



JUNE 9-13, 2014  
UNIVERSITY OF BASEL  
SWITZERLAND

## 9. INTERNATIONAL CONGRESS ON THE ARCHAEOLOGY OF THE ANCIENT NEAR EAST

### ABSTRACTS

SECTIONS, POSTERS, WORKSHOPS



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# Papers

Themes/Sections 1-7



- 1 Ababneh, A. 5 Dealing with the Past  
11 Wednesday  
Afternoon
- Interpretive Media, Problems and Challenges at the Museum of Dar As Saraya in Jordan**
- Jordan • Yarmouk University, Irbid • kaderabab@yahoo.com
- Jordan has a rich tangible cultural heritage which manifests itself in archaeological sites, historic centres, and different museums. Museums play major roles in the cultural life of a society and they are considered as tourist magnets. The Dar As Saraya museum is a city museum in the city of Irbid in Jordan that uses different approaches to interpret the history of the area.
- This paper seeks to assess interpretation techniques applied at this museum in regard to the public and the significance of the museum. The museum was visited and documented by examining two main topics: exhibition and display and interpretation media. Examination of exhibition and display focused on the themes and the structure of the display. The public information analyses the way in which information is communicated. Public interpretation includes education programs, panels and a guide book. Public interpretation covers issues like management, organization and publics of the museum. The values of the museum were identified, along with a profile of the public of the museum, interpretation techniques and tools were also determined. According to this study, it is found that the museum in north Jordan is lacking effective interpretation programs and is limited. This is due to the absence of scientific studies of values of museums, visitors' profile and improper techniques of interpretive tools. Those in charge of museums management and interpretation have to review their plans and policies; they have to apt with visitors' desires and international interpretation principles
- Key words: interpretation, museums, challenges, Dar As Saraya, Jordan*
- 2 Abedi, Akbar – Ahmadi, Rasul – Karimifar, Azam – Abbasi, Mahdi – 6.1 Reports Region  
11 Wednesday  
Midday  
Mottaghizadeh, Farnaz – Abedi, Hossein – Allahyari, Hasan
- An Updated Chronology for the Chalcolithic Period of the Lake Urmia Basin, NW Iran: New Evidence from Dava Göz**
- Iran • University of Tehran • akbar.abedi@ut.ac.ir
- The settlement of Dava Göz situated about 15km SW of Khoy and 5km north of the Dizaj Diz town in NW Iran. Dava Göz is a small site at north of the Lake Urmia, measuring about 100×100m (ca. 1ha). The first season of archeological excavation primarily aimed to clarifying the chronology, settlement organization, and respond to some of the fundamental questions such as the transition process from Late Neolithic to Early Chalcolithic (Hajji Firuz to Dalma) and identifying different cultural horizon including Late Chalcolithic (LC1 and LC2 periods) and also outlining cultural condition of the region during prehistoric periods. The present paper is intended to expose briefly the main stratigraphic, architectural and material data from the site. The stratigraphy of the settlement is now well understood and covers the Late Neolithic/transitional Chalcolithic (Hajji Firuz/Dalma=Period I) and Chalcolithic (Pisdeli=LC1=Period II and Chaff-Faced Ware horizon=LC2=Period III) phases of the regional culture of north of the Lake Urmia Basin. Actually, Dava Göz is one of the scant well excavated settlements that give new and fresh information on the developments of the Lake Urmia Basin communities between the sixth to fourth millennium BC, and on their relationships with the contemporary Caucasian cultures as well as with those located further west and south, in Eastern Anatolia and in the Syro-Mesopotamian region. The implications of the findings will discuss along with limitations and future research directions.

- 3 Abolahrar, Alireza (1) – Zare, Mosa (2) – Ebrahimi, Saeed (2) 6.1 Reports Region  
11 Wednesday  
Morning
- The Study of the Oldest Pottery belong to Neolithic Period, Based on Archaeological Survey on Banooj Tepes in Darab, Fars, Iran**
- Iran • 1 Islamic Azad University, Kazerun Branch; 2 Islamic Azad University, Central Tehran Branch • alireza.abolahrar@gmail.com; mousa.zare59@gmail.com; sd.ebrahimi@gmail.com
- The present paper is the results of survey and research on a Neolithic- Ceramic site at Banooj village in Darab. Darab is an ancient city that located in the east of Fars province in the south west of Iran. Banooj tepe are two tepe that situated near of Banooj village (054°31'190 E, 27°38'853N). In the center of Darab that called Banooj A and Banooj B. One of the important character of Banooj tells in this survey is the age of them in the region.
- Banooj A is located in the south of Banooj village and we found one of the oldest Fars' potteries in there, which is parallel with Jarry period (6100-5800 BC) in Marvdasht. Banooj B also is another important tells, because there are a few sites parallel with Mushki period (6300-6100 BC) in Fars province. After one cycle of settlement in Bnooj B, the settlers have left their house and had gone to other site, may be they settled down in Banooj A?
- Key words: Fars, darab, banooj, Marvdasht, Mushki, Jarry
- 4 Abu-Laban, Aiysha 2 Travelling Images  
10 Tuesday  
Morning
- Representing the Divine in Dilmun Iconography – between Image and Concept**
- Denmark • University of Copenhagen • aiysha@hum.ku.dk
- By the end of the 3rd millennium BCE and more than half a century onwards, the Dilmun civilization developed its own iconographic tradition which is best represented in the seal assemblage. By focusing on the representation of divine figures and symbols on Dilmun seals the paper will discuss: 1. the notion of adopting 'foreign' divine images without employing their original concept, and 2. the reuse of old iconographic concepts from the past (Early Dilmun period) on late type Dilmun seals (Middle Dilmun period). The paper is part of the author's PhD research on the stamp seals from Failaka, mainly based on the recent discoveries conducted by the Kuwaiti-Danish Mission to Failaka in Kuwait (2008-2012). The archaeological project is a collaboration between Moesgård Museum in Denmark and Kuwait's National Council of Culture, Arts and Letters.
- 5 Aghalary, Bayram – Abdollahzadeh, Aylar 6.2 Reports Themes  
13 Friday  
Morning
- Cultural Characteristics of Northwestern of Iran in the Parthian Period (Based on the Results of the 2nd Season of Excavations at Köhne Pāsgāh Tepesi)**
- Turkey/Iran • University of Hacettepe/Ankara; University of Tehran • bairamaghalary@yahoo.com
- Northwestern of Iran in the Parthian period was part of the Atropatene semi-autonomous province. The region witnessed several cultural and political events and developments during the Parthian Period; however, in the study and exploration of this era, we are in short of cultural material. In recent years (2007-2008), the rescue excavations in Khodā-āfarin Dam Area have opened a new horizon in studying this significant historical phase in northwestern region. The issue at point is the old mound of Köhne´ Pāsgāh Tepesi which was explored in parallel with the project for saving the dam of Khodā-āfarin and other areas in two seasons. Due to limited material evidence related to the region during the Parthian Period, the material and data derived from the region will definitely be able to fill, though partialy, some of the gaps and material as well as cultural ambiguities and the manner of cultural interactions in the region. To this end, authors of the present article, have endeavored to introduce and carry out a comparative study of the findings of the Parthian Period belonging to this period together with other regions which were concurrent with it, with the aim to take an effective step in the qualitative and quantitative study of the date and the amount of bilateral interactions in the northwest of Iran and the neighboring regions during the Parthian Period.
- Keywords: Parthian, Atropatene, Köhne´ Pāsgāh Tepesi, Khoda Afarin Dam Area, Northwestern of Iran

- 6 Ahrens, Alexander 1 Egypt  
10 Tuesday  
Evening
- “Coherence and Divergence” – Egyptian Iconography in the Glyptic Material found in the Northern Levant during the Early 2nd Millennium BCE**
- Switzerland • University of Bern • alexander.ahrens@iaw.unibe.ch
- During the second half of the Middle Bronze Age, Egyptian iconographical traits and the use of both Egyptian and Egyptianizing motifs along with an assorted array of “emblematic” hieroglyphic signs appear on a number of cylinder seals found in the northern Levant. The date of the beginning of this influence seems to roughly correspond to the first appearance of scarabs and their production in the Levant as well as to the import of Egyptian objects. Scholars have dealt with this corpus in the past, trying to shed light on the difficult question of the nature and extent of Egypto-Levantine interconnections during this period. While most of the specimen known today are from unprovenanced contexts and stem from collections, recent archaeological finds in Egypt and the Levant can clarify on the question of chronology and regional distribution. Furthermore, the paper also tries to evaluate the reasons and motivation of the Levantine elites to incorporate Egyptian iconography into the Levantine glyptic material.
- 7 Ahrens, Alexander – Kozal, Ekin 6.1 Reports Region  
13 Friday  
Midday
- The Turkish-Swiss Excavations at Sirkeli Höyük (Eastern Cilicia) 2011 -2013: Material Culture, Settlement Structure, Chronology and Interregional Connections**
- Switzerland/Turkey • University of Bern • alexander.ahrens@iaw.unibe.ch
- Research at Sirkeli Höyük in Plain Cilicia, in South Turkey is being carried out over a decade. Since 2011 the excavations are conducted as a joint research project by the Departments of Near Eastern Archaeology of Bern and Çanakkale Onsekiz Mart Universities supported by the Swiss National Fond (SNF).
- Located at the bank of the Ceyhan River, Sirkeli Höyük controls one of the main routes coming from Mesopotamia and the Mediterranean to Anatolia. The site has been occupied continuously from the Late Chalcolithic to the Late Hellenistic Period and therefore provides an unbroken sequence throughout these periods.
- Sirkeli Höyük is one of the largest and therefore crucial sites in Eastern Cilicia for investigating the local material culture and chronology. The project also contributes to the understanding of the cultural and chronological elements of Cilicia in comparison with other exca-vated sites. In the light of the evidence obtained from the renewed excavations this paper will pre-sent an updated analysis of the material culture of the Bronze and Iron Ages with a special focus on the structure of the settlement as well as the chronology depending on associated local material. The evidence of interregional connections will also be considered.
- 8 Alaei Moghadam, Javad 6.2 Reports Themes  
13 Friday  
Morning
- Results Obtained from First Part of Archaeological Activities in Kolak Castle Tepe of Sistan**
- Iran • Department of Archaeology, Zabol University • J\_alaye@yahoo.com
- Sistan as one of the most important royal states of Parthian dynasty and after it of Sassanid kingdom has been considered to have an outstanding position and of course it has been led to strategic, agricultural, religious and military significance of this region. Also, this was the reason for accumulation of remarkable population in Sistan and many residential places were established. The places that today their remaining could have been found in form of huge ruins and small and large Tepes. One of these areas which is very important is the Tepe so-called “Kolak Castle.” This area is ruins of a circle castle with remarkable satellite hills on north of Sistan, Iran which is structurally a unique one.
- This area and its satellite Tepes were selected in order to conduct the archeological studies in 3002 and various operations including systematic study and archaeological Stratigraphy were done on it that the obtained results includes very valuable information on historical period establishments in Sistan.
- This research provides a brief explanation of the archeological activities done on the valuable area of Kolak Castle Tepe of Sistan.
- Key word: Sistan; Kolak Castle Tepe; Parthian Dynasty establishments; Sassanid Dynasty establishments; historical castles

- 9 Alaei Moghadam, Javad (1) – Banijamali, Seyyede Leila (2) – Roustaei, Mohamad Sadegh (3) – Farahzad, Behroz (4) 6.1 Reports Region  
11 Wednesday  
Evening
- Establishment Periods in City of Mahallat from Early Times to Present (A Summary of Results of Archaeological Studies on City of Mahallat)**
- Iran • 1 Zabol University; 2 University Of Tarbiat Modares; 3 University of Sistan and Baluchistan; 4 Islamic Azad University of Tehran • j\_alaye@yahoo.com
- Mahallat is of eastern cities of Markazi Province and by considering its geographical location in a region which has been paid a remarkable attention throughout different historical periods, it has many valuable ancient areas from Neolithic to the last century that all of them are featured having of high values in terms of studies. This lead the researchers to jointly conduct complete and archaeologically organized studies on establishments of this city and try to scientifically study every of these ancient areas surrounding this city. Based on these studies that take approximately one year to be completed all ancient areas of this region remaining of the last centuries were identified and studied; and the establishment structures of the various cultural establishments and the above-mentioned region's establishments were recognized. The present research which is relying on the field archaeological studies tries to provide a brief explanation of the results obtained from the archeological studies on city of Mahallat and study of various establishments in it. Key word: City of Mahallat; ancient areas; archeological study; establishment structures
- 10 Albukaai, Diao 4 Reconstructing  
12 Thursday  
Midday
- Collectif, familial : reconstitution de l'organisation sociale dans le village néolithique à partir des structures de combustion. L'exemple de Jerf el Ahmar et de Halula (moyen Euphrate - Syrie)**
- France • Archéorient / UMR 5133, université de Lyon2 • dia960@hotmail.com
- Cette étude présente un essai de reconstitution socio-économique dans les communautés villageoises au néolithique à partir de l'analyse des structures de combustion de deux sites localisés dans la moyenne vallée de l'Euphrate : Jerf el Ahmar (PPNA) et Halula (PPNB). Ce travail s'articule autour de deux concepts : la répartition spatiale des structures de combustion dans leurs contextes architecturaux et les modes de cuisson. Le premier point permet d'établir une évolution dans l'organisation spatiale des sites entre le PPNA et le PPNB. Le second expose les différents modes de cuisson qui peuvent être employés dans les structures de combustion. Ces données permettent de distinguer entre les foyers destinés à une utilisation collective et ceux à une utilisation familiale. Ce papier s'intègre à mon travail de thèse en cours de réalisation. Mon analyse porte sur cinq sites néolithiques en Syrie, un choix qui a permis d'analyser différents types de foyers dans un cadre géographique et préhistorique bien circonscrit. Les données présentées sont basées à la fois sur l'observation archéologique de terrain (Tell Haula 2007-2010), et sur les documents des fouilles plus anciennes (Jerf el Ahmar – 1995).
- 11 Aliei, Meissam 7 Islamic  
12 Thursday  
Afternoon
- A comparison between sepulchral buildings of Lavāssānāt and RūdbārGhasrān region and the tombs of Māzandarān area on the decorative and architectural styles**
- Iran • Tarbiat Modares University, Tehran • meissamaliei@gmail.com
- After arrival of Islam in Iran, architectural sites including shrines and sepulchral places were developed. There are several reasons for this issue, among which immigration of offspring of Imams (Imamzadeh) and Sādāt to Iran and their death or martyrdom in various points, and also formation of Shiite States (governments) into existence in Iran can be mentioned. Meanwhile, Zagros and particularly Alborz mountain chains, has been the burial place of many of the elders, Sādāt of Alavid and etc. This area has been a suitable shelter for fighters and opponents of Umayyads and Abbasid reigns with attention to formation of Shiite States in this area and because of the cold weather and mountainous rough and difficult to pass. The southern area of Alborz mountain chain, named Ghasran, is divided into two parts: Inner Ghasran and outer Ghasran and traditionally has been in interaction with northern regions and its local rulers. The present research is conducted for comparison and analysis of the sepulchral buildings on either side of the Alborz mountain chain, namely Shemiranat, Lavassanat and RudbarGhasran zones with Mazandaran region and coastal parts of Caspian Sea. These structures are analyzed morphologically, and antiquity, materials and ornament aspects. Keywords: Architecture, Shemiranat, Lavassanat and RoudbarGhasran, Mazandaran, Sepulchral Buildings.

- 12 Alishahi, Hamzeh – Shahivand, Mohammad 7 Islamic  
12 Thursday  
Afternoon
- The Significance of Socio-political Evolutions in Western Regions of Iran During Early Islamic Era. According to Scripts and Archaeological Studies; Case Study of Mèhrjan-kàzàgh State**
- Iran • University of Shahid Beheshti, Tehran • hamzeh\_alishahi@yahoo.com
- West side of Iranian plateau has always been noteworthy for human societies and regional states because of its climatic conditions and strategic situation. One of the most significant historical events in this region might be Iranian-Arab confrontation that ended to the victory of the Arab Muslims and were the point of conflict between conquerors and small regional states. Therefore, two states of Mèhrjan-kàzàgh and Mäsbàzan, that have passed their blooming period during Sassanian era for their favorable climate, natural defenses, fertile lands, strategic situation, etc. became the point of interest, aside from early Islamic conquests. Some large sites and cities such as historical cities of Seymarreh, Sérwan, Bàz-Ghävälèh, Sàrgàndäb, Kàlàk, and also many fortresses and bridges there could be considered as facts for this statement. This research aims to manifest significant role of the ancient land of Mèhrjan-kàzàgh and changes happened in a part of time there, according to historical scripts and recent archaeological studies.
- Keywords: West Side of Iranian Plateau, Early Islamic Era, Mèhrjan-kàzàgh, Scripts, Archaeological Studies.
- 13 Alizadeh, Fatemeh – Afarin, Reza Mehr – Shirazi, Rouhollah 6.2 Reports Themes  
13 Friday  
Midday
- Study of the Pottery Samples of the Parthian Period in Baluchestan (Classification, typology and typology comparison)**
- Iran • Jiroft University; Mazandaran University; Sistan & Baluchistan University • Fatemehalizadeh28@yahoo.com
- Makkoran region is an independent and cultural area which has identical boundary. It is a vast single and cultural area which had a specific unity from antiquity to the past centuries. , because Parthian government was based on feudalism, and an identical and uniform pottery was not made in Iran, because Iran had specific geography- different races and also the second reason was related to the political texture of Parthian period. The south east Parthian pottery of Iran is not considered well by archaeologists. The identification and classification of Parthian pottery in this region could provide a useful (suitable) tool for more identification of pottery tradition in Parthian period and also help the study of cultural and economical transactions of population centers in that period. This study tries to introduce, the classification typology and typology comparison of south east Parthian pottery (Southern Makkoran) by the findings of archaeological studies of southern Baluchistan (Chabahar and Nikshahr cities) on the supervision of Ruhollah Shirazi in 2010 and 2011, and with the comparison of samples in this region to the pottery of other Parthian squares inside and outside of Iran, we can reach an inference regarding the answer to the quality question of pottery industry of Parthian period in this region.
- Key words: Classification, Parthian period, Pottery, Southern Makkoran, Typology, Typology comparison.
- 14 Alkhalid, Mohammed 5 Dealing with the Past  
12 Thursday  
Midday
- Archaeology Between Literature and Discovery**
- Italy • Sapienza University Of Rome • mo.alkhaled@gmail.com
- Since the XII Century, Arab travelers started to wander across the Islamic states describing places, monumental and historical buildings that also included archaeological ruins that were not yet excavated at that time. In the mid-XVI and XVII century, the mention of the allusive Tower of Babel, the legendary stories about the city of Babylon and the power of the Assyrians in both the Old Testament and ancient Greek and Roman sources pushed Western travelers to come to see and discover the places in the Near East in search for the ruins of these ancient civilizations, thus causing in some way the birth of Near Eastern archaeology.
- This papers aims at illustrating how Arab and European travelers described the remains of ancient Near Eastern civilization and, as a consequence, how both Arab and Western archaeologists used these descriptions at the beginning of the 19th century.

- 15 Altaweel, Mark – Marsh, Anke – Kadereit, Annette – Rösch, Manfred – Mühl, Simone 4 Reconstructing  
09 Monday  
Evening
- Reconstructing the Paleoenvironment in the Shahrizor Plain, Iraq**
- UK/Germany • University College London – University of Heidelberg – University of Munich • m.altaweel@ucl.ac.uk
- The Shahrizor plain is a wide valley in northeastern Iraq at the border with Iran. In antiquity, as well as today, the plain was an important hub for traffic and trade along the Zagros and gave access to the Iranian highland. From the 2nd half of the 3rd millennium B.C., and for the length of nearly a millennium, the kingdom of Simurru, situated in the Shahrizor plain, was able to gain control over a wider region along the “Hurrian frontier”. For reasons, which still remain obscure, this kingdom disappeared from the historical records before the middle of the 2nd millennium B.C. Later mentions of the region are scarce and the archaeological material became more heterogeneous than it had been before: while the cultures of the Early and Middle Bronze Ages in the Shahrizor plain had strong ties to the material and intellectual traditions of eastern Mesopotamia, the remains of the Late Bronze and Iron Ages suggest stronger links to the material culture of western Iran and show stronger regional identities.
- A major focus of the effort lies on a micro-regional exploration of environmental conditions and the human impact on landscape and climate by deforestation, animal husbandry, field-crop agriculture and the use of irrigation. This presentation aims to present our wide multidisciplinary approach in studying the paleoenvironmental record that supplements our archaeological results.
- 16 Álvarez-Mon, Javier 2 Travelling Images  
11 Wednesday  
Midday
- From Kūl-e Farah to Persepolis: the Elamite Heritage of Persian Sculptural Arts**
- Australia • University of Sydney • javier.alvarez-mon@sydney.edu.au
- Of all the traditions that seemingly contributed to the artistic “universal” ideology of commonwealth sponsored by the Persian rulers, the contributions of the native Elamites have been least understood. However, by the mid-7th century BCE the inhabitants of southwestern Iran, both Persian and non-Persian, were embedded in cultural landscapes bearing the marks of thousands of years of Elamite civilization, including a conspicuous legacy of Elamite relief sculpture. Among these, the monumental reliefs of Kūl-e Farah III and IV will be presented here as major sources of core ideological and artistic “localisms” for the “universal” visual agenda of the Persian Empire.
- 17 Arce, Ignacio 7 Islamic  
10 Tuesday  
Midday
- Qasr Harrane. Domed Throne Halls and Ribbed Vaults**
- Spain • Spanish Archaeological Mission to Jordan, Amman • dr.ignacio.arce@gmail.com
- As a result of the research conducted within the project “Documentation and Analysis of Building Techniques and Architectural Typology in the Transition from Late Antiquity to Early Islamic Period” (funded by the Spanish Ministry of Culture and directed by the author), important results arise from the analysis conducted on several Umayyad palaces.
- In this paper it will be presented, on the one hand, the conclusions regarding the dome that has been elicited that originally covered the throne hall (room 26) in Qasr Harraneh (corresponding to the type of raised domed throne halls like Qastal, Minya, etc), together with the evidences that have led towards this conclusion, as well as the different hypotheses regarding the shape and setting that it might have had. On the other hand, it will be presented the relationship between the traditional system of diaphragm arches (typical from the Levant) and the first ribbed cross vaults, as a new element that will be developed in Early Islamic period (actually at Qasr Harrane we would have the very first experimental stage of ribbed cross vault), following these first steps till its complete development in the 10th C CE.

- 18 Areshian, Gregory E. 6.2 Reports Themes  
10 Tuesday  
Midday
- Geographic Diversity and the Growth of Social Complexity in the Late Neolithic and Chalcolithic: New Perspectives from the Central Near Eastern Highlands**
- USA • University of California, Los Angeles • gareshia@ucla.edu
- The growth of social complexity in the Ancient Near East – from the emergence of earliest farming settlements to the establishment of first cities and associated polities – has been traditionally viewed as mainstream trajectory (i.e. the “Mesopotamian model”) within specific geographic regions. Despite studies in prehistoric trade, interregional economic and cultural interactions were not considered an essential driving force in the growth of complex societies. Recent discoveries in the Central Near Eastern Highlands (i.e. between the Eastern Taurus in the south and the Great Caucasus in the north) shift the focus to interregional interactions. Excavations of Shulaveri-Shomutepe-type sites in Armenia suggest that the beginning of long-distance trade in pottery (Halaf) coincides with an expansion in trade in obsidian ca 6000-5500 BCE, which indicates that exports from the early centers of artisanal production were stimulative to the extraction and initial processing of different kinds of raw materials. Later, with the expansion of metal production during the Chalcolithic, an enormous transregional system of interactions was established, which is attested by a concomitance, within a single assemblage, of different styles of pottery derivable from Central Anatolia on the one hand, and from southwestern Turkmenistan – on the other, at the ritual Areni-1 cave complex (ca 4000 BCE). Discoveries at Godedzor reveal the importance of mobile pastoralists in long-distance obsidian trade ca 3500 BCE. The aforesaid suggests that current theorizing regarding early social complexity in the Near East must be reassessed.
- 19 Arwa, Kharobi (1) – Patrice, Courtaud (2) – Henri, Duda (2) 4 Reconstructing  
10 Tuesday  
Midday
- Bones can talk: An Archeo-Anthropological analysis of Mozan Graves in Units A16 and A15 (Northeastern Syria – Middle Bronze Age)**
- France • 1 Univ. Bordeaux; 2 CNRS Talence • a.kharobi@pacea.u-bordeaux1.fr
- Our focus is to present mortuary practices in Tell Mozan (ancient city of Urkesh, Syria). This was made possible by analyzing biologically and archeologically a group of 29 graves (35 skeletons) found in units A15 and A16 of the Tell. These units, together are part of the Middle Bronze Age necropolis of the site.
- Firstly, children graves seem to have special mortuary practices, not followed for adult ones (jar burial, double inhumation). Secondly, a ritual activity related to fire was recognized; it is related to an installation of fire on or in the proximity of some burials. This association reflects the link between the notion of death and the symbolism of fire during this period. Finally, one skeleton exhibiting significant amount of pathological conditions was buried together with the others. This shows that contrary to what was mentioned in some ancient letters and medical texts from Mesopotamia, distancing the sick body from the healthy constituents of society was not a common funerary practice.
- Therefore, by crossing anthropological, paleopathological, archeological and historical data we were able to reconstruct the ancient lived world of Urkesh via the dead one. This approach can be applied to other periods or region.
- Key words: graves, ritual, paleopathology, Mozan, Syria, Middle Bronze age.
- 20 Ascalone, Enrico 2 Travelling Images  
11 Wednesday  
Midday
- New Archaeological Finds from Ziwiye. The Glyptic Art of North-West Iran during the First Millennium BC**
- Italy • University of Salento, Lecce • enrico.ascalone@libero.it
- The site of Ziwiye is a large mountain top citadel fortified by a massive wall, unfortunately become famous in the past for clandestine excavations; many objects, now scattered in the museums around the world, are alleged to have come from Ziwiye. The looting of the site occurred in about 1946, when the local people discovered some gold, ivory, bronze objects. All of these objects in fact came from antiquity dealers, none was excavated by archaeologists. However the finds were widely discussed by the scientific community for their cultural and artistic origins. The artefacts coming from Ziwiye were indiscriminately considered as the result of a Scythian, Mannaian, Median, proto-Achaemenid, Assyrian, Assyrian made by Syrian artists, provincial Assyrian or Urartian cultural tradition.
- The aim of this paper is to present a corpus of 79 unpublished seals now placed in the National Museum of Iran and coming from the Nosratollah Motamedi's excavations carried out in 1977 and 1978 at Ziwiye. The research is focused to the study of the cylinder and stamp seals from Ziwiye in a historical perspective, identifying their chronology and the cultural horizons of production.

- 21 Atakuman, Cigdem 2 Travelling Images  
**Stamp Imagery and Social Transformation during the Later Neolithic of the Near East** 10 Tuesday Morning  
 Turkey • Middle East Technical University, Ankara • cigdem.atakuman@gmail.com  
 Stamps, pintaderas, pendants and related image bearing objects are ubiquitously found as part of “the Neolithic Package” in the Near East. While some scholars associate their appearance with growing importance of property control, others emphasize their decorative use. Yet, the function of these objects still remains a mystery. The aim of this study is to better understand the symbolic role of the later Neolithic stamps and pendants within the wider context of social practice and organization.  
 Through a basic stylistic analysis, the study compares the material from the Later Neolithic sites of Northern Mesopotamia and Central Anatolia. The results of this study suggest that the stamps and pendants can be best viewed as a transformative medium of identity discourse that elaborated on its user’s location in various layers of community membership. More succinctly, the study argues that the stamps introduced a new discursive field through which personal identities and community structures began to be redefined with reference to the importance of social continuity and the significance of male sexuality in providing this social continuity. While these may have been the general concepts that became popular in a wide region, the negotiation and practice of these concepts varied from one social context to another.  
 keywords: neolithic, stamp seals, symbolism
- 22 Avni, Gideon 7 Islamic  
**Continuity, Innovation and Decline of Agricultural Fields in Early Islamic Palestine** 09 Monday Evening  
 Israel • Israel Antiquities Authority • avnigid74@gmail.com  
 Three decades after the publication of Andrew Watson’s book *Agricultural Innovation in the Early Islamic World* (1983), new insights on early Islamic agriculture in the Near East are provided by a number of detailed studies aimed to reconstruct the chronological framework and mode of operation of ancient agricultural fields in the southern Levant.  
 Based on recent archaeological research of rural hinterlands, which included the dating of agricultural terraces in the Negev Highlands and the Jerusalem region with OSL (Optically stimulated luminescence) methodology, this presentation will discuss the processes of continuity, innovation, change and decline in the agricultural regimes of Early Islamic Palestine, suggesting a new chronological framework for their intensification and abatement.
- 23 Ayaz, Gulan 6.2 Reports Themes  
**The Early Iron Age Jewelleries of the Karagündüz Cemetery from Eastern Anatolia, and their relationship to Southern Caucasia** 10 Tuesday Evening  
 Turkey • Yüzüncü Yıl Üniversitesi, Van • gulanayaz@hotmail.com  
 Karagündüz is an Early Iron Age cemetery located 35 km. north-east of city of Van, and near the lake of Erçek. It was excavated between 1991 and 1996 by Veli Sevin during which time ten tombs were investigated. Nine of them are chamber tomb (K1, K2, K3, K4, K5, K6-7, K8, K10), and the one is simple pit burial (K9). The ceilings of the rectangular tombs had collapsed but their heights are estimated at 2-2.5 m. Depending on their dimensions, there were 20 to 80 bodies in each chamber.  
 This study deals with jewelry from the chamber tombs of the cemetery. All of these are generally iron, a small number of bronze and only one gold object.  
 The most numerous group is made up of finger rings, armlets and anklets, which come into two distinct types, one with a round in section, while the other has been beaten into a thin, flat band. Other examples of everyday objects that were used as grave gifts are decorative toggle-pins made of bronze and iron. The decorations of the bronze examples usually include pair of cocks, placed back-to-back and poppy-heads. One of the toggle-pins made of iron is distinguished by having a large spherical carnelian bead attached to its head. Only one gold object, an earring, was unearthed during the excavations.  
 Keywords: Early Iron Age Jewelry, Karagündüz, Early Iron Age Cemetery, Eastern Anatolia

- 24 Azad, Arezou 7 Islamic  
11 Wednesday  
Midday
- The Landscape of Early Islamic Balkh**
- UK • University of Oxford & University of Birmingham • arezou.azad@orinst.ox.ac.uk
- This paper will examine the landscape of early Islamic Balkh brought to light through the recent study of textual and archaeological material. It will argue that for the first four centuries of Islamic rule Balkh experienced a growth in size and importance. This development was coupled with a reconfiguration of the sacred landscape of Balkh, a process which involved the appropriation of pre-existing sacred sites, notably shrines, for Islamic purposes. It also involved the construction of an Islamic narrative of Balkh's sacred history that celebrated its transformation from Zoroastrian and Buddhist holy place into a major centre of Islamic piety, worship and scholarship. The paper will present time-layers of maps of Balkh and its province – which spanned parts of modern-day Afghanistan, Tajikistan, Uzbekistan, and Pakistan – recently developed by the “Balkh Art and Cultural Heritage Project”. The maps will plot the sacred sites of Balkh over time, and the narratives that are attached to them from a variety of language sources (Persian, Arabic, Chinese, etc). The paper will review the evidence and try to suggest the social and economic factors that may have led to this seemingly contradictory development.
- 25 Azadi, Ahmad 6.1 Reports Region  
10 Tuesday  
Evening
- Archaeological Survey of the Kohgiluyeh Area; A Preliminary Report of two Seasons**
- Iran • Iranian Center for Archaeological Research • aliazadi52@yahoo.com
- Kohgiluyeh and Boyer Ahmad Province lies in southern part of the Zagros Mountain range. This region is located in southwestern Iran and is one of regions which lies between two important cultural zones of Fars and Khuzistan. The region has never been investigated archaeologically and history of systematic archaeological researches in the region came back to about 10 years ago. Landscape of the region would be divided into three parts inclusive mountains, valleys and hills. Archaeological surveys in Kohgiluyeh area have been conducted in two time frames of 1999-2002 and 2007-2012. In addition to general identification of various sites of the region, some of our objectives for the survey were 1. Investigating the settlement patterns of different periods through the finds acquired by surface survey; 2. To get an understanding of the subsistence economy of the prehistoric sites; 3. Better understanding of cultural character of the study region concerning its location between two most influential cultural spheres of Fars and Khuzistan; to which degree it has its own character. Summing up, we surveyed 374 sites from Upper Paleolithic to the late Islamic period including a wide range of sites such as caves, mound, ossuary, water transfer channels, mills, shrines, bridges, castles, paved roads, water reservoirs and other architectural structures. In this article we discuss the settlement patterns of various periods and general descriptions of sites in the region.
- 26 Baccarin, Cristina 6.1 Reports Region  
12 Thursday  
Afternoon
- Consumption in a Temple? An Interpretation of the Ceramic Repertoire of the Early Bronze Age Temple at Tell Ahmar (North Syria)**
- Italy • Università Ca' Foscari Venezia • cristinabaccarin@hotmail.com
- During recent excavations at Tell Ahmar, a temple dating to the late Early Bronze Age was unearthed on the acropolis of the settlement. The temple was destroyed in a sudden blaze, preserving many artifacts. Beside luxury objects and various items, a well preserved ceramic collection was found in the building. Some of the vessels were still in situ, on the benches running along the walls of the structure.
- This presentation focuses on the study of the vessels from the temple. It describes the vessel shapes and offers a discussion of their function according to their context of recovery and the information provided by the organic residue analysis undertaken for a few samples.

