levant.

10:00 - 10:30

4.a (ROOM:15A.0.13) Karina Croucher et al. - Archaeology and Heritage for wellbeing and cohesion: BReaTHe – Building Resilience Through Heritage.

Karina Croucher (University of Bradford), Adrian Evans, Owen Greene and Andrew Wilson

An interdisciplinary collaboration between archaeology/heritage and peace studies/international development, with partner organisations Mercy Corps, Jordan Heritage and South Azraq Women's Association, has used archaeology and heritage for cohesion and wellbeing among displaced and host communities. Focusing on Azraq town and camp in North Jordan, the project codesigned Cultural Heritage Festivals with community members. During the festivals, Virtual Reality (VR) creations of heritage sites were used to prompt discussion and share stories, along with a celebration or intangible heritage, such as music, dance, food and craft. The VR sties included threatened and destroyed heritage sites (using webscraped technology). VR sites were selected with community members and included places of 'everyday heritage' such as mosques and souks. The events had a remarkable impact on participants, who shared memories and stories, and crucially, built new relationships, supporting resilience across groups and between host and displaced communities.This paper discusses the project and lessons learned, how it addressed Social Development Goals (particularly goal 3), as well as discussing next steps for the innovative use of heritage and technology in this way.

10:30 - 11:00

1.a (ROOM:22.0.11) Sevinç Günel - The cultural development of Çine-Tepecik and the reflection on Aegean archaeology.

Sevinç Günel (Hacettepe University, Turkey)

The geographical structure of the Büyük Menderes (Great Meander) Region, which reflects both the mountains and plains, has been an important aspect of its settled life, and has shaped the social life of its societies. The opening of the deep valley formed by the Büyük Menderes to the Aegean Sea in the west, and its extension to the Central Anatolian plateau in the east, not only affected the socio-cultural life of this region, but also played a role in its active commercial activities. This region hosts evidence that sheds light on early urbanisation processes. Çine-Tepecik, located on the Çine plain near the southern branches of the Menderes, provides cultural data regarding this. The earliest cultural layer in the mound belongs to the Chalcolithic period. The settlement process continued without interruption until the end of the Bronze Age. In Çine-Tepecik, a social life based on agriculture and animal resources, which determined the livelihoods of early societies, stands out. These resources and substance economy have also enabled certain technological developments. Pottery production, clay and marble figurines, marble vessels and ornament art are emblematic of the industrial activities of the period. As a raw material resource, obsidian was obtained from the Cyclades islands and Central Anatolia. Obsidian, which was the main material of trade, made interregional communication and trade active until the end of the 2nd millennium BCE. The social structure in Çine-Tepecik, based on political organisation and a public structure, dates back to the 3rd millennium BCE. Pottery, the chipped stone industry, the metal industry and the weaving industry have revealed that Tepecik was not a closed local culture, but a lifestyle and artistic understanding that communicated effectively with the surrounding cultures. The lifestyles of the societies, the technology they developed and the economic system were decisive in shaping the 2nd-millennium-BCE settlement. In the first half of the 2nd millennium BCE, the attention given to the art of depiction reflects artefacts such as rhytons and anthropomorphic vessels belonging to the cult of the bull that shed light on their religious understandings. Clay and horn models glorified with bull idols show iconographic similarity with the cult of the bull known from the Aegean, Anatolian and Eastern Mediterranean geography. On the other hand, the obsidian and rock crystal vessels of this period highlighted interregional cultural communication and interaction as prestige artefacts produced for the royal or elite classes in the geography covering Anatolia, the Aegean and the Eastern Mediterranean. Tepecik reveals a settlement model that had a strong defence system in the 2nd millennium BCE and actively conducted interregional trade. In the settlement, the official storeroom structures, the pithos – where products are stored by covering them with seal impressions with hieroglyphic characters belonging to the Hittite Imperial period – showed that the land of Arzawa/Mira had a strong economy. The hieroglyphs and the depiction of the Hittite prince on the seal impressions reflect the local administration's connection with the Hittite kings. Çine-Tepecik, on the other hand, has demonstrated its closeness with the Aegean world with Mycenaean paint-decorated sherds. In Tepecik, imported and local Mycenaean paint-decorated deep bowls, stirrup jars and Mycenaean pictorial krater traditions shed light on Tepecik's cultural relations with the Aegean world. The decoration of these vessels shows very typical Mycenaean motifs that are often found on various vessel types from the Late Helladic III B and III C in the Aegean. Çine-Tepecik's geographical position on natural routes, its use of land and sea communication made it one of the central powers of its geography.

10:30 - 11:00

1.a (ROOM:23.0.49) Ibrahim Salman - Early Christian churches in al-Ḥīra, Iraq: preliminary results of the 2022 excavation season.

Ibrahim Salman (German Archaeological Institute Orient-Department)

The late antique capital of the Lakhmid kingdom of al-Ḥīra, located in Mesopotamia, modern southern Iraq, was an essential centre for several coexisting religious communities. Particularly, Christians continuously prevailed at this culturally radiant focal point, also during the early Islamic period. Current research focuses on archaeological and liturgical investigations of Christian buildings in regional and interregional contexts. This paper discusses the results of analyses of two buildings uncovered in 2017, interpreted as churches based on architectural features, liturgical furnishings, and Old Syriac sources. Additionally, it presents the preliminary results of a recent excavation conducted in 2022, as part of the Hira-project funded by the German Research Foundation (DFG). This excavation revealed another building structure and significant findings, such as extensive stucco fragments, and other features that point to ecclesiastical use. In view of the distribution patterns of these and similar buildings, most of them in use in the early Islamic period, but perhaps originating prior to that, we shall discuss potential cultural influences from within and outside the region.

10:30 - 11:00

1.b (ROOM:15A.2.11) Francesca Meneghetti, - The world is a small place: an interdisciplinary approach to the study of miniature pottery from Athienou-Bamboullari tis Koukounninas (Cyprus).

Francesca Meneghetti (Archaeological Research Unit, University of Cyprus)

Dated between the 16th and 12th cent. BCE, Athienou-Bamboullari tis Koukounninas is a long-lived site located in the eastern Cypriot hinterland. The paper focuses on the so-called miniature pottery from Stratum III (late 16th-end of 13th cent. BCE), a period that yielded circa complete 10000 vessels. The final publication dealt with small-size ceramics but did not include the entire corpus, focusing instead on the whole and the nearly whole exemplars (Dothan and Ben-Tor 1983, 53–110). It also interpreted small-size pottery following a biased scholarly tradition that assigns miniatures a votive function. Without completely discarding it, the paper tries to revise this interpretation by studying the findspots of what the excavators termed small and miniature pottery. Further studies on miniaturization, rituality, haptics and apprenticeship will also integrate the archaeological analysis of the material. The aim is to offer an updated and interdisciplinary investigation of Athienou small-size pottery and possibly clarify the actors involved and the circumstances of their manufacture and deposition.

10:30 - 11:00

2.e (ROOM:21.0.54) Gunnar Lehmann - Myth of the Ancient Israelity City.

Gunnar Lehmann (Ben-Gurion University)

The paper discusses the social and economic character of urbanism in ancient Israel during the Iron Age. After examining the question what may constitute an ancient city, it is claimed that most settlements in the Israelite highlands were non-urban, rural settlements throughout the Iron Age which formed corporate communities based on kinship groups. This form of rural, yet complex communities is contrasted by the political centers of patrimonial and entrepreneurial character located mainly in the coastal plains.

10:30 - 11:00 **2.f (ROOM:15A.2.13) Liora Bouzaglou - Cooking fabric recipes and manufacturing technologies a "chaîne opératoire" perspective on Iron Age II cooking pots from Judah**

Liora Bouzaglou (Tel Aviv University and Paris 1 Panthéon-Sorbonne University)

During the Iron Age II in Judah, new types of cooking pots appeared together with the apparent existence of regional production centers of specialized coarse wares. This paper discusses the results of an interdisciplinary project combining technological, typological, petrographic and chemical aspects, aiming 1. to describe the ceramic "chaîne opératoires" (clay selection and preparation, forming and finishing techniques, firing) employed by the Iron Age cooking pots makers in Judah; 2. to determine whether different "chaîne opératoires" were used to make different types; 3. to investigate whether continuity or technical shift occurred in clay recipes and forming techniques from the Iron Age IIA, IIB-C, until the Persian period; 5. to assess the degree of variability/ standardization and specialization in raw materials, pottery technology, and cultural traditions in regional center of productions; 6. to evaluate to what extent was cooking ware imported, on both an intra- and inter-regional scale; 7. and finally to interrogate evidence for
diverse cultural traditions and economic factors in the cooking ware production of Iron Age Judah.

10:30 - 11:00 **4.a (ROOM:15A.0.13) Bill Finlayson et al. - Rewriting the Prehistory of Jordan.**

Bill Finlayson (University of Oxford), Sahar Khassawneh (Yarmouk University), Sam Smith (Oxford Brookes University)

Jordan has a long and important prehistory, with remarkable sites and material culture that span vast swathes of time, representing major stages of human development. With some notable exceptions, early prehistoric archaeological research has been largely written by international researchers, and been marginal to cultural heritage presentation within Jordan. There are real problems with the engagement of Jordanian academics and the wider public in prehistory and a lack of local interest translates into a lack of protection for these sites. Until recently there has been little interest in developing the public archaeology or tourism potential of this period – with the focus on monumental classical and Nabatean archaeology. Prehistory does not figure in Jordanian school education, despite the many resonances with contemporary issues. Our project has worked to raise the profile of prehistory amongst Jordanian researchers and show its relevance to modern life in the origins of herding, farming, and water management, all vital to modern Jordanian society. The intention has been to focus on Jordanian engagement, helping develop Jordanian skills, policies and procedures to research and manage prehistory.

11:00 - 11:30 **Coffee Break**

11:30 - 12:00 **1.a (ROOM:22.0.11) Michele Massa et al. - Intensive survey and geophysics at the Bronze and Iron Age regional centre of Türkmen-Karahöyük: final results.**

Michele Massa (Bilkent University), James Osborne (University of Chicago), Jesse Casana (Dartmouth College), Petra Creamer (Emory University) , Anthony Lauricella ((University of Chicago)

Building on preliminary survey results of the larger Konya Regional Archaeological Survey Project (KRASP), intensive survey at the site of Türkmen-Karahöyük 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. 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. This paper reports the final results of this intensive survey, including the discovery of fragmentary pieces of Iron Age sculpture and another brief Luwian stele. 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 features belonging to a number of satellite mounds in the lower town.

11:30 - 12:00 **1.a (ROOM:23.0.49) Amanda Dusting - Murad Rasu.**

Amanda Dusting (University of Sydney)

The Darband-i Rania Archaeological Project (DIRAP) as part of The British Museum Iraq Scheme has been excavating three sites in Iraqi Kurdistan: Qalatga Darband, Usau Aska and Murad Rasu, since 2016. The most recent season of excavation was undertaken in autumn 2021 when all three sites were investigated. The smallest of these is Murad Rasu, a multi-period tell site on the eastern shore of Lake Dokan. The fluctuating water levels of Lake Dokan are continually eroding the side of Murad Rasu and it is estimated that up to 30% of the northern edge of the tell has been lost over the last five years. Recent looting activity was also noted. This paper will present the latest findings from trenches dug at Murad Rasu targeted to establish a chronology of the site and record areas of robber pits, looting and erosion.

11:30 - 12:00 **1.b (ROOM:15A.2.11) Daniel Berger et al. - The coming of bronze in Central Asia and the significance of the copper-tin deposit of Mušiston, Tajikistan: New evidence from isotopic and chemical analysis**

Daniel Berger (Curt-Engelhorn-Zentrum Archäometrie), Kai Kaniuth (udwig-Maximilians-Universität München), Nikolaus Boroffka (Deutsches Archäologisches Institut), Steffen Kraus1, Ernst Pernicka (Curt-Engelhorn-Zentrum Archäometrie)

The tin deposit of Mušiston in the Tajik Hissar Mountains houses some of the oldest mines of Central Asia. Mining archaeological research and radiocarbon dating proved the mines to have been exploited since the end of the 3rd millennium BC with an apogee during the 2nd millennium. This dating is of special interest as it coincides with the emergence of early bronze technology in the region. The significance of Musiston is based on the coexistence of tin and copper ores in a single mineralisation that – when smelted – give a natural tin bronze which would have been highly sought-after by ancient people. We investigated some 80 bronze artefacts of the Sapalli- and Andronovo cultures (2nd millennium BC) with tin, lead and copper isotope analysis and compared the data with that of the Musiston ores. Excitingly, plenty of bronzes share isotope signatures with the ores which means the first analytical link between bronzes and an ancient tin mine. The results will be the topic of the talk.

11:30 - 12:00

2.e (ROOM:21.0.54) Selin Gür - A Theoretical Approach to Identity in Households: A Case Study from Sirkeli Höyük, Turkey.

Selin Gür (University of Bern)

Sirkeli Höyük is located within the borders of modern Adana, Turkey, and is one of the largest mound settlements in Cilicia. Excavations and geophysical prospections made it possible to understand the location of the residential areas and the organization of the houses within the settlement. This study offers a theoretical approach to the identity of the inhabitants of Sirkeli Höyük based on these house structures, which mainly date to the Late Iron Age, by interpreting them together with the history of the region.

11:30 - 12:00

2.f (ROOM:15A.2.13) Madeline Bowers - Tracing Textiles and Trade in the Aegean and Near Eastern Late Bronze to Early Iron Age Transition.

Madeline Bowers (Macquarie University)

The Aegean and Near East were closely linked during the Late Bronze Age, evident in part through the exchange of textiles and textile technology. The Mycenaean palaces produced textiles on an industrial scale, the exchange of which is indicated by the appearance of Aegean textile motifs and tools at Near Eastern sites. However, the cultural and economic links between the Aegean and the Near East were transformed by the social upheaval and widespread destructions of the Late Bronze Age collapse (c. 1200 BCE). The elite exchange networks of the LBA facilitated by state administrations were destroyed alongside cities and palaces. Nevertheless, there is increasing evidence of social resilience during the Late Bronze to Early Iron Age transition (1200–800 BCE), indicated by interregional contact and exchange occurring at a smaller non-elite scale. This paper explores the idea of social resilience through the continued exchange of textiles and textile technology. A reconstruction of the Aegean textile culture will be presented and linked to similarities in textile production and consumption in the Near East to trace these contact and exchange links.

11:30 - 12:00

4.a (ROOM:15A.0.13) Maria Elena Ronza - Transforming Jordanian Archaeology in a Sustainable Industry: The Decolonization of Jordanian Archaeology through the Active Engagement of the Host Communities

Maria Elena Ronza (Sela for Training and Protection of Heritage)

This paper aims at presenting the work of Sela for Training and Protection of Heritage in Jordan. Sela for Training and Protection of Heritage was established in 2015 with the aim of enhancing the role of Jordanian CRM workers in an attempt to decolonize Jordanian archaeology. Sela was the first company of its kind in Jordan and is still unique. At the time, it represented a major step forward in building long-term economic sustainability for host communities through cultural heritage resource management. Sela attempted and succeeded to enter and build its reputation in an economic and scientific sector that had been dominated almost exclusively by governmental institutions, foreign-led archaeological missions and research institutes for over a century. The mere existence of a company like Sela posed serious challenges to an established system that tends to marginalize and exclude host communities from the management of their own heritage. With the Employment through Heritage Project (EHP), supported by the Drosos Foundation between 2018 and 2022, Sela created the possibility for an equal partnership between government/research authorities and local communities, a partnership in which trained local community members are valued technicians and advisors and not simply unskilled workmen. Sela partnered with the Department of Antiquities of Jordan to improve the legal framework of the Cultural Resources Management (CRM) sector by introducing 21 professional and technical profiles within the governmental system to differentiate career opportunities in the sector. This represented the first step towards transforming what was formerly a seasonal unskilled labor force into a formal workforce of technicians trained in particular sets of vocational skills and expertise. With the formal recognition of roles and competences and with the introduction of employment contracts, Sela has contributed to changing hiring practices in a sector that privileges short-term unregistered verbal agreements. Through training courses, developed as part of EHP, Sela has created a skilled workforce that successfully entered the job market within the newly defined profiles. The objective of EHP was the placement of skilled Jordanian jobseekers into a formalized CRM job market. The offer within the newly formalized CRM job market remains mostly seasonal though, since the vast majority of employment opportunities continue to be offered within foreign-led projects, when those projects are in-country, and by the Jordanian government through socio-economic seasonal initiatives. Nevertheless, even if most of the jobs are seasonal, the high placement rate (over 85%) demonstrates the potential of this job market to become a sustainable industry if planning and coordination between different stakeholders are in place. The greater involvement of the host community and the introduction of job profiles versus the indistinct “qualification” of “workmen” has also facilitated the employment of women in the fieldwork. Sela has successfully engaged an equal number of men and women in its projects, posing serious challenges to a traditionally male-dominated sector. But for the Sela model of community engagement to be truly viable in the long-term, more established cultural heritage stakeholders and especially government authorities will have to foster a legal and professional environment that recognizes and embraces local communities as equal partners in heritage protection. Over the past four years, Sela has played an important role in connecting different stakeholders and has been able to initiate new collaborations and initiatives at the local level, but also to bring new perspectives to the field of CRM and public archaeology in Jordan. Sela acted as a connector between governmental authorities, Jordanian CSOs and international institutions, by offering the opportunity for long-term collaborations. In 2022, Sela launched a new project, JASI (Jordanian Archaeology as a Sustainable Industry), aiming at piloting and formalizing a model of collaboration that triggers synergies among different parties (public and private, national and international, local and global) and aiming at creating multidisciplinary skilled units, capable of implementing a project from inception to completion. As a result, the main employers in the Jordanian CRM field (the Jordanian government and the foreign missions) have the opportunity to contract those units as a team rather than individuals and through this have an impact on all the layers of a community. This paper will present the results and challenges of these two projects.

12:00 - 12:30

1.a (ROOM:22.011) Kathryn R. Morgan et al. - Excavations at Zincirli, Türkiye, 2018–2022: economy, environment, chronology.

Kathryn R. Morgan (Duke University), Virginia Herrmann (Penn Museum), Timur Demir(Gaziantep University), and David Schloen (University of Chicago)

Recent work at Zincirli Höyük in Gaziantep province, southeastern Türkiye, has combined excavation with a holistic program of bioarchaeological analyses in order to broaden our understanding of land use, resource exploitation, and socioeconomic organisation at the site in both the Bronze and Iron Ages. This report focuses on results from the site’s Middle Bronze II destruction level, where comparing evidence from animal bones, seeds and fruits, charcoals, and phytoliths has revealed residents’ strategic use of a diversity of local environmental resources. Specialised activities including weaving and wine processing are also indicated by the combined bioarchaeological and artefactual analysis. Ceramic parallels further demonstrate that the site was enmeshed in long-distance exchange networks, making new 14C dates for its destruction in ca. 1632–1610 BCE significant to broader regional chronologies. New evidence for earlier MB, LB and Iron Age activities will be briefly summarised, as well.

12:00 - 12:30

1.a (ROOM:23.0.49) Konstantinos Kopanias et al. - Preliminary results of the 2022 excavation season in Tell Nader and Tell Baqrta in Iraqi Kurdistan

Konstantinos Kopanias (National and Kapodistrian University of Athens), Panagiota Barlagianni (National and Kapodistrian University of Athens), Erato Vemou (National and Kapodistrian University of Athens, NCSR Demokritos), Pshtiwan Ahmed Ibrahim (National and Kapodistrian University of Athens), Nader Babakr (Director of Antiquities in the Erbil Province)

The excavation of the sites Tell Nader and Tell Baqrta in the Kurdistan Region in Iraq by the National and Kapodistrian University of Athens resumed in June 2022. This paper presents the preliminary results of the excavation in both sites. First will be presented the results of the excavation in Tell Nader. In this Late Chalcolithic site several pyrotechnic constructions have been unearthed, as well as floors and part of walls dated to the late Ubaid period. The second half of the paper will focus on the preliminary results of the excavation in the site Tell Baqrta, located 28km south of Erbil. The 2022 excavation was conducted on top of the Tell, where two rooms of a Late Antique building were revealed, consisting of mudbrick walls and plaster floors, as well as the remains of a staircase.