- 27 Bader, Bettina 1 Egypt  
09 Monday  
Evening
- Differences in Settlement Structure and Burial Customs as Perception of Alterity at Tell el-Dab'a II**
- Austria • Universität Wien • [bettina.bader@univie.ac.at](mailto:bettina.bader@univie.ac.at)
- A part of the late Middle Kingdom settlement at Avaris/Tell el-Daba (Area A/II) yielded housing facilities combined with tombs. Analysis has shown that at this stage of the development towards the so-called Hyksos culture several decades later the inhabitants seem to have made a conscious choice in what manner and with which objects they wanted to be buried, which may not inform about their intrinsic 'ethnicity'. Traits of Egyptian and Middle Bronze age culture can still be separated, especially in the burials. This cultural diversity is much less notable in the settlement itself with medium to small simple housing units with a few elaborate exceptions. A typical compound surrounded by a thin irregular precinct wall contained not only a small to medium house with a simple suite of rooms, but also some installations and activity areas such as those for dumping refuse and ash as well as for cooking. That 'quarter' of ancient Avaris differs not only to other settlements in Egypt, but also to other quarters at the same site (Area F/I) in the lay-out, the number of burials interred within the settlement and some finds. Some potential reasons for this difference will be highlighted in this paper.
- 28 Banijamali, Seyyedeh Leila (1) – Alaei Moghadam, Javad (2)– Mousavi Haji, Seyyd Rasoul (3) – Afarin, Reza Mehr (3) 7 Islamic  
13 Friday  
Morning
- The Results of the Latest Studies Conducted on Palace of Kuh-e Khajeh, Qaleh Kaferun, in Sistan**
- Iran • 1 University of Tarbiat Modares; 2 Zabol University; 3 Babolsar University • [leylabanijamali26@yahoo.com](mailto:leylabanijamali26@yahoo.com)
- Being located at 02 km of south-west of Zabol, Kuh-e Khajeh is one of the significant historical region in Sistan where geopolitical and religious situation caused considerable buildings to be structured on eastern steep slope since ancient times. Despite of studies and researches done by archaeologists and scholars, there have not been known certain chronology, however, what have been done was based on architectural remains of the site.
- In the present paper, it is attempted to date the palace of Kuh-e Khajeh based on pottery data. Therefore, it is embarked to collect needed data in a systematic survey in the castle area. Since recognizing potteries characteristic in archaeological studies is significant, so it was given priority to the study of pottery characteristics. Nevertheless, the collected remarkable potteries were classified.
- According to the results from the typology of potteries, Kuh-e Khajeh palace has three different settlement phases. First phase and 0nd phase which are Parthian and Sassanids, and 3rd one is Islamic (6-8 AH centuries).
- Keywords: Sistan, Kuh-e Khajeh palace, Qaleh Kaferun, pottery, historic period, Islamic period.
- 29 Basafa, Hassan – Rezayi, Mohammad Hossein – Rahmati, Mahdiye 6.1 Reports Region  
11 Wednesday  
Afternoon
- New Evidences on Bronze Age Cultures in Neyshabur Plain (Northeast Iran)**
- Iran • Neyshabur University • [hbasafa@gmail.com](mailto:hbasafa@gmail.com)
- It is clear that we don't have enough archeological information's in northeastern Iran, especially in the Bronze Age; this is while we have good information outside Iranian borders especially in Central Asian regions because of archaeological investigations. Neyshabur Plain as a foothill plain in Northeast of Iran situated south of Binalud mountain (highest elevation in Khorassan Province), that Bronze Age materials have been found in it in archeological excavations in Shahrake Firoze. Shahrak Firoze is located adjacent northwest of the city of Neyshabur and was hidden under alluvial deposits because the special environmental conditions. During the construction activities near the modern Neyshabur, It was discovered for the first time in 1999, and unfortunately a major part of it was destroyed. According to a large amount of cultural materials were found during archaeological excavations in 2009 and 2010, Shahrak Firoze located in the path of major trade routes in the Late Bronze Age, and has an important role in management of the commercial ways. Also taking place at Shahrak Firoze Management expertise and some goods has been produced in large scale. Preliminary investigations also suggest a date of Middle and Late Bronze Age for Shahrak Firoze that in the late Bronze Age has been under the influence of BMAC culture in Central Asia (Margiana and Bactria).

- 30 Baseri, Zohreh 6.2 Reports Themes  
12 Thursday  
Afternoon
- Trade and the development of writing (According to the National Museum of Iran Counters: Plain and Complex Tokens)**
- Iran • Curator and Keeper Head of Seals and Coins Department National Museum of Iran -  
Tehran • zohreh46baseri@yahoo.com
- By the end of the 4th millennium BC, some 5000 years ago, Porto-Sumerian scribes in Mesopotamia and Proto-Elamite scribes in Iran had developed systems of measures and numbers that from the foundation of our today, s decimal system of mathematics. The earliest writing was development from the need of the early state organization to keep records of their increasing activities in exchange both raw and finished materials as well as food and drinks. The addition of new items of trade such as beer, oil, cosmetics and perhaps dairy products required a number of specially shaped containers to be produced on a large scale. Therefore, around 3500 BC, the beautiful art of painted pottery was replaced by the production of plain, but highly specialized vessels of the Protoliterate period. by 3500 BC, long-distance trade in large volume developed. to make sure that the commodity was delivered intact, and to inform, the recipient of the commodity's quantity, clay tokens alone were not sufficient. Thus, the prehistoric clay tokens that represented various commodities and their quantities were made much smaller in the Protoliterate period (ca.3400-3100 BC) and were placed in clay balls.
- 31 Baştürk, Elif 6.1 Reports Region  
13 Friday  
Midday
- A Mitannian Fortress on the Northern Border of Mesopotamia: Siirt – Türbe Höyük**
- Turkey • Ahi Evran University, Kırşehir • elif.basturk@gmail.com
- Although her motherland was in the Khabur triangle, the political impact of the Mitannian state was visible between the Zagros range and the Mediterranean, including the Southern Taurus on the north, Upper Tigris Valley. The written data informs us that, during the downturn and the collapse of the Mitanni, Upper Tigris Valley was hosting the late capital Taidu, located in the same valley. Since 1998, Ilisu Dam Rescue Excavation Project in Upper Tigris Valley has been adding numerous novel data to the understanding of Northern Mesopotamia, including pottery finds, and some limited architectural evidence about the Mitannian expansion.
- Siirt – Türbe Höyük, which was excavated between 2002 and 2007, has been exposing much more evidence about the Mitannian era. Located 6 km. to the intersection point of Tigris and Bothan rivers, Türbe Höyük holds a strategic position for the natural passes for north – south transportation via Bothan valley. The Late Bronze Age layers of the mound are represented by a fortress with a defence system, and a great amount of pottery repertory of the Mitannian culture. This paper aims to discuss the northern borders of the Mitannian state with the help of the evidence from Türbe Höyük, and tries to make an archaeological understanding of the Mitannian existence in Upper Tigris and Bothan valleys.
- 32 Baştürk, Mahmut Bilge 2 Travelling Images  
10 Tuesday  
Evening
- Warriors and Gods on the Highlands: Urartian Visual Perception of the Mesopotamian Divinities**
- Turkey • Anadolu University, Eskişehir • bilgebasturk@gmail.com
- Urartian visual art has long been considered as a reflection of the ancient Mesopotamian culture. The relation between the two traditions is nearly certain from the symbolic and iconographic point of view, and the Urartian tradition can easily be accepted as a continuation and replica of the Mesopotamian one, especially the Assyrian art. However, despite numerous similarities, Urartian artists had a real tendency to create an art of their own; an ideological idea and aim, which in some degree could have been successfully managed: while the representations of some of the famous Mesopotamian divinities were faithfully conserved, some others were altered and converted. The preferences of the artisans seem to be conscious rather than being spontaneous receptions, and there are some clues leading us to imagine the armed elites, a warrior class, acting as the main force and source of inspiration. This paper focuses on the iconographic features of the Urartian representations of the Mesopotamian divinities, and tries to reach an understanding about both the visual sources of the divine representations, and the authority behind this visual approach.

- 33 Battini, Laura 2 Travelling Images  
10 Tuesday  
Midday
- Syro-Mesopotamian Travelling Images from Seals Examples**
- France • UMR -5133- Archéorient-CNRS, University of Lyon • [laura.battini@mom.fr](mailto:laura.battini@mom.fr)
- The appearance of some cylinder seals handles the question of exchanges' possibilities. In this paper priority is given to the analysis of few II<sup>nd</sup> millennium Syrian examples looking at their possible Mesopotamian connections. Under consideration is the manner of how images travel and change.
- 34 Becerra, Ana 2 Travelling Images  
11 Wednesday  
Morning
- The Buried Griffins of Persepolis: Eagle-Headed Griffins and the Elite in Elam and Persia**
- Australia • The University of Sydney • [abec6397@uni.sydney.edu.au](mailto:abec6397@uni.sydney.edu.au)
- Discarded and buried shortly after their construction, two eagle-headed griffin capitals excavated from the north-west of Persepolis' terrace platform are enigmatic in both purpose and abandonment. Publication of the find by Ali Sami suggests that these protomes could have been "made on trial"; their rejection an indication of discord with the officially sanctioned 'vision' of Achaemenid Persian kingship.
- First recorded in the proto-urban levels of Choḡā Miš and Susa, the eagle-headed griffin holds a special place in the iconography of ancient Iran as a consistently popular motif with strong ties to elite manufacture. Notable for its guardianship of Inšušinak at Middle Elamite Choḡā Zanbīl, over the course of the first millennium B.C.E. the positive qualities of the eagle-headed griffin appear to shift in favour of antagonistic traits. This paper will explore the transformation of this creature from a dedicated protector of Elamite deities to an enemy beast in Mesopotamian and Persian heroic encounter. The eagle-headed griffin of the Persepolis landscape will be viewed as a complex motif in the Achaemenid imperial programme, influenced stylistically by the Elamite artistic tradition yet highly divergent in meaning.
- 35 Becker, Johannes 1 Egypt  
10 Tuesday  
Morning
- Large-Scale Landscape Paintings of Tell el-Dab'a/Egypt**
- Germany • Ruprecht-Karls-Universität Heidelberg • [Johannes.Becker@stud.uni-heidelberg.de](mailto:Johannes.Becker@stud.uni-heidelberg.de)
- The representation of nature is one of the major topics in the iconographies of the Aegean Bronze Age. It can be found on various media such as seals and metalworks. Especially the wall paintings within several elite buildings emphasize the important role of this theme for Aegean societies.
- However, landscape and floral motifs are not restricted to the Aegean, but are also part of various scenes in Egyptian tomb and palace paintings of second millennium B.C.E. Yet, the way the natural environment is depicted, varies distinctively from the contemporaneous iconographies in the Aegean.
- In this respect, a finding in the Eastern Nile Delta is of special interest. The 18th Dynasty wall paintings of Tell el-Dab'a show not only technical features which are closely linked to the material culture of Neopalatial Crete, but also iconographic similarities to the representation of landscapes in the Aegean world. Next to a preliminary analysis of the unpublished large-scale landscape paintings of Tell el-Dab'a, the paper aims to show their various links to Minoan iconography and to embed them in their Egyptian context. By doing this, the wall paintings – which at first glance seem foreign in Egypt – will be examined in context of divergent 'Bildsprachen' within this paper.

- 36 Belcher, Ellen – Croucher, Karina 2 Travelling Images  
**Exchanges of Identity in Prehistoric Anatolian Figurines** 09 Monday  
 USA/UK • John Jay College/City University of New York; Bradford University • ebelcher@jjay.cuny.edu; k.croucher@bradford.ac.uk Evening  
 This paper will examine the exchange imagery and ideology of the human body manifested through figurines from prehistoric (seventh – sixth millennia BC) Anatolian contexts. We present our investigations into the nature of communication of gender, identity, materiality and personhood across the prehistoric Anatolian landscape. Ambiguities in form and use of figurines will be considered for potential shared and divergent messages and meanings.  
 Approaching prehistoric figurines through case studies of assemblages and examples from central and southeastern Anatolia, this paper examines patterns in reciprocal exchange of body representation and local practices. Recording a way of seeing the body in clay and stone, under consideration are larger milieus of materiality and functionality, including figurine vessels, figurine pendants and figurine tools. Taken as a whole, these figurines express local, regional and inter-regional communication of Anatolian identity, materials, ideologies and skills, which travelled largely by ephemeral means within and between cultures rarely evidenced elsewhere in the archaeological record.
- 37 Bellucci, Benedetta 2 Travelling Images  
**Travelling Monsters: The Representation of Fantastic Creatures in Late Bronze Age Glyptic** 11 Wednesday  
 Italy • Università degli Studi di Pavia • benedetta\_bellucci@yahoo.it Morning  
 Motifs and iconographies travel through peoples and cultures. Contacts and influences among different cultures are evident and include ideas, religion, mythological tales, and beliefs. This process of transfer is particularly interesting if the subjects of the visual representation are supernatural beings.  
 By observing representations of fantastic creatures is possible to identify interesting aspects of the diffusion of these motifs. The message behind the image of supernatural beings, such as composite creatures, is not always deliberately transferred, accepted nor understood. Often, it is misinterpreted and adapted to the local cultural context; sites located in regions of geographical (and political) interfaces are particularly keen to ambiguities in the adoption of images.  
 The representation of composite creatures on seals and seal impressions is the object of this research. The north-Syrian Euphrates region during the last centuries of the 2nd millennium BC represents the geographical and chronological frame. Examples provided include well-known composite creatures, such as sphinxes and griffins, together with creatures only sporadically represented.  
 The paper will analyse changes in iconographies, motifs, and themes. The main goal is to outline the influences of not-local cultures in the development of the representation of composite creatures.
- 38 Ben-Dor Evian, Shirly 1 Egypt  
**Representations of "Sea-Peoples" as Icons of Alterity: Creating a New Philistine Paradigm** 10 Tuesday  
 Israel • Tel-Aviv University • bdevian@gmail.com Evening  
 The Philistine Paradigm has dominated archaeological research for many decades. According to common views, the "Sea-Peoples" were defeated by Ramesses III in his eighth regnal year, ca. 1175 BCE, and were subsequently settled in his strongholds in Southern Canaan. However, the archaeological remains from the initial Philistine settlement strata have not yielded any Egyptian finds that would attest to the Egyptian involvement in the Philistine settlement process. This has prompted the advent of the "Low Chronology", dating the Philistine settlement to after the Egyptian withdrawal from Canaan, ca. 1130 BCE. A new problem now presented itself: how to account for the gap between the initial appearance of the Philistines in the records of Ramesses III and the later date of their settlement in Philistia?  
 The answer lies in the often debated location of the land battle against the "Sea-Peoples". A new analysis of this famous relief, based on the principles of Egyptian iconic conventions suggests that the "Sea-Peoples" were depicted using icons that were reserved for the representations of battles in Syria. Combined with the new evidence for a Philistine settlement in the 'Amuq plain (kingdom of Palistin) a new paradigm can now be articulated: Ramesses III halted the advance of the "Sea-Peoples" in Syria ca. 1175 BCE, resulting in the Philistine settlement in the 'Amuq plain, and only later, once Egypt withdrew from Canaan, did the Philistines settle in Philistia.

- 39 Ben-Yosef, Erez 6.2 Reports Themes  
10 Tuesday  
Evening
- Back to Solomon's Era: Results of the First Phase of the Central Timna Valley Project (CTV 2013-2014)**
- Israel • Department of Archaeology and Ancient Near Eastern Cultures, Tel Aviv University, Tel Aviv • ebenyose@post.tau.ac.il
- Tel Aviv University's Central Timna Valley (CTV) Project is a multi-year interdisciplinary research aimed at elucidating various aspects related to societies and ancient copper production in the vicinity of the copper ore deposits of the southern Arava, Israel (<http://archaeology.tau.ac.il/ben-yosef/CTV/>). The first phase of the project (2013-2014) focused on copper mining and smelting sites at the turn of the 1st millennium BCE. It included excavations at several mining fields, surveys of slag mounds, and the first excavations at the smelting camp of Site 34 – “The Slaves’ Hill” – located at the center of the Timna Valley. High resolution radiocarbon dates from the latter site indicate a peak in copper production during the 10th century BCE and disprove previous interpretations of the site as a New Kingdom Egyptian smelting camp. The new dates provide the background for understanding the various new discoveries of our team, and further constrain the discussion regarding social organization, ethnicity and identities of the people reflected by the archaeometallurgical remains of the region. Engaging in a sophisticated and centralized copper production system, these people were part of a complex society of nomadic or semi-nomadic tribal organization that necessarily had a significant role in the geopolitical history of the southern Levant. Our finds stress the limits of archaeology in tackling questions of social complexity in non-sedentary societies, which unless engaged in unique activities such as mining and smelting, are transparent in the common archaeological quest.
- 40 Benati, Giacomo – Lecompte, Camille 6.1 Reports Region  
10 Tuesday  
Midday
- New Light on the Archaic Texts from SIS 5-4 at Ur: A Contextual and Archival Reconstruction**
- Italy/France • University of Turin; CNRS • giacomo.benati@gmail.com
- This paper seeks to reconsider an archive of cuneiform tablets, allegedly excavated in the so-called Seal-Impression Strata (SIS) 5-4, at Ur in Mesopotamia. The in-depth analysis of the original excavation records kept in the British Museum (G. Benati) revealed a wealth of new stratigraphic and contextual data that can be used to better reconstruct the provenance of the tablets. In addition, a project consisting of both the re-analysis of the Archaic Texts and of the publication of a group of tablets, left unpublished by E. Burrows and kept in the British Museum, is actually underway (C. Lecompte). In this paper, fresh archaeological and textual data are used in the attempt of throwing more light on the administration and the main institutions of Early Dynastic Ur, as well as on the nature of the layers underlying the Royal Cemetery tombs.
- 41 Bergoffen, Celia J. 2 Travelling Images  
09 Monday  
Afternoon
- Prized Pots: Cypriot Painted Wheel Made Kraters in MB-LB Cyprus and the Levant**
- USA • Fashion Institute of Technology • CELIA\_BERGOFFEN@exchange.fitnyc.edu
- Cultural, artistic and technological exchanges between Cyprus and the Levant in the 16th - 15th centuries B.C.E. followed the island's intensified copper production and its integration in eastern Mediterranean trade networks as the principal supplier of this commodity. Cypriot Bichrome and White Painted Wheel made (WPWM) wares, created in this period, exemplified these multi-level exchanges. A late-comer on Cyprus, the potter's wheel was introduced no doubt as a result of regular contact with the Near East. But while NAA analyses demonstrated that Bichrome vessels were largely produced in southeastern Cyprus, their distribution suggests that they were made for export to southern Canaan where kraters and bowls, in particular, were mostly found in settlement contexts and probably used in ceremonial feasting. In Cyprus, at Enkomi, WPWM I kraters possibly filled this function. Was the bird on a branch motif, occasionally depicted WPWM I vessels, inspired by Syro-Phoenician luxury goods? Imports were valued for their exotic qualities but also because they signaled the owners' acquaintance with the complex social networks through which they circulated. Although WPWM I kraters were not luxury items, their performative role in ceremonial feasting offered ideal vehicles to communicate their owners' cosmopolitan tastes.

- 42 Bessard, Fanny 7 Islamic  
11 Wednesday  
Afternoon
- Patterns of Urbanism in Early Islamic Iran and Central Asia I**
- UK • SOAS London • fb14@soas.ac.uk
- These two papers will look at the development of cities in early Islamic Iran and Central Asia in the light of textual sources and recent archaeological excavations.
- The first paper will introduce the results of new excavations conducted at Paykent (Uzbekistan), as part of the Louvre-Institute of Samarkand programme of research about the evolution of settlement patterns in the oasis of Buḥāra. These excavations conducted by S. Berthier, F. Bessard and J. Mirzahamedov have so far resulted in the discovery of a manufacturing area extending over close to one hectare along the eastern side of the city wall and a ribāṭ from the 9th-11th c. Using the data collected in Paykent and in the neighbouring sites of Rāmīthan, Waraḥša, Wardan or Buḥāra, it will be demonstrated that the Arab conquest lead to a new demographic momentum, as well as a probable change in the urban economic strategies in the oasis of Buḥāra. These cities, which remained fortified entities enriched by long-distance exchange towards China until the Late Antiquity, saw, in the early Islamic period, a development of their outskirts beyond the ancient fortified enclosures. This went along with the development of an industrialisation process from the beginning of the 9th to the 11th c. The huge pottery production area recently discovered at Paykent notably provides traces of carefully controlled and organised manufacturing activities of high technical levels.
- 43 Bieliński, Piotr 6.1 Reports Region  
13 Friday  
Midday
- Kuwaiti-Polish Excavations of Bahra 1 Site on As-Subbiya Desert**
- Poland • University of Warsaw • piotr.bielin@wp.pl
- Since 2009 an joint Kuwaiti-Polish mission is investigating an Ubaid culture related site on As-Subbiya desert, some kilometers from the present shoreline. Preliminary results of recent excavation campaigns on Bahra 1 show that the settlement measuring ca 180 x 50m was composed of not less than nine separate multi-roomed architectural units, most of them rectilinear. Among them are also remains of so-called "tripartite" building characteristic for Ubaidian architecture. Walls (at least their lower parts) were built of unworked slabs of local sandstone. All Structures uncovered in the western part of the site (with rectangular rooms) were erected within same orthogonal system, which slightly differed from the one which was respected in its central part, while in the eastern part different pattern of space organization was observed. In some parts of the settlement at least three consecutive building level were revealed. In many of the explored rooms were found remains of workshops producing shell beads. Analysis of collected ceramic material shows that besides imported Ubaid vessels, representing Ubaid 2/3 phase, inhabitants of Bahra 1 settlement were using but in smaller numbers local red coarse pottery.
- 44 Bietak, Manfred 1 Egypt  
09 Monday  
Afternoon
- Canaanites and Egyptians: Ethnic Markers and Evidence of Co-existence**
- Austria • Institut für orientalische und europäische Archäologie und w.M. der Österreichischen Akademie der Wissenschaften • manfred.bietak@univie.ac.at
- This paper tries to assess all literary and non-literary evidence of co-existence of Canaanites and Egyptians and the implications of cultural and religious interference between the two population groups between 2000 and 1500 BC.

- 45 Binder, Anne-Birte 5 Dealing with the Past  
**Documentation, Publication and Reception by and of Anton Moortgat** 11 Wednesday  
 Germany • Goethe-University Frankfurt/ Main • binder@em.uni-frankfurt.de Midday  
 Known for his contributions on the iconography of the Ancient Near East Anton Moortgat was a pioneer and expert in Mesopotamian art who brought forward our understanding of its significance. Likewise he is a joint founder of archaeological research in Syria as the first excavator of Tell Chuera, Syria, publishing his results regularly in preliminary reports. His reports are an important source of architecture and iconography until today.  
 After the death of his wife Ursula Moortgat-Correns the complete documentation of 11 seasons conducted by Moortgat and Moortgat-Correns between 1958 and 1985 in Tell Chuera was allocated to the Institut für Archäologische Wissenschaften, Abt. I Vorderasiatische und Klassische Archäologie at the Goethe-University, Frankfurt/Main, Germany. This circumstance enables a comparison of the original documentation and the published results presenting some important conflicts between the notes made during the seasons and in between and the preliminary reports.  
 On the basis of a seal impression found in the season of 1974 in the area of the “kleiner Antentempel” one discrepancy will be discussed in detail as this finding and its dating to the Djemdet Nasr-Period affect the discussion on chronology of Northern Syrian glyptic until recent times.  
 This paper is a contribution to the dating of the glyptic of Tell Chuera and Northern Syria in the 3rd millennium BC.
- 46 Blocher, Felix 6.1 Reports Region  
**Excavations at Tall Munbāqa (Syria) – City Development between Middle and Late Bronze Age** 10 Tuesday  
 Germany • Martin-Luther-Universität Halle-Wittenberg • felix.blocher@orientarch.uni-halle.de Midday  
 Tall Munbāqa, the ancient Ekalte, has a rich documentation for the LBA as far as houses, house inventories, temples, city gates, streets and of course clay tablets are concerned. The MBA is only sporadically attested. Newly published OB texts from outside Ekalte (Mari) tell us that certain groups from a nomadic background became settled at this place in the 18th century B.C. This allows a fresh view on the MB-LB phase of the development of this truly astonishing place on the left side of the Euphrates.
- 47 Boertien, Jeannette 6.1 Reports Region  
**Recent Discoveries at Tell Abu Sarbut in the Eastern Jordan Valley** 13 Friday  
 The Netherlands • University of Groningen • jhboertien@gmail.com Afternoon  
 In 2012 the Renewed Excavations of Tell Abu Sarbut started a new project in cooperation with Groningen University, The Netherlands. The goal was to uncover the Roman layers of this small non-urban site situated in the Central Jordan Valley in Jordan. Previous excavations at the site had revealed a Late Roman occupation layers: a hamlet consisting of some farmhouses or perhaps a Roman villa. The new excavations also yielded earlier pottery and other finds demonstrating unexpected similarities to that of households in Early Roman Judaea and Galilee. The excavations at Tell Abu Sarbut may thus shed new light on the inhabitants of Early Roman Peraea and on their relations with the inhabitants of contemporary Cisjordan.

- 48 Bourke, Stephen J. 6.1 Reports Region  
13 Friday  
Midday
- The 2013 Field Season at Pella in Jordan: Major New Civic Structures of the Bronze and Iron Ages**
- Australia • University of Sydney • stephen.bourke@sydney.edu.au
- The 2013 field season at Pella in Jordan have focussed on two monumental architectural complexes - the EBA terrace/fortress/gateway complex on the eastern summit of Tell Husn, and three distinct sequential MBA, LBA and IA II administrative complexes on the south side of Khirbet Fahl.
- On Husn, recent work on the EBA complex uncovered a 3.6m wide circuit wall that appears to ring the Husn summit, dating from the later EB IB period (ca. 3200 BCE). Earlier EBA materials (ca. 3500-3200 BCE) include two phases of 'pre-terrace' architecture, featuring an early (late EB IB) stone paved gateway built atop a massive stone retaining wall, which is built over parts of a six-metre diameter hollow stone tower (early EB IB), apparently the southeast strongpoint of an earlier fortification system.
- On Khirbet Fahl, the earliest phase of the administrative/civic complex uncovered so far dates to the later MBA (ca. C17th BCE). It is directly associated with the stone anten-temple (Temple Phase 3), and is similarly monumental in scale. In the east of the complex, large plaster-floored courtyards lined by smaller boundary rooms were uncovered, as well as a series of stone-lined deep well-like structures, which are linked together by ceramic-lined stone covered drains. These lay below a pebble-paved plaza, associated with a thoroughly rebuilt administrative complex dating to the LBA (ca. C14th BCE), associated with the Pillared Hall (Temple Phase 5), less monumental but similarly Egyptianising, as suggested by the multiple 'lamp and bowl' foundational deposits.
- Finally, this stone-built Residency structure is overlaid by a well preserved brick-walled grid-plan complex of more than 34 rooms, built in the early Iron II (C10th BCE) and destroyed at the end of the 9th BC, in a site-wide conflagration. Complete room assemblages were preserved in the destruction, illustrating the multi-purpose storage, industrial and administrative functions of this Iron II complex.
- The presentation will discuss major architectural and object assemblages on Husn and Khirbet Fahl, and place each in their local and regional contexts.
- 49 Boyer, Don 6.1 Reports Region  
13 Friday  
Midday
- Aqueducts and Birkets: New Evidence of the Water Management System Servicing Gerasa (Jarash), Jordan**
- Australia • University of Western Australia • donboyer@iinet.net.au
- The commonly held view that the water monuments of the Classical period in the Decapolis city of Gerasa were mainly supplied from a source at Birketein, 1.6 km to the north of the city, may need to be revised in light of new evidence from field surveying. Elements of an aqueduct from a high level source have been identified approaching the city from the north west. Aqueducts have also been identified approaching the city from sources to the north at a higher elevation than the level of the Birketein source, and a new source has been identified within the eastern part of the walled city.
- 50 Bradbury, Jennie 6.2 Reports Themes  
11 Wednesday  
Morning
- "Missing Persons": body parts, personhood and ownership in the Levantine Bronze Age**
- UK • Durham University • j.n.bradbury@durham.ac.uk
- The human body and the ways in which it is treated after death can be a powerful symbol, highly emotive and closely associated with concepts of personal identity and socio-cultural beliefs. Popular conceptions often highlight the primacy of the "individual"; however, research as part of the "Invisible Dead" Project (John Templeton Foundation) has demonstrated that many of the human remains extant within the archaeological record consist, not of articulated human skeletons, but of body parts that have been curated and deposited separately from the rest of the corpse. In other cases, despite the existence of burial monuments and favourable taphonomic conditions, the dead are simply "missing". One way to approach this is to examine death not as a single event, but as a process, different parts of which may be identified archaeologically. This paper will consider the potential mobility of the dead, in whole or in parts, between monuments, cemeteries and amongst the living. It will discuss how changing concepts of the body, personhood and ownership during the Levantine Bronze Age may be reflected in the mortuary record, and question at what point evidence for the "individual" is manifest within the archaeological record.

- 51 Bradosty, Zidan Rasheed 7 Islamic  
11 Wednesday  
Morning
- The Qaysaria (Suq, Market) of Erbil in the Ottoman period**
- Kurdistan of Iraq • Salahaddin University, Erbil • zidanbradosty82@gmail.com
- The city of Erbil has a special importance that comes from its unique location between the upper and down Greater Zab Rivers to the east of the Tigris. A witness for this importance and an incentive for the same is its originality in history. It is the city that been created in the prehistoric times and continued to this day holding the same old name, the name which appeared in cuneiform texts since the early times of writing before the third millennium BC and that makes it the oldest city holding the same name all over the world.
- Hence, the study of Qaysaria of this unique city is a way to shed light on an important aspects of the history of Erbil that are closely linked to its strategic location; the economic and architectural aspects and their development. Therefore, this research has two methods in approach, the first is dealing with the city's history and its evolution through ages, and the second is studying Qaysaria Architecturally and that is supported by a field study, which makes it a pioneer research in the field. The research also includes a set of drawings and illustrations that are prepared on this Qaysaria that to be published for the first time ever.
- 52 Braemer, Frank – Geyer, Bernard 4 Reconstructing  
09 Monday  
Afternoon
- From Site Catchment Analysis to Regional Settlement Pattern Analysis: Building Regional Map of Environmental Resources' Potential**
- France • CEPAM, CNRS Université de Nice, Archéorient CNRS Maison de l'Orient et de la Méditerranée Lyon • frank.braemer@cepam.cnrs.fr
- Understanding land conditions necessitates a methodology for building regional environmental frames in order to understand factors that make areas more or less attractive for human subsistence and activity. First maps were built within the frame of PaleoSyr/PaleoLib project (French ANR funded project 2010-2014) for two steppe areas of Western Syria. The aims is to get a regional reference for estimating agricultural and herding land use potentialities by drawing a synthesis of known environmental conditions and constraints at a micro-regional scale. The studied area covers the medium arid (200 to 300 mm rainfall avg. / Year) and lower arid (100-200 mm rainfall avg. / Year) bioclimatic zones that are areas where human occupation and land use are the most sensitive to any change in climate.
- A bioclimatic map based on rainfall and induced vegetation values is not sufficient to define the constraints map: it must be crossed with topography and geomorphology, lithology, water resources and soils maps. We put in perspective the weight of the climatic aridity, and highlight the weight of the edaphic component that may increase or counterbalance aridity.
- The second step attempts to draw, at regional scale, areas that were systematically occupied during the Holocene and those who experienced phases of abandonment or decrease of settlements. We thus define of more or less attractive or repulsive zones.
- 53 Braun, Eliot 6.2 Reports Themes  
11 Wednesday  
Afternoon
- Early Bronze I Domestic Architecture in the Southern Levant-- Definitions, Sources, Inspirations and Functions**
- Israel • Centre de Recherche Français de Jérusalem & Senior Fellow, WF Albright Institute of Archaeological Research, Jerusalem • eliotbraun@yahoo.com
- While much has been written on traditions of domestic architecture of the southern Levant in Early Bronze I, quite recent increments to the archaeological record have greatly broadened the data base from which we can better distill its history of development and change over the 5 or 6 centuries assigned to that chrono-cultural period. This paper will consider new and old evidence that will, it is hoped, alter some previously suggested conceptions that no seem longer tenable, and offer some more precise definitions of domestic house types. It will briefly review the chronological progression of those types in different areas of the southern Levant and their relationships to their socio-cultural environments. The earliest EB I houses were associated with virtually egalitarian hamlets and villages, while near the end of the period many were integral parts of urban-like environments organized along complex, stratified, hierarchical lines. This paper will investigate how the EB I house made the transition from one social milieu to another.

- 54 Buccellati, Federico 5 Dealing with the Past  
12 Thursday  
Morning
- Architecture to Stratigraphy, Spaces to Volumes, Line-of-Sight to Perception: The Use of 3D Models as Vehicles for Archaeological Research**
- Germany • Goethe University, Frankfurt am Main • fab.arkesh@gmail.com
- All too often 3D models of archaeological remains are developed by technical experts whose efforts, while visually often very evocative, are limited in their usefulness in pursuing answers to the kinds of questions posed by archaeologists studying architectural remains. The Mozan/Urkesh Archaeological Project's modelling of the AP Palace focused on developing a technique that (1) models the actual archaeological remains as found in the field, (2) is simple enough that an archaeologist can create the model without technical support, and (3) is adaptive, meaning that the results from new excavations can be added to previous models.
- This kind of model, while not as technically sophisticated as other models, allows the archaeologist to produce real time results so as to answer the kinds of research questions often posed in the field when dealing with architecture. Examples from the model of the AP Palace help illustrate this point: the height of preservation of the walls as found in the archaeological record, as well as the ability to compute the volume of building material present both in the record and in a reconstructed version of the Palace, or the ability to calculate how much would have been seen from central 'node' rooms within the service wing.
- 55 Bulu, Müge 6.1 Reports Region  
13 Friday  
Midday
- An Intact Palace Kitchen Context from Middle Bronze Age Alalakh: Its Organization and Function**
- Turkey • Koç University • mbulu@ku.edu.tr
- This paper presents the results of the contextual study conducted on the recently excavated Middle Bronze Age palace kitchen unearthed under Courtyard 9 of the Level VII Palace at Tell Atchana, ancient Alalakh. By examining the mud brick architecture and artifact assemblages uncovered, this research examines how an Amorite palace kitchen was organized and what it can reveal about an essential part of daily life at a palace. Using the rare opportunity of having an in situ and well preserved context due to its destruction by fire, the use of space and the nature of food preparation were examined according to the attributions of the artifact assemblages and their distribution. The preserved hearth with associated cooking pots, built-in storage jars and adjunct artifacts suggest that this small area was used for a particular type of food production and possibly processing grains for meals or beer-making. This research contributes to our knowledge of the lesser-known earlier Middle Bronze phases of Alalakh and provides an insight to the foodways of a Middle Bronze Age Amorite palace.
- 56 Bunnens, Guy 6.1 Reports Region  
12 Thursday  
Afternoon
- A Third Millennium Temple at Tell Ahmar (Syria)**
- Belgium • Université de Liège • guy.bunnens@skynet.be
- Excavations in 2009 and 2010 at Tell Ahmar, on the Upper Syrian Euphrates, have revealed an EBA IV temple with a complicated system of platforms, fragments of wooden sculpture and an abundant ceramic corpus. The political situation preventing from completing the excavation of the building, the present paper aims at presenting an overview of the results obtained at the end of the 2010 season.

- 57 Burnett, Joel S. 2 Travelling Images  
11 Wednesday  
Afternoon
- Egyptianizing Elements in Ammonite Stone Statuary**
- USA • Baylor University • Joel\_Burnett@baylor.edu
- The influence of Egyptian, Mesopotamian, and Syrian artistic traditions on Iron Age stone statuary from the Amman district is well established in existing studies (Abou Assaf 1980; Dornemann 1983; 'Amr 1990; Zayadine 1991; Routledge 2004). An Egyptianizing element that has received minimal attention in scholarship is the lily or lotus flower, which appears in the left hand on the inscribed limestone statuette portraying the royal figure "Yarh-Azar, son of Shanib," also on a headless statuette, and now on the larger-than-life basalt statue discovered in downtown Amman in 2010. This presentation will examine this Egyptianizing element of Ammonite statuary in light of its well-documented background in Egyptian art and myth, and in light of its relationship to another Egyptianizing element with which it alternates in Ammonite stone statuary, namely, the atef crown (Daviau and Dion 1994; Burnett 2009). The thesis of this paper is that the lily and atef crown serve in Ammonite statuary as distinguishing elements among figures with otherwise identical stance in the portrayal of royal and divine personas, respectively.
- 58 Caracuta, Valentina (1) – Barzilai, Omry (1,2) – Marks, Anthony E. (3), Boaretto, Elisabetta (1) 4 Reconstructing  
10 Tuesday  
Morning
- Palaeoenvironmental Changes: New Data from Charred Wood Remains from Prehistoric Sites from the Negev Highlands, Southern Levant**
- Israel/USA • 1 Weizmann-Max Planck Centre for Integrative Archaeology and Anthropology, D-Reams Radiocarbon Laboratory. Weizmann Institute of Science. Rehovot, Israel. 2 Excavation, Survey and Research, Israel Antiquities Authority, Israel. 3 Southern Methodist University, Texas, USA • Valentina.Caracuta@weizmann.ac.il
- The present work focuses on the arid region of the Negev in the Southern Levant, where a sequence of prehistoric camp sites dated to ~50.000 and 10.000 B.P. were recorded (Marks 1977). Preliminary study of 19 samples suggested a variety of species with the dominance of *Pistacia atlantica* throughout the sequence (Liphschitz and Waisel 1977). Recent archaeobotanical investigations in this region have increased the number of identified charcoal remains markedly, up to 1000. Part of them were collected during the renewed excavations in 2013 at the site of Boker Tachtit, while the remainder come from the 1970's excavations. These data provide some new insights as to the type of wood used as fuel during the Initial and Early Upper Palaeolithic, Late Epipalaeolithic, and Neolithic periods. The new study suggests that during the "intermediate" Middle to Upper Palaeolithic Juniperus-Tamarix association was common near Boker Tachtit, possibly pointing to a steppe forest around the Ain Avdat spring. Later, during the Early Upper Palaeolithic, the steppe became more 'forested' with schrelophyllus species, such as *Rhamnus* sp. At the end of the Upper Paleolithic the *Juniperus* was replaced by *Pistacia atlantica* and *Quercus deceduos*. The *Pistacia* became the dominant element in the Negev during the Epipalaeolithic, although *Juniperus* still survive until the late Holocene. While the botanical remains are the product of human selection, yet they indicate close available vegetation resources and, as well, reflect the palaeoclimate. High resolution proxies in the region, like the Soreq Cave stalagmite stable isotope profile, recorded several cold/dry episodes and two warm/wetter peaks in the period considered. With this study it is possible, though with a lower resolution, to associate the observed environmental changes in the Negev with regional climatic conditions.

- 59 Casana, Jesse 4 Reconstructing  
09 Monday  
Afternoon
- Landscape Phenology, Climate Variability and Settlement Sustainability in the Northern Fertile Crescent: Insights from Regional-Scale, Satellite Remote Sensing**
- USA • University of Arkansas • jcasana@uark.edu
- While evidence of past climate change has long been invoked as a major force in driving both the emergence and collapse of complex societies in the Near East, few paleoenvironmental datasets provide sufficient temporal resolution to fully assess the timing or severity of hypothesized climate events. Furthermore, most archaeological research represents precipitation as a series of mean annual isohyets, doing little to reveal the spatially complex ways in which climate variability impacts localized environments. This paper presents results of a NASA-funded project that utilizes high-temporal resolution satellite data (AVHRR and MODIS) from the past three decades to reconstruct the spatiotemporal dynamics of seasonal and interannual environmental variability, or landscape phenology, in the northern Fertile Crescent. A high-resolution gridded precipitation dataset for the same time period further enables a nuanced perspective on how the totality of water resources influences cycles of plant growth and overall agricultural potential throughout the region. These data are analyzed against an archaeological site database, including more than 25,000 sites mapped through systematic analysis of declassified CORONA imagery, to offer novel perspectives on the relationship between site location and environmental variables, as well as on the role that past climate events may have had on agricultural sustainability.
- 60 Casero Chamorro, Maria Dolores 5 Dealing with the Past  
11 Wednesday  
Morning
- Sealing the Present with the Past: The Babylonian Influence on the Construction of the Neoassyrian Empire**
- Spain • CSIC-Spain • mariadolores.casero@cchs.csic.es
- The tablet K 2673 contains an inscription from the Assyrian king Sennaquerib (704-681 BC). On this clay tablet Sennaquerib added a copy of a seal inscription of Tukulti-Ninurta I king of Assyria from 1243 to 1207 BC. The seal on which this inscription was written might have been owned originally by the kassite king Šagarakti-Šuriaš (1245-1233 BC) and brought to Assyria as a "gift" at the time of Tukulti-Ninurta I after his conquest of Babylon. After the addition of Tukulti-Ninurta's inscription on it, the seal was somehow returned to Babylon until Sennaquerib re-discovered it and brought it once again back to Assyria probably as part of the booty when he destroyed Babylon in 689 BC. Although there is no description or print available from this kassite seal, the fact that Sennaquerib's tablet records its history indicates that it was not merely a looted object; it is rather an example of the role Babylon played in constructing the identity of the Assyrian Empire.
- 61 Caspari, Gino 6.1 Reports Region  
13 Friday  
Afternoon
- Automatic Detection of Iron Age Grave Mounds in the Altai Mountains**
- Germany • University of Hamburg • gino.caspari@gmx.net
- The frozen tombs of Iron Age civilizations in the Altai Mountains are under threat. This unique cultural heritage and invaluable archaeological source being preserved for more than 2000 years runs the risk of ultimately being destroyed by climatic change i.e. the thawing of the permafrost. Preliminary satellite imagery based analysis of archaeological landscape is now an indispensable tool for understanding a site within its geographical context and a valuable decision basis for further research activities. However, the limited accessibility of those mountainous regions and the scattered archaeological sites in a vast geographical context make a complete on-ground survey almost impossible. We have tried to establish an algorithm-based detection of Scythian grave mounds in order to tag areas of paramount importance for future intensive surveys and preservation measures. We successfully adapted class-specific Hough Forests to the problem, with the objective of rendering a time intensive manual process obsolete while establishing a highly accurate method for automatic detection of grave mounds. Through further research we aim to apply this method as a primary tool for broad scale cultural heritage management in the Altai Mountains.

- 62 Catanzariti, Antonietta 2 Travelling Images  
10 Tuesday  
Midday
- Traveling Images from Southern Lebanon and Southwestern Syria: A Study on the Perception and Use of Extrinsic Motifs**
- USA • University of California, Berkeley • a.catanzariti@berkeley.edu
- This paper deals with the study of traveling images circulating throughout Lebanon's Beqa'a' Valley and southwestern Syria during the Middle Bronze Age (2000-1550 BCE). The aim is to elucidate how Middle Bronze Age sites that were geographically distant from more culturally interactive centers, often located in coastal areas, reacted to external influences. Artifacts from the coast and the hinterland area will be analyzed. These will include the wall paintings from Tell Sakka in southern Syria and Tell Burak in Lebanon, ceramic vessels, of which the Levantine Painted Ware and the Kamares Ware are prime representations, and seal and scarab impressions from Kamid el-Loz. They will reveal how certain motifs deriving from Egypt and the Minoan world were conceived, transformed, and adapted according to the location in which they were used or, conversely, were excluded from the local artistic repertoire. Furthermore, the material available from the Beqa'a' Valley and southwestern Syria indicates a process of assimilation and incorporation of specific motifs that convey powerful implications and were strategically used to delight and capture the interest of international viewers. Additionally, these same motifs may have also been used as a means to achieve a sense of self-identification.
- 63 Cellerino, A. – Bucci, I. – Foietta, E. – Giusto, F. – Mortarini, M. – Quirico, E. 5 Dealing with the Past  
12 Thursday  
Morning
- A Decorated Gold Jug from Nimrud Tomb III**
- Italy • Università di Torino • alessandra.cellerino@unito.it
- Between 1988-1990, during excavations conducted by the Iraqi Department of Antiquities at Nimrud, four chamber tombs, built beneath the floors of certain rooms, were brought to light in Assurnasirpal II's Palace. The discovery of these tombs, designed for the burial of royal women, was an amazing event for the quality of goods unearthed and the historical and cultural information they provide.
- The funerary inscriptions found in Tomb III show that the burial belonged to Mulissu-Mukannišat-Ninua, Assurnasirpal's wife, even if at least 13 individuals –males, females, children– were buried in the following decades into three bronze coffins located in the antechamber. Coffin no. 2, the lower of the two coffins on the antechamber eastside, stood out for its astonishing grave goods. These include a side-spouted gold jug (I.M.115618), whose shape and decoration, characterized by figurative repoussé bands, provide clear indications of the rich international repertoire of the artefacts at the Assyrian court. The vessel analysis (shape, iconography, functional purpose) and comparison with coeval materials lead to postulate that it could have been committed by the court in the context of a cultural milieu into which manifold traditions coexisted, or even maybe an object imported into Assyria as a gift or tribute.
- 64 Chamel, B. (1) – Ravy, E. (2) – Coqueugniot, E. (1) 6.2 Reports Themes  
09 Monday  
Afternoon
- Task Related Wear, Interproximal Grooves and Non-masticatory Tooth Use in the Pre-pottery Neolithic Population of Dja'de el-Mughara (Syria, 9th Millennium BC)**
- France • 1 UMR 5133 Archéorient, CNRS; 2 8 av. S. Allende, 69100 Villeurbanne (France) • berenicechamel@gmail.com
- The Neolithic site of Dja'de el-Mughara (Syria) is dated from early PPNB, known to be a transitional period in terms of food production. A total of 883 teeth from 70 individuals (adults and immatures) have been studied. Several modifications on the teeth have been observed, including task related wear, interproximal grooves, and striations on the occlusal surface of lower molars.
- Task related wear concerns two adults, with striations and grooves on the occlusal surface of the front teeth, consistent with a repeated passage of a string between the teeth. The presence of remains of mats at Dja'de supports this hypothesis. The interproximal grooves, mostly found on the molars, seem to be symptomatic of the use of a toothpick. These grooves are sometimes associated with caries and possibly indicate a "therapeutic" gesture.
- At least, more than 50 % of the lower molars show striations on their occlusal and buccal surface, added to heavy oblique wear. This could be symptomatic of pulling down a plant through the teeth, to extract juice or process the matter. Given that these modifications concern both adults and immatures (including from the [1-4] age class), it seems that the mimesis of children towards adults starts very early.

- 65 Chanteau, Julien 1 Egypt  
11 Wednesday  
Morning  
**The Chapels of the « L shaped » Temple at Byblos**  
 Belgium • Université Libre de Bruxelles • julien1chanteau@hotmail.com  
 Since its publication in the second volume of Fouilles de Byblos, the « L-shaped » temple upon which will be erected the famous Obelisk temple (also known as the Reshef temple) from the Middle Bronze Age, has raised multiple propositions concerning the phasing of its different constitutive elements. The aim of this paper is to re-examine the archaeological sequence of this 3rd millennium monument by highlighting the chapels area located in the main court and by considering an eventual Egyptian influence on its structuration.
- 66 Charbonnier, Julien – Purdue, Louise 4 Reconstructing  
13 Friday  
Morning  
**Masāfī: Origin and Evolution of an Oasis in Eastern Arabia from the IInd Millennium B.C. to the Present Day: Interdisciplinary Approach**  
 UK/France • Durham University; CEPAM-UMR 7264 • julcharbonnier@gmail.com  
 Located in the northern part of Hajar al-Gharbī mountains in the Fujairah Emirate (U.A.E), Masāfī benefits from important water resources, which could explain its occupation since the Second millennium B.C. As part of the excavation conducted by French Archaeological Mission in the U.A.E., we aim to study the spatial and diachronic organisation of this oasis in order to better understand agrarian landscapes and water management, which have a direct impact on the economy at Masāfī. In this paper we will expose the interdisciplinary approach adopted as well as the first results. First of all, hydraulic structures have been recovered, and mainly the downstream end of an Iron Age canal, which fed several small earth channels. The latter supplied water to fields and gardens, clearly separated from built areas. This was completed by a geoarchaeological study of long-term cultivated fields and canals in the oasis itself. Samples were taken to estimate their age, soil properties and identify the crops grown. Finally information regarding the historic and modern use of the oasis has been obtained thanks to ethnological investigations, as well as precise mapping. This study provides insights on the relevance of interdisciplinary approaches to study oases and long-term anthropic landscapes in Arabia.  
 Keywords: land use, irrigation, geoarchaeology, Iron Age, U.A.E.
- 67 Charloux, Guillaume (1) – Angevin, Raphaël (2) – Bouchaud, Charlène (3) – Durand, Caroline (4) – Monchot, Hervé (5) – Dal-Prá, Patricia (6) – Novik, Witold 3 Traditions  
10 Tuesday  
Evening  
**New Evidence of the Nabataean Presence in the Jawf Region at the Dawn of Romanization: a Triclinium at Dūmat al-Jandal (North Saudi Arabia)**  
 France • 1 CNRS, UMR 8167, Paris; 2 SRA Centre, Ministère de la Culture, Paris; 3 Université Paris I, Museum National d'Histoire Naturelle; 4 Institut Français du Proche-Orient; 5 Labex Resmed, université Paris IV; 6 Institut National du Patrimoine; 7 Laboratoire de recherche des Monuments Historiques; 8 Musée du Louvre • gcharloux@hotmail.com  
 The Nabataean presence at Dūmat al-Jandal (ancient Dumat/Dumata, Saudi Arabia), a large oasis at the extremity of Wādī Sirhân, is well-known thanks to the discovery of inscriptions, graffiti and scattered archaeological remains in the region. Until now, however, no structures belonging to this period had been brought to light; the thorough excavation of a triclinium, a sizeable U-shaped meeting room built on a promontory in the western part of the oasis, constitutes a new element for the interpretation of the Nabataean presence in this isolated area, but it also heralds community practices which seem to end abruptly with the arrival of the Romans.

68 Choobak, Hamideh

7 Islamic

**Alamut Dome Chamber "Molasara"**

12 Thursday

Iran • Alamut Cultural Heritage Base • h\_Choubak@yahoo.com

Afternoon

Historical and recorded documents and data are the most important learning instruments in archeology, particularly the archeology of the Islamic era. Based on historical data collected in books such as "Jahangoshaye Javini" and "Zafarnameh" of Hamdollah Mostofi as well as the paintings in the book of "Jameh al Tavarikh" valuable information has been obtained on the architecture and features of the Alamut Castle, enabling the representation of this demolished fort's image. During the excavations of the Hassan Sabah Castle, a part of the magnificent architecture of this place has been discovered. The findings are consistent with historical data, documents, records and events. The most important discovery is the command center and the mosque in the main courtyard, which is referred to in the texts as "Molasara" and which symbolizes the thoughts and the roots of the Shiite culture. It is the most unique post Islamic archeological discovery of the recent decade. The valuable and magnificent building of the Dome Chamber or Molasara, which was probably the residence and the command mosque of the Fortress (of Hassan Sabah and his successor) with three distinct construction periods (the 5th, 6th and 7th century Hijra 11-13 A.D.– the Ismaili period) occupies the upper section of the fortress. It includes a courtyard and the main portal with 4 podia: spread over an area of approximately 110 m<sup>2</sup>, the northern porch with intricate brickwork portal similar to those of the Alawis Domes in Hamedan; the square mid-courtyard; the southern podium with a tall portal, bearing intricate brickworks representative of the Ismaili periods of 11th and 12th centuries at the remaining height of 5 m from it, which are referred to as Baghdadi style in texts and the decorative tiles of 12th and 13th centuries categorized in the two groups of turquoise and cobalt blue glazes and lusters. These are the decorations of the Alamut Palace, and bear witness to the words of Hamdollah Mostofi about the motifs on the walls of this excellent dome. A number of such tiles have been unearthed during the excavations. Moreover in the illustrations of "Jameh al Tavarikh" and "Zafarnameh" the building has vaults and dome shaped ceilings, but there are no signs of these today.

The results and analysis of the findings underline the fact that the command center of the Ismailis was not merely a military and defense quarter, but it was a fortress palace, which through its intricate, simple or turquoise and cobalt blue glazed or luster bricks and tile work decorations, could equal and compete with the magnificent monuments of its own era and the grand palaces of Abbasid Caliphs.

69 Cluzan, Sophie

6.1 Reports Region

**Un site du Bronze ancien en Damascène, Syrie**

12 Thursday

France • Musée du Louvre, Paris • Sophie.Cluzan@louvre.fr

Evening

Les sites de Tulul el-Far, Tell el-Kharaze et Tell Taouil ont fait l'objet de trois campagnes de fouilles, de 2007 à 2009. L'ensemble est situé à une vingtaine de km au sud-est de Damas, à proximité du Nahr el-A'ouaj, le fleuve qui forme la bordure méridionale de la Ghouta. Mené en collaboration entre la Direction Générale des Antiquités (Ahmad Ferzat-Taraqji) et le musée du Louvre, département des Antiquités orientales (Sophie Cluzan) ce projet a pour objectif de documenter la période du Bronze ancien dans cette région. Il constitue le premier programme consacré à cette période dans une zone dont on soupçonne aisément l'importance, à la croisée des routes reliant le sud et le nord de la région syro-palestinienne. Bien que le projet ait été momentanément suspendu en raison des événements récents, de premiers résultats permettent d'entrevoir le rôle qu'ont pu jouer ces sites, et notamment Tulul el-Far, un site de 25 hectares. Des preuves de relations simultanées avec la Palestine méridionale et la Djezireh avant l'abandon définitif de l'occupation inscrivent ce site dans des horizons culturels divers. La présentation tentera de faire le point sur l'état actuel des connaissances de la région de Damas à la fin du Bronze ancien.

- 70 Cocca, Enzo (1) – Franzese, Francesco (1) – Genito, Bruno (1) – Maresca, Giulio (1) – Genito, Andrea (2) 6.1 Reports Region  
11 Wednesday  
Afternoon

**A WebGIS about the Italian Archaeological Activities in Sistan, Iran (60s -70s of the XXth century): ArchaeoPro.Di.Mu.S.**

Italy • 1 Università degli Studi di Napoli, "L'Orientale"(UNO); Università degli Studi di Napoli, Federico II, Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse • bgenito@iuo.it

This contribution is dealing with the archaeological researches carried out between the 60's and the 70's of the past century in Iranian Sistan by IsMEO (Istituto Italiano per il Medio ed Estremo Oriente) and directed by Prof. Scerrato. The importance of the region, as well known, derives both from strong cultural conservatism and regionalism and its environmental setting, centred on the Hilmand basin. This importance, attested throughout the History is also evidenced by the archaeological activities. It is, therefore, obvious that the historical and archaeological potentiality of the area is enormous, with regards both to the proto-historic and historical periods. The results of the Italian activities related to the historical period have been partially published. A new scientific project, based at CISA (Centro Interdipartimentale di Servizi di Archeologia, UNO) and directed by Prof. Genito, is aiming at revising the old archaeological data from the region. The project, entitled "Archaeo.Pro. Di.Mu.S.: Archaeological Project Digital Multimedia Sistan", is centred on the management of the digital graphic and photographic documentation of that activities by means of a WebGIS. This system provides a data entry and data visualization structure through an interactive query. The collected data will be managed in a spatial RDBMS with an appropriate graphical interfaces.

- 71 Conard, Nicholas – Zeidi, Mohsen 6.2 Reports Themes  
10 Tuesday  
Midday

**The Record of Clay Objects from the Aceramic Neolithic Site of Chogha Golan, Ilam Province, Iran**

Germany • University of Tübingen • mohsen.zeidi@ifu.uni-tuebingen.de; nicholas.conard@uni-tuebingen.de

In 2009 and 2010 the members of the Tübingen Iranian Stone Age Research Project (TISARP) excavated the 8m thick aceramic sequence of Chogha Golan. This tell covers 2 hectares and is located above the deeply incised Konjan Cham River at an elevation of 485m above sea level. Excavators recovered rich assemblages of most classes of archaeological materials in a sequence divided into eleven cultural horizons. Radiocarbon dates indicate that the occupation of Chogha Golan occurred between 11,700 and 9,600 cal BP.

In addition to an important record of botanical materials and the high resolution record of changing ground and chipped lithic technology, the TISARP team recovered 59 examples of small clay artifacts. These finds were generally air-dried rather than fired. Considering the small size of the excavation, the density of clay objects is high. Among the clay objects we have identified 10 depictions of animals, 7 depictions of humans, 24 clay cones, 4 clay balls, 2 beads and various other objects. The finds originate from all horizons and document a long sequence of using clay as a medium for producing diverse small objects in the absence of a tradition of using clay to make ceramic vessels. Here we present the clay objects from Chogha Golan and characterize their role in the context of other assemblages of clay objects from the aceramic Neolithic of the Zagros and eastern Fertile Crescent.

- 72 Cooper, Lisa 6.1 Reports Region  
12 Thursday  
Midday

**Neo-Assyrian Period Remains at Bestansur, Iraq**

Canada • University of British Columbia • licooper@mail.ubc.ca

Described here are the recent investigations of the Neo-Assyrian period remains at the site of Bestansur in the Shahrizor Plain of the Sulaimaniyah Province of Iraqi Kurdistan. The investigations, which were undertaken as part of the Central Zagros Archaeological Project (directors: Roger and Wendy Matthews) have been focused on a 10 x 10 m trench about 30 metres to the south-east of the central mound at Bestansur, where geophysical prospection had identified a large, rectilinear building. Excavations in the trench have brought to light the storage, food processing and living spaces of a sizeable building that appears to have been destroyed by fire. Judging by the building's ceramic assemblage which is composed mainly of storage and serving vessels, many of which were found smashed in situ on the floors of the building, the occupation dates to the 7th century BCE. Analyses of the architectural and artifactual remains from the building are assisting in understanding the nature of settlement in this region of Kurdistan and the settlement's relationship to Assyria during the latter's twilight years of imperial power and control.

- 73 Coqueugniot, Eric 4 Reconstructing  
12 Thursday  
Midday
- Dja'de el Mughara (Syria): a Village from the 9th Millennium cal. BCE in the Euphrates Valley**
- France • CNRS Lyon • eric.coqueugniot@mom.fr
- The stratigraphy at Dja'de covers the whole of the 9th millenium BCE, with more than 9 meters of deposits. The evolution is progressive from the end of PPNA to the end of EPPNB (we observe a continuum), without major step (no cultural change between PPNA and PPNB). These levels are particularly rich of indications on the techniques, the social organisation ("House of the Dead", remains of feasting, non domestic buildings...) and the sanitary state of populations (oldest attestations for tuberculosis). The most spectacular discovery is that of an 11 000 years-old circular and half-buried "communal building" with still well preserved polychromic geometric paintings, the oldest known in SWA. The "symbolic" representations found at Dja'de lead us to question the notions of the "cult of the bull" and of the "female figurins" and consequently their leading role in the process of Neolithic (religious or social?).
- 74 Coqueugniot, Gaëlle 3 Traditions  
10 Tuesday  
Evening
- Ancient Near-Eastern Traditions and Greco-Roman Culture in the Agora of Europos-Dura (Syria)**
- UK • University of Exeter • gaelle.coqueugniot@mom.fr
- Founded as a military fort in the late 4th century B.C.E., Europos-Dura controlled a strategic stronghold overlooking the Euphrates River, on the road between Antioch on the Orontes and Seleucia on the Tigris. Its exploration (1920-1922, 1927-37 and 1986-2011) has shed light on the impact of Mediterranean and Near Eastern traditions in a small centre of the Euphrates' valley under Seleucid, Parthian and Roman rule. The Greek foundation developed into a full-scale town between the 2nd century B.C.E. and the 2nd century C.E. with the afflux of indigenous population, and then experienced a rapid Romanization after 165 C.E., before its abandonment in the mid-3rd century. This paper focuses on the site's public square, the agora, with its registration office, "Roman market", and numerous shops and dwellings. New fieldwork in the sector (2005-2010) has focussed on the architectural characteristics, the adopted plan, and the evolution in the organization and use of the square. The combined study of new data collected in the field and documents from the 1930s expedition, and its comparison with other public squares in the Hellenistic East provide us with a better understanding of this central district and valuable information on the impact of Greco-Roman and local traditions in the urban landscape of Europos-Dura.
- 75 Córdoba, J. M. – Mamedov, M. 6.1 Reports Region  
13 Friday  
Midday
- The Iron Age at Dehistan. Turkmen and Spanish Archaeological Investigations in Geoktchik Depe and Izzat Kuli (Balkan Province, Republic of Turkmenistan)**
- Spain • Universidad Autónoma de Madrid • joaquin.cordoba@uam.es
- Recently it has initiated a Turkmen and Spanish archaeological project in the ancient region of Dehistan (Balkan Province, Republic of Turkmenistan). In the fifties of the last century, V. M. Masson discovered in the desert plain Misrian, a new and unknown culture that dated to the Iron Age, and called Archaic Dehistan Culture: a huge network of canals, settlements of different types related to it and also some major archaeological sites where enormous surface suggested an urban or proto-urban status. Since then, brief interventions Soviet, Turkmen and French have been providing more information, but much still to understand the characteristics, relationships and real history of this culture. This joint project has started operating on three routes: the territory and the control of the environment, the hierarchy of settlements (Izzat Kuli), and a possible ceremonial center (Geoktchik Depe). We present here the first results.