12:00 - 12:30

1.b (ROOM:15A.2.11) Karolina Joka - The experimental and methodological challenges in the application of 15N and 13C stable isotopes analysis on perennial plants.

Karolina Joka (Adam Mickiewicz University)

Thanks to the advancement of 15N and 13C isotope studies, irrigation and manuring belong to the most intensively studied agricultural practices. They have been developing since the 1980s and have mainly focused on plants with a short growing season, namely cereals, such as barley and wheat, and legumes. The application of this method for studying soil fertilization and irrigation of perennial plants remains poorly developed. The objectives of this paper are twofold. Firstly, it will present the preliminary results of experimental work aimed at establishing the research protocol enabling the application of stable isotopes for studies of perennial crop cultivation practices. It includes, in particular, (i) the differences and challenges in carrying out stable isotope studies between perennials and annually grown plants, (ii) establishing a baseline making it possible to interpret fruit cultivars, and (iii) the recognition of human interventions in the cultivation of perennial plants. Secondly, the paper will outline the results of studies of olive and grape cultivation at the Early Bronze Age site of Tel Qedesh, Israel, in the context of these methodological developments.

12:00 - 12:30

2.e (ROOM:21.0.54) Jeanine Abdul Massih and Shin Nishiyama - Batroun (Lebanon) from the Iron Age to the Roman times: the evolution of the urban occupation.

Jeanine Abdul Massih (Lebanese University) and Shin Nishiyama (Chubu University)

Batroun is a coastal town located about 30 km north of Beirut known for its impressive sea wall the so-called "Phoenician Wall". The city of Batroun is first mentioned in the texts of Tell Amarna and sporadically in the texts of ancient authors until the medieval period when it occupied a strategic position in the Comté of Tripoli. From an archaeological point of view, the city of Batroun has only been the subject to very few field investigations. Since 2018, a joint archaeological mission of the Lebanese University and Chubu University (Japan) has established with the Directorate General of Antiquities of Lebanon a systematic archaeological research programme on the site of Batroun. The problematic of this research focus on establishing the settlement sequence of the city and defining the evolution of the urban and territorial occupation of the site while linking these results to the natural context in which the city is embedded. Therefore, our investigations focused on the western side of the site, linking the remains uncovered in our excavations with the port installations and the sea wall bordering the large maritime quarry. Thus, in the course of our research, substantial evidence of occupations from the Iron Age to the Roman and Medieval periods was uncovered in the old town revealing the boundaries of the city in the different periods and the evolution of its urban installation. In this paper, we will present the results of four years of investigation on the site of Batroun and discuss the strategy of our research and the different conclusions reached regarding the occupation phases from the Iron Age to the Roman period.

12:00 - 12:30

2.f (ROOM:15A.2.13) Shamir et al. - Textile Production, Consumption and Trade in Iron Age in Smelting Sites at Timna, Israel.

Orit Shamir (Israel Antiquities Authority), Vanessa Workman (Tel Aviv University), Naama Sukenik (Israel Antiquities Authority) and Erez Ben-Yosef (Tel Aviv University)

In its initial five years of activity the Central Timna Valley Project has dedicated its efforts to the excavation of several Iron Age sites (12th-9th centuries BC) in the southern Arabah Valley of Israel. The project, headed by Erez Ben-Yosef of Tel Aviv University, explores the ancient exploitation of copper ores at Timna; these were utilised for the production of copper ingots that were traded throughout the southern Levant and possibly the greater Mediterranean region. A few hundred textiles fragments were uncovered. The exceptional preservation conditions in the arid environment of the Timna Valley have permitted – for the first time – an extensive study of a large and unparalleled archaeological textile assemblage from this formative period in the southern Levantine region when Egyptian hegemony was replaced by the emergence of local polities such as the Edomite Kingdom and Ancient Israel. The material will be compared to other sites in the regions of the Southern Levant and Egypt, in order to see diachronic changes and cultural and functional variations. Discussion on technical aspects of the textiles—e.g., fibers, spin directions, weaving techniques, decorations, sewing and quality—will be presented, together with results of analytical studies including systematic radiocarbon dating, dye analysis, and scanning electron microscope examination. This will be followed by a discussion on the chronological, cultural, economic, and social implications of this unique catalogue of textile material. These ongoing studies attempt to reconstruct the ancient journey of the textile fragments from fibre to archaeological deposition while considering their significance within the temporal, geographical and cultural setting. A total of 221 textile objects, 137 threads, 56 cordage and rope items were catalogued. Worth mentioning is tapestry and many colorful textiles. The excavations located at Smelting Camp Site 34/the Slaves' Hill revealed an impressive gatehouse and related features. On both sides of the gatehouse the excavations exposed a wealth of organic finds among the layers of slag debris and textiles. Three items that were dyed with true purple, which is based on extracts from the murex sea snail were discovered at the Iron Age, late 11th–early 10th centuries BCE, copper smelting site of "Slaves' Hill" (Site 34 (examined by Naama Sukenik. Another textile collection comes from Smelting Camp, Site 30 located just next to Site 34.

12:00 - 12:30

4.a (ROOM:15A.0.13) Mariko Makino - Educational approach to cultural heritage under conflict using manga booklets.

Mariko Makino (Research Institute of Cultural Properties, Teikyo University)

Recently, community involvement has become an essential concept in the practice of public archaeology and cultural heritage management. Cultural heritage professionals prepare outreach and educational activities to help community members gain a better understanding of their work and discuss the values of cultural heritage. However, how can cultural heritage professionals implement these educational approaches in conflict zones where the environment surrounding cultural heritage and local communities are significantly changing? In 2022, an educational manga booklet on the history of Ain Dara, an archaeological site located in the northwestern part of Syria, was created and distributed among locals in cooperation with nongovernmental organizations. This study discusses the effectiveness, potential, and challenges of distributing cartoon materials, such us manga booklets, based on a questionnaire survey of local residents.

12:30 - 13:00

1.a (ROOM:22.0.11) Anacleto D'Agostino et al.- Uşaklı Höyük: new results from a site in the hearth of the Anatolian plateau

Anacleto D'Agostino (Università di Pisa), Yağmur Heffron (University College London), Valentina Orsi (Università di Siena 1240 and Research Center for Anatolian Studies, Koç University, Istanbul)

Uşaklı Höyük is the largest archaeological mound visible across the countryside between the cities of Yozgat and Sorgun in north-central Anatolia, at the centre of the territory defined in Hittite texts as the “Upper Land”. The excavations, which began in 2013, brought to light a long sequence of occupation extending from the 3rd millennium BC to the Byzantine period. In recent years, the main focus of the Uşaklı Höyük Archaeological Project has been to reconstruct the history of the settlement during the 2nd and 1st millennia BCE, and understand the shape and extent of the site. Excavations so far document the presence of monumental architecture dated to the Hittite period in the lower town, as well as a stone glacis and fortifications of probable Iron Age date encompassing the high mound. This paper will present an overview of the main results of recent excavation seasons with a focus on stratigraphic sequence, architectural features, and the pottery repertoire.

12:30 - 13:00

1.a (ROOM:23.0.49) Carlo Colantoni et al. - On the Assyrian Frontier. Recent results of the Danish Archaeological Expedition to Iraq

Carlo Colantoni (Independent researcher), Tim Boaz Bruun Skuldbøl (University of Copenhagen), Mette Marie Hald (National Museum of Denmark), Henrik Brahe (Portugal), Mohammad Masoumian (University of Kurdistan)

The Danish Archaeological Expedition to Iraq (DAEI) will present work undertaken at the site of Girdi Gulak on the Rania Plain - located in the Zagros foothills of north-eastern Iraqi Kurdistan. Evidence from excavations at the site suggests that it was an Assyrian stronghold. DAEI will discuss the results and their significance for our understanding of the role of the site within the eastern peripheries of the Assyrian empire in the first millennium BC. Until recently our knowledge of the Assyrian Empire’s eastern frontier was limited. A decade of work in the foothills of the Iraqi Zagros Mountains has shed light on the importance of these borderlands for understanding the expansion and consolidation of the Assyrian empire. DAEI will place its fieldwork into the wider research undertaken in the region, with new evidence
suggesting control of the foothills was important in the domination strategies of the Assyrian state. By placing DAEI’s results into this framework, we can better comprehend the administrative and cultural complexities of the Assyrian presence in this marginal region.

12:30 - 13:00

1.b (ROOM:15A.2.11) Eduardo Torrecilla - The LBA Middle Euphrates as a Geopolitical Border: Reflections on the Archaeological and the Textual Evidence.

Eduardo Torrecilla (University of Castilla-La Mancha)

In the LBA, the Middle Euphrates sites underwent deep political changes. As a natural frontier, the area was targeted and/or dominated by Great Powers like Mittani, Hatti, and Assyria. Recent studies (especially *From Pottery to Chronology,* ed. Otto, 2018) on the archaeology of the excavated sites in the Middle Euphrates (e.g., Tell Meškene, Tell Munbāqa, Tell Bazi) contribute to sharpen the chronological framework and the sequence of events. I aim to compare the archaeological results with the socio-political information supplied by the cuneiform tablets in order to better understand the historical developments in the area as late as the eventual LBA collapse. This is due to the fact that the chronology of the Syrian-type texts from up to three sites is still debated, despite being coeval. Those sites are Emar (Tell Meškene), Ekalte (Tell Munbāqa), and Azû (Tell Hadidi).

12:30 - 13:00

2.e (ROOM:21.0.54) Brita Jansen - In the shade of Gadara - the Tall Zar'a in Hellenistic-Roman times.

Brita Jansen (German Protestant Institute of Archaeology, Amman)

The later Decapolis city of Gadara in northern Jordan was fortified with a mighty fortress in Seleucid times. From there, the city developed into a culturally and politically prosperous centre in Roman times. The settlement on nearby Tall Zar'a, on the other hand, which had been an important settlement site since the early Bronze Age, apparently lost importance the more Gadara developed. But the recent research on Tall Zar'a has provided new clues to examine more closely the parallel development of the two sites and their mutual relations in the Hellenistic-early Roman period.

12:30 - 13:00 **2.f (ROOM:15A.2.13) Carlos Fernández Rodríguez - Iron Age Trade in the Gulf Revisited: An Archaeological Perspective (ca. 1300-300 BC).**

Carlos Fernández Rodríguez (Universidad Autónoma de Madrid)

Mesopotamian written sources report about trade of raw materials, products, people and ideas throughout the Gulf and Indian Ocean during the Third and Second millennia BC. These texts state that places such as Meluḫḫa (the Indus Valley at large), Dilmun (Bahrain) and Magan (i.e., the Oman Peninsula and Mesopotamia's primary source of copper) were relevant locations of that Trade Network. From the second half of the Second millennium BC, Mesopotamia started to source its raw materials from other regions so that the previous golden age of commerce with the Southern Arabian Peninsula languished. During the first millennium BC (Iron Age in Southeast Arabia), Mesopotamian sources show very few references about trade with this area. Theoretically, role played by the Gulf (as a centre of trade) during the Iron Age has lagged, due to the emphasis by the few Mesopotamian texts. However, archaeological discoveries demonstrate that material and cultural exchanges persisted during the first millennium BC as well.

12:30 - 13:00 **4.a (ROOM:15A.0.13) Judith Muñoz Sogas - Hybrid religions in the Eastern Mediterranean: Egyptian and Phoenician conceptions in Greece.**

Judith Muñoz Sogas (University of Barcelona)

Evidence for the hybridization of religions has been attested in Greece, through the presence of many Egyptian statuettes, scarabs and amulets in different sites, such as Kommos in Crete, the Temple of Apollo at Eretria in Euboea, the Temple of Hera at Samos, the Temple of Zeus at Olympia and Rhodes (Ialyssos, Cameiros and Lindos), among other sites. Some of these finds include statuettes of Egyptian gods and goddesses, also worshipped all over the Mediterranean by Phoenician cultures, and seem to be sent to Greece mostly by these Near Eastern merchants. However, some of the most common deities that appear are Bes, Reshef, Amon Ra, Sekhmet, Nefertum and Ptah. These last three represent the Memphic Triad and seem to be associated with the Cretan triad of Apollo, Leto and Artemis. This is a phenomenon that can only be understood within a network of interactions and close contact between Near Easterners and locals willing to accept or integrate newcoming beliefs, as well as practices, techniques, objects and languages that interact and are used in a shared space.

13:00 - 14:00 **LUNCH**

14:00 - 15:30 **General Directors (ROOM:23.0.50)**

14.00-14.15

HE Prof. Fadi Bala'awi , Director General, Department of Antiquities of Jordan: Archaeology in Jordan

14.15-14.30

Prof. Iman Saca , Bethlehem University, on behalf of Jehad Yasin, General Director of Excavation & Museums, Palestine: The state of Archaeology in Palestine Today.

14.30-14.45

Dr Leila Khosravi, Head of the Iranian Centre for Archaeological Research, Teheran: Archaeology in Iran.

14:45 - 15:00

Dr. Kaifi Mustafa Ali, General Director of Antiquities and Heritage, KRG. Kurdistan: Ancient archaeological sites in KRG and main challenges. An overview of activities of the General Directorate of Antiquities and Heritage of the Kurdistan Region of Iraq.

15.15-15.30

Dr. Yitzhak Paz on behalf of Dr. Yuval Baruch, Head of Archaeology Division, Israel Antiquity Authority, Israel: Archaeology in Israel.

15:30 - 16:00 **Coffee Break**

16:00 - 16:30 **1.a (ROOM:22.0.11) Birgül Ögüt and Matthias Lange - Land of the stormgod: Gaziantep/Şehitkamil Survey, Turkey.**

Birgül Ögüt (Humboldt Universität zu Berlin), Matthias Lange (Humboldt Universität zu Berlin)

Numerous archaeological works show the rich heritage of Gaziantep province. It is all the more astonishing that the region of Şehitkamil, the largest county in Gaziantep, has remained widely unexplored. The only exception, the site of Dülük in Gaziantep/Southeast Turkey, is of central importance in this archaeological survey as, on the one hand, it is a significant Paleolithic site and, on the other hand, the temple of the storm god later known as Jupiter Dolichenus, dating from Iron Age II to Roman times, was located in the vicinity. A settlement contemporary to the temple has so far only been excavated at the Hellenistic/Roman site of Keber Tepe/Doliche, which seems to be a new foundation. The settlement structures and settlement network in the immediate vicinity before Hellenistic times are unknown, as is the need for a new foundation. Moreover, due to the rapid expansion of Gaziantep and its industrial areas, known and unknown archaeological sites are threatened with destruction. The first results of the survey, which began in 2022, already illustrate the rich heritage from the Paleolithic to the Ottoman period, which has been documented by numerous finds.

16:00 - 16:30

1.b (ROOM:15A.2.11) Francesca Meneghetti and Enrico De Benedictis - Ex charta lux: a multidisciplinary study of the excavations of Enkomi (Cyprus).

Francesca Meneghetti (University of Cyprus) and Enrico De Benedictis (University of Cyprus)

The LBA Cypriot site of Enkomi played an essential role in the island and the Eastern Mediterranean thanks to its geographical location, copper industry and trade. Two archaeological missions, led by C.F.A. Schaeffer (1934-1974) and P. Dikaios (Cypriot Department of Antiquities, 1948-1958), separately dug Enkomi. Despite the extensive archaeological investigations, only Dikaios published the results of his mission, while the French never released a comprehensive and organic publication. The current inaccessibility of Enkomi and the patchiness of the archaeological record left us with partial archaeological data and unresolved questions about the site. Thus, the paper integrates GIS technology, data acquired through the analysis of the archives of the French mission, and the study of museum collections to examine weighing tools and miniature oxhide ingots. Thanks to this interdisciplinary approach, it is possible to regenerate heterogeneous information otherwise lost and create a unified analytical matrix, allowing new holistic analyses and more cohesive archaeological interpretations of the materials found at the site.

16:00 - 16:30

2.e (ROOM:21.0.54) Shin Nishiyama - The structure of the “lower town” in the Assyrian provincial cities: from the results of the Yasin Tepe Archaeological Project, Iraqi Kurdistan.

Shin Nishiyama (Chubu University)

The Assyrian provincial cities distributed in the Levant, Anatolia, and Mesopotamia have been investigated since the early 20th century. The majority of these cities consist of the “acropolis” mound and the “lower town”. However, the investigations of the “lower town” have been more or less neglected in the majority of cases and the archaeologists tended to focus on the acropolis mound. After the 2000s, several investigations of the lower towns in the provincial cities started to be reported. Yasin Tepe, now confirmed as an Assyrian provincial city in the western Zagros piedmont, has been focused on investigating the lower town since the beginning of the project. After the four seasons of excavations by the Yasin Tepe Archaeological Project, a hypothetical structure of the lower town during the Neo-Assyrian period can be deduced. In this paper, we would like to present the latest excavated results as well as the hypothetical structure of the lower town through comparative analysis with other excavated sites in the imperial territory.

16:00 - 16:30

2.f (ROOM:15A.2.13) Jackson-Tal and Oren Tal - “A Bolt from the Blue” - Vitreous Materials in the Hellenistic Southern Levant.

Ruth E. Jackson-Tal (Israel Museum and Hebrew University of Jerusalem) andOren Tal (Tel Aviv University)

Vitreous materials are defined according to their composition. they are all silica-based but have different proportions and added components. These materials are known since the fourth millennium BCE, and include glazed stones, Egyptian blue, faience, frit and glass. This paper will focus on two vitreous materials; faience and glass, during the Late Hellenistic period in the southern Levant. The southern Levant during this period played a crucial role in the evolution of the glass industry. Therefore, the study of the interactions and influences of the faience and glass industries, their production methods and workshops, distribution and function will be presented, in order to establish cultural and socio-economical patterns.

16:00 - 16:30

4.a (ROOM:15A.0.13) Stephanie Döpper et. al - “You’ll never walk alone” – Smartphone tours to archaeological sites with the ArchaeoTrail App.

Stephanie Döpper (Würzburg University), Luise Loges (University of Glasgow), Deng-Xin Ken Oehler (Goethe University Frankfurt), Iwan Gurjanow (Goethe University Frankfur)

Archaeological sites can offer valuable insights into the past for visitors and local audiences if they are presented well. Often, however, more information is needed than easily available to communicate this knowledge to a wider audience. To fill this gap and make local heritage accessible to people around the world, the ArchaeoTrail project was set up. The ArchaeoTrail App is based on the successful system of MathCityMap, which entails a web portal and an actual app for mobile devices. The portal (www.archaeotrail.org) aims at archaeologists and others working with heritage worldwide. With just a few clicks, texts, photos, audio files and videos can be uploaded in the web portal. By doing so, a new tour is automatically created. In the smartphone app, visitors are guided by their GPS along a suggested route to the various stations of the tour. They receive information in the form of texts and multimedia and there is also an option for a more child-friendly tour with fun quizzes.

16:30 - 17:00

1.a (ROOM:22.0.11) Fikri Kulakoğlu et al. - Recent discoveries at Kültepe/Kanesh

Fikri Kulakoğlu (Ankara University), Luca Peyronel (milan University), Agnese Vacca (Milan University)

Recent excavations in the mound of Kültepe brought to light a series of superimposed structures and associated stratified deposits that are allowing a precise definition of the site’s occupational sequence from the mid-3rd millennium BC to the Iron Age. The paper presents the evidence of the 3rd millennium BC occupation in the central part of the mound, characterised by various public buildings, and the discovery of a monumental stone building dating to the last phase of the Old Assyrian colony period (end of the 19th-18th century BC) in the south-western sector of the town.

16:30 - 17:00

1.b (ROOM:15A.2.11) Mynářová and Cohen - Text and Context: the epigraphic evidence for the MBA – LBA transition in the southern Levant.