- 76 Coşkun, Nilgün 6.1 Reports Region  
12 Thursday  
Morning
- Middle and Neo-Assyrian Periods at the Harran Plain in the Southeastern Anatolia: In the Light of Survey**
- Turkey • Yüzüncü Yıl University, Van • nilguncoskun@yahoo.com
- An archaeological surface survey has been carried out in the plain of Harran by Veli Sevin between 1987 and 1989, and fourteen settlement mounds were identified. The Middle and Neo-Assyrian pottery collected at this work shows a strong continuity in form and technic.
- Assyrian wares are always wheel-made tempered with sand and chaff. The light-coloured surface is occasionally burnished. Carinated bowls and pots with “s” profile are among the most common types.
- Assyrian kings tried to keep under control to the city because of its strategic location on the important trade roads. After the fall of the Ninive in 612 B.C, the city of Harran became a capital city of the Assyrian Kingdom of a short duration. The pottery collected during the Harran plain survey may have reflected to its political situation.
- Keywords: Harran, Southeastern Anatolia, Middle and Neo Assyrian pottery
- 77 Couturaud, Barbara 2 Travelling Images  
11 Wednesday  
Midday
- Image and Ideology during the ED III and the Akkadian Periods: the Example of the Figurative Inlaid Panels of Mari**
- France • University of Versailles-St-Quentin-en-Yvelines & Ifpo & UMR ArScAn • bcouturaud@yahoo.fr
- The figurative inlaid panels represent an important part of the material culture of the ancient Near East, discovered from the south of the Mesopotamian basin up to the north of Syria. Nowadays, only fragments of inlays have been recovered. The images depict military victories, religious ceremonies or social ceremonies such as the so-called banquet scene. Questions remain about the owner of those objects, or the identity of the characters represented in the compositions; in any case, they are not kings.
- It's difficult to determine precisely the dates of appearance and of disappearance of those objects. Nevertheless, we can fix their “life” during the ED III. This chronological range is significant as it reveals a period defined by the increase of illustrated documents and prestige goods. The date of disappearance is particularly significant because the Akkadian period refers to a moment where the images are mainly created for the glorification of the king. It seems very clear that those images had no reasons to be – or legitimacy? – at the Akkadian time, probably because they served the interests of an ideology and a social group that seems to no longer exist at the Akkadian time. In this way, the figurative inlaid panels are precious evidences showing an ideological and social change.
- 78 Crabtree, Pam J. – Campana, Douglas V. 3 Traditions  
12 Thursday  
Afternoon
- Animal Bone Remains from the site of Kinik Hoyuk, Southern Cappadocia, Turkey: Animal husbandry and hunting practices during the Iron Age, Hellenistic, and Medieval periods**
- USA • New York University • pc4@nyu.edu
- The site of Kinik Hoyuk in southern Cappadocia, Turkey, is currently being excavated by Lorenzo D'Alfonso of the Center for the Study of the Ancient World at New York University. the mission is a joint project of NYU and the University of Pavia in Italy. During the 2013 excavation season, we identified and recorded the faunal remains recovered during the 2011 and 2012 campaigns. These animal bones were recovered from features dating to the Late Iron Age, Hellenistic, and Medieval periods. The large and well collected faunal sample allows us to trace changes in animal husbandry, hunting practices, and human diet through time. the large sample recovered from Area B and dated to the Middle Ages is of particular importance, since it appears to be an Islamic occupation--pigs are almost totally absent. This paper will use species ratios, age profiles, and measurement data to trace changes in animal economy through time at Kinik Hoyuk.

- 79 Cytryn-Silverman, Katia 7 Islamic  
10 Tuesday  
Morning  
**Tiberias' congregational mosque: some conclusions**  
 Israel • The Hebrew University of Jerusalem • cytryn@mscc.huji.ac.il  
 Excavations of the congregational mosque of Tiberias started in the 1950s, though back at that time archaeologists were certain they had found a covered market. Despite Tiberias' important political role during the early Islamic period, and the many finds dated to that period – ceramics, glass, coins, metal, etc., the paradigm was that monumental architecture certainly pre-dated the Islamic era. This working paradigm persisted until quite recently. The author and her team from the Hebrew University of Jerusalem have excavated some of the remaining parts of the structure for eight seasons, since 2009. Not only has the date of the monumental structure been clarified, but an earlier one, apparently a mosque of the seventh century, has been detected and studied. The excavations have also been able to clarify some urban issues related to the Islamization of Tiberias, from the street system surrounding the mosque, to the relationship between the latter and a monumental Byzantine church nearby.
- 80 D'Agostino, Franco – Romano, Licia 6.1 Reports Region  
10 Tuesday  
Morning  
**Excavations at Abu Tbeirah, Southern Iraq (2012-2013)**  
 Italy • Univ. of Rome - Sapienza • franco.dagostino@gmail.com; licia.romano@gmail.com  
 The paper will present the results of the three excavation campaigns carried out between 2012-2013 in Abu Tbeirah, a site of 42 ha located near Nasiriyah, 16 km south-east from Ur, in Southern Iraq. Mainly focused on two areas in the north-eastern and south eastern part of the Tell, the first activities on the site have brought to light a city of the 3rd millennium BC.
- 81 D'Andrea, Marta 6.1 Reports Region  
13 Friday  
Midday  
**Pottery Production at Khirbat Iskandar, Jordan. Preliminary Results of the Technological Study of EB IV Pottery from the Site**  
 Italy • Sapienza Università di Roma • martadandrea@libero.it  
 Khirbat Iskandar, Jordan has provided substantial EB III and IV stratified sequences from Area B, and one of the longest EB IV (chronological and typological) sequences published so far. Both areas have yielded a large corpus of ceramic materials, which has recently been studied from a technological perspective in order to reconstruct manufacturing techniques. A comparative analysis of the EB III/IV corpus from Areas B and C was undertaken in order to determine the possible presence of EB III/IV transitional pottery in the earliest EB IV phase, and to discern trends of continuity/change in pottery production between the two periods. Secondly, the analysis concentrated on the Area C pottery with the goal to investigate whether technological changes occurred; and, if so, if these changes could be linked to the site's trajectory of crisis, recovery, and growth over three stratified EB IV phases. Finally, ceramics from the two EB IV phases in Area B were also analysed for technological changes in order to compare the results with those from Area C.  
 Utilizing the preliminary results from the above research, the paper will compare Khirbat Iskandar's EB IV ceramic production with other southern Levantine sites, and will address regional patterns of technological, cultural, and socio-economic interactions during the late EBA.
- 82 Da Riva, R. 2 Travelling Images  
11 Wednesday  
Evening  
**Recycling Images: Royal Representations in First Millennium BCE Mesopotamia**  
 Spain • University of Barcelona • rocio.dariva@gmail.com  
 This paper aims at analysing symbols, iconographic motives and representations of the king in First Millennium BCE Mesopotamia depicted on stele, reliefs, seals, etc. Of importance is the idea that representations of political power can be recurrent, and that a specific iconographic pattern can be used in different periods and cultures. In this paper I would like to analyse the celebrated motive of the "lion killer" and its presence in Assyrian, Babylonian and Persian culture.

- 83 Daghmehchi, Maria – Shirzade, Gholam – Sharahi, Ismail 6.2 Reports Themes  
**Settlement Patterns of Parthian Sites in Komijan Plain, Central Iran** 13 Friday  
 Iran • Tehran University; Mohaghegh Ardebile University; Tarbiat Modares University MIDDAY  
 • maria.daghmehchi@yahoo.com  
 During conducted Archaeological surveys in Komijan plain, as total as 65 sites were identified that 44 of them can be assigned to Parthian period. These sites include hills in different size and length. This paper studies settlements pattern and distribution of Parthian sites of the region by using Geographic information system (GIS) and statistical analysis. Preliminary studies showed, Parthian sites that distributed in highlands of northern and southern parts of the region are related to pastoral societies and all of them are camp site. It also indicates that regarding to landscape of the region, permanent Parthian settlements located in western and central parts of region. It is noticeable that quantity of camp sites in comparison to permanent sites is rare. Parthian period settlements cover a wide extent of the region. Although the settlements were relatively reduced in Sassanian period, dispersion of the pottery is indicative of the fact that most of the settlements were drawn into larger settlements many of which survived till the early Islamic Period.
- 84 Danielyan, Ani 6.1 Reports Region  
**L'art rupestre d'Oughtassar, Arménie : approche méthodologique et analytique** 12 Thursday  
 France • Université Paris-1 Panthéon-Sorbonne • anidanielyan@ymail.com Evening  
 L'Arménie est un pays particulièrement riche sur le plan du patrimoine archéologique, au sein duquel l'art rupestre tient une place importante.  
 Cet exposé est dédié à l'étude de l'art rupestre d'un site arménien, appelé Oughtassar, situé dans la région montagneuse du Syunik, au sud-est de l'Arménie. C'est un site particulièrement riche en pétroglyphes de plein air. Certains ensembles de gravures de ce site remarquable ont été étudiés dans les années 1960, mais les méthodes traditionnelles n'ont alors permis qu'une compréhension limitée du site. Depuis 2009, de nouvelles recherches y sont menées dans le cadre d'une collaboration arméno-britannique. Les recherches sont ici basées sur des méthodes scientifiques modernes avec de nouvelles approches d'inventaire et d'étude de l'art rupestre. Ces représentations rupestres sont majoritairement attribuées aux Âges du Bronze et du Fer (fin 4e-1er mill. BC), mais certaines se distinguent par leur thématique, leur organisation et leur style. Ces différences pourraient indiquer une origine plus ancienne (Néolithique ou Chalcolithique, 6e-5e mill. BC). Cette communication propose une discussion sur l'étude préliminaire de ce site d'art rupestre sous une approche essentiellement méthodologique et analytique. Les gravures rupestres seront analysées de différents points de vue.
- 85 Danti, Michael D. 6.1 Reports Region  
**The Rowanduz Archaeological Program 2013 (Iraqi Kurdistan)** 09 Monday  
 USA • Boston University • michaeldanti@gmail.com Evening  
 In June–July 2013, the Rowanduz Archaeological Program (RAP) conducted its first season of archaeological excavations and surveys in the areas of modern Rowanduz, Soran, and Sidekan in the Zagros Mountains of northeastern Iraqi Kurdistan. Excavations at Qalaat Lokan (Rowanduz area) and Gird-i Dasht (Soran area) coupled with archaeological surveys are being used to develop an archaeological chronology and to reconstruct long-term patterns in human occupation in this virtually unexplored region at the northeast outlets of the Rowanduz Gorge (Gal-i Ali Beg) — an important but treacherous route linking northwestern Iran and northern Mesopotamia. The occupational sequence revealed thus far spans the Neolithic to the modern era. Emergency salvage excavations and survey in the Zagros Mountains along the Topzawa Çay at the cemetery of Ghabrestan-i Topzawa and the burned settlement of Gund-i Topzawa (Sidekan area) have revealed a strong early Iron Age presence in this region — likely part of the early Iron Age kingdom of Musasir/Ardini.

- 86 Darabi, Hojjat 6.2 Reports Themes  
**An Updated Chronology for the Neolithic Western Iran** 10 Tuesday  
 Iran • • hojjatdarabi@gmail.com Midday
- The chronological debates are important to researchers for understanding subtle changes through time. However, recent neolithic investigations indicated different cultures with their own borders and criteria across the Near East. But, cultural changes of the neolithic time are usually treated by using the same chronology in the entire region, while eastern wing of the Fertile Crescent, notably western Iran, shows different archaeological evidence from the Levant. To better understanding neolithic time in western Iran, therefore, an updated chronology is discussed dividing it into Early Neolithic 1, Early Neolithic 2, Middle Neolithic and Late Neolithic. Additionally, the preceding time period lasting from end of the epipaleolithic to the neolithic beginning is also called "Transitional Neolithic". Each proposed chronological period contains its own archaeological criteria in a regional context. This offers an understandable cultural change and continuity through time.  
 Keywords: Neolithic, Chronology, Western Iran, Cultural criteria.
- 87 Darby, Erin 2 Travelling Images  
**Reaction, Reliance, Resistance?: Judean Pillar Figurines in the Neo-Assyrian Levant** 12 Thursday  
 USA • University of Tennessee • edarby1@utk.edu Morning
- Recent scholarship has interpreted the rise of Judean Pillar Figurines (JPFs) as a reaction against the Neo-Assyrian Empire and a move toward identity consolidation. Alternatively, scholars have credited trade networks with the spread of figurines throughout the Levant in the Neo-Assyrian period. In actuality, the situation was more complex. At the same time that archaeological data indicate figurines were not traded between regions, the data also suggest that figurines became prominent in many areas of the Levant in this period.  
 Only by looking beyond the iconography of JPFs to their possible functions can their relationship with the broader Neo-Assyrian Near East be determined. Moreover, many treatments suffer from simplistic models of empire, enculturation, and resistance. In contrast, by recognizing the manifold nature of network interactions and power relations in imperial systems, this paper uses archaeological data and ANE textual records to explicate the possible relationship between the empire-wide turn toward miniature terracottas and the specific manifestation that movement took in Iron II Judah. In so doing, the paper explores the likelihood that healing rituals circulated throughout the Neo-Assyrian empire provided the context for the rise of figurines in southern Israel, while the particular JPF iconographic form reflects long-standing, Levantine traditions.
- 88 Darby, Robert 3 Traditions  
**Local Influence and Adaptation in the Late Roman Military Bathhouses of Arabia/Palaestina** 11 Wednesday  
 USA • University of Tennessee • rdarby2@utk.edu Morning
- The kingdom of Nabataea which first rose to regional prominence in the Near East during the Hellenistic period through a vast caravan trade network was ultimately absorbed into the Roman empire following the emperor Trajan's annexation of the former Nabataean territories in 106 C.E. As a newly founded Roman province, Arabia Petraea (later Palaestina), prospered from the pre-existing commercial infrastructure of its Nabataean populace as well as the influx of foreign wealth and goods brought by its new inhabitants, the majority of which were soldiers in the Roman army assigned to garrison the province. Institutionalized amongst the quotidian life of Rome's soldiers and standardized as a fundamental architectural form in its legionary and auxiliary forts across the empire were bathhouses, which as elsewhere, became a common fixture in Arabia/Palaestina.  
 This paper examines the transformation which occurred in the standard design of Roman military bathhouses in Arabia/Palaestina between the second and fourth centuries. It suggests that this apparent change can be attributed to the acculturation of the Roman army into the local traditions and practices of the indigenous population whose own standardized architectural forms played an important role in the creation of a new, regional variant in Late Roman military bathhouses.

- 89 Darles, Christian 3 Traditions  
12 Thursday  
Midday
- Un sanctuaire chrétien en Arabie : la question de l'église d'Abraha (550 ap. J.-C.) à Sanaa-Yémen**
- France • Ecole Nationale Supérieure d'Architecture de Toulouse • christian.darles@toulouse.archi.fr
- L'apparition du monothéisme au 3<sup>e</sup> siècle de notre ère en Arabie du Sud a-t-elle impliqué une transformation de l'architecture des sanctuaires polythéistes ? Dès cette époque, alors que la population locale reste encore généralement impliquée dans des cultes pratiqués depuis plus d'un millénaire, les souverains himyarites se dirigent vers un certain monothéisme. Au sein des panthéons en nette diminution, une divinité tend à être privilégiée et son culte, dominant, devient progressivement unique (hénouthéisme). Le rejet officiel du polythéisme intervient dès 380, pendant 150 ans toutes les inscriptions sont monothéistes ou juives. Au début du VI<sup>e</sup> siècle le royaume chrétien d'Aksum en Ethiopie, contrôle les souverains himyarites qui seront tantôt chrétiens, tantôt juifs. Après le massacre de Najran en 525, le territoire sera sous tutelle des souverains chrétiens d'Aksum, dont le roi Abraha. Les Perses sassanides s'empareront ensuite du pouvoir dès 575. Abraha va construire plusieurs églises au Yémen dont la célèbre église de Sanaa. Décrite par al-Azraqi, ce monument a fait l'objet de plusieurs tentatives de restitution. Notre propos est de tenter une synthèse de ces travaux à la lumière de notre connaissance de l'architecture religieuse préislamique.
- 90 Davidovich, Uri (1) – Marom, Nimrod (2) – Porat, Roi (1)– Boaretto, Elisabetta (3) 4 Reconstructing  
13 Friday  
Morning
- Yoram Cave (Masada): Human-Environment Interaction in the Late Chalcolithic Judean Desert, Israel**
- Israel • 1 Institute of Archaeology, The Hebrew University of Jerusalem; 2 Laboratory of Archaeozoology, Zinman Institute of Archaeology, University of Haifa; 3 D-REAMS Radiocarbon Laboratory, Weizmann Institute of Science • uri.davidovich@mail.huji.ac.il
- The Late Chalcolithic presence in caves located in the sheer cliffs of the Judean Desert has been studied for over sixty years. Interpretations to this phenomenon range from seasonal shelters for pastoralists through locales reserved for cultic use to temporary refuge places. These explanations, however, were mainly based on the results of surveys and unsystematic excavations, which did not emphasize human behavior in the context of desert environment. In 2009, we conducted a systematic, high-resolution excavation in Yoram Cave, a small cave located in the southern cliff of the Masada Horst. The excavations revealed evidence for complex interplay between human and natural agents involved in site formation processes throughout the Holocene, highlighted by a well-preserved Late Chalcolithic layer sealed below a large predator nest. The Late Chalcolithic deposit consists of a peculiar floor made of compacted organic matter, in association with pockets of ash, pottery and the remains of organic artifacts (mats, textiles and ropes). The study of cultural and environmental traits in Yoram Cave calls for a new examination of the Late Chalcolithic occupation of precipitous caves in the Judean Desert, and contributes to the reconstruction of Holocene environments in the region.

- 91 De Backer, Fabrice 2 Travelling Images  
**La construction d'un char de guerre néo-assyrien: quelques idées visuelles** 12 Thursday  
Evening  
 Austria • Aloïs Musil Center for Oriental Archaeology, University of Vienna  
 • [debackerf@yahoo.co.uk](mailto:debackerf@yahoo.co.uk)  
 Le char représente un des premiers véhicules abondamment utilisés dans l'iconographie proche-orientale ancienne pour manifester l'idée de pouvoir.  
 Les divinités et les rois montent sur leurs véhicules pour parader, chasser et, surtout, faire la guerre afin d'imposer leur domination aux autres collectivités. Néanmoins, la représentation de ce véhicule devait certainement aussi pouvoir véhiculer, même en partie, l'idée visuelle d'un char réel.  
 Mises à part les découvertes exceptionnelles de la Grande Fosse de la Mort à Ur pour l'Âge du Bronze Ancien, et celle de la tombe de Toutankhamon pour la période suivante, aucun char destiné à une utilisation réellement guerrière ne fut découvert au Proche-Orient. De plus, malgré les nombreuses études consacrées à ce mode de transport, aucune tentative pragmatique n'a encore été faite pour tenter d'en mieux appréhender le fonctionnement.  
 Au I<sup>er</sup> Millénaire avant notre ère, les Néo-Assyriens fournirent un très grand corpus de documentation visuelle, complété par les monuments issus des royaumes avoisinants, sur les char de combat.  
 Grâce à la minutie de ces scènes, à l'étude attentive des sources actuellement disponible, et à leur comparaison avec les modèles de chars contemporains en Mer Égée, quelques schémas de l'architecture d'un char de guerre néo-assyrien se dessinent.
- 92 de Gruchy, Michelle 4 Reconstructing  
**Don't Get Stuck in the Mud and Other Lessons from Route Analysis** 12 Thursday  
Midday  
 UK • Durham University • [michelle.de-gruchy@durham.ac.uk](mailto:michelle.de-gruchy@durham.ac.uk)  
 This paper addresses the importance of considering the ancient landscape (fields, wadis, forests, grasslands, etc.) and terrain, not just elevation from a digital elevation model in cost layer construction for route analysis. The specific analysis employed is the isolation and quantification of individual variables as factors for route choice; but the principles apply across all forms of route analysis, including prediction and reconstruction. Focussing on a case study from protohistoric North Jazira where the landscape was reconstructed as a prior step to route analysis, results of identical route analyses with and without consideration of the landscape and terrain are presented side by side.
- 93 de Jong, Lidewijde 3 Traditions  
**Empires and Palmyra: a View from the Tombs** 10 Tuesday  
Evening  
 The Netherlands • Department of Archaeology, Rijksuniversiteit Groningen •  
[lidewijdedejong@gmail.com](mailto:lidewijdedejong@gmail.com)  
 Scholarship on the material culture of Palmyra is often split between those who approach the site as an example of Parthian art, epigraphists concentrating on the distinctly local Aramaic dialect, and Roman scholars trying to fit Palmyrene cultural expressions in a Hellenistic or (provincial) Roman mold. Such approaches rarely do justice to the complex interplay of cultural influences at play in this city in the Syrian desert, and obscure the fact that Palmyrenes originated from (semi-) nomadic people rooted in Ancient Near Eastern and particularly Mesopotamian traditions. This paper offers a fresh look at the people of Palmyra and their active manipulation of distinct cultural traditions as their society underwent rapid change between the late 1st c BCE and the 3rd c CE. The focus lies on funerary practices, which include architecture, gravegoods, epitaphs, and physical remains. The sudden rise of wealthy benefactors of nomadic background is clearly marked in the cemeteries. They built tombs for their families, and adapted an eclectic mix of Roman, Parthian and Mesopotamian cultural symbols. The importance of the tomb in preserving and protecting the physical body, and creating a memory of lineage and family was anchored in older, Near Eastern traditions.

- 94 Deckers, Katleen & Riehl, Simone 4 Reconstructing  
11 Wednesday  
Afternoon
- Olive at Zeraqon (Jordan) and its Importance in the 3rd millennium BC Levant**
- Germany • Institute for Archaeological Sciences, Tübingen • katleen.deckers@uni-tuebingen.de; simone.riehl@uni-tuebingen.de
- The Early Bronze Age site of Zeraqon (3100-2300 BC) is located in northeastern Jordan having about 400 mm annual rainfall. The area around Zeraqon is today a highly degraded agricultural landscape with almost no natural woody vegetation. We investigated 159 archaeobotanical flotation samples and found amongst the charcoal remains a clear dominance of olive which was also well-presented by its pips. Interestingly, olive trees need additional water already when rainfall is below 400 mm. Within this presentation we will place the Zeraqon archaeobotanical results in their regional context by comparing with other Levantine sites and investigating the variously proposed economic models.
- 95 Degli Esposti, Michele 6.1 Reports Region  
13 Friday  
Afternoon
- Excavations at the Early Bronze Age site "ST1" near Bisyah (Sultanate of Oman): Notes on the Architecture and Material Culture.**
- Italy • Dipartimento di Civiltà e Forme del Sapere - Università di Pisa and Italian Mission To Oman (IMTO) • michele.degliestposti@gmail.com
- Ongoing investigations at the site of a third millennium tower near the town of Bisyah in central Oman, conducted by the University of Pisa, have already revealed its monumental architecture, typical of the area and period, along with the remains of an imposing system of contemporary channels which bear witness to the mastery of water management by the inhabitants of the region. The chance to conduct extensive excavation also allowed the discovery of auxiliary structures, as well as the collection of a large pottery assemblage which if of importance in dating the site to the so-called Umm an-Nar period. Besides, the pottery and the material culture tell the story of the far-reaching connections of the site, and show how central Oman was perfectly integrated in the exchange network that opened to the outer world via the coastal centres of the same age. From regions as far afield as southeastern Iran, the Indus Valley and possibly central Asia, different classes of artefacts were shipped all the way down to the site, at the same time transmitting cultural influences that can be traced in the likely local productions. Keywords: Oman; Bronze Age; Umm an-Nar; long-distance trade; water management
- 96 del Cerro, Carmen 4 Reconstructing  
10 Tuesday  
Morning
- Irrigation Canals and Cultures in the Oases of Oman Peninsula in the Iron Age. Questions, Systems and Environmental Adaptations**
- Spain • Universidad Autónoma de Madrid • carmen.delcerro@uam.es
- Oases of Oman Peninsula grew and allowed the establishment of a settled population at the beginning of First Millennium BC thanks to environment knowledge of its inhabitants. The falaj technique is probably the most widely known system of capitation of water, as well as water transfer, in UAE and Oman. While water collections systems are well known in Oman in Islamic period, our understanding of Iron Age aflaj just getting started. Only one falaj alley has been dug by the Spanish Archaeological team at al Madam 2 –Sharjah-, and only three aflaj wayout has been studied until now (Hili 14, y Bida Bint Saud -in Abu Dhabi- and al Madam2), displaying water delivery systems, even cultures arrangements, quite different. The wayout of the excavated falaj at al Madam and distribution of water thanks to a big Irrigation Canals and ponds Network to the cultures, allowed us to reconstruct some aspects of Ancient Eco-Systems and its transformation in that region in the Iron Age.
- 97 Denham, Simon 2 Travelling Images  
10 Tuesday  
Morning
- The Social Importance of Late Neolithic Stamp Seal Imagery**
- UK • University of Manchester & British Museum • sdenham@thebritishmuseum.org
- Stamp-seals are a widespread and enduring aspect of late Neolithic (c. 6500-5500 cal. BC) material culture found across the Greater Mesopotamian region. Current interpretations link prehistoric sealing systems with changing economic relationships and growing control over the flow of goods. Against this background, stamp-seals are repeatedly interpreted as a means of marking the identity of individuals, social groups, or institutions through the replication of an image. This paper argues that stamp seal imagery can be better understood as a shared symbolic language that referenced an imagined community – one that cut across other social and cultural boundaries to unite people across the late Neolithic world.

- 98 Devillers, Anne 4 Reconstructing  
10 Tuesday  
Midday
- New Approaches in Paleofauna Reconstruction**
- Belgium • Royal Museums of Art and History, Brussels • a.devillers@kmg-mrah.be
- The mammalian and avian faunas are important elements of terrestrial palaeoenvironments, both because of the ecological role of some of their components, capable of modifying and structuring ecosystems and because of their economical and cultural interactions with human populations. The data sets that can be used to evaluate these faunas include usually scant palaeontological finds, occasional textual accounts, archaeozoological material and iconographic representations. For Upper Mesopotamia in the IVth and IIIrd millennia, the evidence is practically restricted to the latter two. However, both archaeozoological and iconographic material is fairly extensive at many sites of this area, so that a comparison is possible between the views offered on the faunas by the two sets of data. In some cases this comparison can usefully comfort inferences made from one set. In other cases divergences can open perspectives on cultural or environmental circumstances that explain contrast between artistic interest and economic use, as well as throw light on the limitations of both lines of evidence.
- 99 Di Paolo, Silvana 5 Dealing with the Past  
11 Wednesday  
Afternoon
- The 'Modern Life' of Ancient Near Eastern Antiquities: Polyvalent Objects for the Construction of Cultural Meanings**
- Italy • Consiglio Nazionale delle Ricerche – Istituto di Studi sul Mediterraneo antico • silvana.dipaolo@isma.cnr.it
- For archaeology, objects are defined by style, context, function, chronology etc. Over the last few decades, the social sciences (including anthropology and archaeology) have focused on the relationship between objects and people and the way human and object histories inform each other. The central idea (developed for the first time in a very important article published by Ch. Gosden and Y. Marshall in 1999) is that, as people and objects move in space and time, they are constantly transformed and mutually influenced each other. Until the early 20th century when archaeology began to place the material remains in their own historical context, the significance and the value of the antiquities were often linked to the individuals who have appreciated, owned, and/or transacted them. Examining some case studies and different types of artifacts (portable or not), this paper aims to understand the way Near Eastern antiquities, outside of their original contexts, become invested with meaning through social interaction.
- 100 Dighton, Anne 6.2 Reports Themes  
09 Monday  
Evening
- Human Interaction with the Olive Tree in the Neolithic-Iron Age Jordan Valley: New Research from Pella in Jordan**
- Australia • University of Queensland • anne.dighton@uqconnect.edu.au
- New research is presented from the archaeological site of Pella in the north Jordan Valley. This research builds on earlier work carried out in the southern Jordan Valley examining the process and timing of human interaction with the olive in prehistory. Previous research demonstrates that through time, olive endocarps became more uniform in size; this may be as a result of human involvement in the reproductive cycle of olive trees by initiation of vegetative propagation, or perhaps simply as a result of the selection of favoured trees. Pella's location in an area situated within the natural growth range of olive trees provides an interesting contrast to the semi-arid growth conditions in the southern Jordan Valley area. A metrical analysis of the olive endocarp assemblage spanning the Neolithic-Iron Age periods at Pella was carried out. These results demonstrated a significant reduction in the size variation of the olive endocarps through time. However, the results also suggest that the process and timing of olive cultivation may contrast with these events in the south. This research contributes to gaining a more nuanced understanding of the contribution made by this valuable resource to the food production systems of the Neolithic and Chalcolithic Jordan Valley.

- 101 Dodd, Lynn 5 Dealing with the Past  
11 Wednesday  
Evening
- Seeing, Selling, Saving Jerusalem: Diffusing Heritage-based Conflict**
- USA • University of Southern California, Los Angeles • [swartz@usc.edu](mailto:swartz@usc.edu)
- Jerusalem's contested sovereignty remains a vexing problem both politically and in terms of imbalanced heritage exploitation, including legal sales and looting. Until a peace agreement is implemented, competing claims for Jerusalem and variable, highly inflammatory access to, and protection of, its irreplaceable material heritage will continue to be factors in the on-going conflict.
- This paper details the heritage and antiquities-focused activities (non-military involvement) that can diffuse conflict in the short term, as envisioned in the international norm, the Responsibility to Protect (R2P). This paper reflects research undertaken through the Jerusalem Old City Initiative (<http://www1.uwindsor.ca/joci/>). The recommendations are designed for a post-agreement scenario and advocate changes to existing heritage governance structures and revisions to policies that permit legal sales of antiquities, inadequately involve community members in heritage decisions or benefits, and fail to engage principles of sustainable heritage management in an historic urban landscape around a UNESCO-designated World Heritage Site.
- Concrete steps can be taken by international agencies, state parties, private NGOs, faith institutions, and academics to effectively encourage policies that will diffuse conflict now, prevent greater conflict in the future, and secure the preservation and protection of the material heritage that still remains in Jerusalem, under the rubric of R2P.
- 102 Dönmez, Şevket 3 Traditions  
09 Monday  
Evening
- 'Persianisation' at Oluz Höyük, North-Central Anatolia**
- Turkey • Istanbul University • [donmezsevket@gmail.com](mailto:donmezsevket@gmail.com)
- Oluz Höyük, which is 2km northwest of Gözlek Village and 5km east of Toklucak (former Oluz), is located on 3km south of Amasya-Çorum highway. It is 4km north of Yeşilirmak's (Kummešmaha in Hittite texts, ancient Iris) an important branch of Çekerek River (Zuliya in Hittite texts, ancient Skylax) and on the west side of the fertile Geldingen Plain. Oluz Höyük, which is almost round shaped, 280 x 260m in dimension and 15m higher than the plain level, has an area of 4,5 ha. Oluz Höyük 2007 - 2012 archaeological research, resulted in the detection of 9 architectural layers.
- Reflecting characteristics of Persian culture in architecture, pottery and small finds, Oluz Höyük 2nd Architectural Layer is divided into two sub-layers as A and B 2B Architectural Layer is architecturally characterized by the stone paved road (Persian Road) lying in the direction of southeast and northwest in the Trench A and remains of a complex building, of which we thought to be a small palace or mansion, partly revealed in the north of this road in the campaigns of 2011 and 2012.
- Keywords: Oluz Höyük, Iron Age, Persianisation, Persian Road, Phrygian
- 103 Döpfer, Stephanie 6.2 Reports Themes  
11 Wednesday  
Evening
- The LBA Pottery of Area BU in the Royal Palace of Qatna, Syria.**
- Germany • Institute for Ancient Near Eastern Studies (IANES), University of Tübingen • [stephanie.doepfer@student.uni-tuebingen.de](mailto:stephanie.doepfer@student.uni-tuebingen.de)
- This paper will present the preliminary results of the analysis of the Late Bronze Age pottery assemblage from area BU in the Royal Palace of Qatna, Syria. Within the scope of the paper an overview of the main characteristics of the pottery will be given and a chronological assessment of this assemblage will be attempted. Furthermore, the pottery will be compared to other assemblages from Qatna. Correspondence analyses based on all published LBA pottery in Syria and the Levant will be used in order to ascertain how the pottery from area BU in Qatna relates to existing pottery traditions.

- 104 Dolce, Rita 2 Travelling Images  
10 Tuesday  
Midday
- Headless Mortals and Gods. Some Remarks on Decapitation in the Ancient Near East**
- Italy • Università di Roma Tre • ritadolce@quipo.it
- Research on the procedures and meanings associated with decapitation in the visual communication of the Ancient Near East leaves many aspects still to be explored. Among these, attention will be called to the following two:
- a) The representation, specifically in a document from Amorrite Mari, of the decapitated heads of the defeated, held by the hair by the victors, which holds a strong meaning regardless of its final destination given the “two person” relationship between the victor and the “inanimate object” in his temporary possession and that of suspended heads, in various ways and diversified places and spaces, which take on different meanings in the logic of this act’s tangibility.
- b) Archaeological evidence for the intentional decapitation of statues of mortals and gods; this has for some time been the subject of research also on the epigraphical sources and is supported by recent data from Early Dynastic Mari. In my view, the latter confirm that this was an independent procedure, with an emotional communicative impact perhaps linked to rituals, which are unknown, for the discovery contexts and with complex meanings relating to the centre of the individual and the centre of statues of the gods.
- 105 Donald, Alexander 2 Travelling Images  
09 Monday  
Afternoon
- Adaptation, Appropriation and Late Cypriot Glyptic Iconography**
- Australia • La Trobe University • A.Donald@latrobe.edu.au
- Transition from Middle Bronze Age to Late Bronze Age culture on Cyprus is associated with a suite of changes, reflecting an apparent expansion of Cypriot horizons and a more outward facing elite identity. This is evident particularly in the increased import of visually complex goods from abroad. Cylinder seals first appear in Cypriot tombs dating to the earliest phases of the Late Bronze Age and their use flourished throughout the period. Though Cypriot glyptic style continues to be discussed, it is poorly defined and its relationship with that of adjacent cultures is ill understood.
- Though Edith Porada wrote extensively on Cypriot glyptic, her seminal study which established Cypriot seals as a distinct stylistic group was published in 1948, and addressed only a limited number of unprovenanced seals. This study offers a reassessment of Cypriot glyptic, drawing upon a much wider corpus of material and with a specific focus on formally excavated seals. In particular, Porada’s criteria of Cypriot style are assessed and the question is posed whether it is possible in firm, positive terms to define distinct regional iconographic traditions in a period of increased visual eclecticism.
- 106 Dreiser, Anja R. 7 Islamic  
11 Wednesday  
Afternoon
- Islamic Ceramics from Central and Eastern Oman**
- Germany • University of Bamberg • anja-ruth.dreiser@uni-bamberg.de
- In the course of the multi-disciplinary German research project Processes of Transformation in Oasis-Settlements in Oman (1999-2009), fieldwork was carried out in five oases in the Sultanate of Oman. Investigating settlement structures and their change through time, especially in view of the vanishing traditional ways of living since the rapid modernization from the 1970s onwards, the project comprised agricultural sciences, architecture and urban development studies, oriental studies and an archaeological section. The latter undertook extensive surveys of the oases, mapping sites and collecting surface finds, mainly ceramics. The paper presents the results of the second and third fieldwork campaigns that concentrated on the coastal town of Ṭṭwī, the oasis of Ibrā’ and of Nizwa. A large amount of the ceramics belong to the Islamic period, still only understood in broad outlines concerning chronology from former surveys. The finds from Ṭṭwī, Ibrā’ and Nizwa are therefore discussed in view of previous research and also in comparison to each other, considering regional divergences and similarities. The presentation further focuses on the imported Far Eastern wares, The possibility of a more detailed chronology in conjunction with the “bacini” found in Omani mosques will be elucidated.

- 107 Düring, Bleda S. 6.1 Reports Region  
12 Thursday  
Morning
- Reconstructing Repertoires of Rule: The Middle Assyrian Empire in the West**
- The Netherlands • Leiden University • b.s.during@arch.leidenuniv.nl
- What strategies and practices did Assyrians use to obtain and maintain their hold on the western territories they conquered in the latter part of the Late Bronze Age? How standardized were these strategies and practices and can we define concentric zones with specific sets of practices? These questions are part of ongoing research in a large ERC funded project at Leiden University, and in this talk some preliminary ideas and results will be put forward, both about the nature of the dunnu at Tell Sabi Abyad and the broader situation in the western provinces.
- 108 Duncan, Carrie E. 3 Traditions  
11 Wednesday  
Midday
- Remembered for Giving: Jewish Benefaction in the Roman World**
- USA • University of Missouri - Columbia • duncance@missouri.edu
- This paper explores the phenomenon of Jewish dedicatory inscriptions within the broader context of Greco-Roman euergetism. A recent argument asserts that Jewish dedications constitute a unique form of benefaction motivated by the specifically Jewish value of piety termed hesed. This assertion rests on two premises challenged in this paper: first, that Jewish dedications are demonstrably consistent in their invocation of hesed as a motivational factor, such that the phenomenon should be construed as broadly “Jewish;” second, that the piety and expectation of divine recompense integral to the idea of hesed has no parallel among non-Jewish benefaction, such that it should be considered unique. The data do not support either premise. Jewish dedicatory inscriptions are widely divergent in form, character, and – so far as such things can be ascertained – motivation. “Jewish” inscriptions share no uniform or characteristic element beyond the religio-ethnic background of their dedicators. The arrogation of piety as a motivation for Jewish benefaction exclusively ignores the role of piety in the multifaceted system of reciprocity and exchange endemic to Greco-Roman society. This paper demonstrates that Jewish dedicatory inscriptions varied widely and, as a Jewish response to the encounter with Greco-Roman euergetism, contributed to that system’s richness and diversity.
- 109 Eberle, Joachim (1) – Bachofer, Felix (1) – Hochschild, Volker (1), Marker, Michael (2), Uerpmann, Hans-Peter (3) 4 Reconstructing  
09 Monday  
Evening
- Holocene Landscape Dynamics and Geo-Archaeology in the Central Region of the Emirate of Sharjah (UAE)**
- Germany • 1 Department of Geography, University of Tuebingen; 2 Heidelberg Academy of Sciences and Humanities; 3 Institut für Ur- und Frühgeschichte, Naturwissenschaftliche Archäologie, University of Tübingen • felix.bachofer@uni-tuebingen.de
- The study area in the vicinity of the oasis-town of Maleha (UAE) contains the most complete Holocene archaeological record in Eastern Arabia. The enormous artefact density of different archaeological epochs in this region leads to the hypothesis that the conditions for human settling must have been very favourable here during some periods, especially in the Early Holocene. The focus of the research is the water supply especially by temporary lakes (playas) in the transitions zone between the pediments of the Hajar Mountains and the dunes of the north eastern Rub al-Khali. Their extension and the frequency of channel flow will be determined by hydrological process modelling and associated sedimentary archives. The proposed study utilizes digital and mostly non-invasive research methods to evaluate the landscape and to conclude from today’s landforms and processes to the development of the landscape. Objective of the project is the understanding of the process dynamics and the paleoenvironment during favourable and unfavourable climatic periods throughout the Late Pleistocene and the Holocene by means of an integrative landscape reconstruction approach, addressing stratigraphy, sedimentology, radiocarbon dating, remote sensing, geophysical prospection and hydro-geomorphological process models. The geographical results will be related to archaeological evidence.

- 110 Eger, Alexander Asa 7 Islamic  
10 Tuesday  
Evening
- (Re)Mapping Medieval Antioch: Life After the Islamic Conquests**
- USA • UNCG • [aaeger@uncg.edu](mailto:aaeger@uncg.edu)
- Many scholars have taken a bleak view of the post-classical city of Anṭākiya, arguing for a significant decline and ruination that began already before the Islamic conquests. However, historical accounts affirm that the city's population did not decrease dramatically, but rather maintained an active economic and religious life. Further, a reanalysis of the excavated and published material from Princeton 1930s expedition shows that post-classical Antioch was an important emporium along the trans-Asian Silk Road. Although smaller than its extensive Roman and early Byzantine incarnation, Antioch still was a local center of manufacturing production linked to surrounding settlements. The city was no longer dependent on its large hinterland plain as a 'parasite city,' but more ruralized and self-sufficient, being codependent on the needs of a far more immediate hinterland than previously and serving the highly contested western Islamic-Byzantine frontier. The textual and excavated evidence offers a compelling case for reenvisioning post-classical Antioch and replacing the narrative of Antioch's decline with one of contraction, self-sufficiency, and transformation.
- 111 Eidem, Jesper 6.1 Reports Region  
09 Monday  
Afternoon
- Back To Shemshara**
- The Netherlands • NINO Leiden University • [j.eidem@hum.leidenuniv.nl](mailto:j.eidem@hum.leidenuniv.nl)
- Tell Shemshara was excavated by Danish and Iraqi archaeologist in 1957-59 as part of the Dokan Dam Salvage project. In 2012 the Netherlands Institute for the Near East began new investigations at Tell Shemshara (for the BA occupation; the prehistoric levels are investigated by R. and W. Matthews) and adjacent sites (Sulaymania Governorate). The paper reports on results from the first seasons.
- 112 Elias, Nada –Hourani, Yasha – Badawi, Ali – Arbogast, Rose-Marie –Castex, Dominique 6.2 Reports Themes  
09 Monday  
Evening
- Burial or not? The Case of Men/Cattle Deposit in the Necropolis of Jal al-Bahr in Tyre. Reflection on the Phoenician Funeral Symbolic**
- France • Université Bordeaux 1 • [n.elias@pacea.u-bordeaux1.fr](mailto:n.elias@pacea.u-bordeaux1.fr)
- Tyre is situated on the coastal road between the north (Beirut) and the South (Jerusalem). Since 2011, an archaeological excavation conducted by the Directorate General of Antiquities of Lebanon in Jal el Baher (Tyr), has revealed a Phoenician-Hellenistic necropolis on the Mediterranean coast. This article aim to study a multiple deposit of several individuals in the most ancient level of funeral occupation in the Phoenico-Hellenistic necropolis.
- The multiple deposit is formed by eight human skeletons deposited simultaneously with five skulls of cattle in a staging that may suggests voluntary will wich suppose a funerary practice. The archaeanthropological and archaeozoological approaches tend to understand funeral rituals, beliefs and perception of life after death that used to exists in the Phoenician Tyr.

- 113 Eminli, Jeyhun – Iskenderov, Emil 6.1 Reports Region  
13 Friday  
Midday
- Archaeological Investigations at Piboz Tapa Necropolis. Lerik, Southern Azerbaijan (Preliminary Report 2012-2013)**
- Azerbaijan • The National Academy of Sciences of Azerbaijan • ceminli@mail.ru
- Piboz Tapa is situated in Lerik region of the southern part of Azerbaijan. The site was discovered accidentally in the 80th of last century, during construction of the village road. In 2012 there was carried out wide scale archaeological investigations in studying of this monument. Investigations were carried out on the north-eastern slope of the hill. In the issue of 2012-2013 excavation campaign there were investigated 72 graves. Investigations prove that the hill was used for burials in the end of 5th centuries BC and lasted until 3rd centuries BC. Later on after approximately one thousand years the site was occupied by the Christian and Muslim burials. The early stage of the necropolis was followed with burials flexed position lying on the left and right sides. Parts of these graves were destroyed accidentally by the later graves and during road construction. The inhumation burials belong to adults and children. The bodies lying on the right side are oriented south-west to north-east with the head to the south-east and the face to east. The bodies lying on the left side are oriented south-west to north-east with the head to the south-west and face to north and north-east. There are general features for these graves. Generally, small size vessels as well as bowls and phials were placed above the skull and in front of the face, big size vessels as well as one and two handle jars were placed near the legs. The bowls and phials were placed together with iron spear head above or near the skull. In some graves the amount of spear heads up to 5. In addition together with spear heads, there were placed iron knife and swords. Domestic animal bones were found inside and under the vessels. Characteristic feature for the graves is clay or bone spindle placed inside the jars. There were followed ash and coal in most part of these burials. Sometimes ash and coal covered inside the graves, and over the hands and legs, in front of face and arms. All the graves contain personal ornaments such as bronze and silver earrings, fingerings, bracelets and beads of various materials. Chronologically, these graves belong to Achaemenid and Parthian periods.
- Keywords: Southern Azerbaijan, Talysh region, 5-3rd centuries BC, ground graves, burial rites.
- 114 Erdem, Aylin Ü. 6.2 Reports Themes  
12 Thursday  
Midday
- Ethnoarchaeology at Ayanis in Eastern Turkey**
- Turkey • Ege University, Bornova- Izmir • aylin.erdem@ege.edu.tr
- Ayanis Village is located on the Eastern shore of Lake Van in Eastern Turkey. A fortress surrounded by a city belong to the Urartian Kingdom are situated on the northwestern edge of the modern village. Archaeological excavations both in Ayanis citadel and city have been conducted by Prof. Dr. Altan Çilingiroğlu since 1989.
- Ethnoarchaeological researches in Ayanis provide a viable link between the modern and ancient lifeways. Although Urartian fortress of Ayanis is mainly represented by the monumental state buildings, the domestic quarters of the fortress, which is characterized with daily life, make possible to correlate these buildings with modern village. The archaeological results obtained from city excavations is also represent some similarities with modern village. In this presentation, I will discuss the material culture and lifeways of domestic structures of Urartian period by comparing to the modern village.
- 115 Erlich, Adi 3 Traditions  
12 Thursday  
Afternoon
- Late Hellenistic Figurines from Tel Anafa, Israel**
- Israel • Institute of Archaeology, University of Haifa • aerlich@research.haifa.ac.il
- Tel Anafa is a small site in the Hula Valley in northern Israel. The decorated Hellenistic building at the site was settled by Hellenized well-to-do Phoenicians in the late 2nd century and the early 1st century BCE, and its finds include imported and local ceramics, and glass and metal vessels. Among the finds there were terracotta, stone and bronze figurines and appliqué, which probably had domestic uses, either in household cult, as apotropaic objects, toys and ornaments. The objects portray deities, mortals, animals, and objects of cult and magic. The terracotta figurines composing majority of the assemblage were found in zones which may be related to female activity. Similarly to other assemblages of figurines from Palestine, the repertoire can be described as standing firmly in its surroundings. It shares much with the art from Phoenicia, Cyprus and Ptolemaic Egypt. The figurines are of Eastern-Hellenistic koine types, representing the complex identity of the Hellenized Phoenicians who lived there.

- 116 Ertsen, Maurits – Wilkinson, Tony 4 Reconstructing  
10 Tuesday  
Morning
- Understanding Long-Term Trends in Ancient Water Systems**
- The Netherlands/UK • Delft University of Technology; Durham University • m.w.ertsen@tudelft.nl; t.j.wilkinson@durham.ac.uk
- As one of the material bases of human civilization, irrigation systems are shaped through complex interactions between and within the social and natural domains. The natural environment sets boundary conditions to which humans respond with irrigation technology. Such responses can then impact both boundary conditions and humans anew. Such human-material interaction is captured by Niche Construction Theory, which emphasizes the capacity of organisms to modify their environment and thereby influence their own and other species' evolution. We will discuss the Human Niche Construction (HNC) approach as a suitable research framework for the study of long-term irrigation trends, as it forces a recursive relationship between long-term human actions and landscape modification. In this example, drawn from irrigated southern Mesopotamia, we suggest how HNC can lead to the development of sustainable irrigation systems in contrast to the large-scale systems of later empires. Human Niche Construction theory could be key to framing future research and fieldwork in which landscape interventions such as irrigation will be considered as a response to societal needs and as an impact on subsequent settlement, land use, and social organization.
- 117 Eskandari, Nasir (1) – Abedi, Akbar (2) – Salmanzadeh, Javad (2) – Shafie, Mozhgan (2) – Javadi, Mehri (1)– Yousefi, Mosayeb Ahmad (2) – Tayari, Zahra 6.1 Reports Region  
11 Wednesday  
Evening
- The Development of Pastoralism in the Highlands of Halil Rud Basin, Southeast Iran: Archaeological Evidence and an Ethnoarchaeological Study**
- France/Iran • 1 Université Louis Lumière Lyon 2; 2 University of Tehran • nasir.eskandari@yahoo.com
- Southeastern Iran consists of several different geographical zones. Archaeologically, Halil Rud Basin is one of the most important parts of the region. This little known basin includes two different geological parts, highlands and lowlands. This dichotomy was to cause interactions between the two areas. The evidence for interactions between the highland mobile pastoralist and lowland urban centers in urban phase of 3rd Millennium BCE in Southeastern Iran has been elusive. However, it is supposed that scattered highland settlements have played a very subservient role in the cultural landscape of the region during this era. In May-June 2012, an archaeological salvage project carried out by the authors at the area of Hanzaf Dam in the highlands of Halil Rud Basin. This paper presents the results of the project that including excavations at two Bronze Age pastoral sites, a Bronze Age destroyed cemetery and also an ethnoarchaeological study.
- Key words: Southeastern Iran, Bronze Age, Salvage excavation, Pastoralism, Ethnoarchaeology
- 118 Esmaeili Jelodar, Mohammad Esmail – Yadegarnia, Masoomeh 4 Reconstructing  
11 Wednesday  
Evening
- A Comparative Study of the Ancient Nomadic Camp Sites and their Modern Counterparts in Bakhtiari Highlands, Iran**
- Iran • University of Tehran; Islamic Azad University—Central Tehran Branch • jelodar@ut.ac.ir
- Cultural interfaces have prevailed from ancient times up to the present among the human communities and embody a major factor in the behavior of these societies. Indeed, such interactions still continue to exist particularly among the transhumant groups and are still visible among the Bakhtiari nomads presently residing the two Iranian provinces of Chaharmahal va Bakhtiari, and Khuzestan. The present paper reports a comparative analysis between the results of the excavation of a nomadic camp site (in Parsian, vârgah) and modern examples of camp sites that are currently used by the local nomads. The archaeological site of Shahriari 2 is located 1 km west of the present-day Shahriari village in the Biregoun County, Kouhrang District, Chaharmahal va Bakhtiari province.
- The site was excavated as part of a salvage excavation project within the limits of the Kouhrang Dam Project. This comparative study will help to attempt at interpreting and gaining a deeper insight into this type of archaeological site through juxtaposing seasonal, transient architecture of the modern Bakhtiari nomads in the region with the excavated architectural remains of the vârgah at the excavated site. In this presentation we would have a short description of the excavated camp site, comparing it with modern nomadic camp sites of the region, and try to put forward some archaeological insights of this comparison.

- 119 Esmaeili Jelodar, Mohammad Esmail – Mortezaei, Mohammad 7 Islamic  
12 Thursday  
Evening

**New Findings from the First Phase of Salvage Excavations at Rayy:  
Results of Extensive Excavations at the Base of Rashkan Fortress in 2012  
(Western Section)**

Iran • University of Tehran; Iranian Center for Archaeological Research • jelodar@ut.ac.ir

Rayy ranks among the major ancient Iranian cities with its settlement history dating back to the prehistoric period with the prominent site of Cheshmeh Ali and its distinctive culture. The pioneering archaeological investigations by J. de Morgan in 1912 was followed by enduring field works by several foreign and Iranian archaeologists at different parts and sites of this important region that have continued into the present time.

The most recent excavations in Rayy concern the salvage excavation which is briefly and partly reported in this paper. The excavation program was carried out by the present authors in 2012 in the area that was the focus of the constructional activities of the Tehran Municipality to construct the Imam Ali Highway that caused damages to and exposed the existing cultural remains. The excavated area lies near Schmidt's trenches at the base of the main fortifications of Rayy. The excavation involved opening a total of 18 trenches in the northern and southern sections of the excavation area which revealed architectural remains both in the form of building complexes and isolated architectural features, including structures relative to storing and conveying water through water conveyance channels and clay pipes. Provisional study of the excavated pottery assemblage suggests a date of the early Islamic period in particular 3rd to 7th centuries A.H. for these architectural remains. Moreover, presence of burnished gray pottery diagnostic of the 1st millennium B.C. in the form of unstratified sherds in disturbed Islamic contexts hint at a contemporary settlement in the region. The latest results from this excavation and the analysis are presented in this paper.

- 120 Fabian, Peter – Gilead, Isaac 6.1 Reports Region  
12 Thursday  
Afternoon

**The Chalcolithic Site of Tel Sheva - the 2009 Season**

Israel • Ben-Gurion University of the Negev, Beer Sheva • gilead@bgu.ac.il

The Chalcolithic site of Tel Sheva – Special Education Campus, is located at the Bedouin township of Tel Sheva and it was excavated between March to July 2009. The study of the rich Ghassulian artifactual assemblages, mainly pottery and stone vessels and flint and limestone knapped tools, is currently in its final phase.

About 1,700 sq. m were excavated in areas A, B and C, and the intra-sites variability is obvious. While area A features a network of underground structures, partially inter-connected, area B contains remains of above-ground bricks and stone structures and one underground cavity, in area C there are neither above- nor below-ground structures and this part of the site is characterized by numerous pits, some of which were used as industrial installations, and a few were probably pits for pottery firing.

The phenomenon of above-ground and below-ground structures is a prominent aspect of the Nahal Beer Sheva Ghassulian sites known since the 1950s. The recent finds at Tel Sheva are the basis for further discussion of this phenomenon and its cultural and chronological implications.

121 Fahimi, Hamid

6.1 Reports Region

**Sialk 7; A Suggestion for the Latest Period in Sialk South Mound, Based on the New Excavations at Tepe Sialk (2001-05)**

11 Wednesday

Midday

Germany • Free University of Berlin • h\_fahimi2000@yahoo.com

Based on the excavation of Roman Ghirshman, the first archaeologist who worked at Sialk, the layers of Iron Age in the southern mound of Sialk were divided into two main chronological phases, Sialk V and Sialk VI. Ghirshman also compared these layers to the cemeteries A and B.

Starting from the stratigraphic analysis and the typological study of the pottery recovered in the southern mound of Sialk during the new excavations, the Iron Age evidence has been categorized into three chronological periods, from Sialk V to Sialk VII.

The Sialk VII period is represented by architectural remains on the southern mound and has been divided in the sub-phases Ia and Ib. It corresponds to two distinct ceramic horizon, characterized by two different wares (the Late Central Gray Ware and Late Central Buff Ware) and five types of pottery (VII-1 – VII-5), which have not been recognized so far at the Cemeteries A and B. These pottery types can be compared to the late Iron Age ceramic productions found in numerous sites in Central Iranian Plateau, such as Šamširgāh, Sagzābād, ... as well as in sites located out of the central plateau, such as Āq Tepe, Torang Tepe, ... The presence of the aforementioned pottery indicates that the southern mound of Sialk was still occupied after period VI.

The new chronological framework established for the southern mound of Tepe Sialk and some sites such as Qoli Darviš and Tepe Hesār along with the results of the new C14 determinations from Hasanlu point to the 12th century BC as the beginning of the Iron Age in Iran.

122 Fallah, Meysam – Taghavi, Abed

7 Islamic

**New Islamic Potteries discovered from Masjed-e Jome Amol (Friday Mosque)**

12 Thursday

Evening

Iran • University of Mazandaran, Babolsar; High education Institute of Sabz, Amol  
• abed.taghavi@umz.ac.ir

In recent archaeological project in year of 2012 discovered various types of Islamic pottery in Eastern court (Sahn) of Amol Friday Mosque. Various types of Potteries such as sgraffito, Lusterware, turquoise and polychrome wares indicated that Historical city of Amol has determined as one of the important productive centers in Islamic pottery in North of Iran.

In this article tried that on the base of archaeological documentation, recovered Islamic potteries have been recognized according to typological and relative chronology methods. The result of this research shows that Islamic Pottery products in Amol including to three main phases:

- a) Early Islamic centuries such as unglazed pottery with red paste.
- b) Medieval Islamic centuries such as multi-colored wares.
- c) Late Islamic centuries such as Blue and white porcelain type.

Also, in some types such as sgraffito shows that commercial relation connected between Amol and Jurjan historical cities in tenth and twelve's centuries. It is an engraving technique based on incising the design with a sharp tool through a white slip to reveal the red earthenware body. The vessel is then coated with glaze.

Keywords : Masjed-e- Jome Amol , Islamic pottery , typology , relative chronology.

- 123 Fantone, Federica 4 Reconstructing  
11 Wednesday  
Afternoon
- From Fodder to Staple Food: Rethinking the Role of Barley at LBA Tell Sabi Abyad**
- The Netherlands • Leiden University • f.fantone@arch.leidenuniv.nl
- Barley is the most represented cereal crop at Late Bronze Age Tell Sabi Abyad. Why was it preferred? The common idea is that barley was mainly used for animal feeding and the production of beer. Are we perhaps underestimating its role in the past economy? Focus has been given on environmental factors, less on other reasons regarding the selection of crops in marginal areas. Actually, agriculture relies on complex socio-economic relations embedded into environmental constraints. In particular, the organization of the food economy involves several steps, from the acquisition of the resources to the production of food, its storage and distribution.
- In this paper I will reassess the role barley played in the agriculture economy. Rethinking post-harvesting processing in connection with the specific characteristics of crops I will argue that barley could be profitably cultivated and processed as staple food because of its economic advantages. The results of the ongoing research on the botanical remains from Sabi Abyad dunnu will be discussed, which also offer the opportunity to shed new light on the palaeoenvironmental conditions in the Balikh valley at the end of the 2nd millennium BC.
- 124 Faramarzi, Khashayar – Akbari, Mahsa 3 Traditions  
12 Thursday  
Midday
- Sassanian Royal Army against Counterpart World Powers**
- Iran • Marlik Institute of higher education, Mazandaran; Univeristy of Tehran • khashayar\_faramarzi@yahoo.com
- The rise of the Sassanian empire in 220 AD, could be considered as a beginning for a new era in the history of Western Asia. The Sassanian Empire, from its early times to extinction in 642 AD, had severe military conflicts with the Roman Empire in west, Hephthalites in east and the Arabians from south. The Sassanian army, which had got an orderly structure, achieved considerable victories against the Roman Empire. In this essay the author seeks to investigate the evolution of the Sassanian army from the reign of Khosraw-Parvez till the fall of Ctesiphon. In this regard, historical texts such as roman, Armenian and Islamic resources, and the archaeological data like weaponry stuff, relieves, seals and coins are studied and mentioned. For this purposes the efficiency of the weapons, the military strategies and the structure of the army are investigated through the above mentioned sources. So this essay attends to indicate that the Sassanian army had not enough logistic potential, martial power, and military battle strategies to conflict the Arabians.
- Keywords: Sassanians, Army, Martial Power, Historical Texts.
- 125 Faust, Avraham – Katz, Hayah 6.2 Reports Themes  
11 Wednesday  
Afternoon
- The Birth, Life and Death of an Iron Age House at Tel 'Eton, Israel**
- Israel • Bar-Ilan University • avraham.faust@biu.ac.il
- Tel 'Eton is a large site (about 15 acres) in the trough valley, on the southeastern part of the Judean Shephalah. The mound is currently (since 2006) being excavated by Bar-Ilan University, as part of a large-scale exploration project at the site and its surroundings.
- The main occupational phase unearthed in the excavations is from the 8th century BCE (Iron Age IIB). This large city was violently destroyed toward the end of the century, probably by the Assyrian army during Sennacherib's campaign of 701 BCE. The massive destruction layer sealed houses with their content, including many pottery vessels, metal artifacts, botanical material (some still within the vessels), as well as loom weights, seal impressions and many additional finds. A large four room house (some 250 sq.m.), located on the upper part of the mound, is currently being excavated. So far about 80% of the structure, which was found in an excellent state of preservation, were exposed. The lecture will present the finds from this house, along with an analysis of the way the house was constructed (its "birth"), the way it functioned on the eve of its destruction (its "life"), and the way it was eventually destroyed (its "death").