Jana Mynářová (Charles University) – Susan Cohen (Montana State University)

Epigraphic sources are extensively used to reconstruct both the political history and reality of daily life in the southern Levant in the second millennium BC. In this respect, the LBA documents – especially those from the Amarna archive – play a dominant role, while the MBA texts are usually not taken into an account. However, the small corpus of epigraphic material found in the southern Levant can also provide information concerning the Middle and Late Bronze Ages in the region, although the dating of several of these texts is still problematic. The latest research in the field of cuneiform paleography, combined with the chronologies produced by recent radiocarbon data, whereby the transition between these two eras is raised by at least a century, if not more, opens new perspectives for the re-examination of this corpus of cuneiform documents. Likewise, re-analysis of the archaeological contexts of these texts informs our knowledge of the economic, social, and presumed organizational frameworks in which they may be read. Combining paleographic and archaeological methods and theory this paper will present an analysis of both the text and the context of epigraphic evidence from the southern Levantine sites from the second millennium BC, in order to situate these materials within the broader social and cultural *milieu* of the region during this period.

16:30 - 17:00

2.e (ROOM:21.0.54) Eleonora Mariani et al. - Shape and function of small palatial buildings in Neo-Assyrian cities.

Eleonora Mariani (University of Bologna), Claudia D'Orazio (University of Bologna), Noemi La Cara (University of Bologna), Giulia Roberto (University of Bologna)

While great importance has always been attributed to the study of the grand royal palaces of Assyria, less attention has been paid towards administrative palace-like buildings which were present as well. This paper aims at analyzing the latter category mainly in the cities of Nimrud, Assur, and Nineveh (but considering also some other cases from the provincial sphere), discussing their typology, origin, and position within cityscapes. A remarkable study case has been brought to light during the new excavations conducted by the Iraqi-Italian Expedition at Nineveh under the direction of Nicolò Marchetti (University of Bologna): the as yet ongoing excavations started in 2019 in area C revealed a small palace, which had a multiplicity of functions including a scriptorium and a library of literary texts dated to the reign of the last king Sîn-šarru-iškun just before the fall of the city in 612 BCE.

16:30 - 17:00

2.f (ROOM:15A.2.13) Marianne Mödlinger et al. - Silvery daggers from Koban and Chmi: their secret untangled.

Marianne Mödlinger (University of Genoa), Elyse Canosa, Giorgia Ghiara, Angelica Salanitro, Pietro Manfrinetti, Marei Hacke, Stefano Trasatti

Some of the Late Bronze Age daggers found in the cemeteries in Koban and Chmi and today held in the Natural History Museum of Vienna, Austria, show some very peculiar surface features: though made of tin-bronze (blade) and arsenical bronze (hilt), the hilts often have a silvery surface, which cannot be traced back to any form of silvering. Similar features were noted also on other arsenical bronzes, mainly daggers and swords, from the Iberian Peninsula and, rarely, from elsewhere in Europe. It was usually assumed that this phenomena is related to the long deposition in the ground and/or to "inverse segregation", i.e. arsenic sweat during casting. However, the reason for the silvery color lays in a specific treatment of the bronze after deformation and polishing, which will be presented for the first time. The observed treatment is the oldest known proof of alteration of an alloy's surface in order to change its color apart from intentional patination.

16:30 - 17:00

4.a (ROOM:15A.0.13) Federico Buccellati - Archaeology for a Young Future: Building Stakeholder Communities and Sharing Heritage Across Borders.

Federico Buccellati (Freie Universität Berlin)

The Tell Mozan/Urkesh Archaeological Project (Syria) has developed a unique program to develop cultural heritage aspects at the site and surrounding communities. Awarded an ILUCIDARE Special Prize in 2020 and the EAA's European Archaeological Heritage Prize in 2022, the project has become a model for outreach at archaeological sites in the wider region. This paper will showcase how the project reaches stakeholders in Syria despite the war, the challenges faced as well as the means by which we have overcome them. The schools project connects elementary and middle school classes in the area around Tell Mozan with their peers in schools located in Europe and the US – pupils from each school learn not only about the other school's heritage, but, in teaching their own past, helps them make that past part of their own heritage. Thus a community becomes invested stakeholders in their cultural heritage. The paper will also look to the future, discussing expansion and the new challenges involved.

17:00 - 17:30

1.a (ROOM:22.0.11) Marco Iamoni and May Haider - Between villages and cities: results of the Northern Lebanon Project in the area of Koura.

Marco Iamoni (University of Udine), May Haider (Lebanese University, 3rd Branch Tripoli)

This paper aims at presenting the results of the survey investigations carried out by the joint Italian – Lebanese team in the region of Koura, located in the area of Northern Lebanon. Somehow forgotten by the systematic research projects, the region of Koura has revealed an impressive landscape of ancient settlements situated in particular in the inner sector of the coast. Survey data of the Northern Lebanon Project allow now to reconstruct the interaction between coastal sites and inner settlements and to understand in more detail the settlement pattern that has characterised the territory since the Neolithic epoch until the Iron Age. In more detail this paper will discuss the nature of the settlement system during the 3rd – 1st millennium BCE, with the possible formation of a specific settlement hierarchy characterising the inner plain of Amioun. This will be discussed in the wider framework of the Bronze and Iron Age settlement pattern of the central Levant, in order to highlight similarities and divergences with other regions.

17:00 - 17:30

1.b (ROOM:15A.2.11)) Yasaman Nabati Mazloumi and Federico Zaina -The endangered Archaeological Landscape of Khuzestan: Assessing Anthropogenic Impact through Multi-temporal Remote Sensing.

Yasaman Nabati Mazloumi (University of Glasgow), Federico Zaina (Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano)

Over the last decades, the study of anthropogenic threats to cultural heritage has received a growing attention by scholars from different disciplines on a global scale. However, despite the importance of documenting the extent and scale of damage to cultural heritage, in particular during armed conflict, there are few attempts to put a spotlight on the rapid anthropogenic changes. This paper attempts to tackle this issue by conducting a damage assessment on a sample area, consisting of 199 archaeological sites located in Khuzestan, Iran. Our methodology relied on the manual multi-temporal remote sensing in four decades (1960-1970-2010 and 2020), first to present a systematic classification of anthropogenic threats and damage and their evolution through time and, second, to challenge their definition as static phenomena. The result of this research shows the concerning sites and landscapes are at risk of damage and destruction from rapid changes following widespread development. This study can help decision-makers to better frame action, policies and other solutions for protecting the heritage of the region.

17:00 - 17:30

2.e (ROOM21.0.54) Enrico Foietta - The Small Shrines of Hatra. Architectural Features, Religious Topography and Chronology.

Enrico Foietta (University of Torino)

Numerous small shrines are dotted across the urban landscape of Hatra confirming the dissemination and spread of the sacral space outside the main Temenos area, where were built the most important temples. These interesting religious structures testify to different traditions, rites, and relations with the local tribes in comparison with that encountered in the main Temenos. These shrines are conformed to an ancient pattern, usually defined as 'T-shaped', with a large antechamber and a narrow chamber opposite the entrance, even if some differences concerning the plan, the orientation, the entrances, the presence of a projecting chamber, and the existence of a temenos are clearly detectable. Fourteen small shrines have been excavated by different Iraqi Expeditions from the 50s and almost three unexcavated structures have been identified via remote sensing. This paper concerns the study of this fascinating group of religious structures, lastly discussed in a book by K.Jakubiak in 2014, stressing the architectural similarities, their location in the urban and religious landscape, the dedication to particular gods or goddesses, and their chronology. Published and unpublished data from the archive of the Italian Archaeological Expedition at Hatra will be crossed to achieve the result.

17:00 - 17:30

2.f (ROOM:15A.2.13) Zahra Kouzehgari - Scythian-Type Weaponry in the Iranian Highlands and the Development of New Warfare Practices in the Region and Beyond.

Zahra Kouzehgari (University Lumière Lyon 2, Archéorient)

A look at the weaponry repertoire at the Iranian Plateau following the late 800 BCE shows a distinct phase in their evolution. Scythian-type weapons appear to have replaced the current Iranian weaponry. Large numbers of Scythian cavalry, with their proficiency in archery techniques, and their high mobility, could have distracted bulky infantries and charioteers using their efficient weapons. These tactics turned the Scythians in to a war-machine difficult to defeat. These archers served as mercenaries in other armies, as evidenced by cuneiform texts and recovered material. These weapons technology, military tactics, and war modes could have been adopted through such collaborations throughout the Near East. The Iranian Highlands played a fundamental role in the adoption and evolution of these warring techniques. Present paper examines the connection between the arrival of the Scythians and changes in weapons in the Iranian highlands from 800 to 300 BCE. I also investigate the specific role of Iranians in adopting, transmitting, and evolving the Scythian weaponry styles, war tactics, and practices within the Near East.

17:00 - 17:30

4.a (ROOM:15A.0.13) Iman Saca - Heritage Education: Heritage as A Teaching and Learning Tool.

Iman Saca (Saint Xavier University)

Heritage education activates knowledge and strengthens relations within a community, between communities and globally with the world community. It focusses on one's own culture, history, and traditions. Heritage education provides a vehicle to protect, preserve as well as strengthen any community's connection to its legacy by generating a sense of pride in its history, geography and heritage. For the knowledge gained from heritage education to be truly successful, it needs to also extend beyond one's boundaries; it must move from a local context to a regional and global one. This larger perspective focuses on our connectedness in this world and the need to better cooperate in order to preserve our regional and human heritage. Heritage education is immersive; it creates educational opportunities which allows students to better understand the linkages between heritage and environmental issues, aspects of general education, preservation and protection, development issues and local and global citizenship education. So, it is argued that heritage education should start at an early age and be incorporated in students' curriculums all the way even through their higher education. Heritage education is a process, a long term relational and experiential process. Research, including work done by UNESCO, support the idea that starting early and incorporating heritage education in various curricula is a natural process to learn about heritage in an engaging and tangible manner as well as help develop a sense of connectedness, pride, and care for the future of one's heritage and the heritage of our shared humanity. The goal is to have individuals who are aware of their heritage, understand its value and become active participants in the processes of protection and preservation, the goal is also for these persons to become involved participants in creating ways to enjoy the benefits of the heritage and facilitate the transmission of this heritage to future generations and to the world at large. In this presentation various heritage education strategies will be discussed; with a focus on lived experiences, stories and traditions, oral histories, as well as creative and experiential learning methodologies of both tangible and intangible heritage. Examples will be presented from my fieldwork and research in Palestine.

17:30 - 18:00

1.a (ROOM:21.0.11) Marta D'Andrea et al. - Seasons 2019-2022 of the Lebanese-Italian Archaeological Project in the region of Tyre, Lebanon: an overview.

Marta D'Andrea (Sapienza University of Rome), May Haider (Lebanese University), Ali Badawi (Directorate-General of Antiquities)

The Lebanese-Italian Archaeological Project in the Region of Tyre is a new collaborative endeavour for the first systematic investigation of previously little know areas in the environs of the Old City of Tyre – the regions of Tell Mashouk, Shawakeer, and Ras el-Ain. This paper reports on the results of the 2019-2022 fieldwork and study seasons concerning the timeline of human occupation from prehistory to modern time, and patterns of urban/rural/maritime interactions in these regions. It also discusses future steps and strategies for sustainable cultural heritage protection and promotion in these unique maritime landscapes and waterscapes.

17:30 - 18:00

1.b (ROOM:15A.2.11) Dimitris Papageorgiou - "Cultures" vs ethnic groups in North Levant archaeology of the Early Iron Age: historiographical pursuits and methodological perspectives.

Dimitris Papageorgiou (National and Kapodistrian University of Athens)

Archaeological research in the Northern Levant during Early Iron Age has fallen short on the topic of ethnic identity so far. Previous studies adopted mainly an evolutionist approach on the material culture, trying to pinpoint elements of cultural continuities or breaks. However, ethnicity is often implicated by most of the scholars, especially, those involved in the discussion concerning the presence/absence of the Sea People in Northern Levant. These "traditional" historical-cultural approaches in archaeology failed to address the question of ethnic identity in its substantial, social, dimension. In this paper, ethnic identity of the people in the past is investigated as a process of comprehension, in a social level, of the feelings of similarity, distinctiveness, and continuity. Adopting the Theory of Practice of Pierre Bourdieu, ethnicity is identified in the archeological field as common, distinct and continuous social *habitual* practices. This approach is implemented in the case study of the Northern Levant during the period of the 12th-10th century BC, supplemented by the indications retrieved from newly published texts.

17:30 - 18:00

2.e (ROOM:21.0.54) Gabriele Giacosa et al. - A capital unveiled: new evidence on the urban layout of Nineveh in the Neo-Assyrian period.

Gabriele Giacosa (University of Bologna), Giuseppe Guarino (University of Bologna), Amira Conley Conversi (University of Bologna), Daniele Alaimo (Independent researcher)

Neo-Assyrian Nineveh represents an unrivalled example of pre-Classical metropolis in Western Asia. However, available information on its urban layout beyond its city walls has been limited so far and is mainly based on sporadic evidence and generic assumptions. The paper aims at revising and updating current interpretations, by dealing with the structural and material evidence from the geophysical analysis and excavations conducted since 2020 in the North-Eastern sector of Nineveh by the Iraqi-Italian Archaeological Expedition by SBAH and the University of Bologna under the direction of Nicolò Marchetti. These operations have led to define an articulated urban plan, with buildings of different sizes organised in a relatively tight grid of streets and alleys, substantially deviating from the mainstream assumption of this area as characterized by gardens, pastures or low-density dwelling.

17:30 - 18:00

2.f (ROOM:15A.2.13) Vemou Erato et al. - Archaeometrical analysis of swords from Hama.

Vemou Erato (National and Kapodistrian University of Athens, National Center for Scientific Research Demokritos),
Filippaki Eleni (National Center for Scientific Research Demokritos), Lumsden Stephen (National Museum of Denmark)

This paper focuses on the archaeometrical analyses of five swords (4 bronze and one iron) found in the cremation cemetery of Hama, kept in the collection of the National Museum of Denmark. Hama is one of the most important sites of North Syria in the passage from the Late Bronze Age to the Iron Age. The swords of Hama in the collection of the National Museum are part of an exceptional type of sword, called Naue II type, of which we have a very limited number in the Near East. Questions concerning the alloy of the swords and their technique of manufacture arise, as well as the treatment of the bronze and the iron on these particular swords. Analytical and microstructural analysis by SEM–EDS and optical microscopy will be followed in order to shed light on the metal manufacture of Naue II type in the funeral context of Hama. Emphasis will be placed on the technical treatment of the artefacts in order to understand the capacity of these weapons. Overall, this contribution will offer an important addition to the analyses of swords from the Near East.

17:30 - 18:00

4.a (ROOM:15A.0.13) Ali Ghalhoud et al. - The Salvation of the Archaeological Site of Sabratha Libya. Collaboration, Training and Optimization of the Protection of a World Cultural Heritage Site

General Al Sunousi, Head of the Libyan Tourist Police Forceand Sotiriou Konstantinos-Orfeas (Senior Expert on the Protection of Cultural Heritage)

The World Cultural Sites have been indicated as places of outstanding universal value for mankind. There are only 1000+ World Cultural Heritage Sites in this world and for that reason, their protection transcends the national interest. Illegal excavations, destruction, vandalism, and terrorist actions in that places could be indelible blots of human history. Unfortunately, many World Cultural Heritage Sites need our help.
One of these World Cultural Heritage Sites is the famous Archaeological Site of Sabratha in Libya which lies 70 km west of modern Tripoli, on the Mediterranean coast. Alongside Oea and Leptis Magna, Sabratha was the westernmost of the ancient three cities of the Roman Tripoli and was established around 500 BCE. A plethora of ancient people such as Phoenicians, Berbers, Greeks, Romans, and Byzantines, to name but a few used this strategic location/port. The remaining archaeological site consisting of 40.000 square meters, is one of the most spectacular sites in the world.
Unfortunately, the Archaeological Site of Sabratha has already experienced several dangerous factors such as war, which eventually led to the absence of a centralized state. Moreover, the lack of sufficient protection was indicated by many international organizations. Last but not least, the site was used as a camp for the so-called ISIS and its malicious activities. As a result, the United Nations, and the European Union alongside other organizations disbursement a significant amount of funding in order to lead Libya to post-war stability. The salvation of the Sabratha was placed high among the scope of these international fundings.
The following presentation wishes to reveal a "success story" of how a national organization, the Libyan Tourist Police

• addressed all the challenges and overcame several difficulties,
• forged a fruitful collaboration with other stakeholders,
• embraced the ongoing security sector reform tense,
• optimized the protection of the Archaeological Site of Sabratha

The main objective of the presentation is to reveal the key points of this success story and to become an example for the future.

18:00 - 18:30

2.e (ROOM:21.0.54) Dieter Vieweger - The City Walls around Jerusalem Through the Ages New Evidence from Mt. Zion.

Dieter Vieweger (Director-General German Protestant Institute of Archaeology, Jerusalem/Amman)

Since 2015, the author has been exploring and excavating on Mount Zion, a strategically important hill in the city of Jerusalem located southwest of the Old City. Based on this work he discusses the existence and dating of the various city walls around Mount Zion from the Iron Age to the Umayyad period. The excavations carried out cast doubt on traditional theses and open new perspectives to shed light on the life of Jerusalem up to the time of the Crusaders.

18:30 - 19:00

2.e (ROOM:21.0.54) Jennifer Zimni - Domestic life in Jerusalem through the Ages. New Evidence from Mount Zion.

Jennifer Zimni (Assistant director, German Protestant Institute of Archaeology in the Holy Land)

The excavations by the DEI on the southern slope of Mount Zion in Jerusalem revealed (in addition to the city walls, cf. abstract D. Vieweger) the ancient living quarter. Starting from the Hellenistic era, throughout the Roman and Byzantine period up to the Early Islamic period, the area was inhabited gapless throughout time. This allows a detailed view on the urban development of Jerusalem's Mount Zion in the longue durée. The paper traces down the living quarter's history from its beginnings to the flourishing Byzantine-Umayyad peak until its decline following the 747/9 earthquake. A focus will be set on the transition from the Byzantine to the Early Islamic period.

09:00 - 09:30

NOT ON THE PROGRAMME ANTMORE -1.a (ROOM:21.0.54) Aktham Oweidi - Archaeology of Jordan today.

Aktham Oweidi (Director of Excavations in Jordan)

The archaeological work in Jordan has increased over the last 30 years. Not only Jordanian teams (from the university as well as from the DoA) work in Jordan, but also a variety of foreign teams. This lecture is giving an overview of the numbers per year, the percentages of different nations working in Jordan and most importantly, the periods, on which these excavations concentrate (country/time period). If possible there is also an overview of the municipalities, where the excavations are carried out.

09:00 - 09:30

1.a (ROOM:15A.2.13) Reza Nafari et al. - Introduction and study of the artifacts from the archaeological survey of Safar Abād Cave - Arsanjān (Fārs)

Reza Nafari (Azad University), Habib Emādi (Azad University), Abouzar Tavakol (Mazandaran University), Sānāz Mardāneh (Azad University), Nedā Nazirzādeh (Azad University)

The mountains and heights of Arsanjān, are among the most important places inhabited by tribes and human groups in prehistoric times. One of these sanctuaries in prehistoric times is Safarābād cave, which is located 300 metres east of Safarābād village. According to the type of tools from this cave, which includes stone artifacts, including simple blades, curved blades, or with reverse polishing, and microblade. The type of findings indicates that most of these tools were used in the Palaeolithic era. In this regard, it may be considered in the category of Palaeolithic caves, which, in addition to blades, combined tools such as sickles were also used in this era. As a result, in addition to the description and introduction of the Safarābād cave, as well as the description and classification of its findings, its relative chronology is discussed. The method of research is also field-documentary research, in which the desired work was documented in the field method, and in the document method, it was then compared and analysed by using library sources.

09:00 - 09:30

2.b (ROOM:15A.0.13) Sari Jammo - Burying the Child in the Neolithic:Insights on Child Burials during the Pre-Pottery Neolithic B and Pottery Neolithic Periods at Tell el-Kerkh, Northwest Syria.

Sari Jammo (University of Tsukuba)

Child burials are an important component of the demography of any society, especially those experienced life stress-related high mortality rates in the Neolithic societies. Children were buried in different interment contexts and spatial locations and subjected to complex funerary practices. The increase of grave goods in child burials, burying inside pottery jars, segregating their burials from adults, and removing and decorating their skulls are undoubtedly meaningful and suggest that the age at death is a considerable matter. This paper discusses the child burials during the transition from the Late PPNB to the PN at Tell el-Kerkh and highlights the social and conceptual changes the role of children had in society.