- 126 Festuccia, Silvia 2 Travelling Images  
12 Thursday  
Evening
- Sport Representation: Transfer Images of Agonistic Contests**
- Italy • University Suor Orsola Benincasa, Naples • [silviafestuccia@hotmail.it](mailto:silviafestuccia@hotmail.it)
- Agonistic contests were staged in the ancient Near East many centuries before the first Panhellenistic games were held in Ancient Greece. The competitions were popular and coincided with particular cultural events and feast days as shown by the iconographic and epigraphic depictions dating back at least to the III millennium BC. Findings uncovered to date show many sports, including races, wrestling, boxing, archery, and ball games. Indeed, iconographic representations of wrestling and boxing depicted on various media, such as metal and stone artefacts, are widespread. Some iconographic representations depicting competitive sports have attracted interest to this topic. Such images reveal similar styles and the development of techniques across various historical eras and geographical areas and these may be linked to the techniques and rules that gradually came into force in sporting events.
- 127 Fischer–Genz, Bettina 3 Traditions  
10 Tuesday  
Evening
- Becoming Roman without being Hellenized? A Case-Study of Different Narratives of Near Eastern Culture in the Northern Beqaa (Syria/Lebanon)**
- Lebanon • Université de Saint-Joseph, Beirut • [Bettina.Genz@dainst.de](mailto:Bettina.Genz@dainst.de)
- Although the geographical position of the Beqaa between the Levantine coastal centers and the cities of the Decapolis implicitly make it part of the Hellenized Near East, we are faced with culturally diverse aspects of material culture at centers such as Heliopolis/Baalbek and Laodicea ad Libanum/Tell Nebi Mend. On the one hand, the Romanization of this region takes on a rather monumental aspect, but despite their architectural decoration especially the sanctuaries of the northern Beqaa are still connected to Near Eastern cultic traditions in terms of layout and cultic features such as the raised altars. On the other hand, when looking for Hellenistic traditions in the material culture of this region, we are faced with scarce and ambiguous evidence in the area around Heliopolis/Baalbek, while a site such as Laodicea ad Libanum at a crossroad between the coast and inner Syria shows the expected Hellenistic features in its assemblage. In reviewing the data known from all sites of the northern Beqaa, this paper will propose a new synopsis of the changing identities of regional centers and their rural hinterland during the late Hellenistic and early Roman periods.
- 128 Forza, Maria 1 Egypt  
10 Tuesday  
Midday
- Could the Crematory Ritual be Explained as a Marker of Alterity with Respect to the Central Power and of Self-Identity? Considerations on Crematory Burials in the Upper Tigris Valley during the Iron Ages I and II.**
- Italy/Germany • University of Rome 1 “La Sapienza” & Freie Universität, Berlin • [mariaforza@gmail.com](mailto:mariaforza@gmail.com)
- The present study focuses on the crematory ritual in the Iron Ages I and II in some sites of the Upper Tigris Valley, such as Ziyaret Tepe, Giricano, Kavuşan Hüyükh, Gre Dimse and Zeviya Tivilki. The aim is to offer a multi-perspective analysis regarding the original community and, contextually, that of marking all possible connections with cremation processes as they can be found in some contemporary Urartian sites (Dilkaya, Habibuşağı, Van-Altıntepe, Adilcevaz, Iğdır). At this historical moment the Upper Tigris Valley was characterized by a socio-political system (defined by Szuchman “Tribe State System”), in which different ethnic groups interacted. The Assyrians, who had subdued the area as early as the 10th cent. B.C., referred to it as “Bit Zamani”, and they identified the local populations with the name of “ People from Nairi”. In this context the nomadic element, which was basically devoted to transhumant pastoralism, played an important role both with regard to the economy of the region, and the extended network of contacts which it helped to foster: it lay between the northern highlands, the site of the Urartian kingdom, and the Mesopotamian southern region, which was the core of Syrian power. Scholars have indicated cremation as one of the archeological markers of the indigenous communities of the Upper Tigris Valley, distinguishing them from the tradition of the Assyrian conquerors, who favoured inhumation. Cremation is, instead, widely certified in the Urartu of the 9th and 8th cent.
- The objective of this proposal is a reflection upon the role the nomadic element played in the introduction of this practice into the Upper Tigris Valley, and whether it may be reasonable to consider it as an identity marker for these communities, representing “alterity” with respect to the Assyrian invaders.

- 129 Fragnoli, Pamela – Mallegni, Chiara 2 Travelling Images  
**Society and Visual Image Transmission. The Painted Pottery during the Early Bronze Age at Arslantepe and in the Malatya-Elaziğ Area.** 13 Friday Morning  
 Italy • Sapienza University of Rome • c.mallegni@live.it  
 From the second half of the 3rd millennium BC strong social and economic changes occurred in the Upper Euphrates area. The archaeological evidence in the Malatya-Elaziğ province shows a transformation from more mobile (EB2) to stable communities (EB3) with the development of small political entities and town-like settlements. The typological and stylistic characters of the pottery of these two periods further explain this phenomenon: the EB2 is characterized by small distinct groups with similar organization, whose differences in the painted pottery may reflect distinct identities; in EB3 painted pottery, in the whole Upper Euphrates region, shows a high standardization degree, typical of specialized handcrafts. Preliminary mineralogical-petrographic and chemical analyses of the painted pottery further confirm this. Could this homogeneity be related to the existence of workshops, either located in some centres or distributed in various selected sites? The unpublished painted pottery material from the well stratified sequence of Arslantepe (Periods VIC [EB2], VID [EB3]), compared to the same ware from other sites of the Malatya plain, Aşvan and Altinova area, is ideal to investigate these phenomena.
- 130 Frangié-Joly, Dina 3 Traditions  
**Beyrouth hellénistique** 09 Monday Evening  
 France • d.frangiejoly@gmail.com  
 Issu d'un travail de thèse qui a reposé sur une approche pluridisciplinaire de l'histoire de Beyrouth à l'époque hellénistique, cette communication propose d'analyser la place de Bérytos dans l'économie à l'époque hellénistique à une échelle régionale et internationale : urbanisme, productions céramiques et importations, produits échangés, structures sociales des échanges, ainsi que la place des Bérytiens dans l'économie méditerranéenne, notamment à travers l'exemple de Délos où leur présence est la mieux attestée. À partir des corpus céramique, nous jetterons la lumière sur les phénomènes d'hellénisation et de romanisation qui se sont développés dans la cité, entre le IVe s. et la fin du Ier s. av. J.-C., et sur la base d'autres données, le passage qui a lieu entre l'époque hellénistique et le début de l'époque romaine, entre rupture et continuité. À partir de ces exemples, nous tenterons de proposer une synthèse historique sur Bérytos et les activités des Bérytiens à l'époque hellénistique, et de souligner les problèmes qui restent en suspens et l'importance des études archéologiques et historiques à venir pour répondre à ces questions.
- 131 Franke, Kristina A. 6.2 Reports Themes  
**Metal and Elites in Upper Mesopotamia - Uniqueness or Uniformity?** 10 Tuesday Evening  
 UK • Institute of Archaeology/UCL • k.franke@ucl.ac.uk  
 The 3rd millennium in Upper Mesopotamia is a time of change and innovation. Especially between 2600 and 2350 BC the rather sudden appearance of the so-called city states and the growth of complex urban societies suggests the power of a possibly newly established elite. Beside the lack of metal resources in Upper Mesopotamia metallurgy plays a recognisable role within society. However, the uniformity of this possible elite regarding the contemporary appearance of city states within that region and their control of the urban life and of the hinterland, appears to be more independent in terms of their metallurgy and metallurgical interests. The analysis of metal artefacts and metallurgical debris from major Upper Mesopotamian sites may help to understand similarities and differences between the founders of these city states. Also, the proximity of many Upper Mesopotamian sites to neighbouring Anatolia, where metal resources were available, led to the suggestion that this region may have worked as a transmitting area in the development of skills and transport of material across Mesopotamia, giving the Jezirah a pioneer position within Mesopotamian metallurgy.

- 132 Fridman, Julia 2 Travelling Images  
11 Wednesday  
Afternoon
- Concentric Circles Incised on Judahite Storage Jars; Origin and Meaning**
- Israel • Tel Aviv University • juljularchaeo@gmail.com
- The 7th century BCE appearance of incised concentric circles on Judahite storage jar handles is considered to be one of the royal administrative markers of the Kingdom of Judah, however the symbol appears to have come out of nowhere. In contrast to the other markers in the series, which were stamped onto the wet clay of the handle, these were incised. Approximately half of the time they were found in conjunction with the symbol of the flying solar disk and sometimes with the earliest of the markers, scarab beetle. Symbols that did not originate in 8th and 7th century Judah, in fact the concentric circle symbol can be seen in it's various representations throughout Near Eastern art, and from the Mediterranean and Aegean regions, such as Cypro-archaic and Mycenaean decorative art hundreds of years, if not more, prior to it's 7th century appearance. It seems that this symbol retained its initial religious and royal meaning throughout the centuries, even when used by different cultures. An exploration of it's origins and meaning to the various cultures that utilized it will be explored in order to understand the possible reason for its longevity and why it was eventually used as a royal Judahite administrative marker.
- 133 Fujii, Sumio 6.1 Reports Region  
13 Friday  
Morning
- Mosaic Representations of Feline Animals: New Finding at 'Awja 1, a Late Neolithic Open Sanctuary in Southern Jordan**
- Japan • Kanazawa University • fujiikun@staff.kanazawa-u.ac.jp
- Our recent investigation at 'Awja 1, a Late Neolithic open sanctuary near the Saudi border, has revealed several mosaic representations of feline animals. They were produced with the two-rowed upright slab wall technique, a unique construction method peculiar to the Neolithic Badia, and attached to an elongated open sanctuary built again with the same construction technique. Similar combinations have been reported from a few contemporary open sanctuaries in the Negev Highland and the Sinai Peninsula. Thus the finding would shed new light on the cultural contact among arid peripheries at the initial stage of pastoral nomadization. This paper introduces the new finding and discusses the chronology of the feline representation and the open sanctuary, two essential keys to tracing the process of pastoral nomadization in the southern Levant.
- 134 Ganji, Shadi – Daneshi, Ali 6.1 Reports Region  
13 Friday  
Midday
- Probable Evidences of Nomadism in the Mountainous region of Jiroft : An archaeological Survey in Iran, 2009**
- Iran • Organization of Cultural Heritage; Tarbiat Modares University • ganji\_shadi@yahoo.com
- The Jiroft region is located in the Southeast of Iran in Kerman Province. This region is divided into two different geographical zone : Plain (with hot weather) and mountain (with cold weather). The present survey was conducted in mountainous zone that in comparison to another is more unknown.
- During our survey season, we recorded a total of 72 sites of human activity that most of them were identified as historic tombs and Islamic occupation, and just 2 sites were belonged to prehistoric period.
- Because of cold weather and elevated height – unlike the Jiroft Plain where contain huge prehistoric mounds- under survey area is suitable for nomadic people who are living there also until nowadays. Existence of numerous tombs and lake of correlated settlements with them confirm presence of nomadic tribes in the history of area.
- In this study we try to show some probable evidences of historical nomadism in a part of Iran where is poor in archaeological research.

- 135 Ganor, Sa'ar 6.1 Reports Region  
12 Thursday  
Evening
- Seven Years of Excavation in Khirbet Qeiyafa. A Fortified Judean City of the Tenth Century BCE**
- Israel • Israel Antiquities Authority • saar586@hotmail.com
- Khirbet Qeiyafa is situated 35 kilometers south-west of Jerusalem, on the ridge bordering the Ella Valley to the north. The site follows the natural topography of the hilltop, extending over an area of 23 dunams. Excavations have revealed a fortified city of the tenth century BCE and radiocarbon dates from charred olive pits indicate that it was occupied between 1020 and 980 BCE, making it the first fortified Judean city of the Iron Age IIA period that has been excavated.
- The city has two four-chamber gates, each with adjacent public spaces, and it is surrounded by a casement wall, ca. 700 m. in length. A number of structures attached to the casement wall include dwellings, cultic installations and storehouses that contained a rich variety of finds. A large public building that may have housed a local governor, ca. 1000 square meters in size, was partially exposed on the peak of the hill.
- The site commands an impressive view of the surrounding area which made up the border between Judah and Philistia and the important roads leading from the Mediterranean coast to the highlands. The city may be identified with the biblical site of Sha'arayim ('Double-Gated').
- 136 Garavand, Morteza – Zeynivand, Mohsen 6.2 Reports Themes  
13 Friday  
Afternoon
- Locating Sasanian City of Seimarreh, according to Historical Scripts and Archaeological Evidences**
- Iran • Islamic Azad University, Central Tehran Branch (IAUCTB) • garavand.morteza@gmail.com; zeynivand@gmail.com
- Sasanian period of time is one of historic periods in the chronology of ancient Iran. This period's main property to discern is rubble-made architectural structures and plaster cement. Cause of this trait, Most of historiographers give such structures to the Sasanian period of time. And also, those scholars who work on recognition of history of Iran, attribute such structures to Sassanians, following historiographers; But, in recent decades, archaeological researches and excavations show the contrary. Ancient city of Seimarreh is one of the Sasanian cities mentioned in historical scripts of early and medieval Islamic era. Those scripts demonstrate Sasanian Seimarreh as one of the cities included in state of Mahrjan-Ghazagh, on the Seimarreh river basin. This city's ruins are now located in Darreh-Shahr's area in Ilam province. More than 120 hectares of the rest of this structural complex is excavated up to archaeological rules in recent decades. Their conclusions show that this structural complex belongs to early Islamic centuries, and after Sasanians fall of empire by Arabian warriors, is made according to Sasanian architectural properties. Nevertheless, the result is in opposite of what is mentioned as Seimarreh in historical scripts. On the other hand, rescue excavations of Sasanian-period site of Barz-ghavaleh in the district of Seimarreh dam, besides probing Kelek-Cham-mehr site near Seimarreh river and dispersion of sites with architectural structures made of rubble with plaster cement in this basin, specially Tarhan zone, shows the importance of this area in Sasanian period. In this essay, we try to locate Sasanian city of Seimarreh in Seimarreh river basin, adjusting Muslim historiographers' sentences with archaeological evidences out of excavating the above mentioned sites. according to documents and evidences, This research would show that Sasanian city of Seimarreh might strongly be Barz-ghavaleh.
- Keywords: Sasanian, Seimarreh, Darreh-Shahr, Barzghavaleh, Kelek-Cham-mehr, archaeological excavation, Islamic scripts.
- 137 Gavagnin, Katia 6.1 Reports Region  
09 Monday  
Afternoon
- The Land of Nineveh Regional Project: Preliminary Results on 3rd Millennium B.C. Settlement Patterns in the Northern Region of Iraqi Kurdistan**
- Italy • University of Udine • katia\_gavagnin@hotmail.com
- The paper will present the results of the analysis of the 3rd Millennium B.C. pottery collected during the two first survey seasons conducted in the northern region of Iraqi Kurdistan by the Land of Nineveh Regional Project of the University of Udine. It will discuss the main diagnostic types for the different sub-phases of the Early Bronze Age and provide a preliminary interpretation of settlement development in the area during the third millennium B.C.
- To judge from the surface pottery assemblage, the 3rd millennium B.C. was a period of intense occupation in the area, with almost all its sub-phases (Ninevite 5, Mid-3rd Millennium, Akkadian and Post-Akkadian) being attested. We thus hope to be able to provide an overview of settlement development patterns during the "Second Urban Revolution" in a hitherto poorly investigated region of Northern Mesopotamia.

- 138 Gebel, Hans Georg (1) – Wellbrock, Kai (2) – Grottker, Matthias (2) – Zielhofer, Christoph (3) 4 Reconstructing  
13 Friday  
Morning
- Mid-Holocene Land-Use in NW Arabia**
- Germany • 1 Berlin Free University and ex oriente, Berlin– 2 Lübeck University of Applied Sciences – 3 Leipzig University • hggebel@zedat.fu-berlin.de
- Hitherto unknown Chalcolithic/EB shepherd cultures populated NW Arabia, and other parts of the Arabian Peninsula, establishing burial fields, watering places with wells and hydraulic systems harvesting surface water beside tapping intermediate and deep groundwater. These pastoral and sepulchral landscapes, often characterized by structures made by standing stones, apparently were sustained by a moisture 5th millennium BCE, followed by increasingly dry conditions in the 4th millennium. The results of two transdisciplinary projects (the Saudi-German Rajajil/ Standing Stones J.A.P. and the Eastern Jafr J.A.P.) are presented, focussing in addition on the question how land use might have changed when pastoral land diminished after 4000 BCE: The projects search evidence for their thesis that sedentary oasis life was a result of environmental degradation during the 4th millennium BCE. First archaeological, hydrological and geoarchaeological evidence will be presented for the Chalcolithic occupations in Qulban Beni Murra, Rajajil, Rasif, and others.
- 139 Genequand, Denis – Northedge, Alastair 7 Islamic  
11 Wednesday  
Midday
- Medieval urban development between Khurasan and Khwarezm: the case of Misriyan/Dehistan (Turkmenistan)**
- Switzerland/France • University of Geneva; University of Paris I • dgenequand@yahoo.fr
- The medieval town of Dehistan, modern Misriyan, is situated in south-western Turkmenistan. Dehistan or Ribat Dehistan is often mentioned in the written sources between the 9th and the 13th century and was the capital town of a rich agricultural district. According to these, it was a 9th century foundation attributed to 'Abd Allah ibn Tahir, the governor of Khurasan. Dehistan was then a ribat intended for the defence of the frontier zone of north-western Khurasan. The ribat and later the town, which developed from it, successively belonged to the realm of the Ghaznavids, the Saljuk Turks and the Khwarezmshahs.
- Since 2012, the Dehistan Archaeological project is investigating this huge archaeological site that was only partly studied during the 1970s. This paper will present a renewed insight on the topography of the town and discuss its progressive development and the reasons for it.
- 140 Gerber, Yvonne 7 Islamic  
10 Tuesday  
Morning
- The South Jordan paradox and the Early Islamic ceramic**
- Switzerland • Universität Basel • yvonne.gerber@unibas.ch
- The South Jordan paradox: a region which has long been a crossroads and a cultural and commercial hub appears isolated in its ceramic tradition. Does the paradox of its ceramic isolation persist into the Early Islamic period? Already during the Classical ages (Nabataean to Byzantine periods), South Jordan formed a peculiar ceramic koine.
- The aim of this paper is to show that even during the Early Islamic period, with its upheavals, pottery forms and shapes from a part of South Jordan are hardly comparable with the forms of the north of Transjordan, of North Arabia or Palestine. Remarkably, the long and gradual slide of ceramic forms proceeds from the Late Byzantine into the Early Islamic (Umayyad, Abbasid) periods, seemingly impervious to the changes seen in Early Islamic pottery manufacture centres from surrounding regions.
- The paper shows the facts and probes for possible reasons, based on the case studies from Jabal Harun (in the region of Petra), South Jordan [excavations of the University of Helsinki, Finland; dirs.: Prof. J. Frösén, Dr. Z. Fiema; pottery partially published], and Meda'in Salih (Saudi Arabia) [French-Saudi excavations; dirs.: Dr. L. Nehmé, Prof. F. Villeneuve, Prof. Dayfallah al-Talhi; pottery unpublished]. Key words : Early Islamic, South Jordan, ceramic tradition, Jabal Harun, Meda'in Salih

- 141 Gerber, Yvonne – Durand, Caroline 3 Traditions  
11 Wednesday  
Morning
- At Crossroads — and in the Crossfire? Work-in-progress Studies on Pottery and other Small Finds from a Hellenistic/Nabataean Trade Centre in Northwest Arabia**
- Switzerland/Jordan • Universität Basel; IFPO – French Institute for the Near-East, Amman • Yvonne.Gerber@unibas.ch; c.durand@ifporient.org
- What happens when a settlement along the trade routes, close to the capital of the Dedanite/Lyhanite kingdom, is infiltrated by the Nabataeans, and later on by the Romans? How are the changes reflected by the material (archaeological) legacy? The latest studies on pottery and other small finds shall give a work-in-progress view on the ways the “crossfires” of different influences and epochs contribute to change or preserve forms and shapes.
- Case study: Meda’in Salih / ancient Hegra. The French-Saudi excavations [dirs.: Dr. L. Nehmé, Prof. F. Villeneuve, Prof. Dayfallah al-Talhi] since 2008 reveal new insights from that Nabataean oasis site, but also at the crossroads of important trade routes running Northwest to Southeast and Northeast towards Southwest over the Red Sea.
- Key words : Meda’in Salih, Hegra, Northwest Arabia, Hellenistic, Nabataean, Roman
- 142 Ghasemi, Mohsen (1) – Haghighat, Ali (2) – Arefi, Zahra (3) 6.2 Reports Themes  
13 Friday  
Midday
- A New-Discovered Altar in the North of Iran Central Plateau**
- Iran • 1 Golestan Institute for Higher Education; 2 Azad University; 3 Tarbiat Modarres University • Mohsen.ghasemi.1982@gmail.com; yahaghali@yahoo.com; z.arefi@gmail.com
- The ancient hill of Ghabrestan-Sar in Fooladmahalleh village in Mahdishahr of Semnan, with the height of 1865 meter above the sea level and the geographigal posirion of 36 degree and 5 minutes of northern width and 35 degree and 33 minutes of eastern length is located in the plains of alborz mountains in Iran.
- In 1391, an Iranian archeology group started to excavate this area of 100 M. Removing the first layer of the remains of the graveyard from the Islamic era, the special and native architecture of this region consisting of stone and wood was discovered. Having cleaned and removed the first layer, the vestige and remains of a shingles architecture with stucco, from a historical era in Iran ( probably Parthian) were discovered, with walls as thick as 120 cm and a length of 850-350 cm in the north-south, east-west direction. The dimensions of the shingles used in this discovered architecture were like 11-9\*38\*38 and 11-8\*40\*40 which besides the use of shingles in the walls, the use of it in covering the ground of the internal space of this structure and then cover of stucco and soil can also be mentioned. Besides, in the excavation of the second layer, the leg of a firebox, made of stucco, circle-shaped with the diameter of 100 cm, decorated with spoon-like rosette petals was discovered in the floor of the main area of the architecture. Beside that, there was a U-formed stage like a sanctuary or a standing stage According to the plan and form of the discovered architecture remains which is like a Cross, and the evidences related to the religious architecture of Parthian era, probably, this layer has something to do with an altar in Parthian era and the altar of Anahita goddess in the plains of southern Alborz Mountains and Iran central plateau whose firebox was transferred to another place and with the pass of time this area was abandoned. Besides the remains of the altar architecture, in the excavated underside layers, some burials, probably from the Bronze and Cheshme-Ali periods, with some other cultural remains and clays of old, middle and new Iran plateau were also discovered.
- Keywords: Iran central plateau, Ghabrestan-Sar, Semnan, Altar, Parthian, Firebox

- 143 Glazer, Eva Katarina 6.1 Reports Region  
13 Friday  
Morning
- Sedentary and Nomadic Population during Bronze Age Southern Levant: An Example of Cultural Contacts**
- Croatia • The University of Zagreb • ekgglazer@gmail.com
- Bronze Age was a dynamic period in southern Levant history, most commonly recognized as a first great urban period in the area. The influx and the beginning of urbanization, background of the cities, the cities layout and the story of the surrounding area, that is, the centre and the periphery, has been discussed a lot among historians and well documented. The author considers that there is still a question concerning the inhabitants of the cities, and how they coped with the urban life style, that is, were they more connected with the idea of being a city dweller, or were they more connected with the people living outside the cities, the people that inhabited small rural settlements, villages and camps, and also the always present nomadic people of the region. How did those people understand each other and how did they encounter, how did they manage to coexist? Terminology issues and lack of interdisciplinary studies led the author to pursue some analytical methods in order to achieve describing and better understanding of the cultural contacts between nomadic and sedentary populations in the Bronze Age southern Levant.
- 144 Golani, Amir 1 Egypt  
10 Tuesday  
Midday
- Circular Structures of the Late Early Bronze I in the Southern Levant and Predynastic Egypt**
- Israel • Israel Antiquities Authority • amirgolani77@gmail.com
- Nearing the end of the EB I period (3350-2950 BCE), the southern Levant underwent a transition from a village-oriented to an urban-centered society. An outstanding phenomenon of this period throughout the region is the proliferation of rounded circular structures, interpreted as storage facilities, often found in proximity to domestic buildings. These imply increased food production of individual households and a greater need for storage of food surpluses which could also have been traded. A similar situation is reflected in pre-dynastic Egyptian settlements of the same time period. The agricultural prosperity and resulting surpluses suggested by these storage structures represent changes affecting both southern Levantine and Predynastic Egyptian societies and may have been one of the catalysts in the formation of ruling elites and urbanization during this period.
- 145 Gondet, Sébastien – Mohammadkhani, Kourosh 6.2 Reports Themes  
12 Thursday  
Evening
- Results from 2012-2013 Large Scale Surveys at Persepolis (Central Fars, Iran). New Insights on the Achaemenid City Organisation Scheme**
- Italy/France • Università di Bologna & Université Louis Lumière Lyon 2 • sebastien.gondet@unibo.it; kourosh.mhmdkhani@gmail.com
- Former archaeological works focused on the monumental 12 ha Persepolis Terrace bringing into light a complex of royal building defined as a Royal residence as well as a dynastic high place. However the Terrace is only a part of a larger 50 ha Royal Precinct and further of a city called Parsa. It was the seat of the capital of the Persian satrapy during the Achaemenid Empire as it is evidenced by the progressive translation of the administrative tablets discovered during the 1930's excavations. The archaeology is far to be able to identify and to render the remains of Parsa particularly because the recent upheaval of the surrounding landscape by modern farming practices have levelled major parts of ancient traces. In straight collaboration with the Iranian archaeological administration and the Iranian-Italian excavation team a survey program was carried out during two seasons in a 3 km circle around the Terrace. It is based on the use of new methodological solution, mainly geophysics, able to map the disappeared traces of the Achaemenid organisation. As first preliminary conclusions we can assess that the city was not densely built but organised as a network of interconnected settled areas included in a landscaped environment.

146 Gopnik, Hilary

3 Traditions

**Mixing and Matching: Hybridity at Oğlanqala, Azerbaijan**

11 Wednesday

USA • Emory University • hgopnik@emory.edu

Midday

The site of Oğlanqala, in Naxcivan, Azerbaijan appears to be a striking example of what might be called hybridity. Located on the periphery of empires throughout the first millennium BCE, the inhabitants of Oğlanqala repeatedly used their material culture to adapt to, interact with, and perhaps comment on, the imperial powers that surrounded them. From the 8th century BCE Urartian expansion through the establishment of Seleucid power in the 3rd century BCE to the Parthian-Roman conflicts in the 1st century CE, the architecture and pottery of Oğlanqala reflect both local traditions and the cultural entanglements created by interactions with empire. But although the position of the site on the edge of empire is similar in these different periods, the material expression of this interaction is quite different from period to period. This paper will discuss the different strategies of material culture borrowing, mixing, and importation used by the inhabitants of Oğlanqala during the Early Hellenistic and Parthian/Roman periods (Oğlanqala periods II and III) in order to explore the broader concept of hybridity in the archaeological record.

147 Gorzalczany, Amir

7 Islamic

**Early Islamic Industry, Ecology and Urbanism: The Case of Ramla**

09 Monday

Israel • Israel Antiquities Authority • amir@israntique.org.il

Evening

The city of Ramla was established as the capital of Jund Filastin under Umayyad rule. The construction was a carefully planned enterprise that included the mosque, the palace and markets. Water supply was guaranteed by means of a sophisticated aqueduct that conveyed water to pools and cisterns through intricate pipelines and channels systems. Historical sources and archaeological research show that the economic prosperity of the city was assured by the establishment of numerous industrial installations and workshops that answered to the city's demands and allowed dynamic trade.

Commerce and industry had a predominant influence in the urban planning. Approximately 196 archaeological excavations were carried out so far within the city and in its environs since J. Kaplan pioneer projects in 1949. Files stored in the IAA archives branch were checked by the author during the present research in quest for all available sources of information in the archaeological record regarding the various industries during the Early Islamic period (Umayyad to Fatimid dynasties). Thanks to efforts carried out by the IAA to attribute to every issued license excavation a precise map reference, it was possible to locate a substantial part of the spots on GIS generated maps.

The location breakdown of the industrial areas discovered in Ramla precludes the option of random distribution. Moreover, it is possible to point out changes and developments that occurred during and after the construction of the city. Urban development and location of industrial quarters are inherently linked and reciprocally influenced.

The city of Ramla constitutes a good case study for the research of early Islamic urbanism, because it was set up on vacant ground, with no previous developments that could have limited the planning. Thus, it seems that given the right conditions the Islamic builders were able to plan in advance, foreseeing challenges and difficulties such as water delivering and ecological concerns.

- 148 Greener, Aaron 6.2 Reports Themes  
11 Wednesday  
Evening
- Late Bronze Age Imported Pottery in the Southern Levant: Intercultural Contact, Symbolism and Society**
- Israel • Bar-Ilan University • aarongreener@gmail.com
- This paper will investigate and compare the variations in the cultural significance of both Cypriot and Aegean pottery vessels which were imported to the Southern Levant during the Late Bronze Age. This imported pottery is different from the products of the local industry, and represented high-quality products. The pottery was hard fired, often elaborately painted and came in a wide range of shapes. It is likely that these physical properties of the vessels played a role in their attraction for local consumers.
- Moreover, imported vessels allowed their owners to be part of the world from which the artifacts derived and emphasized their capacity to extract the objects from that world. The distribution patterns of the imported vessels were dictated by conscious and unconscious choices and decisions made by individuals and groups as to which vessels to use, whom to purchase them from, and how to use them while storing, preparing and consuming their food. Thus, although these goods travelled in small quantities, their social importance was probably out of proportion to their bulk. My study will survey a large number of sites and analyze the finds on a regional level. I will show that in order to be culturally relevant in their new surroundings, the imported Cypriot and Aegean objects were often re-contextualized by the imposition of local cultural associations. Furthermore, even within the Late Bronze Age cultural context of the Southern Levant, the new symbolic and cultural meanings attached to the imported vessels could vary according to the social or ethnic group using them, and the context within which they were used. For example, in certain circumstances some parts of the cultural assemblage reflected interaction between groups, while others the retention of groups' separateness and identity.
- 149 Greenfield, Haskel J. – Shai, Itzhaq – Maeir, Aren M. 6.1 Reports Region  
12 Thursday  
Evening
- Understanding Early Bronze Urban Patterns from the Perspective of an EB III Commoner Neighbourhood: the Excavations at Tell es-Safi, Israel**
- Canada/Israel • University of Manitoba; Ariel University/Bar-Ilan University; Bar-Ilan University • Haskel.Greenfield@umanitoba.ca
- This paper describes some of the results of the excavations of the Early Bronze Age III commoner neighbourhood in Area E of Tell es-Safi/Gath, Israel. The neighbourhood contained a layout that is common for other EB urban centres, including sturdy small multi-room houses, often with a courtyard and in few cases a small storage room. Occupants had access to local and some interregional trade goods, used various recording methods, sacrificed expensive animals, and built and maintained the neighbourhood over a long period of time. These results are discussed in conjunction with other EB finds from the site, both from the surface survey and from the excavations in other areas. Based on these data and analysis, we discuss the role of Tell es-Safi/Gath during the Early Bronze Age in a regional perspective. The results of the excavation suggest that Tell es-Safi/Gath was an important EB III political and economic centre in this region.
- 150 Greenfield, Tina – Rosenzweig, Melissa 4 Reconstructing  
10 Tuesday  
Midday
- Assyrian Provincial Life: Faunal and Botanical Remains from Domestic Contexts at Ziyaret Tepe, Southeastern Turkey**
- UK/USA • University of Cambridge; University of Chicago • tlgreenfield@gmail.com; mrosenzw@uchicago.edu
- In the early first millennium BCE, the Late Assyrian empire established the settlement of Tushan (the modern site of Ziyaret Tepe) as a provincial center for state expansion into southeastern Anatolia. According to cuneiform texts from the site and from Assyrian royal archives, Tushan was occupied by both Assyrian administrators and subjects of the empire. In this paper, we explore the lives of the non-elite at Tushan, many of them resettled deportees, by bringing together the faunal and botanical information collected from four rooms of a domestic house situated alongside the city wall of the site. This dataset provides a critical counterpoint to the wealth of knowledge obtained about elite lifeways in royal contexts and documents, and offers insight into the daily practices of those communities under Assyrian rule.

151 Grossman, Kathryn &amp; Monahan, Belinda

3 Traditions

### **What the Empire Eats: Animal Economies at Hellenistic Hacinebi Tepe and Beyond**

12 Thursday

Afternoon

USA • Bradley University; University of Chicago • grossman@uchicago.edu

In the 1990's, excavations at the site of Hacinebi Tepe in southeastern Turkey revealed two phases of Hellenistic occupation. The earlier phase included what may have been a small fort, possibly guarding a Euphrates River crossing, while the later phase consisted mostly of modest houses and refuse pits. Thousands of animal bones were recovered from these two phases. Given that zooarchaeological studies of Hellenistic remains are relatively rare in the Near East, these bones comprise an important new data set for the study of foodways during this period. In this paper, we present the results of our analysis of the Hellenistic faunal remains from Hacinebi. We compare faunal remains from the two phases of Hacinebi's occupation with each other and with contemporary settlements in northern Syria and southeastern Anatolia. This analysis then serves as the basis for a bottom-up examination of strategies of imperial administration and incorporation during the Hellenistic period in the Near East.