09:00 - 09:30

2.c (ROOM:15A.1.13) Nazarij Buławka and Hèctor A. Orengo - On the ancient irrigation detection and analysis using advanced remote sensing methods. Preliminary results of the UnderTheSands project.

Water of life: On the ancient irrigation detection and analysis using advanced remote sensing methods. Preliminary results of the UnderTheSands project

Nazarij Buławka (Landscape Archaeology Research Group, Catalan Institute of Classical Archaeology), Hèctor A. Orengo (Landscape Archaeology Research Group, Catalan Institute of Classical Archaeology)

The paper's goals is to present the EU-funded project "UnderTheSands: Ancient irrigation detection and analysis using advanced remote sensing methods" (HORIZON-MSCA-2021-PF-01-101062705). UnderTheSands aims to identify irrigation networks and examine their temporal dynamics using four study areas in Turkmenistan, Iran, and Iraq. The project aims to apply BigData in archaeological research via Google Earth Engine (GEE) cloud computing environment and FAIR research principles. Remote sensing, terrain analysis, hybrid machine learning and deep learning techniques,
archaeomorphology, spatial correlation indices, historical research, and other spatial data sources are all part of the project's methodology. An extended battery of satellite-based datasets will be employed including Sentinel 2 multispectral imagery and Sentinel 1 synthetic aperture radar. On top of that, we will use TanDEM-X data, which will allow us to achieve an excellent spatial resolution and improve the reconstruction of the irrigation network. Due to the diversified environmental characteristics of the areas chosen, we will create a novel workflow for the extensive analysis of irrigation networks. This workflow can then be applied to any other region with resembling traits.
The paper will outline the project objectives and discuss the research issues on ancient irrigation we encountered during the project's first year. The preliminary results of remote sensing and terrain micro-relief analysis will be presented.

09:00 - 09:30

4.b (ROOM:15A.2.11) Francesca Simi et al. - Public Archaeology challenges and perspectives in the Kurdistan Region of Iraq: the case of Faida (Duhok Governorate).

Francesca Simi (Università degli Studi di Udine), Kovan Ihsan Yaseen (Duhok Directorate of Antiquities and Heritage), Daniele Morandi Bonacossi (Università degli Studi di Udine)

In the past ten years, the Kurdistan Region of Iraq underwent a new wave of archaeological projects working in its territory. Thanks to this "renaissance" of archaeological research, the region became a laboratory for the experimentation of new methodologies and approaches in the field. However, only a few virtuous attempts were carried out in the dimension of community engagement, outreach and more in general in Public Archaeology. The paper presents the experience of the Land of Nineveh Archaeological Project (LoNAP) of the University of Udine in the Governorate of Duhok. Here, the project was engaged since its very beginning, in heritage protection and valorisation. Since 2021, LoNAP promoted a series of activities (including a community survey, public events, and site visits) aimed at understanding and improving the local community's perception of the Faida complex where the first stage of a new archaeological park was recently opened to the public. The preliminary results highlight the positive response of the communities and the extreme potential of public engagement at archaeological sites in KRI.

09:30 - 10:00

1.a (ROOM:21.0.54) E.B. Banning and Kevin Gibbs - An enigmatic Yarmukian Late Neolithic site in Wadi Qusaybah, northern Jordan

E.B. Banning (University of Toronto), Kevin Gibbs (Heritage Programming, City of Kingston)

Excavations in 2014, 2018 and 2022 at a small Neolithic site that the Wadi Qusaybah survey discovered in 2012 have uncovered architecture and a long stratified sequence covering several centuries of the Yarmukian, capped by an Early Bronze I occupation. The site's occupation began with a large number of pits dug into a marl while later deposits show both stone-built and mud-brick phases associated with abundant Yarmukian pottery, figurine fragments, lithics, and incised pebbles. The 2022 excavations exposed most of a rectangular mud-brick building belonging to the penultimate Yarmukian phase at the site. The uppermost Yarmukian phase that overlay this included a large stone-founded oval building, while the remnants of an EBI oval building had been constructed within the ruins of the Neolithic oval structure. While the site presents evidence for some change in the decorative style and execution of pottery over the course of the Yarmukian, it lacks true Jericho IX or Wadi Rabah elements.

09:30 - 10:00

1.a (ROOM:15A.2.13) Vahid Alimardani et al. - Toll-Rigi: new evidence from Middle Paleolithic in the southern Zagros, Jahrom-Fars Province .

Vahid Alimardani, Marzieh Mehrzadeh, Sara Kordi (Islamic Azad University, Iran)

Southern Zagros consists of small, narrow, and high plains and mountain valleys that were one of the routes connecting the centre of the Iranian Plateau to the Fars Plain. Despite the connective position of the region, little archaeological research has been conducted in the region and our knowledge of the Palaeolithic period is rare. During an unplanned visit of one of mountain valley at 2019, known as Toll-Rigi, 25km southwest of Jahrom, several lithic artifact were recognized and collected, including cores, flakes, and examined pebbles. Probable evidence of Levallois technique indicates that the collection dates to the Middle Paleolithic, and regarding artifact typology the site was probably a tool manufacturing workshop. The paper will present preliminary reports of studies on lithic tools of Toll-Rigi site.

09:30 - 10:00

2.b (ROOM:15A.0.13) Katarzyna Harabasz - The outstanding burial chamber from the East Area at Çatalhöyük, Turkey.

Katarzyna Harabasz (University of Szczecin)

The paper aims to present the research conducted in 2021 originating from the Neolithic site of Çatalhöyük in Central Anatolia. In particular, the paper will discuss the results of the preliminary burial findings that provides insights into funerary practices occurred during the Late Neolithic period. Altogether 21 burials were found inside the building, related to different phases of its life history, and serving as funerary purposes during its lifetime. Nonetheless, the most interesting space were burial chamber containing the remains of 10 individuals that had been interred in a variety of ways. The results correspond with transformation in burial practices that appeared at Çatalhöyük in the Late Neolithic.

09:30 - 10:00

2.c (ROOM:15A.1.13) Maureen Le Doaré et al. - Remote sensing hydraulic and hydrologic survey of the Uruk-Larsa region unveils new connections between cities.

Maureen Le Doaré (*Archaïos, 20 rue des gravilliers, 75003, Paris*) Jessica Giraud (*Archaïos, 20 rue des gravilliers, 75003, Paris*), *Mathilde Mura (Archaïos, Paris, UMR 7041 ArScAn – VEPMO, Maison de l'Archéologie et de l'Ethnologie)*

Landscapes in the deltaic plain of the Uruk-Larsa region are subjected to constant dune shifting due to strong deflation, exposing previously buried networks of ancient hydraulic structures and fluvial landforms. A remote sensing survey was conducted in the region of Uruk and Larsa using high resolution imagery to enrich the ancient watercourses maps of the desertic plain. It unveiled a new major connection between the two cities and brought new elements to reconstruct a complex hydraulic system over millennia of occupation. This survey also highlighted the use of a recently available open access digital elevation model produced by the European Space Agency, allowing an unprecedented quality for open access DEM in the region and many future applications in archaeological and paleo-environmental studies.

09:30 - 10:00

4.b (ROOM:15A.2.11) Kyle Olson - Archaeology and Modernization: A pivotal encounter in the history of Near Eastern Archaeology.

Kyle Olson (Washington University in St. Louis)

A critical aspect of the history of archaeology is the field's entanglement with foreign aid for development and modernization programs. This connection can be traced back to the efforts of American archaeologists to establish the practice of salvage archaeology to mitigate heritage destruction brought by dam-building during the Great Depression in the US Southeast. After World War II, dam-led regional development became a key domain for foreign-aid spending. Archaeologists rode the coattails of the development contractors and aid agencies into the field, with lasting consequences for the professional, practical, and intellectual development of the discipline. Most famously, archaeologists and their supporters mobilized to "save the monuments of Nubia" behind the rising waters of the Aswan Dam, but several projects in Iran from the 1960s more clearly reveal what was at stake as archaeologists followed in the wake of development experts around the globe during the early Cold War.

10:00 - 10:30

1.a (ROOM:21.0.54) Andrea Polcaro et al. The 2021-2022 Spanish-Italian archaeological campaigns at Jebel al-Mutawwaq: the Early Bronze Age I site and the megalithic necropolis.

Andrea Polcaro (Università degli Studi di Perugia) , Juan Muniz, Alessandra Caselli

The paper will present the results of the 2021 and 2022 archaeological campaigns carried out at Jebel al-Mutawwaq, an EBI site located along the Wadi az-Zarqa, Jordan. In the last campaigns the excavations were focussed both in the settlement area and in the megalithic necropolis. In particular, a domestic unit has been investigated inside the village giving interesting data about the daily life of the EBI community. On the Southern slope of the mountain, outside the wall of the settlement and close to Dolmen 11, a second building has been investigated. The structure (Building 1214) has been interpreted as a food productive centre. Finally, a sector of the Eastern necropolis was investigated. In fact, because of the modern threats to the megalithic monuments, it was important to document the dolmens still preserved. Five dolmens have been excavated and the collected data are precious to reconstruct the funerary rituals and to identify the chronological phases of use of the necropolis.

10:00 - 10:30

1.a (ROOM:15A.2.13) Seyyed Kamal Asadi Ojaei et al. - From lowlands to the highlands: new evidences of Neolithic settlements in the southeastern Caspian Sea.

Seyyed Kamal Asadi Ojaei, Rahmat Abbasnejad Seresti (University of Mazandaran, Iran)

After a 60-year gap following Carlton Stevens Coon's excavations in Hotu and Belt Caves, it has been more than a decade since the Neolithic studies and the process of Neolithization and domestication in the southeastern Caspian Sea region have been resumed. New research and explorations have been carried out in the caves and sites in plain, and Hotu and Belt caves revisited. Also, pottery and stone tool assemblages from past excavations have been reviewed. Even though all of these programs have contributed significantly to the development of Neolithization studies in this region, on the other hand, it has raised new questions; including whether the process of Neolithization and reaching the Neolithic lifestyle can be explained with the two hypotheses of endogenous and exogenous agency that are dominant now? What is the relationship between the slopes and plains of North Alborz and South Alborz in the Neolithic period (specifically the east Sang-I Chakhmaq) which has been determined by the recent excavations at the sites in the plains (Tooq Tappeh and Tappeh Valiki)? So far, the Neolithic and Neolithization studies in the southeast of the Caspian Sea have been focused on plains and areas with an elevation of less than 100 metres above sea level, which were the main core of the beginning of the studies, but the highlands areas have not place in these studies. While the exogenous hypothesis believes that the Neolithization process and the presence of domesticated species in the southeastern region of the Caspian Sea can be explained according to diffusion theories, and the presence of east Sang-I Chakhmaq/Djeituni pottery type states one of its reasons, therefore, there should be connections between these two regions through natural mountain corridors. Therefore, we persuaded a field survey project with the focus of revisiting the sites of the region. Our main goal in this field survey was to find evidence of the connection between the lowlands of northern Alborz and its highlands as well as the southern regions of Alborz during the Neolithic period, therefore in this survey, we carefully investigate not only the lowlands but also the sites in the highlands. In this survey, while finding new sites both in the plains and in the highlands, we also noticed new transregional connections that lead to the formation of new questions.

10:00 - 10:30

2.b (ROOM15A.0.13) Michael Campeggi - A Preliminary Assessment of the Halaf and Ubaid Horizons in the Eastern Tigris Area.

Michael Campeggi (University of Milan)

The transition between the Halaf and the Ubaid (c.5500-5300 BC) represents a crucial moment in the late Prehistory of Mesopotamia. Indeed, the northern diffusion of Ubaid material culture, architecture, and social customs, resulted in profound transformations both in terms of community organization and economic practices among local late Neolithic groups. This paper seeks to provide a preliminary assessment of the data available for tracking such a cultural shift in the Eastern Tigris area in Mesopotamia. Specifically, it will focus on the Erbil Plain where the research carried out by the Italian Archaeological Mission in the Erbil Plain (MAIPE) since 2013 at Helawa has unearthed new data belonging both to the Halaf and Ubaid phases in Step Trench B and Operation C. By adopting a multiscalar approach ranging from survey to material culture analysis, this paper will evaluate the dynamics of the transition between the two horizons both at Helawa and in a wider regional perspective by considering the surrounding key sites where these two phases are attested.

10:00 - 10:30

2.c (ROOM:15A.1.13) Reed Goodman et al. - The Deltaic Origins of Mesopotamian City-States.

Reed Goodman (University of Pennsylvania), Dr. Liviu Giosan (Woods Hole Oceanographic Institution, Woods Hole), and Dr. Holly Pittman (University of Pennsylvania)

We present multi-proxy data that represent the intersection of urbanization and ecological change during the 4th- and 3rd-millennia BCE in Lower Mesopotamia. Specifically, we consider recently collected geoarchaeological evidence in the form of sediment cores and hand augers from the sites and areas of Lagash and Ur to interpret the growth and decline of some of the earlies cities and polities in southwest Asia. Chemostratigraphic and palaeofaunal studies of targeted strata reflect and chronologically constrain geomorphodynamic changes on the Tigris-Euphrates floodplain while ongoing archaeological, remote-sensing, and geophysical investigations indicate contemporary changes in the form and function of important sites. We support these findings with additional sedimentary datasets downstream and situate them within Sumer’s broader textual and art historical record.

10:00 - 10:30

4.b (ROOM:15A.2.11) Ahmed Fatima Kzzo - Fighting Illicit Trafficking of Cultural Property in Jordan.

Ahmed Fatima Kzzo, Helen Malko, Jehad Haron & Pearce Paul Creasman (American Center of Research, Jordan). Aktham al-Abbadi & Mohammad Nasser (Department of Antiquities of Jordan)

The illicit trafficking of cultural property is an international problem, with some nations treating the issue more seriously than others. Recently, the authorities in Jordan have taken major steps to address the issue of looted and trafficked objects of cultural significance. To support the protection of Jordan's cultural heritage, the American Center of Research (ACOR) has initiated a collaborative project to enhance national and international efforts to preserve and protect this heritage and highlight Jordan's role in preventing illicit trafficking across the region. 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.

10:30 - 11:00

1.a (ROOM:21.0.54) Stephen J. Bourke - House, palace and fortification at Pella in Jordan: highlights from the 2023 field season .

Stephen J. Bourke (University of Sydney)

The 2023 field season at Pella in Jordan worked both on the main mound of Khirbet Fahl, and on the high hilltop of Tell Husn to the south. On the north face of Husn, more of the western course of the 4m thick EB II circuit wall was explored, evidently badly damaged by the late EB II earthquake. The 25 x 15m northernmost rubble platform, immediately west of the circuit wall, was fully exposed, revealing a much larger dimension than first anticipated. At the base of the long EB I-II Husn sequence, perhaps two-thirds of an apsidal house of the earliest EB IA horizon was fully excavated, and below the EBIA floors, Late Chalcolithic period pits and clay-lined installations uncovered. On the south face of Khirbet Fahl, excavations explored more of the LB I period palatial architectural contexts in the southeast corner of the complex, further exploring the rooms in which a rich deposit of ceramic, glass, faience, ivory and metal objects were uncovered in 2019, many with close parallels in early New Kingdom Egypt. Below the LB I palatial residence, another 5m of the polished plaster floors of the MB/LB period Courtyard Palace were exposed, along with walling of rooms that line the north side of the courtyard.

10:30 - 11:00

1.a (ROOM:15A.2.13) Hassan Afshari et al. - Neolithic period formation in Southern Zagros: a new assessment based on research in Arsenjan Plain.

Hassan Afshari (University of Tehran), Elham Fotuhi Dilanchi (Diyarmehr Institute for Palaeolithic Research), Hassan Fazeli Nashli (University of Mazandaran, Iran), Parisa Nekouei(University of Tehran)

The Neolithic period emergence in the Near East is one of the most important human events that caused the hunter-gatherer community to change to sedentary farming communities, which naturally led to the formation of villages. This period is characterised by changes in the genetics of the plants through the cultivation of wild plants and selective breeding and taking advantage of some of the potential of wild animals. Researchers believe that these changes first occurred in the late Epipaleolithic period and early Neolithic period about 10,000 to 8,000 B.C. Of course, this is the result of gaining human experience in the late period of Epipaleolithic that hunter-gatherer communities turned to a diet with a wide variety of plants and animals, which Flannery believes is known as a "broad spectrum revolution". So far, extensive explorations have been carried out in fertile crescents from this period. In the eastern region of the fertile crescent and where it is now known as "Zagros", due to little research, there is no complete understanding of this period and the progress and change of the culture of hunting and food gatherer to food-producing. On the other hand, in archaeological surveys of this area, various sites of this period have been identified that only little and incomplete information remains. For example, in the revision of Pal Guerra Cave in Zagros, Iraq, it only provides information about the lives of the people of Zagros from 15,000 to 11,500 B.C. So far, no scientific exploration (not classical exploration) of this period has been conducted with the aim of finding out how the culture of hunting communities has changed to food-producing humans, which includes uninterrupted cultural findings from the end of the Epipaleolithic period and the early Neolithic period. This is if there is a large number of caves and rock shelters with possibly Epipaleolithic and Neolithic layers in Zagros, especially southern Zagros, and it is one of these areas "Arsenjan plain" that it led J. Ikeda in 1977 to the identification of dozens of sites with surface findings from the Epipaleolithic period and the Early Neolithic. In this research, the authors attempt to understand the importance of the Neolithic period of Southern Zagros by field study and library theories, The evidence indicates that the oldest settlement explored from the Neolithic period of Fars is Rahmat Abad Tepe with an approximate history of 7400 B.C. also indicate the domestication of animals and plants. On the other hand, in this part of Zagros, no earlier settlements have been explored and also despite the large number of caves and prehistoric and long-standing areas of relatively suitable climate for settlement, it can be guessed that the origin of plant and animal domestication in Southern Zagros can be found in some of these caves. One of the most important of them is the A4 enclosure in Arsenjan plain, which in their surface findings along with the pebble tool of the Epipaleolithic index, a considerable number of blades and core stones have been obtained by the pressure construction technique which is one of the indicators of the early Neolithic period. By excavation them, it may be possible to get good information about the origins of early Neolithization in Zagros and how the culture of hunter-gatherer community to food-producing in the east of fertile crescent.

10:30 - 11:00

2.b (ROOM:15A.0.13) Rouhollah Yousefi Zoshk - Tehran Plain Between Two Worlds. On the Crossing Borders of an Uruk/Proto-Elamite Identity.

Rouhollah Yousefi Zoshk (Islamic Azad University)

Throughout Ancient Near Eastern history, lowland civilizations of Mesopotamia have been interacting intensively with the Iranian Highlands in various ways, which self-evidently has led to mutual influence. This continuous interaction and balancing between lowland and highland traditions, values and influences resulted in a duality of cultures primarily manifest in the Iranian Central Plateau, and therefore a contact area par excellence. This duality of cultures is particularly reflected in the Cultural Material used in the Fourth millennium BCE of Iranian Highlands, showing a certain degree of biculturalism within the urban population. In this paper, I investigate an approach to the Iranian Central Plateau objects in order to search the dynamic interaction between political, demographic, cultural and economic boundary sets. The focus of this article, pottery evolution during the 4th millennium B.C., for a long period of time has long been recognised as a significant factor in the emergence of complex societies in Iranian Central Plateau. This recent research carried out in Tepe MeymanatAbad and Tepe Sofalin, studied the pottery sequence and evolution during Sialk III6-7 to more complex ones known as late Uruk and Proto Elamite. The authors suggested that the increasing pottery production complexity over time and variation in social complexity at any given point in time could be related to differential requirements of information processing and decision-making. Almost all of the data to be introduced come from Tepe MeymanatAbad, Tepe sofalin, Tepe Qabrestan, Tepe Ozbaki and Tepe Iyqerbolagh in northern ring of Iranian Central Plateau.

10:30 - 11:00

2.c (ROOM:15A.1.13) Jaime Silva et al. - The impact of Lower Mesopotamian aquatic environmental changes on the symbolic elements displayed in early cylinder seals.

Jaime Silva (CHAM, FCSH, Universidade NOVA de Lisboa); Vera Gonçalves (CHAM, FCSH, Universidade NOVA de Lisboa); Ana Satiro (CHAM, FCSH, Universidade NOVA de Lisboa); Maria de Fátima Rosa (FLUL-Centro de História) & Isabel Gomes de Almeida (CHAM & DH, FCSH, Universidade NOVA de Lisboa).

When one investigates Lower Mesopotamia data, it becomes obvious the strong impact that changes within its aquatic environment had in the different dimensions of its inhabitants' everyday life. In what concerns the symbolic and metaphorical spheres, the abundance but also the menaces within the natural rhythms of fluvial courses, lakes, marshes and of the coastal area of the Arab-Persian Gulf inspired many motifs one finds in early Mesopotamian discourses. With this paper, we aim to present our recent project - WATERS, which aims to trace and analyze Lower Mesopotamian aquatic symbols and metaphors in the longue durée (3300-1800 BCE), intertwining Archaeology and History of Religions with Environmental History, particularly focusing on a case-study which examines the possible relation between aquatic changes and the different symbols/metaphors exhibited in some early cylinder seals.

10:30 - 11:00

4.b (ROOM:15A.2.11) Lilas Mohammed Ali - Between theory and practice, a panorama of more than 100 years of history of Syrian heritage conservation.

Lilas Mohammed Ali (Sorbonne University - Paris1)

In 2022, nearly 100 years of heritage restoration work in Syria was completed, marked by its diversity and richness. Historically, the architectural restoration field in Syria is an ancient activity, but it was not in its purely heritage-oriented sense as it is now. This complex activity has succeeded during a century in overcoming most of the local obstacles and presenting its experience in full force at the level of the Mediterranean region. But how did restoration theory become a broadly practical field in an emerging country like Syria? During the first half of the twentieth century, restoration work began to flourish in Syria, especially in historical city centers such as Aleppo and Damascus, then the wave of restoration gradually extended to include many archaeological sites and ruins of ancient cities. Such as Palmyra, Apamea...etc. The annual list of restoration projects became longer and more comprehensive, and the field actors were linked by one goal, which is to rise in this activity and preserve the existing archaeological architectural treasures. On the other hand, the dynamic of these intervention works varied between simple interventions and more complex works, such as restoration, consolidation, and reconstruction, as well as varied in terms of materials and techniques used. Much has been done in a hundred years, but the question of the legitimacy of some of these works and their compatibility with restoration theories remains a matter of debate and needs serious review. Moreover, the compatibility between the theme of heritage preservation, and the loyalty to restoration theories and their limitations, and the necessities and specificity of practical application, these three main themes remain a complex issue in an emerging country like Syria. Add to this the economic, political, and social obstacles that played a major role in shaping
Syrian restoration scene over a hundred years.

11:00 - 11:30

Coffee Break

11:30 - 12:00

1.a (ROOM:21.0.54) Nathalie Kallas and Dominik Bonatz - New season, new insights: Tell Ushayer; a Late Bronze-Iron Age fortress in north Jordan.

Nathalie Kallas (Freie Universität Berlin), Dominik Bonatz (Freie Universität Berlin)

An archaeological site in northern Jordan, close to Irbid, with massive stones from a fortification wall poking out of its surface led visitors to believe the remains are fairly recent, the inhabitants of the nearby village are convinced it is modern. Yet, the investigations of the Freie Univestität Berlin at Tell Ushayer, started in 2018, are telling another story. What seemed to be at first sight a defensive wall surrounding the top of the mound, is turning out to be part of a complex and monumental fortification system. The circular wall alternates with massive buttresses, a gate opens to the east shielded by an outer bastion that also limits the course of the ramp, which in turn is further protected by a second wall and watch rooms. The excavated remains indicate a continuous use and modification of the fortification system during the Iron Age, yet the foundation date of this impressive structure remains so far elusive. This paper will present the recent results from the ongoing project at the site and thought about its role and function.

11:30 - 12:00

1.a (ROOM:15A.2.13) Andrea Ricci et al. - Neolithic in the mountains: a multi-proxy survey of old and new data on early sedentism in the Zagros Mountains, southwestern Iran (HighStepLands).

Andrea Ricci (Kiel University), Ahmad Azadi (Iranian Research Institute of Cultural Heritage and Tourism, Tehran), Daniele Moscone (Kiel University), Birgül Ögüt (Kiel University, German Archaeological Institute, Orient Department, Berlin), Marziyeh Zarekhalili (Kiel University), Niklas Dopp (Kiel University)

Over the past decades, archaeological research has deepened knowledge of core areas of innovation and experimentation of Neolithic life-styles. The so-called “Eastern Wing” of the Fertile Crescent (i.e. the area matching with the Iraqi-Iranian range of the Zagros Mountains) has only recently been more intensively investigated, and as a result archaeological data are largely limited to outdated surveys or excavations conducted at individual sites in several sub- regions. By applying a multi-layered approach that comprises environmental and archaeological evidence, and following a diachronic perspective of the study of settlement patterns, this paper provides a first synthesis of old and new data about the Early and Late Neolithic phases from the mountainous regions of Kohgiluyeh, Khuzestan, Fars, and Bushehr in Southwestern Iran. Three main research questions will be pursued: Where did the Neolithic communities live? Were they integrated in a “Zagros” Neolithic culture under the perspective of settlement choices? Are there temporal shifts in the Neolithisation process along the Zagros?

11:30 - 12:00

2.b (ROOM:15A.0.13) Maddalena Scattini et al. - (In)equality in Death: Burials, Pottery and Society in the early Late Chalcolithic at Asingeran.

Maddalena Scattini (University of Venice), Marco Iamoni (University of Udine), Giovanna Bellandi (Independent reasearcher)

Funerary practices are traditionally considered to be among the best indicators of social inequalities in ancient societies. However, studies have largely focused on the burials of adults to identify signs of social differentiation. Recent evidence excavated at Asingeran (Iraqi Kurdistan), suggests that this view might slightly change. The site has revealed a significant Chalcolithic sequence which has been investigated since 2018 in order to identify the socio-economic dynamics that transformed the ancient communities during the Chalcolithic. Via a preliminary analysis of a group of burials of newborn babies, this paper suggests that initial traces of differentiation can be recognized also in this particular type of funerary evidence. In the second instance, the study of the ceramic evidence and the identification of ceramic parallels with some of the most important sites of the region permits to set Asingeran in a wider context of regional contacts and to propose the occurrence of common lines of development during the Chalcolithic in the Eastern Upper Tigris area.

11:30 - 12:00

2.c (ROOM:15A.1.13) Lucie Cez et al. - The hydraulic system of Larsa (Iraq).

Lucie CEZ (university of Paris IV Sorbonne), Régis VALLET (CNRS-IFPO), Lionel DARRAS (CNRS)

Since the resumption of fieldwork in Larsa in 2019, the first map of the Larsa hydraulic system has been*established by* cross-analysis of drone and satellite images and geomagnetic images. Added to this is *the proofreading of old aerial* photographs and direct field observations. This approach has made it *possible to understand the technical* characteristics of the various hydraulic structures that made up*this complex system, on an intra-urban and peri-urban* scale, and to periodize its historical evolution. Although still incomplete, this network was based, in its final state, on several large canals up to 22 m wide connected to basins of varying size, including an intramural reserve of 26,000 m2 and numerous drainage channels, but also a port area (31,645 m2) to the south of the city. In the surrounding plain,
the network was densified to supply the city with water and to develop irrigation, a process that first affected mainly the western network, fed by the Euphrates and Iturungal rivers and probably initiated by King Gungunnum (1932-1906 B.C.). It culminates with the great works of King Sin-iddinam (1849-1843 B.C.), essentially in the east, fed by the Tigris river.

11:30 - 12:00

4.b (ROOM:15A.2.11) Youssef Kanjou - Aleppo project: Safeguarding of the archaeological cultural heritage in Aleppo and its hinterland.

Youssef Kanjou (university of Tubingen), R. Del Fabbro, A. Kai- Browne , K. Kohlmeyer

The archaeological heritage of the city of Aleppo and its surroundings has been largely destroyed during the Syrian war. This dramatic situation required the formation of a project that would help to limit the destruction and document the ongoing situation. Our project developed into several stages: at first basic information about the archaeological sites in the city of Aleppo and its hinterland were gathered and registered into an Excel database. Later this information was used to develop a more sophisticated database using Google Earth, Locusmap, and QGIS. In addition, the project included damage assessment and dossiers for selected sites, as well as capacity building and training for archaeologists working at the Aleppo Museum. In this contribution, we present the final results of this project, which included 809 archaeological sites distributed in the city of Aleppo and its surroundings.

12:00 - 12:30

1.a (ROOM:21.0.54) Stefan L. Smith et al. - Disentangling the palimpsest of a landscape of survival: new chronometric dating in the ‘‘Black Desert’’ of northeastern Jordan

Stefan L. Smith (University of Helsinki), Marie-Laure Chambrade (Université Côte d’Azur, CNRS, CEPAM, France),Dimitri Vandenberghe (University of Gent, Belgium)

The Harra, or “Black Desert”, of north-eastern Jordan, has been called a ‘landscape of survival’ due to its low taphonomic processes which have resulted in a wealth of preserved structural remains of varying types from millennia of human occupation. This greatly benefits studies of the region’s past, but presents a problem for landscape analyses, as it is difficult to disentangle this palimpsest to identify site construction and/or occupation periods. While some advances have been made in dating structures based on material remains, these results have a low temporal resolution and are often reliant on surface finds. Chronometric dating, as was conducted first at Wisad Pools and more recently at other locations in the region, produces a more nuanced view. The “Western Harra Survey” has since 2017 been taking samples for OSL dating from a variety of structure types, using the method of Athanassas et al (2015). These produce not only precise dates, but can also allow chronological relationships to be established between sites and between areas within sites, providing data on both the archaeological landscape and site morphology. The most recent results will be presented here in their regional context.

12:00 - 12:30

1.a (ROOM:15A.2.13) Mahnaz Sharifi - The Bronze Age in the Lesser Zab Basin, northwest Iran.

Mahnaz Sharifi, (Iranian Center for Archaeology Research)

The Zab River basin contains the cities of Piranshahr and Sardasht in West Azerbaijan and parts of the city of Baneh in Kurdistan.The 3rd millennium BC in northwest Iran is principally marked by the Kura-Araxes culture also known as the Early Trans-Caucasian Culture. In the same chronological horizon, the southern Lake Urmia Basin is traditionally considered as being characterised by a discrete culture, labelled variously as Hasan Ali Ware, and Hasanlu VII or Painted Orange Ware (POW) (Hasan Ali Ware and POW are said to have been two related but discrete phenomena(Kroll 2004, p. 677) , with the former, distinguished by more elaborate designs, being thought to have been .In the Barveh excavations we sought to throw further light on this culture, the arrival of which had obviously brought about tremendous changes. We attempted to refine the existing chronology for the Zab basin in ca. 2800 BC earlier variant of POW. Previous studies illustrated that northwest Iran maintained contacts with regions south of Caucasia and the valleys hemmed in by the Aras and Kura rivers to the north, the Central Zagros to the south, and eastern Anatolia and north Mesopotamia to the west via mountain passes. Recent archaeological data from the adjacent neighbouring regions has corroborated this observation. Therefore, serious investigations in the region have the potential to shed light on broad cultural interactions and evolutions in the middle and northern Middle East. The data from Barveh is thus of considerable importance in this respect, and can improve our understandings of the regional and inter-regional interactions.A foremost purpose of this paper is to look into the ties and connections between Barveh and northwest Iran as a whole, and to explore intra- and inter-regional interactions. Inquiry into the attributes of the POW tradition in this region is of utmost importance as it is not as yet fully understood, and excavations in related deposits are vital. Thus, such studies will help fill the existing lacuna in this period. This becomes especially important if we recall that no excavation in the Lower Zab Basin has so far covered the EBA. Another important point is the paucity of known sites in northwest Iran in general with the EBA deposits of any considerable depth. In the chronological sequence established by the Hasanlu Project for northwest Iran, in particular the Ushnu-Solduz valley south of the Urmia Lake, Painted Orange Pottery is typical to Hasanlu Period VII. As stated earlier, POW from Periods VIIC to VIIA is generally considered a local phenomenon restrictively found in the Ushnu-Solduz valley and the southeastern Lake Urmia Basin. Barveh can well supplement the limited dataset at hand for Hasanlu VII. An important point about this site is the absence of the Kura-Araxes material culture. Indeed, the latter culture does not seem to have failed to enter the Lower Zab basin, but rather could have simply gone unnoticed or unexcavated so far, and future research might identify it in the region. The existing evidence from Hasan Ali, Hasanlu, the Zab River basin, and Kani Shaie points to a possible spread of POW or Hasan Ali Ware from Lake Urmia to Iraqi Kurdistan. Barveh reveals links between northwest Iran and Iraqi Kurdistan in that the forms in orange fabric typical to northwest Iran in the EBA was produced by the potters at Kani Shaie in buff or cream pastes. Barveh fills a gap between recent excavations in Iraqi Kurdistan and the Hasanlu region in Iran. In the Middle Bronze Age, The exploration of Bard Zard tepe enclosure was aimed at elaborating the sequence of Barde Zard settlement as well as cultural interactions of its residents with neighbouring areas and identifying the features of the Middle Bronze Age there. The excavations of this tepe led to the identification of the Middle Bronze Age settlement and a burial ground. Traditional potteries of Barde Zard (or of Urmia) have similarities to the simultaneous areas of Northwest Iran and Mesopotamia although they have their own cultural characteristics. In other words, Barde Zard potteries are very similar to those of Hasanlu VI, Dinkha IV and Haftevan, VIB. A striking find in Space 1 is a burial in the southeastern corner at a depth of 150cm. The burial is of a female. The skeleton facing westward is 100cm long and 60cm wide. The burial was on the right shoulder and the rocks were placed below the pelvis, head, and legs. It was in the north-south direction. In the late Bronze Age, Akhoran can well supplement the limited dataset at hand for Hasanlu V. An important point about this site is the absence of the middle bronze material culture. Tepe Akhoran is one of the sites with deposits of the Late Bronze Age within the prospective reservoir of the Kani Sib Dam. The main objective of these excavations is to establish the cultural sequence of the site. Other aims include dating the most important settlement attested at the site, and pinpointing the subsistence system of the Late Bronze Age community that occupied it. The nature of the settlement and material culture of the Hasanlu VI period in Dinkhah Tepe and the limitation of the Khabur pottery to the southern areas of Lake Urmia strongly suggest that during this period, people from Mesopotamia migrated to the Ušnu- Solduz valley. In the Piranshahr area, excavations at Akhoran Hill provided evidence of a new bronze tradition in the Zab Basin. The most important cultural material of the Akhorn in the Late Bronze Age is pottery, which is produced in simple and painted sherds. The pottery from Tepe Akhoran is comparable to the material coming from Azerbaijan and Anatolia.

12:00 - 12:30

2.b (ROOM:15A.0.13) Antonietta Catanzariti and Terri Tanaka - Defining Rural Communities in the Highlands of Iraqi Kurdistan.

Antonietta Catanzariti (Smithsonian Institution) and Terri Tanaka (University of California, Berkeley)

Since the inception of the Qara Dagh Regional Archaeological Project, the data collected has been providing an initial picture of the settlements that formed in the highlands of Iraqi Kurdistan, in particular during the IV and III Millennium BCE. This presentation aims to provide some preliminary thoughts on social complexity in Mesopotamia from the perspective of small, rural settlements using the archaeological data collected between 2015–2022 in the Qara Dagh Valley. This perspective raises questions such as how social complexity outside urban centers should be defined, the extent to which these settlements participated in the cultural interactions taking place throughout the region, and the nature of the relationship between such settlements and larger sites in the plains.

12:00 - 12:30

2.c (ROOM:15A.1.13) Melania Zingarello and Monica Moroni - Managing water for better living (and working): an experimental study on Bronze Age Mesopotamian drainpipes.

Melania Zingarello (Oriental Institute, Czech Academy of Sciences), Monica Moroni (Sapienza, University of Rome)

Deep vertical drainpipes are a regular feature of the hydraulic systems in Bronze Age Mesopotamia. They are usually associated with buildings, or they can appear as standalone installations apparently free of any architectural connection. The latter case may occasionally be the consequence of the erosion of mudbrick edifices. Recent investigations in South Iraq have shown the presence of vertical drainpipes in pottery workshops and areas subject to periodic floods in the sites of Tell Senkereh/Larsa and Tell Zurghul/Nigin. This paper presents the preliminary results of the hydraulic modelling carried out by the joint effort of the Dept of Classics and the Hydraulic Laboratory of Sapienza, University of Rome. The experimental reconstruction aims at verifying the drainpipes functioning and assessing their
response to different stress conditions. The ultimate goal is to bring out the possible range of functions of these specific installations according to the different contexts of use.

12:00 - 12:30

4.b (ROOM:15A.2.11) Juan Aguilar et al. - Recovering 2,700 years of an Iraqi cultural heritage site: A multi-temporal virtual 3D reconstruction of Tell Nebi Yunus in Mosul, Iraq.

Juan Aguilar (University of Luxembourg), Ian Carroll (University College London), Ammar Hatem Najm (University of Mosul)

Tell Nebi Yunus in Mosul with its 2,700 years of partially known history is an example of a cultural heritage site which suffered from urban sprawl and ideologically motivated destruction in recent decades. By comparing R.A.F. aerial photographs from the 1920s with satellite images from the 1960s and drone shots from 2018, drastic changes in the physical appearance of this famous mound of ancient Nineveh become visible: First, the city of Mosul expanded after WWII, second, in the 1980s, then-president Saddam Hussein ordered a large-scale remodelling of the Nebi Yunus Mausoleum on top of the hill, which required old houses around it to be razed, third, the centuries-old place of worship itself and the Late Assyrian palace underneath were irreparably damaged by the so-called Islamic State in 2014. How and to what degree of accuracy can this architectural heritage from different time periods be recovered? This presentation provides insights into how historical photographs, maps, and 3D scans can be used to undo the events mentioned above so that Tell Nebi Yunus can be experienced as a multi-temporal virtual 3D reconstruction and represent a case of cultural continuity.

12:30 - 13:00

1.a (ROOM:21.0.54) Jacek Karmowski et al. - On the edge of prehistory: new data from Polish archaeological research in southern Jordan (2019-2022).

Jacek Karmowski, Piotr Kołodziejczyk, Marek Nowak, Marcin Czarnowicz, Barbara Witkowska, Agnieszka Brzeska-Zastawna, Michał Wasilewski, Justyna Zakrzeńska (Jagiellonian University, Poland)

The presentation will discuss the state of research conducted in years 2019-2022 by Jagiellonian University (Poland) team in southern Jordan, with a special attention to the excavations conducted on three important sites. New data derived from these works allow us for a new perspective to be drawn about the human groups that functioned in the southern part of modern Jordan during late prehistory, or to review some old ones. Excavated sites (Umm Tuweyrat, Huseinya, Wadi Feynan 101) build a new image of human presence in this area, showing his everyday functioning, but also elements of spiritual culture as well as interesting attitudes to the surrounding landscape. Umm Tuweyrat site is the dolmens field associated with beliefs and family traditions. According to the recent analysis the preliminary dating places these structures in the period between the Late Chalcolithic and the Early Bronze Age. They represent slightly different forms than other Jordanian dolmens and seem to be a local variation of the borderline formation so-called southernmost cluster of EB I sites. Some of the burials were examined also with a use of DNA analysis. The other two sites represent settlement and farming traditions, preliminarily dated to the period between Chalcolithic and Early Bronze age. Additionally a lot of environmental data has been obtained, which allows for in-depth analysis concerning this important period. In the presentation, we will try to interpret these data, describe the methods of functioning of people from Chalcolithic to the Bronze Age on this area, as well as indicate the gaps in our knowledge, which should be fulfilled by the coming research.

12:30 - 13:00

1.a (ROOM:15A.2.13) Javad Alaei Moghaddam - Research into the settlement status of Sistan in Period IV of Shahr-e Sukhteh (2250-1800 BC).