152 Günel, Sevinç

6.2 Reports Themes

### **A New Center of Intercultural Relations in Western Anatolia during the Late Bronze Age: Çine-Tepecik**

11 Wednesday

Evening

Turkey • Hacettepe University, Faculty of Letters, Department of Archaeology  
Beytepe, Ankara • sgunel@hacettepe.edu.tr

Recent archaeological research in western Anatolia has uncovered new data which define the cultural structure of the region in greater detail than ever. The geographical location of western Anatolia plays an important role in the cultural development of the region as well as defining the nature of interregional cultural relations. The Meander Valley, which is one of the deepest valleys in western Anatolia, has many small passageways serving as natural communication routes between central and western Anatolia. Tepecik lies on this large plain, to the east of Çine Çayı in a geographically central position along the course of the Meander River. Tepecik has a long settlement history spanning from the Late Neolithic until the end of the Late Bronze Age. In the stratified development of the mound, Culture Level II.1, belonging to the Late Bronze Age, reveals a fortified settlement plan. The fortification wall was further strengthened by square towers. Excavations at the Late Bronze Age settlement have revealed strong fortifications as well as buildings erected for purposes of storage.

In one of these buildings, vessels, as well as dense concentrations of pithos sherds and in situ pithos, have been discovered. A large number of the pithoi, other vessels, metal finds and Hittite seal impressions have been found scattered in this building. Among the vessels, buff ware plates, bowls with red painted decoration, large bowls and jugs reflect the local western Anatolian pottery tradition in terms of both wares and shapes. In this structure, the Mycenaean decorated deep bowls, kraters with figural scenes and seal impressions with hieroglyphic inscriptions dating to the Hittite imperial period demonstrate that the building was involved in interregional trade and exchange, and acted within the context of the administrative buildings of the settlement. In this respect Hittite hieroglyphs on stamp seals are important as they shed new light on the historical geography of the Hittite Empire and redefine the region where Tepecik is located. On the other hand, among the Mycenaean-decorated vessels in this level, the subjects portrayed on the kraters and deep bowls reflect a tradition parallel to the 'pictorial style' of vessels known from the Aegean and the Eastern Mediterranean world. The material culture of Çine-Tepecik demonstrates that settlement was part of both the Mycenaean and Hittite spheres of influence.

- 153 Guliyev, Farhad – Nishiaki, Yoshihiro 6.2 Reports Themes  
**Archaeological Investigations at the Neolithic Settlement of Goytepe Located in the Middle Kura River, Azerbaijan, 2012-2013.** 10 Tuesday  
Midday  
 Azerbaijan • farguliyev@gmail.com  
 Archaeological investigations have been carried out for 6 years seasons by the joint missions from Azerbaijan and Japan at the archaeological complex of Goytepe, one of the largest ancient settlements of the Neolithic period in the territory of Azerbaijan of the Southern Caucasus. The Neolithic settlement of Goytepe is located in the middle part of the right bank of the River Kura, 10 km east of the city of Tovuz. It is on the piedmont of the western part of the Small Caucasus range with 9 m height and its diameter reaches 145 m.  
 The main objective of the investigations for these seasons at Goytepe is to clarify and understand precisely the overall aspects of the Late Neolithic culture with local features on the background and to determine the chronological framework of the site with the help of the modern scientific technologies in research. Well preserved building complexes (wide and small circular structures made from mud bricks), houses which are connected to each other, protruding walls, ovens and fire places have also been discovered during the archaeological excavations.  
 One of the important aspects of the archaeological investigations consists of making an “archaeopark” around this settlement in order to make scientific results available to the public. It will show the significance of the archaeological excavations of Goytepe, as well as ensure the precise and long term investigation of this settlement.
- 154 Hageneuer, Sebastian 5 Dealing with the Past  
**The Influence of Early Archaeological Reconstructions to Near Eastern Archaeology** 12 Thursday  
Morning  
 Germany • Freie Universität Berlin • s.hageneuer@fu-berlin.de  
 In the 19th century, the image of the Ancient Near East was only a vague idea, shaped by accounts in the Bible or early European travellers. Due to the pioneering work of Botta, Layard or Koldewey, the western world started to get a picture of these monumental civilisations. Early on, archaeologists tried to express their imagination of ancient buildings or cities by drawings or paintings. These reconstructions affected the image of the Ancient Near East until today.  
 The depictions of ancient monumentality were of course shaped by a political, social and research-historical background and need to be viewed in their historical environment. How were these reconstructions intended and how do we perceive them today?  
 In my PhD thesis, I analyse archaeological reconstructions to form a typology of their methodological approach and development over time. Part of this work is the study of the cultural-historical influence to these images and how this affected the methods of reconstruction in that time until today. In this talk, I will present some of my results.
- 155 Haider, May 3 Traditions  
**Importation of Attic Pottery to the Levantine Coast during the Persian Period: Case Study the College Site Sidon** 09 Monday  
Evening  
 Italy • Sapienza, Università di Roma • bellissimay@gmail.com  
 During the Persian Period, Attic pottery was being imported in mass quantities all over the Levantine coast mainly from the late fifth century BC until the middle fourth century BC.  
 The use of Attic pottery by the locals seems to be associated, at least partially, with some kind of local festivity related mainly to a local god with a death and rebirth cycle. The British Museum excavation in Sidon, southern Lebanon (College and Sandikli sites) in collaboration with the Department of antiquities of Lebanon and under the direction of Dr Claude Doumet Serhal has yielded an important number of Attic pottery.  
 The aim of this paper is to try to establish the function of this pottery in its local context through the typological and iconographical choice and to try to understand the local ritual or ceremony in which the imported crockery was integrated.

- 156 Hammer, Emily 4 Reconstructing  
12 Thursday  
Morning
- Highland Fortress-Polities and their Settlement Systems in the South Caucasus**
- USA • ISAW, New York University • ehammer@nyu.edu
- In the Late Bronze Age and Iron Age, fortresses dotted the highlands of eastern Turkey, northwestern Iran, and the south Caucasus. After a long period of mobility and pastoral economy that left few archaeologically-visible settlements during the preceding Middle Bronze Age, Late Bronze and Iron Age fortresses marked the reappearance of a more settled mode of life, the transition to an agricultural economy, and the emergence of the first complex polities in the region. However, little is known about the location, size, and character of the domestic settlements that must have been associated with these fortresses.
- Landscape-oriented archaeological research in the Şərur Plain of Naxçıvan, Azerbaijan, has revealed a settlement complex consisting of two separate fortresses and a substantial domestic settlement, all of which were collectively surrounded by a stone wall enclosing almost 500 hectares. The position of the complex at the entrance to a river pass may have facilitated control of highland pastoral and lowland agricultural resources. These discoveries suggest that a large fortified settlement emerged in Naxçıvan as early as the Middle Bronze Age and indicate that the Iron Age Urartian state (ninth-seventh centuries BC) expanded into an area with pre-existing complex political and settlement traditions.
- 157 Hamzavi, Saman (2) – Borujeni, Rasoul Seyedin (1) – Zeidi, Mohsen (3) 6.1 Reports Region  
13 Friday  
Midday
- Discovery of a Long Term Occupation in the Saimarreh River Valley, Western Iran (Report on the Archaeological Survey)**
- Iran/Germany • (1) Iranian Center for Archaeological Research (ICAR), Tehran; (2) No.21, 1st Alley, Valiasr st. Shiraz; (3) Department of Early Prehistory and Quaternary Ecology, University of Tuebingen • samanhamzavi@gmail.com; rasoul\_sey@yahoo.com
- In 2007, an archaeological survey carried out in the Saimarreh River valley of western Iran. The Saimarreh River forms a part of border between the Lorestan and Ilam provinces. The provinces are located in one of the most mountainous regions of the Zagros Mountains in western Iran. Although this rugged mountainous part of Iran is partially known and explored since 1980s by European explorers and travelers but in archaeological point of view not fully investigated. The survey along the Saimarreh River valley had 45km length and between 1-3 km width. The survey area comprised 72 sq. km with mean elevation of c. 700m above sea level. During the survey, 105 localities including of cave and rock shelter, open-air, graveyard and tell sites ranging in date from the aceramic Neolithic to the Islamic period were identified. Among the surveyed sites are of several pre- and proto-historic sites indicating a long term interregional contacts during fifth and fourth millennium B.C. Here we present the survey results in this region.
- 158 Hansen, S. – Boroffka, N. – Thomalsky, J. 6.2 Reports Themes  
10 Tuesday  
Evening
- Ancient Mining and Metallurgy of Afghanistan**
- Germany • German Archaeological Institute, Eurasia Department, Berlin • Judith.Thomalsky@dainst.de
- The rich mineral occurrences in Afghanistan are widely known and were used since prehistoric times. Lapis lazuli was highly favoured for precious items and widely spread as far as Egypt from the fourth millennium BC onwards. A similar wide distribution pattern is documented for gold and tin. This long-distance trade is further underlined with the first appearance of tin-bronzes in Mesopotamia and the Southern Levant. The tin deposits Afghanistan are the best known sources in Western Asia.
- At least, the copper deposits of Afghanistan must have played a significant role in the emergence of early metallurgy. This is considerably shown with the recently identified prehistoric activities around the famous Mes Aynak copper mine district, ca. 50 km southwest of Kabul.
- However, a systematic sampling of ores and ancient metal objects from Afghanistan for geochemical composition and provenance studies is still a desideratum. The Eurasia Department of the German Archaeological Institute started in summer 2013 a new project concerning on the ancient metallurgy of Afghanistan and its relations to Western Asia. The paper will present first results of a re-examination of the existent geological and archaeological data, including freshly gained geochemical samples.

- 159 Hariryān, H. (1) – Hesari, M. (2) – Motarjem, A. (3) 6.1 Reports Region  
10 Tuesday  
Evening

**Settlements Dispersal of Chalcolithic Period to end of Bronze Age in Gavroud River Basin in Sonqor**

Iran • Islamic Azad University, Tehran-Markaz Branch; University of Esfahan; Bou-Ali Sina University, Hamedan • hariryān@gmail.com

Sonqor mountain valleys plaine in the central Zagros with area about 2320 kilometers is located in northeast of Kermanshah. Gavroud river as a vital artery in the natural drainage in Gavrud plaine is current in north of Sonqor and Kolyai county, that have effective role in creating human settlement all times in this area. In this study 31 prehistoric settlement having surface evidence of chalcolithic and bronze period were identified and reviewed. The main issue in this study is the distribution of human settlement in chalcolithic and bronze period in prehistoric and their spatial relationship to each other and with the environment, based on environmental variables. The most important factors in explaining the patterns of settlements, based on environmental indicators including the height, water resources, precipitation, degree of slope and its direction, communication paths and vegetation and based on landscaping specifications, including size, period of (dates) three chalcolithic and bronze period, their distribution and density, using GIS and statistical methods were analyzed. Result indicate that density of settlement in early chalcolithic period is mainly located in northwest of basine, approach to springs. While in middle chalcolithic period due to the increasing complexity of social communities, they also spread to the central plaine, approach to river. And this trend will continued during the late chalcolithic. The number of ancient Settlement will reduce in late bronze and just forms in the center of plain for better access to communication and commercial activities development. In the Middle Bronze period, trend of settlements forming is similar to previous period. Finally we can say settlements site selection in plain Gavroud is evidence of environmental resources recognition, and compatibility with the environment during the Prehistoric periods. Keyword: Central Zagros, Sonqor and Kolyai, Gavroud basine, Human settlements, Chalcolithic, Bronze.

- 160 Harrison, Matthew 7 Islamic  
09 Monday  
Afternoon

**The Houses of Fustāt: Beyond Importation and Influence**

UK • University of Southampton • M.J.Harrison@soton.ac.uk

It is fifty years since George T. Scanlon began excavations at Fustāt, providing the first full and detailed recording of houses and streets of the medieval city on a large scale. Since the publication of Ostrasz's (1977) summary of the architectural evidence and Scanlon's (1984) final preliminary excavation report several studies of documentary sources relating to Fustāt's domestic architecture have been published (Sayyid 1987; Goitein 1983). These studies have initiated a process of re-phrasing of the excavated architecture in terms used by the city's medieval inhabitants, providing a basis to explore the conceptualisation and social function of domestic space by combining archaeological and historical sources.

These new insights elicit reflection upon previous interpretations of Fustāt's domestic architecture centred on the so-called Sāmarrā' bayt; a schema believed to have been imported from Sāmarrā' under the influence of Aḥmad ibn Ṭūlūn. This paper seeks to not only re-assess the evidence for Mesopotamian influence on the domestic architecture of Fustāt, but to expand the discussion beyond the identification of importation and influence. I will reflect upon recent historical scholarship and revisit archaeological data with an aim to build an interpretation of Fustāt's domestic architecture that is both broader (i. e. including spaces and structures beyond the bayt) and that relates architectural space to social being and daily life.

- 161 Harrison, Timothy P. 6.2 Reports Themes  
12 Thursday  
Morning
- The Neo-Hittite Royal Citadel at Tayinat (Ancient Kunulua)**
- Canada • University of Toronto • tim.harrison@utoronto.ca
- The ongoing investigations of the University of Toronto's Tayinat Archaeological Project (TAP) have begun to uncover remains of the citadel of Neo-Hittite Tayinat (ancient Kunulua), royal city of the Kingdom of Patina/Unqi. These newly discovered remains include a sacred precinct and a large gate complex graced with monumental sculptures. Excavations thus far have uncovered a beautifully preserved lion, a colossal human figure, an ornately carved column base, and a statue base engraved with the 'master and animal' motif. The stylistic features and production of these sculptures represent the culmination of a venerable indigenous tradition of Neo-Hittite sculptural craftsmanship at Tayinat, and they provide a valuable glimpse into the sophisticated artistic traditions of the Neo-Hittite states of Iron Age Syro-Anatolia. The approach and structural layout of the Tayinat gate complex is also reminiscent of other contemporary Neo-Hittite royal citadels, most notably the great staircase, or citadel gate, and processional way at Carchemish. By the 9th and 8th centuries BCE, these elaborately decorated gateways, with their ornately carved reliefs, had come to serve as dynastic parades for the ruling elite, accentuating their symbolic (and ceremonial) role as liminal public spaces. Neo-Hittite Tayinat was eventually destroyed in 738 BCE by Tiglath-pileser III and transformed into an Assyrian provincial capital.
- 162 Hart, Cheryl 2 Travelling Images  
12 Thursday  
Midday
- An Analysis of the Iconographic Rosette Motif as a Means of Non-Verbal Communication: A Case Study**
- UK • Department of Archaeology, History & Anthropology, University of Wales, Trinity Saint David, Lampeter • 1102128@student.tsd.ac.uk
- My PhD research, which investigates the prolific use of the rosette motif in the Near East, Egypt and the Aegean regions during the Bronze and Early Iron Ages, utilises a multi-disciplinary approach to the visual interpretation of the motif, encompassing archaeology, art history, anthropology, and even studies into human perception and cognition, in order to examine the role of this particular motif from a broad contextual and conceptual background.
- The role of art as a visual code of communication has long been examined with symbols found on material forms being vehicles for the non-verbal communication of complex ideas to others; semiotic approaches stressing how fundamental concepts could be visibly encoded in artefacts, objects and art.
- I intend to demonstrate in this paper, through comparative data derived from the prolific visual depictions of the rosette, both similarities and differences in its cultural and contextual use in the Near East, Egypt and the Aegean; further illustrating the potential transfer and transformation of visual imagery, and its associated contextual use, with reference to a specific case study.
- 163 Hashemi, Zahra 6.1 Reports Region  
11 Wednesday  
Evening
- Evolution culturelle dans la région de Gilan pendant l'âge du fer. A travers l'étude des cultes funéraires à la lumière des fouilles récentes**
- France • Université Paris 1 Sorbonne, Equipe VEPMO • zahra\_hashemi10@yahoo.com
- Les connaissances que nous avons des cultures qui se sont succédées au début de l'âge du Fer en Orient demeurent encore insuffisante. Dans ce cadre chronologique, le nord de l'Iran joue un rôle clé pour répondre à certaines de ces questions. Le potentiel géopolitique de la région de Gilan (au sud-ouest de la mer Caspienne) la mets au cœur de mes recherches. La technologie avancée du mobilier retrouvé dans les tombes laisse supposer que ces populations ne vivaient pas de manière isolée, encerclés d'une part par la chaîne de l'Albourz et de l'autre par la mer de Caspienne. Tout semble se passer comme si une hiérarchisation et une organisation de la société est déjà bien en place. En se fondant sur les recherches actuelles menées sur de nombreuses nécropoles et en interrogeant les collections conservées dans les musées de Rasht et de Téhéran, je présente les résultats préliminaires de mes recherches concernant la culture matérielle de ces populations, le type de relation qu'ils entretenaient avec leurs voisins proches et lointains (nord-ouest de l'Iran et Caucase).

164 Hassanpur, Ata – Hashemi, Zahra

6.2 Reports Themes

**Décors architecturaux de palais sassanide de Ghaleh-Guri à Luristan**

13 Friday

Iran/France • Département archéologique de l'Organisme du patrimoine et de l'héritage d'Iran au Luristan; Université Paris 1 Sorbonne, Equipe VEPMO • zahra\_hashemi10@yahoo.com

Afternoon

Pendant les fouilles archéologiques de site de Ghaleh-Guri situé dans la région de Kuhdasht à Luristan, durant les années 2010 et 2012, les archéologues iraniennes ont découvert les ruines d'un palais splendide de l'époque sassanide. Les fouilles étaient organisées par l'Organisme de patrimoine d'Iran et sous ma responsabilité. 400 m<sup>2</sup> de ce site est déjà fouillé. Depuis, certaines parties intérieures du palais, les colonnes, les niches et les formidables décors architecturaux en plâtres ont été découverts.

Plus de trente éléments décoratives en plâtre ont été découverts jusqu'à aujourd'hui. Ces décors ont des iconographies figuratives, végétales, animales, géométriques et abstrait. Ils sont comparables avec ceux de Tépé Hissar à Damghan, Tépé Mil à Varamin, Chal-Tarkhan à Rey, Ghaleh-Yazdgerd et Palais de Kish. Parmi ces éléments décoratives, les plus intéressants et les plus caractéristiques sont : la figure d'un roi avec la fleur de Lotus, une femme avec le visage couvert, l'oiseau et le bouquetin. La technique de fabrication est généralement le moulage et puis le travail manuel avec les outils très soigneux.

Dans cet article, on va présenter ces décors architecturaux.

165 Hassas, Najmeh – Razavi, Leila

6.2 Reports Themes

**Tāq-Strukturen im Iran von der Elamite Periode (1250 B.C.) bis zur Qajar Dynastie (1925)**

11 Wednesday

Iran • Islamische Azad Universität, Yazd,; Kerman Universitaet, Kerman • Plakat341@yahoo.com; lilian161981@yahoo.com

Afternoon

Im Iran basieren die Strukturen der Bogendaecher (sogenannte Tāqs) auf Schalenstrukturen. Solche Strukturen werden in der Puzzle-Form gebaut und mit Bindemitteln wie Gips zusammen befestigt. Die Stabilität und Form solcher Dächer ist essentiell. Um die Form zu erreichen, nimmt man Schablonen als Hilfsmittel. Die Form des Bogens hat eine entscheidende Rolle bei der Auswahl der Bau-Materialien. Bei diesem Workshop wird gezeigt, wie sowohl die tragenden Bogen als auch die dekorativen Bogen gebaut werden.

Arbeitsschritte:

1. Wahl des Bogens basierend auf dessen Art und Nutzung
2. Zeichnen des Bogens auf dem Boden: dies kann sowohl traditionell als auch modern durchgeführt werden. Traditionelle Durchführung mit Hilfe von Kreide und Schnur und moderne Durchführung mit Hilfe von Zeichenmittel wie Massband und Zirkel.
3. Umsetzung des Bogens
  - a. Bau der Schablone nach der Auswahl des Bogens: auf dem gezeichneten Bogen wird mit Ziegel, Gips und Armaturen (traditionell wird Schilf und modern wird Stab verwendet) die Schablone gebaut.
  - b. Vorbereitung von Moertel aus Wasser und Gips (in einigen Fällen Ton)
  - c. Bau des Bogens: mit Backstein und Moertel, basierend auf der aufgestellten Schablone.

Schlüsselwort: Arch, Template, Dekoration arch, Strukturell arch.

166 Hauser, Stefan R.

3 Traditions

**Similitude and Syncatabasis. Remarks concerning the Relation between Styles and Religious Practice in Mesopotamian Representational Arts**

10 Tuesday

Morning

Germany • University of Konstanz • stefan.hauser@uni-konstanz.de

Hardly any period offers such an amount of possibilities for individual religious positioning as the Arsacid period. At a number of Mesopotamian cities, e.g. Assur, Babylon, Nippur or Uruk, traditional ancient Oriental deities were still revered. At the same time monotheistic religions, i.e. Judaism and later also Christianity, found more and more followers, particularly in Babylonia and Adiabene. In addition, throughout Mesopotamia and Western Iran manifold evidence points to the growing importance of lunar and solar deities worshipped alongside with numerous local, often tribal deities.

Starting in the Seleucid period figural representations of gods and goddesses very often draw on iconographical and stylistic formulas originating in the Graeco-Roman Mediterranean. This is usually seen as visual expression of a specific phenomenon of acculturation called 'Syncretism', which is explained as incorporating or merging formerly distinct belief systems into one religious practice. It was also for a long-time considered evidence for the adaptation of superior Hellenic culture.

This paper attempts to probe into the interdependencies and cultural communication strategies connected to statues of deities in Hellenistic rendering. What is conveyed by the choice of a particular iconography and style? Are there specific contexts which allow us to further determine the religious or cultural place attributed to Hellenistic representations of deities?

167 Hausleiter, Arnulf

6.1 Reports Region

**Oasis Settlement in Northwest Arabia in the Context of Environmental Conditions**

13 Friday

Midday

Germany • German Archaeological Institute, Orient-Department, Berlin • arnulf.hausleiter@dainst.de

Multidisciplinary investigations at the oasis of Tayma (Saudi-Arabia) by the German Archaeological Institute and the Saudi Commission for Tourism and Antiquities (SCTA) shed new light on the environmental conditions in Holocene NW Arabia. According to the current model for the reconstruction of the environment, integrating archaeological, archaeobotanic, geo-archaeological and hydrological data, increasing aridisation resulted in the disappearance of Pleistocene sweet water lakes from the 6th millennium BC onwards, stimulating the population of pastoralist groups to use available groundwater resources, most probably through wells. Archaeobotanic data suggests sedentist occupation at Tayma as early as in the 3rd millennium BC, whereas large quantities of flint artefacts used for the production of Carnelian beads may have to be dated back earlier (5th/4th mill. BC). Settlement development appears to have been quite dynamic, since, during the early 2nd millennium BC, large parts of the more than 900 ha oasis were surrounded by a substantial city wall. This suggests that Tayma, and most probably also other oases of Northwest Arabia, too, may have been important centres much before the 1st millennium BC with its long-distance trade of aromatics.

168 Heffron, Yagmur

2 Travelling Images

**Anatolian Lead Figurines: Imagery in Literal and Figurative Melting Pots**

11 Wednesday

UK • McDonald Institute for Archaeological Research, University of Cambridge • yagmur.  
heffron@cantab.net

Morning

Anatolian lead figurines belong to a distinct category of small-scale mould made objects attested throughout an extensive geography, from Troy in the northwest and Sippar in the southeast. Their notable concentration in Anatolia particularly in early second millennium B.C. can be linked to Assyrian trade during the k̄arum period. As a time of close contact between Anatolia and the Syro-Mesopotamian milieu, this period sets the historical background for stylistic and iconographic comparisons. To date, Anatolian lead figurines have been catalogued in great detail (K. Emre 1972); their production and place in the exchange networks put in consideration (J. V. Canby 1965, 2003); and their stylistic canons examined and classified (N. Marchetti 2003). However, the iconography and symbolic significance of these remarkable objects have yet to receive detailed treatment.

In addition to recognisable Syrian motifs (most notably a very distinct nude female type), the Anatolian repertoire also recalls divine characters of Mesopotamian origin (such as various protective beings), while certain figures can be linked to deities of the later Hittite pantheon. Subtle trends of admixture are evident, ranging from clumsy copying to skilled adaptation. Within the broader iconographic repertoire of religio-magical meaning, Anatolian lead figurines are undoubtedly at the nexus of multiple traditions of popular imagery, with parallels from contemporary terracotta plaques and cylinder seals.

This paper discusses how lead figurine imagery became part of a mixed iconographic repertoire within which they would have held several layers of symbolic meaning, depending on the cultural background of the viewer.

169 Heidemann, Stefan – Naue, Matthias

7 Islamic

**Balkh. Lessons on Urban Growth from the Coin Finds**

11 Wednesday

Germany • Universität Hamburg • stefan.heidemann@uni-hamburg.de

Midday

The purpose of this paper is to highlight lessons from the recent coin finds of the Délégation Archéologique Française en Afghanistan (DAFA) at the site of Tepe Zargaran (red circle) in the immediate vicinity of the historical center of Balkh, Bala Hisar. In certain periods, Tepe Zargaran was a village close by, at other times a suburb included into a new large walled enclosure and for certain period presumably unsettled.

About 2,000 coins were retrieved during the excavation between 2004 and 2009. The historical analysis of these coins faces interesting methodological challenges, and can be compared to other major centers of the larger Hellenistic world, where the center of the city cannot be archaeologically explored for various reasons. Similarly as in the case of the excavation of Fayyoun in Egypt, the coin sequence retrieved at the fringes of a major urban center only included those periods where the boundaries of the urban settled area (or the flourishing of a suburban village) reached far into its surroundings, here Tepe Zargaran. Thus Tepe Zargaran makes an important contribution to the study of urban growth and the sustainability over a long period from the Hellenistic period to the Middle Islamic period. Rather than obtaining a complete sequence of coin circulation in this area, we gain an impression of the periods of extended growth (or shrinkage) of the city of Balkh. The coin finds can be corroborated with the well-known sequence of coin production from the city's center Bala Hisar and other excavation and textual data.

The author describes the restoration and documentation work carried out with the Balkh coins in 2012-13, and identifies trends. The historical analysis of these coins has interesting methodological challenges, and comparisons will be drawn with other major centres of the larger Hellenistic world, as well as, the Fayyoun in Egypt.

Preliminary results indicate that we have a flourishing community in Balkh during the Kushan period, during which the majority of coins come. The stream of coins seems to taper off in the Kushano-Sasanian period. The Early Islamic period is represented with a few coins, though not comparable in number to the Kushan period. Whether the few Saljuq coins are significant, is yet to be seen.

- 170 Helgestad, Birger Ekornåsvåg 6.1 Reports Region  
10 Tuesday  
Midday
- The Ur Project**
- UK • The British Museum, Department of the Middle East • BHelgestad@britishmuseum.org
- The Ur Project is a dynamic new digital collaboration between the British Museum, the Penn Museum, and in the future hopefully also the Iraq Museum.
- This ambitious project will digitally reunify the remarkable finds from the city of Ur in a state-of-the-art online facility. The artefacts will be photographed and described, the cuneiform tablets will also be translated, whilst the original excavation photographs, the archives, plans, and other documents, will be scanned and indexed. All this data will be made freely available in an open contemporary database. The unification of this diverse information in a single resource, from photographs of Agatha Christie, to excavation diaries, and the find spots of individual artefacts, will enable research that has hitherto been impossible. The website will also provide highly engaging general information on one of world's most enigmatic ancient cities, and one of the world's most fascinating excavations. The second phase of the project started in July 2013, and was made possible by \$1.28 million in lead support from the Leon Levy Foundation.
- 171 Helms, Tobias B. H. 4 Reconstructing  
12 Thursday  
Midday
- Lithic Economies of the Western Jezirah during the 3rd Millennium BCE**
- Germany • Institut für Archäologie und Kulturanthropologie, Bonn • thelms@uni-bonn.de
- Lithic artifacts are increasingly perceived as important components of the technological system of northern Mesopotamia's early urban societies. By referring to the chipped stone industries of two Early Bronze Age sites located in the Western Jezirah – Kharab Sayyar and the major site of Tell Chuera – this paper will explore the role of lithic resources and artifacts in relation to the economy of early urban communities. Besides an evaluation of the strategies of raw material procurement, the local production and use of large (Canaanite) blades, simple blades, expedient flake tools, and arrowheads will be discussed. Special reference will be given to the functional interpretation of the glossed Canaanite blades which is a subject of an ongoing debate. The paper is based on a technological and contextual analysis of hitherto unpublished field data, approx. 4000 artifacts which stem from Late Chalcolithic to mid/late 3rd millennium layers. The results of a microwear analysis of a sample of blades from Chuera and the sourcing of local obsidian finds by an application of portable XRF-analysis will also be presented.
- 172 Hemati Azandaryani, Esmail – Khaksar, Ali 6.1 Reports Region  
11 Wednesday  
Evening
- Arzanfoud: A Troglodytic Underground Architecture Complex in Hamadan Western Iran**
- Iran • Tarbiat Modares University; The Cultural Heritage Organization of Hamadan Province • E. Hemati@Modares.ac.ir
- This handmade troglodytic underground architectural complex is located 30 km from the southwest of Hamadan and also 2 km from the south of a village with the same name (Arzanfoud Village). This complex which has been dug in the hillsides of Alvand Mountain Ranges is actually situated on a natural mound in a place adjoining a holy shrine which is called Imam Zadeh Abdullah. This complex was coincidentally discovered while a mine detection project was being conducted; the primary surveys indicated the existence of a large underground troglodytic architecture under the mound. After running two seasons of archaeological research programs, 66 spaces including rooms and handmade troglodytic interrelated halls were found in a schist rock context in different depths ranging from 3 to 7 meters from the ground surface. It seems that this complex has been formed by the use of a predetermined plan and design; however, each unit of the architectural spaces differentiates from the other in both the area size and the architectural details. The underground spaces connect the mound surface through numerous entrances in the form of staircases which have been cut off the stone context (made of schist rock). Considering the span of these spaces, their structural complexities and also the unique features of this site, assuming a particular function for this place is too difficult. The investigations done on the finds and the cultural materials especially the ceramic wares among all the other finds denote that these underground troglodytic spaces probably date back to the historical period (of the Parthians ?) which from then on persisted being used in the various ensuing Islamic periods (particularly the Ilkhanids).
- Key words: Iran, Hamadan, Arzanfoud, Troglodytic architecture, Schist stone, Underground spaces.