Javad Alaei Moghaddam (University of Zabol, Iran)

The Sistan plain is one of the ancient regions in the realm of Iranian civilization, which has been very important in different historical eras and gone through various demographic and settlement changes. The major settlement developments in this region began at the end of the 4th millennium BC and have continued to this day with many ups and downs. One of the most important settlement periods in this plain is the Bronze Age, evidence of which has been identified from 3200 BC to 1800 BC (more or less) in this region. According to the chronology of Shahr-e Sukhteh (the largest and most important site of the Bronze Age in the east of the country), the Bronze Age in Sistan consists of four distinct periods. Period I is the period of formation; period II is the period of growth and the culmination of expansion and extensive communication; period III is the continuation of the interruption of the city's development and then the beginning of gradual decline; and finally period IV is the continuation of the process of decline and finally the destruction of the Bronze Age civilization of Sistan. Meanwhile, period IV in Sistan is a special period, the changes and developments of which have received little attention from scholars and archaeologists, and hence two fundamental questions remain unanswered: what was the settlement status of Sistan between 2200 and 1800 BC? And what changes have occurred before the disappearance of habitation in this region? In recent decades, in addition to the site of Shahr-e Sukhteh, several Bronze Age satellite sites of Sistan were excavated, including: Tape Taleb Khan, Tape Sadeq, Tape Dasht, Tape Yalda, Tape Graziani, Tape Rostam and Tape Girdi. Additionally, about 900 sites of the Bronze Age were identified during the archaeological survey of the vast plain of Sistan. According to these studies, very valuable information about the Bronze Age of Sistan was obtained, based on which it is possible to reconstruct the Bronze Age of Sistan as much as possible and reveal many of its hidden aspects. The present article intended to focus on period IV of Shahr-e Sukhteh in Sistan, drawing on the specific results of the archaeological excavations and surveys of the region, as well as examining the settlement changes and developments in neighbouring and distant areas (which have cultural and commercial relations with Sistan in the Bronze Age), to analyse the status of settlement changes at the end of the Bronze Age in Sistan. The results of these studies indicate that concurrent with the decline and destruction of the settlement of Shahr-e Sukhteh, two fundamental changes took place in Sistan at the end of the Bronze Age: firstly, a very specific change occurred in the pottery culture of the region and new types of pottery emerged; and secondly, there has been a change in the distribution and number of sites and the concentration of settlements in the eastern and southeastern parts of the southern plain of Sistan. The typology of the pottery sample from the sites of this period suggests that in addition to the continuity of some types of indigenous pottery type in the region, ceramics similar to the Great Khorasan Culture (BMAC) can infrequently be seen and very little (very weak) evidence of the pottery comparable to the Harappan culture is found, probably indicating a migration of the population from one place to another.

12:30 - 13:00 **2.b (ROOM:15A.0.13) Anne Drewsen - Accepted, socially isolated – or scapegoated?**

Anne Drewsen (Independent researcher)

At the funerary, the individual space for each burial becomes a display for the norms of society. During excavation and research this space also becomes a definition of the norm for the culture and period. However, some burials stand out from the norm, and these atypical burials reflect an approach of society to those not aligning with the societal norms, whether due to physical illnesses or behaviour. Especially for the prehistoric period, we know little of how society viewed those outside the norm, and if e.g. individuals with illnesses were accepted, socially isolated or even scapegoated. In one cemetery, Adaima, situated in Upper Egypt, a cemetery with mainly Naqada II burials may be able to provide a few examples. This cemetery includes several individuals with Pott's disease (TB), but there are also other atypical burials that can be compared using theories on deviancy, chronic pain and individualism.

12:30 - 13:00 **2.c (ROOM:15A.1.13) Simone Mühl et al. - A Boat from the second Millenia BC found in Uruk-Warka, Iraq.**

Simone Mühl (German Archaeological Institute), Mayssoun Issa (erman Archaeological Institute), Max Haibt (German Archaeological Institute), Margarete van Ess (German Archaeological Institute)

Close to Uruk, an almost completely preserved boat, made of bitumen and not preserved organic material, was excavated by a team of the Orient Department of the German Archaeological Institute and State Board of Antiquities and Heritage Iraq. Digitally documented in three dimensions and completely recovered, additional study and preservation take place in the Iraq Museum in Baghdad. In the archaeological buffer zone of Uruk, ancient canals, fields and small settlements as well as production sites that illustrate the rich life of the ancient city are located. At one of the canals, the boat was recovered. It is 7 m long, up to 1.4 m wide and not thicker than 1 cm in many places. The archaeological context shows that it sank at the bank of a river that has since silted up, probably in the Old Babylonian Period, and was overlaid by sediments. First results will be presented.

12:30 - 13:00 **4.b (ROOM15A.2.11) Barbara Couturaud et al. - The rehabilitation of the monumental artworks of the cultural museum of Mosul: a challenge towards Iraqi heritage.**

Barbara COUTURAUD (Musée du Louvre), Zaid Ghazi Saadallah AL-OBEIDI (Mosul Cultural Museum), Ariane THOMAS (Musée du Louvre), Daniel IBLED (Independent restorer)

In 2015, the Mosul Cultural Museum suffered an attack by the Islamic State: after extensively looting the collections, they voluntarily destroyed some of its monumental works. Two years later, at the time the city was liberated, the damage is assessed, and support is quickly organized by launching an international partnership funded by Aliph, in cooperation with the SBAH (Iraqi State Board of Antiquities and Heritage), the Mosul Cultural Museum, the Louvre Museum, the World Monument Fund and the Smithsonian Institution, in order to restore the damaged collections, rehabilitate the building and train the museum team. In this paper, we propose to present the restoration work on monumental masterpieces initiated by the teams of the Louvre Museum and to initiate a reflection on the protection of Iraqi heritage.

13:00 - 14:00 **LUNCH**

14:00 - 14:30 **1.a (ROOM:21.0.54) Marta Lorenzon et al. - TYRAS 2022: Preliminary results of the Finnish-Jordanian survey and excavation project in Northern Jordan.**

Marta Lorenzon (University of Helsinki), Antti Lahelma (University of Helsinki), M. Tarboush (Yarmouk University), Elisabeth Holmqvist (University of Helsinki), Saimi Kautonen ((University of Helsinki), Benjamín Cutillas-Victoria ((University of Helsinki), Stefan Smith (University of Helsinki), Maija Holappa (University of Helsinki), Hussein Al-Sababha (Yarmouk University), Ahmad Al-Shorman (Yarmouk University)

This contribution presents the results of the first season of the Tell Ya'moun Regional Archaeological Survey (TYRAS). That examines the relationship between marginal entities and empires in the Western Asia during the first millennium BCE. TYRAS is a joint project of the University of Helsinki, Finland and Yarmouk University, Jordan. Through survey we investigate an area of 288 km 2 surrounding the multiperiod site of Tell Ya'moun in the Northern Jordan. In our survey work we employed different methods of identifying remotely archaeological sites in the area combining the study of historical satellite-imagery, Least Cost Path Analysis and targeted site survey. One important discovery was the unexplored site of Tell al-Assara, a long and narrow tell oriented N-S and surrounded by monumental ashlar walls. Tell al-Assara was the subject of our first excavation campaign in September-October 2022. Preliminary results indicate a long continuity of occupation spanning, Bronze Age, Iron Age and Hellenistic period.

14:00 - 14:30

1.a (ROOM:15A.2.13) Maryam Dolati and Vahid NooriSorkh Dum-i Luri: historical background and geography.

Maryam Dolati, Vahid Noori (University of Tehran)

Sorkh Dum-i Luri is located 10km southeast of Koohdasht in Luristan state. During the 1917 excavations by Holmes, 1804 objects, including ornaments, seals, pins, tools, vessels, figures and weapons were recovered from layer 2. Ornaments and bronze items are the most abundant elements. A significant number of these objects have unique motifs. Among them there are several objects with Mesopotamian and Elamite styles and various artistic methods of Luristan which include a few inscribed objects translated by Van Loon. Based on the quantity and distribution of objects found within the structure, as well as the architecture, the Holmes team designated the structure as a temple, at least during the seventh and ninth century BC. During this period, people donated gifts to the temple according to their economic condition and social position. These gifts were placed anywhere on the floor or between the wall gaps without any discipline. They were contrary to some previous or next period's temples in that they had storerooms for keeping of objects. The amount of discovered objects and the great variety of them made an appropriate opportunity to generally study this collection of buildings and the mentioned objects. This study was not applied for many reasons. Despite archaeological data and also historical data, after 80 years still there are serious ambiguities about the historical identity of this collection and its creators. The current research in descriptive and analytical attitudes, relying on library and free investigation, has attempted to answer the important questions of this relevance. The researches show that Surkh Dum-i Luri is one of the significant religious kingdoms of Elipi, which was established in modern Lorestan between the 7th and 10th century B.C. The creation of this kingdom seems to be shaped by Kassiten, the aboriginal settlers of this region.

14:00 - 14:30

2.b (ROOM:15A.0.13) Gavagnin Katia - Early Bronze Age burials in the Land of Nineveh: the case study of Gir-e Gomel, Iraqi Kurdistan.

Gavagnin Katia (Ca' Foscari University)

The paper discusses the results of the excavation of the prominent EBA funerary area of Gir-e Gomel covering at least the time period running from the late Ninevite 5 to the mid-second millennium BC. Ten burials dated to the Early Bronze Age have been recovered over the years. Some of them, characterized by notable grave goods, with the presence of precious (gold and silver) and imported materials (shells from the Gulf), indicate long-distance trades and commercial routes. The study of the materials retrieved inside the graves, supported by the new C14 dating, offers an important insight into the material culture of an EBA urban centre in a still unknown region of Upper Mesopotamia.

14:00 - 14:30

2.c (ROOM:15A.1.13) Taichi Kuronuma - Land use, water, site distribution pattern: Landscape transformations of Southeast Arabia between the Early and Middle Bronze Ages.

Taichi Kuronuma (Research Institute for Humanity and Nature)

Previous studies indicate the transformation of the Bronze Age Southeast Arabian society such as the emergence of mobility-oriented lifestyles, site distribution patterns, and material cultures in ca. 2000 BCE, a border of the Early and Middle Bronze Ages. However, recent investigations indicate regionally mosaic conditions of maintained and transformed aspects. This paper examines the site distribution patterns of these periods, and discusses the landscape transformations from the land and water resource use aspects. The data is exhaustively collected from the publications and integrated into the Geographic Information System for inclusive analysis of the local topography and water systems. The result indicates that the geographically uneven condition is highly related to local water availability, and this relationship can be patternised. The transition of subsistence strategies and land use from the Early and Middle Bronze Ages was not uniform and relied on the local environment.

14:00 - 14:30

4.b (ROOM:15A2.11) Deodato Tapete and Francesca Cigna Regional-scale mapping and condition assessment of archaeological mounds in southern Iraq with satellite high-resolution digital elevation models.

Deodato Tapete (Italian Space Agency (ASI), Francesca Cigna (Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR))

First studies showcasing the potential of satellite-derived digital elevation models (DEMs) to search for archaeological tells in Near and Middle Eastern archaeological landscapes date back to the early 2000s. Since then, free and open access global DEM datasets at medium resolution such as NASA's 90 m Shuttle Radar Topography Mission (SRTM) surface model have been increasingly exploited by archaeologists to map tells on a supra-regional scale, and thus analyse past settlement patterns. However, in the specialist literature there is little to no evidence that landscape archaeologists have investigated the improvements brought by higher resolution satellite-derived DEMs, as they were made available by space agencies. To understand how these datasets may support archaeological surveying, we test two high-resolution DEMs generated with (1) interferometric synthetic aperture radar (InSAR) and (2) stereo photogrammetry (i.e. the two methods typically used for DEM generation), and assess their performance in comparison with openly distributed datasets (i.e. 30 m SRTM DEM and the Advanced Land Observing Satellite World 3D–30 m - AW3D30). We selected the 10 m posting InSAR-derived DEM generated from 3 m resolution StripMap HIMAGE mode images acquired by the Italian Space Agency's COSMO-SkyMed SAR constellation, and the 5 m posting stereoscopic Cartosat-1 Euro-Maps 3D DEM made available through ESA's Earthnet Third Party Missions programme and ad-hoc call for R&D applications. The demonstration was run at regional scale in the Governorate of Wasit in central Iraq, where the literature suggested a high density of sites, despite knowledge gaps about their location and spatial distribution.The enhanced observation capability of COSMO-SkyMed DEM was found advantageous to detect both well preserved and levelled or disturbed tells, standing out for more than 4 m from the surrounding landscape. The mapped tells were then compared and cross-validated with those detected using the Cartosat-1 dataset. Combined exploitation of the two DEMs allows improving the knowledge of type, distribution and condition of local archaeological deposits, also in the context of contemporary land use changes and threats for conservation. Archaeological heritage in Wasit is currently at risk of vanishing due to natural erosion and weathering, encroachment of anthropogenic activities (e.g., ploughing,infrastructure projects, modern settlement and dam construction) and looting. DEM integration with Google Earth time lapses (where available at suitable resolution), CORONA KH-4B tiles, 1950s Soviet maps and Copernicus Sentinel-2 multispectral imagery, enabled the identification of looting incidents and tells affected by anthropogenic disturbance (e.g., road and canal constructions or ploughing). While the results of our experiments contribute to the current vivid research on Iraqi archaeological heritage and its challenges for conservation, the developed methodology may stimulate further exploitation in archaeological landscapes with similar characteristics elsewhere, and the future development of semi-automated site and looting detection approaches.

14:30 - 15:00

1.a (ROOM:21.0.54) Simon Halama and Nabil Ali - Sites of the living and sites of the dead in the Jordanian Ajlun mountains: the first two seasons of survey by the Wadi Rajib Archaeological Project.

Simon M. Halama (Ludwig-Maximilians-Universität München), Nabil Ali (Jordan University)

A new German-Jordanian collaborative project has started to investigate the archaeological remains in Wadi Rajib in Northern Jordan. Wadi Rajib is situated in the southern Ajlun Mountains and reaches from their highest peak down to the Jordan Valley. Therefore, it is characterised by wide distinctions in altitude, climate and vegetation. The major aims of the first phase of the project were to assess the full spectrum of archaeological sites beyond previously known settlements from Prehistory to Ottoman times, and to re-evaluate previous survey results. The reinvestigation of settlements and the discovery of smaller sites have already begun to change our image of the occupational history of the valley. Moreover, quarries, wineries, and water mills, among others, reveal various aspects of the economy and the exploitation of the landscape, while dolmen fields and dozens of rock-cut chambers testify to burial customs.

14:30 - 15:00

1.a (ROOM:15A.2.13) Esmail Hemati Azandaryani - A recently discovered Median settlement of Haji Khan site in Hamadan Province, Iran.

Esmail Hemati Azandaryani (Bu Ali Sina University, Iran)

The Haji Khan archaeological sites are located within the precinct of the Ibn Sina Petrochemical Company in the province of Hamadan, western Iran. A single season of excavations directed by Esmail Hemati Azandaryani was undertaken in 2017. During the construction of the complex it was necessary to carry out archaeological investigations, which led to the identification of four areas with archaeological remains, Site A (the Median Temple), Site B, Site C, and Site D. In this paper, the author presents the results of the excavation of Site D whereas 500m to the southeast of Site A and where a settlement of the Median period was discovered.

14:30 - 15:00

2.b (ROOM:15A.0.13) Nina Maaranen et al. - The rise of coastal Middle Bronze Age Levant – bioarchaeological finds from Sidon, Lebanon.

Maaranen, N. (Bournemouth University), Stantis, C. (University of Utah), Kharobi, A. (Masaryk University), Zakrzewski, S.(University of Southampton), Schutkowski, H. (Bournemouth University), Doumet-Serhal, C.(University of Southampton)

The Levantine Middle Bronze Age (MBA, circa 2000-1500 BCE) marks a period of increased trade and regional interaction, spurred on by technological developments. Numerous excavations across the region have provided a wealth of information about this time period, and along them publications of skeletal assemblages have also increased steadily. Available data from Lebanon, however, has remained limited, particularly from larger skeletal assemblages, and more information is required to understand how the development of MBA harbour towns shaped populations at the time. The ancient town of Sidon, Lebanon, was formed at a natural harbour circa 40 kilometres south of Beirut. This site offers a unique opportunity to explore population changes during a time of burgeoning network growth and associated social changes by engaging with both skeletal human remains and the rich archaeological record. The investigation combined isotopes, biological distance and palaeopathological analyses. The exhibit Sidon's increasing role in the maritime network, not just as a mediator but also as a hub that prospered from the commerce siphoned through it.

14:30 - 15:00

2.c (ROOM:15A.1.13) Carmen Del Cerro Linares - Al Madam Falaj System (Sharjah, UAE): Archaeology of Water of Life in the Iron Age.

Carmen del Cerro Linares (Universidad Autónoma de Madrid)

The Autonomous University of Madrid works for two decades at al Madam region, Sharjah UAE, linked to an enormous archaeological area, where remains from Neolithic to Iron Age are documented. One of the most significant finds is a system for obtaining water dating back to the Iron Age, an underground gallery so called *falaj*, as well as the *Irrigation Channel Network Area* where cultures have been located in Antiquity. Our team has understood how water is managed for the maintenance of large palm groves. In al Madam, as in any edge of the desert at any time, water is the *Water of Life*.

14:30 - 15:00

4.b (ROOM:15A.2.11) Yvonne Helmholz - Insights into the Insides of the Archaic Sealings from Uruk.

Yvonne Helmholz (Institut für Vorderasiatische Archäologie FU Berlin)

Several studies dealt with the morphology of clay sealing by analysing the impressions of the backsides to identify the function of these objects. The observations and interpretation poured into the visualisation of the original context of these archaeological finds. The paper wants to provide insights into a current study undertaken on the archaic clay sealings of the Uruk-Warka-Collection at the University of Heidelberg. In this study, a 3-D-Model of the sealing is used as the imaging method to detect the originals once left their impressions remained in the moist clay. Illustration possibilities will be visualized and reconstructions will be discussed.

15:00 - 15:30 **1.a (ROOM:21.0.54) Dr. Nibal Muhesen - Seismic Activities and Threats to Cultural and archaeological heritage in the Eastern Mediterranean Region.**

Seismic Activities and Threats to Cultural and archaeological heritage in the Eastern Mediterranean Region. An overview of the damages scale of the 6th of February earthquake on the Syrian archeological sites.

Dr. Nibal Muhesen (University of Tartous: Faculty of Tourism,TMD. Syria)

While the global heritage community and local experts are saddened to see the archeological record that has resisted natural aging crumble, the emergency response to any disaster must necessarily prioritize the affected local communities. In fact, the seismic waves that hit southern Turkey and north-western Syria last February make no exception for this. In an area already severely ravaged by long conflict and human displacement, the challenges are far more significant than imagined. Notably, the region hosts several key archeological and WHL cultural heritage sites, known for their universal value and local importance for touristic activities, many of which were destroyed partially or totally. Therefore, urgent rehabilitation plans for the affected sites and buildings had to be set up and carried out daily amid challenges. This paper will display the impact of the earthquake on Syrian archeological sites and cultural heritage monuments, based on the data provided by governmental and non-governmental agencies and international organizations operating in Syria and abroad. Also, the paper will be focusing on the four most hit governorates heavily populated in the northeast of Syria and on the Syrian coast where high-ranking Classical and medieval fortresses were damaged (for example the Citadel of Aleppo). Although it's impossible to accurately estimate at present the extent and scale of the damage caused by the earthquake to local communities and their heritage, sadly some of the destruction is permanent. Moreover, aftershocks add more difficulties to the work of the inspection teams and endanger the already cracked heritage structures imposing on authorities the need for continuous monitoring and periodic controls to secure the archeological record in Syria.

15:00 - 15:30 **1.a (ROOM:15A.2.13) Mohammad Masoumian et al. - First results of an archaeological survey project in the Marivan and Sardasht regions of Western Iran.**

Mohammad Masoumian (University of Kurdistan, Iran), Nemat Hariri (Diar Mehr Institute), Janoscha Kreppner (Munster University), Tim Boaz Bruun Skuldbøl (University of Copenhagen), Shiler Amelirad (Heidelberg University), Haamid Norasi (University of Tehran), Hamzeh Mohammad Pour (University of Tehran)

This paper presents the first results of a new regional survey project conducted in the Marivan (Kurdistan Province) and Sardasht (West Azerbaijan Province) regions of western Iran. The regions represent the westernmost parts of the Iranian Zagros Mountains, as they share borders with Iraqi Kurdistan. For decades, this border region was inaccessible to archaeological fieldwork, and knowledge of ancient cultures, settlement patterns and social structures of the region was limited. The survey project was initiated in 2019. Two seasons (2019 and 2021) of the intensive and systematic survey have so far been conducted recording over two hundred sites of which many are new discoveries. In the paper, we will discuss the preliminary results of the survey and survey methods.

15:00 - 15:30 **2.b (ROOM:15A.0.13) Heather D. Baker - Social Inequality in Urban Babylonia.**

Heather D. Baker (Toronto University)

Studies of ancient Near Eastern social inequality to date have typically relied on the calculation of Gini coefficients based on house size data, yet other, complementary approaches are possible. The integration of textual and archaeological evidence is important for contextualizing house size data, which ideally need to be analysed in the light of prevailing household size and composition. In this paper therefore I focus on the role played by the inter-generational transmission of wealth in generating social inequality, and I correlate its effects with the transformation of house and household over time in an urban Babylonian context.

15:00 - 15:30 **4.b (ROOM:15A.2.11) Clélia Paladre - Susa – Iran – photographic archive – historiographic studies – archaeological context.**

Clélia Paladre (Musée du Louvre (department of Near Eastern Antiquities))

The department of Near Eastern Antiquities of the Musée du Louvre (DAO) houses an important photographic archive which illustrates the work of French archaeological missions in Iran from the end of the XIXth to the 1970's. Susa, in southwestern Iran, is the most represented site within the whole corpus. This site is fundamental in the comprehension of the history of ancient Iran. The analysis and valorization of the photographs allow a valuable historiographic study to better understand past excavations; especially the older one directed by Jacques de Morgan (1897-1912) and Roland de Mecquenem (1912-1939).

15:30 - 16:00 **Coffee Break**

16:00 - 16:30

1.a (ROOM:15A.2.13) Meissam Aliei - Excavation at Oomiabad Teppe-Torshizi, QomiAbad village: preliminary report

Meissam Aliei (University of Gonabad, Iran)

The hill of Qomiabad (Tarshizi) is a small hill next to the village of Qomiabad, near Rey city in Tehran province and on the Tehran-Varamin highway, inside a private property. This small hill is a part of the larger hill of Qomi Abad, with approximately 150m distance. The main purpose of this season of excavation was to determine the condition and antiquity of the site separated from the main hill. The first season of excavation, directed in a small part inside the private property by M. Aliei accomplished in 2018. Four sondages were created in this season at this small hill: A, B, C and D. The results of excavations in this season included fragments and bricks. Examining the obtained data shows the connection of this location with the surrounding ancient sites as well as the similarity with pottery and glass samples from the early to mid-Islamic era of Iran.

16:00 - 16:30

2.b (ROOM:15A.0.13) Katherine Burge - Constructing and Reconstructing Identity: Evidence of seal reuse in the Lower Town Palace at Tell Leilan.

Katherine Burge (University of Pennsylvania)

The designs depicted on cylinder seals constituted a visual language that carried culturally salient meaning; the seal stones themselves had an intrinsic material value that made them subject to reuse. In these instances, the entire surface of the seal could be ground smooth to accommodate a completely new design, or, conversely, a secondary owner might opt to preserve an earlier design to emphasize the seal's antiquity or pedigree. In most cases, however, the new owner of a second-hand seal would make some modification to update the seal's inscriptional information or transform its visual elements. Recarving practices are mostly known through isolated cylinder seals in museum collections, rarely can we look at these practices as they pertain to a specific time and place. The Lower Town Palace at Tell Leilan provides one such opportunity. The corpus of more than 50 seals attested by hundreds of impressions indicates a relatively high occurrence of seal reuse and recarving among the seal owners active in (and interactive with) the palace. Interrogating the layered semiotic potentials of these reused seals, this paper investigates how social, political, and economic concerns shaped secondary users' decisions to alter earlier seal inscriptions and figural designs in different ways.

16:00 - 16:30

4.b (ROOM:15A.2.11) Milena Gošić and Branislav Anđelković - The Good, the Bad and the Unpublished: A Case Study of the Near Eastern Chalcolithic Assemblage at the University of Belgrade

Milena Gošić and Branislav Anđelković (Department of Archaeology, University of Belgrade)

The Archaeological Collection of the University of Belgrade has in its inventory an assemblage from the Neolithic, Chalcolithic and Early Bronze periods of the Southern Levant. The first objects arrived during the 1980s from the Chalcolithic sites of Teleilat Ghassul and Pella in Jordan as a present from the Prof. Basil Hennessy of the University of Sydney. He excavated both sites and was known to have given similar finds/objects to other institutions worldwide, such as the Ashmolean Museum and the MMA. The present paper aims to create a cultural biography of the objects in Belgrade in order to understand both the archaeological gift-giving practice that brought these artefacts to their current setting and the significance and meaning they hold and embody there.

16:30 - 17:00

2.b (ROOM:15A.0.13) Katja Soennecken - Tracking down 'Sea Peoples' far away from the Mediterranean Cities. The(im)possibility of finding ethnicity in archaeological evidence.

Katja Soennecken (Luxembourg School of Religion & Society)

At the end of the Late Bronze Age massive architectural and cultural changes are visible on Tall Zirāʿa in Northern Jordan: A new sanctuary was built, houses re-organized and the material culture shows signs of cultural interchange. Some of the architectural features, animal bones, pottery and small finds point to a group of people not indigenous of Transjordan, but the Mediterranean. Could "Sea Peoples" have settled in the highlands of Transjordan? This paper will present results of the excavations of the German Protestant Institute on Tall Zirāʿa, compare them with other excavations in the Jordan Valley and beyond and argue for a cultural flow not only of artifacts, but peoples at the end of the Late Bronze Age.

16:30 - 17:00

4.b (ROOM15A.2.11) Valentina Laviola - The Endangered Houses of Hodeida (Yemen). Focus on the Use of Stucco in the "Red Sea Style" Decoration.

Valentina Laviola (University of Naples L'Orientale)

The Yemeni coastal cities of Tihama region are famous for a peculiar architecture known as the "Red Sea Style". Hodeida, in particular, being a flourishing harbour from the late 18th to the mid-19th century, hosted an international community of merchants from Africa, South Asia, and Europe, who contaminated the style of late-Ottoman buildings which included even the use of coral. The current war is the last, and more serious, among the events endangering this architectural heritage, as coastal erosion, demolitions, and frequent non-conservative restorations put it at risk already
during the late 1990s, when an archaeological mission by the University of Naples "L'Orientale" documented the topography of the intra moenia city and more than 200 buildings. Pictures and drawings portray the characteristic the decoration made of carved wood and stucco. This paper presents some case-studies, with a preliminary focus on the stuccoes, highlighting changes and losses in these unique Yemeni buildings.

17:00 - 17:30 **2.b (ROOM:15A.0.13) Licia Romano and Giulia Festa - SLOW SUMER. Repair, Reuse and Recycling and Southern Mesopotamian Society in the Changing World of 2500-2000 BC.**

Licia Romano (Sapienza University of Rome), Giulia Festa Museo (Storico della Fisica e Centro Studi e Ricerche "Enrico Fermi", Rome)

Southern Mesopotamia was the proper setting for the development of intense agricultural practices and the first urban civilization. Sumerians left their mark on history thanks to their exceptional innovation propensity and to their fast growing economy, based on mass production and goods consumption. Nevertheless, primary resources such as woods, stones and metals were not locally available and were acquired through commerce. It is thus possible to state that resource availability had an unavoidable impact on objects' biographies, especially on those made with imported materials. As a consequence, repair, reuse and recycling practices had an undeniably significant role in Mesopotamian economy and everyday life. The paper will analyse some examples of repair, reuse and recycling in Sumer between 2500-2000 BC available from the archaeological and philological scientific literature, combined with new data coming from the excavations at the site of Abu Tbeirah.

17:00 - 17:30 **4.b (ROOM:15A.2.11) Nadezhda Dubova et al. - The experience of conservation and restoration of "cell-complex" of the palace at the Bronze Age proto-urban center Gonur Depe (Turkmenistan).**

Nadezhda Dubova (Institute of Ethnology and Anthropology RAS), Redzhep Dzhepbarovm, Vladimir Artemiev, Aliya Urmanova, Muhammed Begliev.

Gonur Depe is a well–known proto–urban center of BMAC (2300 - 1600 BC) in Southeastern Turkmenistan. The report discusses the issues of the adequacy of the use of different methods for the conservation of raw architecture and describes the best in the authors' option which was used. It includes the following steps: deliting of materials from destruction of preserved structures, manufacturing of raw bricks with dimensions corresponding to the original ones and restoration of the destroyed parts with their help. In the case so called "cell complex" of above them, identified by V. Sarianidi and the architects, it was decided not to erect a protective casing of mud bricks above the walls, as it was done in the case of conservation of the rooms and walls of the Gonur palace, but reconstruct the cells and platforms above them, identified by the architects. For tourist purposes, one of the blocks of the complex is planned to be shown In section (with appropriate preservation of the walls) so that its internal structures are accessible for viewing.

17:30 - 18:30 **Poster Session - Download the Poster Abstracts Book ---------- >>>>>>>>>>>>>>>>>>>>**

Download the Poster Abstracts Book

19:00 - 22:00 **Conference Dinner**

26 May

09:00 - 09:30 **Peder Mortensen Memorial Ceremony**

9.00-9.10
Prof. Henrik Thrane : Peder Mortensen and Denmark

9.10-9.20
Dr. Hojjat Darabi : Peder Mortensen and Iran

9.20-9.30
Prof. Dr. Sultan Muhesen : Peder Mortensen and Syria

09:30 - 10:00 **1.a (ROOM:23.0.49) Bérengère Perello et. al. - In search of the EBA in the Armenian highlands: report on the recent excavations in Haghartsin and Voskeblur.**

Bérengère Perello (CNRS - UMR 5133 Archéorient, Lyon, France), Ruben Badalyan (Armenian National Academy of Sciences), Levon Aghikyan (Armenian National Academy of Sciences), Armine Harutyunyan (Armenian National Academy of Sciences)

The "Caucasus Archaeological Mission", a joint Armenian-French project has been excavating two Early Bronze Age sites, Haghartsin in the Tavush region since 2019 and Voskeblur in the Ararat Valley since 2020. Both sites have yielded occupations of the Kura-Araxes period (3500-2500/2600 BCE) and more specifically of the second phase known as KA II (2900-2500/2600 BCE). They belong to two distinct cultural complexes, as defined by the ceramic assemblages: the "Ayrum-Teghut" complex for Haghartsin, and the "Shresh-Mokhrablur" complex for Voskeblur. Their simultaneous excavation offers the unique opportunity of a cross-analysis of the data of the two contemporary sites placed in distinct ecological regions (Highland for Haghartsin, 1350m and valley for Voskeblur 840m) and at different communication crossroads: the Kura basin for Haghartsin and the Ararat plain for Voskeblur. Voskeblur has yielded significant mud-brick architecture, as well as in situ occupation. The excavation of Haghartsin provided more tenuous indications of occupation, through pits or hearths. The paper will present the results of the 2021-2022 seasons at both sites.

09:30 - 10:00 **1.b (ROOM:15A.1.11) Shira Gur-Arieh et al. - Dietary Practices at Tell Kamid el-Loz (Lebanon) during the Bronze and Iron Age.**

Shira Gur-Arieh (Institute for Pre- and Protohistoric Archaeology and Archaeology of the Roman Provinces, Ludwig Maximilian University Munich, The Leon Recanati Institute for Maritime Studies, Haifa University, Haifa), Patrick Roberts, Mary Lucas, Amanda G. Henry, Lionello Morandi, Jeffery Stone, Stefanie Eisenman, Daniela Lenz, Ptolemaios Paxinos, Hélène Weber, Michael Schultz, Philipp W. Stockhammer

Tell Kamid el-Loz in Lebanon flourished in the Middle and Late Bronze Age, while in the Iron Age I-II the tell was inhabited by rural populations. The most significant record of human presence in the subsequent Iron Age III/Persian period is a large cemetery that wasin use until the Hellenistic Period. We hypothesize that the dietary practices of the tell inhabitants may help to shed insight onto changes in settlement patterns over time. We examined >100 burials dated between the Middle Bronze Age and the Persian-Hellenistic period, combining analyses of stable carbon and
nitrogen in bone collagen and plant microremains (starch grains and phytoliths) from dental calculus to understand the diversity and dynamics of individual human nutrition. Plant remains in the 15 examined calculus samples reflect mostly cereal consumption, while the stable isotope analyses provide broad insights into dietary variability through a period of significant political and economic change at Kamid el-Loz.

09:30 - 10:00 **2.b (ROOM:14.2.80) Omer Sergi - Rural Resilience and Political Formations in the Jezreel Valley (LB II–Iron IIA).**

Omer Sergi (Tel Aviv University)

Ḥorvat Tevet is a small site located in the north-eastern margins of the Jezreel Valley. During the Iron I (11th century BCE) it was inhabited by a rural community, but following a short occupational gap (early Iron IIA, 10th century BCE), large public pillared buildings with craft specialization and production areas were built at the site (late Iron IIA, 9th century BCE). The overall storage capacity of the site, demonstrated by the large assemblage of storage vessels, exceeds the needs of a local community. Hence, commodities stored in Ḥorvat Tevet were in all likelihood meant for consumers in other locations. Analysis of material remains from the site reveals patterns of royal, redistributive economy, based on centralized production, collection and redistribution of agricultural output, originating in the rich lands in the eastern part of the Jezreel Valley. The establishment of redistributive economy in the eastern Jezreel Valley may be identified with the emergence of early monarchic Israel during this period (late Iron IIA). But, according to textual sources from the Late Bronze Age (El-Amarna correspondence) the eastern part of the Jezreel Valley already served within a royal, redistributive economic system, which operated from the exact same region (from Shunem, 3.5 km south of Ḥorvat Tevet) by the imperial Egyptian rule in Canaan (LB II–III). Evidence from Ḥorvat Tevet suggests that more than 200 years after the withdrawal of Egypt from the Jezreel Valley, its eastern part was still utilized as royal lands. Israel, so it seems, inherited its royal economic system from the Egyptian rule in the Jezreel Valley. The continuity (LB II–Iron IIA) in land use and patterns of production in the eastern part of the Jezreel Valley bring to the fore the question of rural resilience, namely, rural strategies that traversed local and temporal socio-political configurations. In this presentation, I will present the material remains from Ḥorvat Tevet as a mean to reconstruct the royal economic mechanism established in this region during the late Iron IIA. Consequently, I will discuss the rural resilience of the Jezreel Valley vis-à-vis the changing political landscape of the Late Bronze–Iron Age transition, which will also shed new light on the socio-political formation of early monarchic Israel in the northern valleys.

09:30 - 10:00

2.c (ROOM:15A.2.11) Daniele Morandi Bonacossi and Bekas Jamaluddin Hasan - The salvage of the Assyrian Faida Canal and its rock-reliefs (Kurdistan Region of Iraq).

Daniele Morandi Bonacossi (University of Udine) and Bekas Jamaluddin Hasan (Directorate of Antiquities and Heritage of Duhok)

The paper presents the results of the joint Kurdish-Italian Faida Archaeological Project (KIFAP) conducted by the Duhok Directorate of Antiquities and the University of Udine at the Assyrian Faida canal and rock art complex in the Kurdistan Region of Iraq. Investigation of this extraordinary and extremely endangered archaeological site was launched in 2019 and has led to the exploration of an at least 10 km-long irrigation canal cut into the limestone bedrock of the Chiya Daka hill range in the outskirts of the village of Faida, south of Duhok. Thirteen monumental sculpted rock panels carved along the canal's eastern bank were brought to light, representing an Assyrian ruler depicted at both ends of each panel, framing the cult statues of seven deities standing on pedestals shaped like striding animals. The Faida Archaeological Complex has been recorded, protected, conserved and transformed into the first archaeological park of the Kurdistan Region of Iraq.

10:00 - 10:30

1.a (ROOM:23.0.49) Felix Blocher et al. - Excavations at Nazarlebi (Georgia) 2017–2022: a Late Bronze / Early Iron Age east Georgian sanctuary.

Felix Blocher (Martin-Luther-Universität Halle-Wittenberg), Paata Bukhrashvili (Ilia State University Tbilisi, Georgia), Shorena Davitashvili (Ilia State University Tbilisi, Georgia and Martin-Luther-Universität Halle-Wittenberg)

Nazarlebi is a conspicuous terraced oval site on the hilly southern fringe of the fertile Shiraki plain in Kacheti region, Eastern Georgia (716m a.s.l.). Earlier archaeological test excavations in the 1990s and 2000s provided evidence for its datation in the Late Bronze and Early Iron Age (ca 13th to 9th century BC). In 2017 a new archaeological joint project between the Ilia State University Tbilisi (Georgia) and the Martin-Luther-Universität Halle-Wittenberg (Germany) started. Excavations 2017–2019 and 2021 produced a double-sided stone wall circle (diam. 19 m), three bronze hoards consisting of weapons, tools, jewellery etc., further small finds, pottery, and obsidian flakes. Three 14C dates (from the 15th to the 11th century calBC) concern earlier layers of the monument. Nazarlebi belongs to the group of East Georgian sanctuaries, the round building itself and the three bronze deposits very probably dating from the 10th century B.C. or later.

10:00 - 10:30

1.b (ROOM:15A.1.11) Alex Rodzinka et al. - Neutron Tomography analysis of bimetallic swords from Northwestern Iran

Alex Rodzinka (Cranfield University, ISIS Neutron and Muon Source), Anna Fedrigo (ISIS), AntonellaScherillo (ISIS), Nat Erb-Satullo (Cranfield University), St John Simpson (British Museum)

Multiple bimetallic split-ear pommel swords from Northwestern Iran dated to the Iron Age (ca. 1250-800 BC) were investigated with Neutron Tomography at ISIS Neutron and Muon Source, UK. It is the first time that Iranian swords from that period were investigated with neutron techniques. The weapons were seized as part of law enforcement investigations and are pending repatriation. These circumstances, and the fact that there are many known examples of bimetallic weapons of this type being modified in modern times, led to a suspicion that a few were pastiches. With the use of Neutron Tomography, various modifications were revealed, including soldering and the use of other modern
materials. Investigating bimetallic weapons is crucial to understanding the use of bronze and iron in the transitional period in early Iron Age Iran. Iranian weaponry, frequently found in museums but rarely well contextualised, is analysed in this study using non-destructive techniques to gain insight into ancient technology and modern forgeries.

10:00 - 10:30

2.b (ROOM:14.2.80) Georg Cyrus - Inequality and well-being – the living conditions of the lower classes in the Neo-Assyrian Empire.

Georg Cyrus (NINO Leiden)

In this talk I investigate the living conditions and the well-being of the lower classes in the Neo-Assyrian Empire. This topic is often neglected in archaeology, due to the fragmented character of the archaeological record. However, it is important to understand the well-being and resilience as well as the stress the lower class was exposed to, to understand systems of inequality from a bottom-up perspectives. I will therefore examine concepts like well-being to judge if these are suitable concept for such a bottom-up view. To elucidate this topic, I present my studies on the living conditions of the lower classes in the Neo-Assyrian Empire. Here I investigate the households of the lower classes in urban environment like in Assur, as well as the rural lower class as in Kumru Tarlası. With this approach I would like to address the living condition of those who are unequally represented in the archaeological record. In the end, with the concept of well-being we might be able to explain, why the Assyrian Empire never recovered from its final destruction in 612 BCE. It was maybe the decision of the upper class to start a war, but the lower classes might have decided to not rebuild the empire.

10:00 - 10:30

2.c (ROOM:15A.2.11) Dirk Paul Mielke - The underground spring of Oymaağaç Höyük/Nerik.

Dirk Paul Mielke (Freie Universtiät Berlin)

After ten years of arduous and difficult work, an underground construction representing an artificial spring has been uncovered at Oymaağaç Höyük (Samsun Province, Türkiye) the Hittite cult city of Nerik. From the top of the höyük a 26 meters long staircase, constructed in a corbelled vault technique, leads to a spring chamber around 10 meters under modern surface level. The construction of the building demonstrates not only distinctive skills of controlled water management but above all highly developed engineering knowledge. As an important part of the urban infrastructure, the spring also had a cultic function because it is very likely that this structure represents the »spring of Nerik«, known from Hittite texts. Erected at the beginning of the 17th century B.C., the spring has been used far beyond the Hittite period and can look back on almost 1000 years of use before it was intentionally rendered unusable. The talk will present the most important details of this exceptional building as well as its extraordinary history.

10:30 - 11:00 **1.a (ROOM:23.0.49) Iulon Gagoshidze et al. - An interdisciplinary study of the Doghlauri cemetery (Georgia).**

Iulon Gagoshidze (Georgian National Museum, Tbilisi), Nikoloz Gobejishvili (Georgian National Museum, Tbilisi), David Gagoshidze (Tbilisi State University), Elena Rova (Ca' Foscari University of Venice), Francesco Bianchi (Ludwig-Maximilians-Universität München), Lia Bitadze (Tbilisi State University), Francesca Bertoldi (Ca' Foscari University of Venice), Eliso Kvavadze (Georgian National Museum, Tbilisi), Allegra Rasia (Ca' Foscari University of Venice)

The paper will present an update on the research about the important cemetery of Doghlauri (Shida Kartli, Georgia), which yielded ca. 500 graves of the EB and LB/EI periods. The main focus will be on the LBA/EIA, to which the great majority of the burials belong. Graves could be divided into three distinct chronological groups; each of them will be described in its characteristic features (grave type, specific burial goods, cultural affiliation etc.); similarities/differences with the EBA burial customs will be highlighted. Results of anthropological, palynological, 14C and other analyses on the cemetery finds will also be presented, as well as a comparison between material from the burials and that from the nearby settlement of Aradetis Orgora.

10:30 - 11:00 **1.b (ROOM:15A.1.11) Sergey Makhortykh - Scythian antiquities in Iran.**

Sergey Makhortykh (Institute of Archaeology Ukrainian Academy of Sciences)

There are several regions in Western Asia, where in the VII-VI centuries BC the significant activity of Eurasian nomads is traced. The presence of nomadic warrior groups in these territories is confirmed by written sources and/or artifacts of the Scythian types, which can be identified as innovations and do not have the local origins. Our paper is devoted to the typological and chronological analysis of the Scythian objects (weapons, horse trappings and objects of the animal art style) found in Iran. Such an analysis is important for determining their place in the Eurasian historical and cultural context. The findings demonstrate that Scythian antiquities in Iran constitute an important chronological indicator and advance our understanding of the periodization and character of the relations between the nomadic horse riders and various Near Eastern communities during the Early Iron Age.

10:30 - 11:00 **2.b (ROOM:14.2.80) Ido Koch - Glimpses of the Deportee Community at Tel Ḥadid during the Assyrian Period.**

Ido Koch (Tel Aviv University)

Ongoing excavations at Tel Ḥadid, located on a high hill overlooking the central coastal plain of modern Israel, have unearthed the remains of settlements dating from as early as the Intermediate Bronze Age and as late as the modern era (the Palestinian village of al-Haditha). In this talk, I will focus on the finds from the late Iron Age: the remains of several structures in which two cuneiform tablets were found. The tablets, which mention Akkadian, perhaps Babylonian, names of several individuals, indicate the presence of deportees brought to the site in the early seventh century BCE by the Assyrian empire. They were fully published and discussed in depth, whereas their context received only a preliminary publication in Hebrew and thus remained the domain of a limited group of scholars. This talk evaluates past reconstructions of the context of the tablets against the complete presentation of the Iron Age remains at Tel Ḥadid, followed by reconstructing the deportee community at the site. Emphasis will be given to practices that indicate modes of coping with the dislocation and the interaction with the hosting society and the colonial system.

10:30 - 11:00 **2.c (ROOM:15A.2.11) Sébastien Gondet et al. - Flood control at Pasargadae (Iran, Fars). Results of archaeological trenches evaluation in the pool of water south-east of the Royal Garden.**

Sébastien Gondet (CNRS/Université Lyon 2) MohammadkhaniKouroshe (Shahid Beheshti University)

In the last two decades, the surveys carried out in the frame of the Iranian-French archaeological project at Pasargadae have enriched the map of Pasargadae, one of the royal centres founded in the Persian homeland by the Achaemenid kings. Amongst the results, a large 1.5 ha pool of water was detected by geophysics south-east of the garden which formed the core of the monumental area. This feature undoubtedly served as an ornamental pool marking out the south-eastern limit of the Royal Area. In 2019, the team dug three trenches on the remains of the pool. The excavations have revealed foundations in stone of a massive dike built to control large incomes of water from the upstream. Downstream, a line of well-cut stones has been brought to light and could correspond with an extension of the pool towards the north-west. Data from geoarchaeological studies have also demonstrated that this feature was placed in the bed of ancient flooding channels probably active during the Achaemenid time. Therefore, the basin would have been as well a large hydraulic infrastructure used to store and to drain water for preventing the effects of floods on Pasargadae.

11:00 - 11:30 **Coffee Break**

11:30 - 12:00 **1.a (ROOM:23.0.49) Elena Rova et al. - "Island-like" settlements in the Alazani plain (Georgia, Southern Caucasus): excavations at Tsiteli Gorebi 5 and Tchiauri 1.**

Elena Rova (Ca' Foscari University of Venice), Davit Kvavadze (Ladodekhi Msueum), Giovanni Boschian (University of Pisa)

Excavations and geoarchaeological research carried out between 2018 and 2022 in the southern part of the Lagodekhi Municipality (Eastern Georgia) highlighted the persistence, in this part of the low-lying Alazani valley, of a settlement pattern characterised by clusters of small ephemeral uni-period sites located on low natural heights rising on the periodically flooded plain separated from each other by a shifting network of meandering watercourses. This peculiar adaptation to local environmental conditions will be illustrated through the results of excavations at Tsiteli Gorebi 5 (Early Chalcolithic) and Tchiauri 1 (Late Bronze/Early Iron Age), surface investigations and geological soundings/coring in different points of the plain.

11:30 - 12:00

1.b (ROOM:15A.1.11) Andrea Orendi and Oren Tal - Crusader Diet and Economy in the Latin Kingdom. The Archaeobotanical Finds from Arsur.

Andrea Orendi (ArchaeoConnect GmbH, Department of Archaeological Sciences,Tübingen), Oren Tal (Tel Aviv University)

Although archaeobotanical processing of sediment samples is standardly carried out on Southern Levantine excavations, a regional and chronological concentration of published archaeobotanical data is apparent. The plant finds from Apollonia/Arsuf/Arsur add new data to the scarce Crusader botanical material in the Latin Kingdom. The fillings of a cesspit from the 12th and 13th century CE revealed mineralized plant finds which are seldomly found in the southern Levant. Together with the carbonized plant material from other loci the whole plant assemblage from Arsur forms a comprehensive picture of the inhabitant's diet which is of typical southern Levantine character also known from other contemporary sites. The plant finds form the starting point for further analyses. Archaeological finds together with the plant material point to the production of olive oil and wine which might have been an important factor of Arsurs economy.

11:30 - 12:00

2.b (ROOM:14.2.80) Neville McFerrin - Identity in Motion: Seals, Sealings, and the Architecture of Imperial Power at Persepolis.

Neville McFerrin)University of North Texas)

Carried by royals and workers alike, seals and sealings serve as ubiquitous, lasting markers of physical and conceptual motion. The heirloom seal of Irdabama transports royal iconography across generations, eliding temporal scales as it
underscores familial connections. On PFS 1532s, lions engage with bulls in a cosmic interplay doubling reliefs at Persepolis, joining images of empire across territories. At Persepolis, registers of delegates unfurl across the Apadana in a composition that doubles the motion of cylinder seals. Juxtaposing sealings from the Persepolis Fortification Archive with the site's architecture, this paper asserts that deliberate elisions between monumental and miniature, individual and collective, underscore the inclusive nature of Achaemenid imperialism. Architecture inscribes the king's
will as a seal upon the landscape; such marks are doubled in the seals carried by his subjects and imperial predecessors. As the ruler moves in procession across his territory, notions of mobility across time and at multiple scales are reiterated, rendering king and court as portable objects, living sealings marking the empire's identity.

11:30 - 12:00

2.c (ROOM:15A.2.11) Dan Socaciu - Urartian Water Management and its Connection with State Religion,

Dan Socaciu (University of Liverpool)

Rock carved inscriptions are one of the most distinctive cultural elements of the ancient state of Urartu, which at its height stretched across eastern Turkey, Armenia, and north west Iran. All inscriptions are a product of the royal ruling apparatus, and they celebrate the kings' accomplishments. Among the most common achievements recorded are the construction of water infrastructure elements, in the form of canals, reservoirs and wells. The proposed paper will focus on those inscriptions that deal with water management and how they fit into the broader narrative of Urartian royal activities. Often the water infrastructure projects are mentioned together with the establishment of vineyards and orchards, and have ritual practices associated with them. We can trace an evolution, from the simple construction of canals, to elaborate rituals connected to artificial reservoirs. This will inform a broader discussion on Urartian religious practices as a whole.

12:00 - 12:30

1.a (ROOM:23.0.49) Nicola Laneri et al. - Communities on the move: a preliminary report of the archaeological work at Uzun Rama and Tava Tepe (western Azerbaijan).

Nicola Laneri (University of Catania, Italy), Bakthiyar Jalilov (National Academy of Science of Azerbaijan), Rachele Mammana (University of Catania, Italy), Alice Mendola (University of Rome, La Sapienza)

For the communities of the southern Caucasus, the Kura river has been a fundamental resource for stimulating communication within this broad and geographically fragmented landscape, but also for supporting the economic subsistence of the people living here. In western Azerbaijan, this is clearly evident through the observation of the archaeological data available from the so-called Kura-Araxes period (ca. 3600-2700 BCE) as well as for the Late Bronze/Iron Age periods (ca. 1200-750 BCE). Accordingly, the Azerbaijan-Italian archaeological project in western Azerbaijan has focused its attention on analysing how the archaeological relics left behind by the communities inhabiting this region during the previously mentioned periods can be interpreted as part of a transforming socio-economical pattern within which the interaction between mobility and sedentarization was more complex than previously conceived. In particular, the project aims are: to reconstruct the funerary landscape of the Kura-Araxes communities inhabiting the Uzun Rama plateau (in the Goranboy province) through a detailed investigation of the kurgans (i.e., funerary mounds) of this specific period; to analyse a Late Bronze Age and Iron Age site, Tava Tepe (in the Agstafa province), that represents, for this specific period, a unique example of an unfortified settlement characterised by the presence of huts with clear evidence of specialised production activities (i.e., kilns and slags, mortars and grinding stones, areas for metal productions) that testifies to a high level of social complexity.

12:00 - 12:30

1.b (ROOM:15A.1.11) Anna Paule - Modelling the Sky. New Results on Late Modern Era and Contemporary Research on the Retrospective Calculation of Solar Eclipses Occurring in the Ancient Near East.

Anne Paule (Independent researcher)

First studies on ancient Near Eastern eclipse records emerged in the second half of the 19th c., driven by the previous decipherment of cuneiform writing. A well-known example is the *Bur-Saggile eclipse* record that was first associated with the solar eclipse of 763 BC by Rawlinson (1867). At that time, first eclipse compilations covering a period of two thousand (Lacaille 1750; Pingré 1770) and three thousand years (Pingré 1786; Oppolzer 1887) were available for research. These compilations have been done already with the aim of offering reference books for historians or archaeologists and of ensuring the highest level of reliability of data over time and space. Here, we discuss both historical and modern computational approaches (esp. astronomy software) to this topic, with the aim of showing progress in this area of research.

12:00 - 12:30 **2.b (ROOM:14.2.80) Mette Bangsborg Thuesen - Inequality and foodways - Everyday life and commensality in Sasanian Iran .**

Mette Bangsborg Thuesen (Freie Universität Berlin)

This paper will address how the study of pottery from selected Sasanian sites can help us reconstruct everyday life, with particular attention to foodways, a sphere of society that is mentioned only in rare instances in written sources. At the current state of research knowledge about commensality in the Sasanian period is primarily derived from historical sources, which mostly deal with the high cuisine of the elite and thereby a restricted part of the society. Knowledge about food and eating of lower classes in Sasanian time is limited, but this is where the potential of archaeological evidence comes in. As ceramic vessels were utilised in almost every aspect of food production and consumption, they can provide substantial information on commensality in everyday life I show in my research that the study of ceramic vessels and their utilisation in commensal activities provides a micro-perspective on the social organisation of the Sasanian societies, thereby furthering our understanding of people living in this empire. The study also helps to fight class bias in historical reconstructions.

12:00 - 12:30 **2.c (ROOM:15A.2.11) Leigh-Ann Bedal - Where Did All the Water Go? Water Management on Petra's Southern Terrace.**

Leigh-Ann Bedal (The Berhend College)

The Petra Garden and Pool Complex is one component of a palatial complex that dominates the Southern Terrace within the ceremonial center of Nabataean capital city. Constructed early in the reign of Aretas IV (9BCE-40CE), the Petra Garden produced a visual display of Nabataean ingenuity and the king's ability to cultivate prosperity and abundance. However, beneath this luxurious display lies a complex system of pipelines, conduits, channels, and underground and designed, not only to transport select water to points of display and irrigation on the garden terrace, but to control and divert surplus as well as potentially destructive water flow away from the garden site which is situated at a natural water catchment point and is vulnerable to flash flooding. This paper will describe the water system of the Petra Garden and Pool Complex as revealed in excavations, with particular attention to the concealed hydraulic system and its place within the larger underground canalization system of the Southern Terrace.

12:30 - 13:00 **1.a (ROOM:23.049) Simone Arnhold et al. - Samreklo.**

Dr. Simone Arnhold (Martin-Luther-University Halle-Wittenberg), Paata Bukhrashvili(Ilia State University Tbilisi, Georgia), Shorena Davitashvili (Ilia State University Tbilisi/Martin-Luther-University Halle-Wittenberg)

The excavations at Samreklo have mainly yielded pottery and features from the Late Achaemenid and Early Hellenistic periods. However, a large quantity of pottery from the Late Bronze/Early Iron Age has also been uncovered, which is clustered nearby linear stone settings. According to the findings in Samreklo, these stone settings are very closely related to the terraces typical of the Late Bronze Age and Early Iron Age, which characterise hilltop settlements in particular. In Samreklo it can be shown how these terraces were constructed and which architectural elements can be found in them.

12:30 - 13:00 **2.b (ROOM:14.2.80) Francesca Bertoldi et al. - Patterns of cranial trauma and interpersonal violence in Bronze and Iron age of Armenia**

Francesca Bertoldi (Università Ca' Foscari Venezia), Hasmik Symonian (Institute of Archaeology and Ethnography NAS, Republic of Armenia, Yerevan), Ruzan Mrchktyan (Department of Cultural Studies, Yerevan State University, Republic of Armenia), Ashot Piliposyan (Department of Armenian History, Armenian State Pedagogical University, Republic of Armenia, Yerevan), Pier Francesco Fabbri (Dipartimento Beni culturali, Università del Salento)

In the archaeology of the Bronze and Iron Age of Armenia, a special place is occupied by burials showing collective funerary rite. The necropolis of which we analysed the craniological collection is situated near the village of Nerkin Getashen of Gegharkunik region in the Republic of Armenia (south-western shore of Sevan lake). This site has been excavated within 1989-1990 by Sevan archaeological expedition led by professor A. Piliposyan. The burial from which the skulls come from is a collective one with 94 specimens (74 adults and 20 subadults) and dated from the Middle Bronze to the Early Iron Ages (XX/XIX – IXth centuries BC). We recorded a high percentage of cranial trauma in some case fatal and in some others multiple, and evidence of nutritional deficiency indicators as cribra orbitalia and scurvy.

12:30 - 13:00 **2.c (ROOM:15A.2.11) Yair Almakeyas - Monks and Dreamers: and The Use of Water Managements as a Political Tool.**

Yair Almakeyas

A study of the water reservoirs that were built near several large Byzantine period monasteries shows that there were significant excess water stores at the sites. This, in addition to the fact that the monasteries contained very impressive agricultural installations, suggests that the water reservoirs were used for agriculture and not just for drinking. It is suggested that these water reservoirs were used as a tool by the central government at that time in order to occupy the area and manage it through extensive agricultural activities and water resource management in the region. In particular a large cluster of castles / monasteries in western Samaria reached their peak in the Byzantine period indicate this phenomenon. These sites are fortified with massive constructions and built of the highest quality ashlar, which indicate shared building characteristics. The Christian-religious element in these sites is evident both in the preservation of their name, the presence of a church, and sometimes even a crypt with the remains of saints in the complexes. These sites were probably established as part of the Byzantine struggle against the Samaritan population. Their presence in the area of conflict was encouraged and even funded by the central government. It is possible that the central government encouraged monastic orders to seize lands in these territories as part of the Christian mission in the Holy Land.

13:00 - 14:00 **LUNCH**

14:00 - 14:30

1.a (ROOM:23.0.49) René Kunze et al. - Ancient question and new perspectives: the Ushkiani gold project in Armenia.

René Kunze (Martin-Luther-University Halle-Wittenberg, Germany), Arsen Bobokhyan (National Academy of Sciences of the Republic of Armenia), Mariam Amiryan (National Academy of Sciences of the Republic of Armenia)

The Artanish region on the northern shore of Lake Sevan represents an exceptional sub-region in Armenia that allows us to explore the process of landscape transformation in a gold-rich environment. At first glance, Artanish was isolated as a tiny part surrounding the eastern shore of Lake Sevan and played a marginal role in the historical and cultural development of the Armenian highlands. However, detailed historical studies and especially new archaeological data indicate the opposite: The region was primarily involved in regional and interregional developments. Intensive archaeological fieldwork has been carried out since 2020 at the Artanish 9 (settlement of the Early Bronze Age Kura-Arax culture) and Artanish 23 (Late Bronze/Early Iron Age cemetery) sites. In addition, the "Ushkiani Project" continues to sample and examine archaeometallurgically numerous gold objects from recent Armenian excavations and museums. The aim of this multidisciplinary project and the talk is to demonstrate a clear link between the prehistoric settlements and gold extraction and processing.

14:30 - 15:00

1.a (ROOM:23.0.49) Stefania Fiori et al. Kurgan phenomenon of the Southern Caucasus: first results of an interdisciplinary survey along the Kurekçay Valley (Goranboy Province, western Azerbaijan).

Stefania Fiori (Kiel University), Bakhtiyar Jalilov (National Academy of Science of Azerbaijan), Ercan Erkul (Kiel University), Simon Levin Fischer (Kiel University), Dennis Wilken(Kiel University), Nicola Laneri (Università di Catania), Jutta Kneisel (Kiel University), Wolfgang Rabbel (Kiel University), Andrea Ricci (Kiel University)

Considerable socio-cultural transformations occurred with increased use of metallurgy and the emergence of associated specialisations in the Caucasus at the end of the fifth millennium BCE. Funerary customs also reflect these changes. Inscribed in the Southern Caucasus landscape, the tradition of burying the dead in burial mounds (kurgans) spread during the Late Chalcolithic and continued until the Iron Age. This paper discusses the results of intensive survey investigations, integrating sets of remote sensing imagery, topographic mapping and geophysical prospection to document the funerary tumuli along the Kurekçay Valley (Goranboy Province, western Azerbaijan). The integration of the results obtained allow us to map and measure the density, size, morphology and spatial distribution of the kurgans remotely. Moving away from an individual burial mound viewpoint, this study contextualises kurgans within their landscapes in order to reconstruct the physical and symbolic relationships between them. This opens innovative perspectives for the interpretation of the kurgan phenomenon, tracing the funerary landscape of the region in prehistoric times.

15:00 - 16:00

Closing Session

Stephan Specht , Director HARRASSOWITZ VERLAG: Proceedings of ICAANE 11, ICAANE 12 and ICAANE 13

Prof. Dr. Frances Pinnock, secretary the International Scientific Committee of ICAANE: News from the committee

?: ICAANE 14

Dr. Ingolf Thuesen , chair ICAANE, University of Copenhagen and Danish Institute in Damascus: Concluding remarks