- 173 Herrmann, Virginia R. 6.2 Reports Themes  
**Recent Excavations at Zincirli Höyük, Ancient Samal, in Turkey** 12 Thursday  
 USA • Dartmouth College • virginia.r.herrmann@dartmouth.edu Morning
- In 2006, the University of Chicago began a project of annual excavations and geophysical surveying at the well-known site of Zincirli in which are found the ruins of the walled capital city of the Iron Age kingdom of Samal, in what is today the Gaziantep province of Turkey. Zincirli was first excavated by a German expedition from 1888 to 1902 and yielded numerous sculptures and inscriptions that provide valuable historical information about the kingdom both before and after it was incorporated into the Neo-Assyrian Empire. In this paper, the results of the recent investigations will be presented, with a focus on the excavation seasons of 2012 and 2013. After eight seasons of excavation by the University of Chicago, several thousand square meters have been uncovered in nine different areas of the site, in both the royal citadel on the upper mound and in the Iron Age lower town. The settlement history of the site has now been clarified, with important implications for our understanding of the impact of the Assyrian Empire in the region.
- 174 Hipp, Krzysztof 6.2 Reports Themes  
**Shamshi-Adad V's Campaigns into the Zagros Revisited.** 12 Thursday  
 Poland • Jagiellonian University, Kraków • krzysztofhipp@gmail.com Midday
- In recent years we have been witnessing a steady progress both in the archaeology of the Early Iron Age of north-western Iran and in the historical studies of the this region in the 1st half of the 1st millennium B.C.E.. Some new sites have been uncovered in the region while Assyriologists have contributed to a better understanding of the written sources, historical geography and as a result, a broader socio-political context.
- One of the problems which has not yet been thoroughly investigated are the campaigns of Shamshi-Adad V (823-811) into the Zagros.
- This paper aims at presenting the routes of his campaigns and political targets stimulated by the Urartian expansion, but mainly at putting the events in a broader historical context taking the recent archaeological discoveries.
- Despite the fact that we do not have many historical records, it is worthwhile to re-examine the Assyro-Urartian relations in this critical period. The reign of Shamshi-Adad is the last attempt to contain the Urartian expansion to the south of Urmia Lake and to regain control over the routes across the northern Zagros which would remain blocked for the next several decades till the revival of the Neo-Assyrian Empire in the 2nd half of the 8th century B.C.E..
- 175 Hoff, Corinna 3 Traditions  
**Achaemenid and Greek Influence in Lycia during the 6th to 4th Centuries BC** 09 Monday  
 Germany • Gonometrics, Halle (Saale) • Corinna.Hoff@gmx.de Afternoon
- At least from the 6th century BC onward the Teke peninsula in southwestern Asia Minor was inhabited by the Lycians, an ethnos with its own language and script. From the late 6th century BC onward Lycia was part of the Achaemenid empire. During the mid-5th century BC the Lycians paid tribute to the Delian League.
- Lycian archaeological remains from the 6th to the 4th century BC consist mainly of rock-cut tombs of different types. The most important types are more or less freestanding grave-monuments, i.e. pillar tombs, consisting of a large pillar with a small chamber on the top, grave houses, rock tombs with one, two or even three façades and sarcophagi consisting usually of a hyposorion and a theke with an ogival lid. Tombs of all types mentioned can be decorated with sculptures mainly greek in style. The fact, that, in contrast to periods of Achaemenid dominion, from the period of Lycian membership in the Delian League no sculptures are known, has been much debated. An analysis of Lycian sculptures and the historical context will help to explain this phenomenon.

- 176 Hole, Frank 6.1 Reports Region  
12 Thursday  
Afternoon
- Historical Processes During the Late Ubaid in the Khabur Basin, Syria: Intrusion, Attenuation, Divergence, Demise**
- USA • Yale University • Frank.hole@yale.edu
- An apparent spread from the South, of Ubaid ceramics and customs into Northern Mesopotamia is exemplified by a series of sites along the Middle Khabur River and its tributaries. Factors involved are 1) prior local cultures, 2) initial settlements and their source regions, 3) local adaptations, 4) attenuation of cultural practices, 5) divergence, and 6) abandonment. Five excavated sites, Mashnaqa, Ziyadeh, Kuran, Kashkashok III, and Beydar III, model a paradigm of pioneering homesteading, separation from the source homeland, local evolution and demise.
- These examples, and a number of unexcavated sites of the same age range, show how environmental and social factors led to the simultaneous installation of small settlements linked by common culture, which then followed a local Northern Mesopotamian trajectory until an unexplained, but widespread, regional abandonment around 4200 cal BC.
- 177 Hossaini, Abbas 5 Dealing with the Past  
12 Thursday  
Midday
- A Descriptive Survey Regarding Archaeology Efforts in Qajar Era**
- Iran • • ab\_h82@yahoo.com
- Whatever the Qajar period is considered to have been in terms of political events, other perspective concerning history, sociology, art and even archeology comes to fore by reading the so called newspaper, Vaghayeh Etefaghiyeh which was published during 19th century of Iran. Although the information regarding the archaeology in this era is few but it commands a better consideration. One of the merits of reviewing this newspaper is presenting a valuable document concerning new findings of two coins in Shosh, south west Iran, related to almost one thousand years ago. This announcement has been published in 1268 A.H, 1895 A.D presenting the drawings of the two coins which are rare at that time. In this short paper first, I will have a short glimpse on the history of lithography in Iran, then I will describe this document concerning the findings based on the published data of the mentioned newspaper and finally based on the museum researches, will try to find more concerning the mentioned coins.
- 178 Huseynli, Namiq 7 Islamic  
10 Tuesday  
Evening
- Medieval Shamkir Town on the Great Silk Way (on the Basis of 2007-2012 Excavation)**
- Azerbaijan • Institute of Archaeology and Ethnography, The National Academy of Sciences of Azerbaijan • namiq\_huseynli@box.az
- The ruins of the medieval town of Shamkir are situated in the western region of Azerbaijan Republic, in the north-eastern part of the Lesser Caucasus, on the left coast of the Shamkirchay River.
- One of the most important achievements of the archaeological excavations is the complete study of the citadel and partial study of the town tower. Fortification constructions evoke special interest in learning the military architecture of Azerbaijan. In 2007-2012 years large-scale archaeological excavation works was held on the territory of Shamkir town according to the joint project of Archaeology and Ethnography Institute of ANAS, Culture and Tourism Ministry of Azerbaijan Republic and Public Association of Regions Development.
- The masonry style typical for the Arran school of architecture was widely used in building the fortress walls of the medieval town of Shamkir. It's built of a combination of river stone, fired brick and local white stone.
- As the medieval town of Shamkir was on the way of international trade road, it was one of the important conditions of building caravan roads, bridges and caravansaries. The significant factor of building bridges was not only natural obstructions but also the necessity of providing the traffic on the intercontinental trade routes running across Azerbaijan.
- The remains of the bridge over the Shamkirchay river with many spans still exist. There are remains of eight pillars of the Shamkirchay bridge built in the 11-12th century. The scientists note that the bridge over the Shamkirchay being a memory of the Middle ages is identical to the bridges of Ganja from chronological and stylistic points of view.
- The archaeological excavations provided with interesting facts about the infrastructure of the town. Taking that fact into consideration urgent actions of preserving are being implemented. From 2009 year conservation work was started in Shamkir. First the danger of destruction of the eastern wall of the citadel completely was avoided by its preservation. Many interesting facts were identified and examples of material culture were studied during the archaeological excavations carried out in Shamkir town. The plan of the town was identified. The monument will be completely cleaned from the dirt layer. One of the important objectives is making this place open for tourism in the future.

- 179 Ilan, David 2 Travelling Images  
12 Thursday  
Midday
- The Iconographic Representation of the Crescent in the Southern Levant**
- Israel • Nelson Glueck School of Biblical Archaeology, Hebrew Union College-Jewish Institute of Religion, Jerusalem • dilan@huc.edu
- The image of the crescent appears in various forms in the material culture of the Chalcolithic, Bronze and Iron Ages of the southern Levant. It also appears in Mesopotamian and Egyptian iconography. It is most frequently associated with the crescent moon and its related deity. The formal similarity of the crescent moon to cattle horns led to that species often becoming the zoomorphic attribute of the moon deity, whoever he or she was. This paper will examine crescent iconography in these different cultural heartlands, asking what the icon symbolized in different functional and cultural contexts. Do symbolic meanings and operative uses vary by context or is the iconography consistent? Finally I investigate whether these uses and meanings changed through time.
- 180 Işikli, Mehmet 4 Reconstructing  
12 Thursday  
Evening
- Re-thinking the Socio-Economic Structure of Kura-Araxian Societies in Eastern Anatolia**
- Turkey • Atatürk University in Erzurum • mehmet.isikli@gmail.com
- The Early Bronze Age in the vast mountainous and rugged region between the Taurus and Caucasus Mountains of the Ancient Near East is largely characterized by the Kura-Araxes Cultural Complex, which is one of the most problematic (and popular) subjects of Near Eastern Archaeology. In this essay we will focus on the unique region of Eastern Anatolia, which is the core zone from which this culture spread. The distinctive ceramic and architectural traditions, settlement patterns and religious systems of this cultural complex also demonstrate remarkable significance in terms of geography and chronology. Because of this, the Kura-Araxes Culture has several persistent problems of variation in terminology and chronology, despite research stretching back over the last one hundred years.
- One of the frequently discussed problems of the culture is its socio-economic structure – always a considerable challenge when dealing with pre-historic societies, as is well-known. The main source of information in relation to this problem is archaeological evidence, and its interpretation is critical. In this paper we will be using evidence from excavated Kura-Araxian sites. The main aim of this essay is to analyse and interpret this archaeological evidence and to reconstruct the socio-economic, and also the socio-political, structure of these folk.
- 181 Jungfleisch, Johannes 1 Egypt  
10 Tuesday  
Morning
- 'Aegean' Style wall Paintings meet 'Egyptian' Palatial Architecture: Architectural Simulations from 'Palace G' in Tell el-Dab'a**
- Germany • Freie Universität Berlin • Jungfleisch@zedat.fu-berlin.de
- The 'Aegean' style fresco paintings found in a palatial district of the 18th dynasty in Tell el-Dabca/Egypt remains up to now a puzzling discovery: The transfer and use of an innovative, but 'foreign' technique and iconography within local style elite buildings stand in marked contrast to Egyptian rules of decorum, governing internal structure, material choice and visual shape of official buildings to suit specific needs of social practice. Additionally, the evidence of these paintings challenges modern perceptions of Ancient Egypt as isolated, self-contained uniformity, rejecting almost all 'foreign' influences. Amongst the murals from 'Palace G', one group of fragments is showing motifs well known in the Aegean for simulating architectural elements in large scale. Most probably, the colourful reproductions of veined stone and timbers gave the local mud brick architecture a distinct appearance, changing the visual shape of the palace building to a great extent. Instead of ascribing these paintings a priori an exotic, alien character according to modern categorizations of 'foreignness', this paper will discuss their iconography in relation to Egyptian art and architecture taking into account that 'foreignness' fades away by recognising the 'Self' in the 'Other'. In this way, it will put emphasis on possible perceptions of the 'Egyptian' audience.

- 182 Kabs, Thomas 3 Traditions  
11 Wednesday  
Morning
- Nabatäische Politik im Spiegel römischer Klientelpolitik**
- Germany • Humboldt-Universität zu Berlin • thomas\_kabs@web.de
- Nach der nabatäischen Intervention in Jerusalem, war auch der erste direkte Kontakt mit der römischen Militärmacht unvermeidlich. Dieser Zeitpunkt wird gemeinhin als der Beginn einer Klientelbeziehung zwischen Rom und den Nabatäern verstanden. In den folgenden Jahrzehnten ist die nabatäische Beteiligung vor allen im Rahmen der Bürgerkriege (Pharsalos, Alexandria, Actium) zu beobachten. Bis heute gibt es allerdings keine konkreten Hinweise oder gar eine archäologische Evidenz für einen Status der Nabatäer als amici des Senats und Volkes Roms. Während die anderen Klientelherrscher, besonders die Könige Kleinasiens, einen umfassenden Kontakt zur römischen Aristokratie pflegten um sich Privilegien und die Gunst der Herren Roms zu sichern, sind vergleichbare Aktivitäten im nabatäischen Raum nicht zu beobachten. Dies ist umso bemerkenswerter, da sich die hervorragenden Beziehungen des Nachbarn Herodes zu Augustus in der Durchführung von Bauprogrammen zu Ehren Roms und der Augusti niederschlug. Es erscheint verwunderlich, dass die nabatäischen Könige in diesen Bereichen kaum hervorstechen. Dieses Papier befasst sich mit der Entwicklung der Klientelbeziehung zwischen Rom und den Nabatäern im Vergleich mit anderen Klientelkönigen. Es sollen gezielt Probleme der nabatäischen Innen- und Außenpolitik angesprochen werden, die im Gegensatz zur römischen Klientelpolitik stehen. Dabei wird das Verhalten anderer Klientelherrscher als Referenz herangezogen. Schließlich sollen archäologische Zeugnisse genutzt werden um festzustellen, ob und wie eine Ehrung der Römischen Caesaren durch die Nabatäer vor der Annektierung stattgefunden hat.
- 183 Kadowaki, Seiji – Nishiaki, Yoshihiro – Guliyev, Farhad 6.1 Reports Region  
13 Friday  
Morning
- Tracing the Origins of Early Agricultural Settlements in the Southern Caucasus: New Evidence from Hacı Elamxanlı Tepe (Azerbaijan) in the 2012 and 2013 Seasons**
- Japan/Azerbaijan • The Nagoya University Museum; The University of Tokyo; The Institute of Archaeology and Ethnography of National Academy of Sciences, Azerbaijan • kadowaki@num.nagoya-u.ac.jp
- A Neolithic site of Hacı Elamxanlı Tepe is located in the middle region of the Kura River, sitting on an alluvial plain at the northern foot of the Lesser Caucasus. This small, oval mound measures ca. 60-80 m in diameter and 1.5 m in height from a surrounding plain. It was found in 2011 during our survey around Göytepe, a larger Neolithic mound, where the Azerbaijani-Japanese archaeological mission has recently re-investigated Neolithic settlements (ca. 5,600-5,400 cal. BC), which are affiliated to the chrono-cultural unit originally defined at Shomutepe. In order to trace back the origins of the early agricultural communities at Göytepe, we started excavations at Hacı Elamxanlı Tepe. In the 2012 and 2013 seasons, we excavated a total of 100 m<sup>2</sup> and uncovered various architectural remains, including mud-brick round buildings and clay-plastered bins, over four occupation levels. Significantly, these Neolithic deposits are dated a few hundred years earlier than those at Göytepe. Although agricultural economy is dominant at the both sites, their chronological difference is reflected by some differences in material cultures (e.g., pottery, lithics, and architecture) as well as in faunal and botanical remains.
- 184 Kaercher, Kyra 6.1 Reports Region  
09 Monday  
Afternoon
- A Preliminary Assessment of the Ceramic Sequence of Northeastern Iraqi Kurdistan**
- USA • Boston University • kaercher@bu.edu
- Since Robert Braidwood's pioneering work of 1948–55, northeastern Iraq has been little studied by archaeologists. Since 2010, the newly founded Soran Directorate of the Kurdistan Regional Government Directorate of Antiquities has renewed research, conducting archaeological reconnaissance and rescue salvage excavations in response to rapid economic and infrastructure development. This paper presents a preliminary analysis of ceramic collections from 35 sites as well as three excavated assemblages collected in 2013 by the Rowanduz Archaeological Program of Boston University. The resulting sequence spans the Neolithic to modern times and sheds new light on the cultures of the western Zagros.

- 185 Kafafi, Zeidan 6.1 Reports Region  
13 Friday  
Afternoon
- Chalcolithic Ritual Aspects from the Jordan Valley: Examples from Abu Hamid**
- Jordan • Yarmouk University • zeidan.kafafi@gmail.com
- The southern Levant region attested a regional economical and social developments during the Chalcolithic period, which led to changes in rituality. This is reflected in the architectural remains, different styles of small objects, figurines and fresco drawings. Several archaeological sites such as Gilat, 'Ain Gedi, Teleilat Ghassul and Abu Hamid produced a number of archaeological data belonging to this subject. The sites of Gilat and 'Ain are located in the Negev and the Dead Sea regions, meanwhile Teleilat el-Ghassul and Abu Hamid are located in the Jordan Valley. Scholars studying the rituals and rituality during Chalcolithic period are referring mostly to three of the above mentioned sited rather than Abu Hamid. Thus, this paper aims at shedding light on these aspects at the site of Abu Hamid.
- 186 Kanjou, Youssef 6.2 Reports Themes  
11 Wednesday  
Midday
- Mortuary Practice in Tell Qaramel North Syria from Early Bronze Age and Neolithic Period**
- Syria • National Museum of Ethnology, Osaka, Japan & DGAM, Aleppo Museum, Syria • kanjou00@yahoo.com
- Tell Qaramel one of the most important sites of prepottery Neolithic A (PPNA) (9500-9300 BC) in northern Syria; her we discovered a number of graves (36 grave) and we note varied treatment for the human body after the death, where there was sometimes a separate skulls, primary and secondary position, multiple graves, individual graves; The burial place was in relation with residential structures; all the skeletons were adults and in flexened position. The skulls sometimes were separated by stone tool and buried in a different place and sometimes near the skeleton of another person. The burial customs of Tell Qaramel indicate to common burial customs in Neolithic period in Levant.
- 187 Karim, Mohmmad A. – Abdul-Karim, Nawzad A. – Talib, Saman R. – Majeed, Sarwat H. 6.2 Reports Themes  
13 Friday  
Morning
- The Parthian Vault-tomb in Sarqala in Iraqi Kurdistan (Preliminary report on the Results of the Archaeological Excavation)**
- Iraq • Project of Garmian Directorate of Antiquities • shwenawarig@yahoo.com
- The vault tomb of Sarqala, located northeast Kifri town, to the west of Diyala River in Iraqi Kurdistan. This paper deal with archaeological excavation at Sarqala in the spring 2013, uncovered vault tomb, the tomb represents a rectangular room (5.10 x 4.80 m), its ceiling's height (2.70 m) divided into four platforms, the width of each platform (ca. 0.65m). Above the platforms, there are two blind half-arch in southern and northern walls. There is a small gate in the western wall its width (0.75m). The vault tomb made from well-backed bricks. The walls and the ceiling covered with white plaster. We discovered 10 skeletons, 2 skeletons on each platform, and the last two skeletons are buried in two glazed ceramic sarcophaguses. in addition, numbers of different objects have been discovered in this vault tomb, including 12 Parthian coins, and some of golden earrings; rings, and necklace. Even more some other metal rings, belts, spearhead, blades, daggers, kohl jar, and 6 small glasses, 5 ceramic jars which burnished with turquoise glaze, ...etc.

- 188 Kavosh, Hoseinali – Salmanzade, Javad 6.1 Reports Region  
11 Wednesday  
Afternoon
- The Preliminary Report of the 5th Season of Excavation at Tappeh Talebkhan (Talebkhān Mound) in Zabol, Sistan and Baluchestan Province**
- Iran • University of Zabol; University of Tehran • salmanzade.javad@yahoo.com
- Tappeh Talebkhan is one of the peripheral archaeological sites around Shahr-e Soukhteh which is located 12 km from Shahr-e Soukhteh within the district of Ghal'e Rostam; 68 km from the southwest of the city of Zabol. The mound measures 60x80 meters in area, and it is 8 m higher than the surrounding lands. This site had already been excavated four times, and the present paper is on the results of its fifth season of excavation. The objective of conducting excavations at this site beside training archaeology students of the University of Zabol was suggesting the absolute dating and cultural sequence through applying radio carbon analysis as well as determining cultural phases and interpreting its probable links with Shahr-e Soukhteh and other peripheral sites and also finding out about Tappeh Talebkhan's rank in the southern plain of Sistan. In order to reach the previously-mentioned objectives, two stratigraphic trenches, one step trench and one vertical trench together with a horizontal trench were dug on our subject site. Finally, based on the finds and data we encountered as well as the tested samples, it was concluded that the settlement of this site dates back to the final phases of the Bronze Age.
- Key words: Talebkhan, Shahr-e Soukhteh, architecture, pottery, plain
- 189 Kazempour, Mehdi (1) – Niknami, Kamal Aldin (2) – Abedi, Akbar (2) – Rezalou, Reza (3) 6.1 Reports Region  
11 Wednesday  
Midday
- New Kurgan Burials at Zardkhaneh, and Reassessment Chronology of Late Prehistory of NW Iran**
- Iran • 1 Department of Architect, Science and Research Branch, Islamic Azad University, Ahar; 2 University of Tehran, Tehran, 3 Department of Archaeology, University of Mohaghegh Ardabili, Ardabil • akbar.abedi@ut.ac.ir
- The first and second seasons of extensive survey and excavation at Zardkhaneh were carried out at June-August 2011 and 2012. The survey and excavation yielded materials from Late Bronze and Early Iron Age (1500-110 B.C). Recent 30 ha extensive survey in north-western Iran at the second millennium B.C. site of Zardkhaneh, located near the city of Ahar in the province of Eastern Azerbaijan, brought to light 95 stone burials indicating that Zardkhaneh was a huge cemetery in relation with adjacent settlement and defensive fortress. Our primary studies show that large stone graves and kurgan type burials of Zardkhaneh had a close connection with Azerbaijan and as far as west as Anatolia and as far north as Armenia material culture during this time span. Keywords: Zardkhaneh, Late Bronze/Early Iron Age, Stone Graves, Kurgan, NW Iran
- 190 Kelley, Kathryn 2 Travelling Images  
12 Thursday  
Midday
- Traveling Signs: Women and Children in the Early Writing of Mesopotamia and Proto-Elamite Iran**
- UK • University of Oxford • kathryn.kelley@stx.ox.ac.uk
- The two distinct archaic writing systems, cuneiform in Mesopotamia and proto-Elamite in Iran during the Jemdet Nasr/Proto-Elamite periods (c. 3100-2900 BC), while consisting of largely different sets of signs, also used a small set of shared or modified signs. These included numerical signs, as well as signs for animals and humans. The paper looks at a set of signs in one comparable cuneiform and proto-Elamite context, those used to record men, women and children in labor and/or grain rationing accounts. In particular, how and when was it relevant for the scribe to represent gender and age, and how similarly was this done in Mesopotamia and proto-Elamite Iran? Data will be drawn from newly transliterated proto-Elamite texts, large (though fragmentary) accounts that seem to list women alongside variously classified children. This approach to the theme 'traveling images' considers signs in early writing as images reflecting and influenced by pre- and proto-historic accounting technologies, social perceptions, labor organization and administration, scribal traditions, and to a limited extent linguistic affiliation. During the transmission of signs from Mesopotamia to Iran transformations in the understanding and visualization of these signs could occur via these various influences.

- 191 Kennedy, Hugh 7 Islamic  
11 Wednesday  
Afternoon
- Patterns of Urbanism in Early Islamic Iran and Central Asia II**
- UK • SOAS London • hk1@soas.ac.uk
- The second paper will examine this archaeological data in a wider context, and comparing them with written sources, to give a better understanding of a general process of dismantling of urban fortifications and abandonment of many urban citadels which affected most cities in the Middle East in the first four centuries of Islamic rule. New quarters were developed (a process known in Arabic as tamṣīr) and these were, in many cases, open, unwalled cities. Nor is there any evidence that the Dar al-imaras (government houses) of the period were in any sense military structures. This changed significantly in the second half of the eleventh century when Seljuq rulers, a military and non-Arab elite, enclosed these areas within walls and constructed urban citadels in many of the main towns. Sites to be considered will include Merv, Buḥāra, Samarqand, Paykent, Balkh and Isfahan and, by way of comparanda, Aleppo and Damascus. The paper will review the evidence and try to suggest some of the social and economic changes which may have underlain these upheavals.
- 192 Kennedy, Will M. 6.1 Reports Region  
13 Friday  
Afternoon
- Untersuchungen zum Defensiv- und Kommunikationssystem im Umland von Petra, Jordanien**
- Germany • • will.kennedy@web.de
- In der zweiten Hälfte des 1. Jahrhunderts n. Chr. erwähnt Flavius Josephus wie eine Tochter des Nabatäerkönigs Aretas IV nach einer Ehekrise mit Herodes Antipas aus Machaerus wieder zurück in ihre Heimat reist. Dabei berichtet er wie sie, „[...] von einem Strategen zum anderen geleitet [...]“, zurück in die Hauptstadt ihres Vaters, Petra, gelangt. Diese Passage ist nur ein Beleg dafür, dass das Nabatäerreich sich auf ein organisiertes Kommunikations- und Defensivsystem stützte, welches notwendig erschien um die teilweise unzugängliche Landschaft zu kontrollieren. Ziel dieses Vortrages soll es sein das Umland der Nabatäerhauptstadt Petra im Hinblick auf die Verteidigung der Stadt und die Kommunikationsmöglichkeiten mit ländlichen Siedlungen in der Umgebung Petras in nabatäischer Zeit zu Untersuchungen. Bisherige Arbeiten des Autors umfassten moderne GIS-basierte Analysen zu den Sichtbarkeitsverhältnissen von einem möglichen Wachturm auf dem zentralen Berg Umm al-Biyara in Petra mit anderen nabatäischen Wachstationen. Diese Arbeit ermöglichte es zunächst nur sehr vorläufige Aussagen über die Organisation des Umlandes von Petra aus verteidigungstechnischer Sicht zu formulieren, doch moderne Methoden der Landschaftsarchäologie sollen angewandt werden um allgemeingültige Parameter und Muster diesbezüglich herauszuarbeiten. Obwohl die vorgestellten Ergebnisse nur ein „Work-in-Progress“ darstellen, soll diese Forschungsarbeit über bisherige historische und landschaftsarchäologischen Untersuchungen hinausgehen und sowohl den Aspekt der militärischen, als auch der zivilen Nutzung des Umlandes von Petra einschließen.
- 193 Kepinski, Christine – Tenu, Aline 6.1 Reports Region  
09 Monday  
Afternoon
- Kunara, a Bronze Age City on the Upper Tanjaro (Iraq)**
- France • CNRS • christine.kepinski@mae.u-paris10.fr
- A French archaeological expedition headed by C.K. (CNRS, ArScAn) assisted by A.T. (CNRS, ArScAn) undertook since 2011 archaeological activities in the Suleymaniah province. After a survey in the upper Tanjaro, three complementary sites were chosen in order to present an assessment of the ancient settlements in that valley: Bingird, Kalespi, and Kunara where excavations started in 2012 after a geomagnetic survey. This 7-10 hectare site, situated on the bank of the Tanjaro river, is one of the largest of the area where tells are usually rather small (1-5 ha). The material retrieved during the reconnaissance gave a first appraisal of its occupation mainly dated to the Bronze Age. The results of the first season confirm this dating. In addition to interesting small finds such as a cylinder seal finely carved, we excavated several buildings, belonging to at least three different levels. Two of them belong to monumental structures, and show sophisticated building techniques. The results of the two first campaigns at Kunara will be presented.

- 194 Kertai, David 2 Travelling Images  
**Identifying Assyrian Palatial Architecture in the Southern Levant** 12 Thursday  
 UK • Institute of Archaeology, UCL • d.kertai@ucl.ac.uk Afternoon
- This paper will argue that the analysis and dating of Southern Levantine palatial architecture is hampered by a focus on historical categories such as Late Assyrian, Neo-Babylonian and Persian. A focus on periodisation impairs an understanding of the architectural changes that took place during this period. This case study highlights the entanglement of Assyrian and Babylonian, and later between Babylonian and Persian, material culture. Architectural analyses are moreover hampered by a focus on morphology to the detriment of reconstructing spatial concepts. These problems are especially pronounced in analyses of 7th century architecture. This is partially related to the use of Turner's 1970 article The State Apartments of Late Assyrian Palaces as the primary tool in identifying Assyrianness in Southern Levantine architecture. This paper will present a different historical trajectory that provides a framework for understanding changes in architecture over time. By reframing the architecture in the centres of Mesopotamia the nature of Southern Levantine palatial architecture can be readdressed.
- 195 Khademi Bami, Mahyar – Komijani, Safura 6.2 Reports Themes  
**The Cultural Interaction of Cairn Burials in the Southeastern Iran** 12 Thursday  
 Iran • Tarbiat Modares University; Tehran University • Mahyar.khademi@gmail.com; Afternoon  
 safoora\_komijani@yahoo.com
- The cultural interaction of cairn burials in the southeastern Iran was studied in the current research. The cairn burials are one of the most important archaeological monuments in the southeast of Iran. Types of communications, regional and interregional interaction, reformation of people's life style (economically, socially, politically) in a special era can be known from these graves and their burials based on the shapes and types of graves and cultural findings. The most significant parts of these cairn burials belong to Bronze Age such as Esfandaghe, Mahtutabad, Rudan, Bandijalal and etc which most of them found in the cemeteries relating to the permanent settlements such as Konar Sandal and the rest belong to the nomadic people.
- Results of this research revealed that native and interregional cultural like Elam civilization affected the cultural materials but having relation with east and northeast like Pakistan, Afghanistan and middle Asia influenced the burial traditions.
- Keywords: Cultural interaction, Cairn burials, Bronze Age, Southeastern Iran.
- 196 Khosravi, Shokouh – Alibaigi, Sajjad – Rashno, Asghar 6.2 Reports Themes  
**A Sassanian Fire Temple Found from Plangerd, Kermanshah (Western Iran)** 13 Friday  
 Iran • University of Tarbiat Modarres, Tehran; University of Razy, Kermanshah; Iranian Cultural Afternoon  
 Heritage and Tourism Organization of Kermanshah province • Shokouh\_khosravi@yahoo.com;  
 sadjadalibaigi@gmail.com;
- In 2012 a salvage excavation carried out in Tepe Plangerd a Sassanian site located some 30 km south east of Islamabad-e Gharb of Kermanshah, Western Iran. The area is composed of two northern and southern natural peaks surrounded by a flat area extending to the east and north east which has now been buried under the present villager's occupations. Excavation on the northern peak revealed a Sassanian splendid fire temple. It is a 17×17 m square chamber consisting of four large pillars of 2.7×2.7m in each side to function as a Chahar Taghi. Chahar Taghi is structural shape of Sassanian fire temple and has commonly four thick pillars through which an arched entrance connected them to a wide corridor surrounding the temple as well as it has a dome over it. For Plangerd temple we found just two of the arched entrances but in the inside of the temple we encountered the traces of almost two bases of fire Altar, a T shaped altar presenting traces of three plastered bases, small pool in the centre of building, a Ostodan containing a collection of human bones. Outside face of Ostodan was decorated by plaster engraving and there have been some broken parts of plastered altars scattered around the pillars. During the excavation, apart from the above mentioned findings, we have revealed a number of fragmented plasters, a large amount of pottery sherds some of which have Sassanian inscriptions, as well as pieces of small objects. Architectural and other evidences recovered from the site, demonstrate that the buildings would probably be one of the major centres for the fire praising in the Sassanian era (Atashgah), as it resembles most of the characteristics of the Sassanian temples recovered from the various parts of Iran. This paper is to describe the existing structural features of the temple to enhance our knowledge on the Sassanian religious system in general and the Sassanian fire temples characteristics in particular.
- Keywords: Western Iran; Kermanshah; Sassanian period; Fire temple; Plangerd.

- 197 Killebrew, Ann E. 6.1 Reports Region  
12 Thursday  
Evening
- Tel Akko Total Archaeology Project: The 2012 and 2013 Seasons**
- USA • The Pennsylvania State University • aek11@psu.edu
- For over three millennia, Tel Akko served as a major urban and maritime center of the southern Levant. First excavated by Professor Moshe Dothan (1973-1989), the renewed excavations at Tel Akko directed by Professors Ann E. Killebrew (Pennsylvania State University) and Michal Artzy (University of Haifa) incorporate an integrated, "total archaeology" approach to the region's past and present. Our goals at Tel Akko, today a municipal park, include: (1) an intensive survey of the mound and documentation of previous excavations conducted by Dothan but remain unpublished; (2) the investigation of Bronze and Iron Age Akko in its role as the major Canaanite and Phoenician urban center in the Plain of Akko, including the exploration of its earliest harbors; (3) the development of Akko/Ptolemais during the Persian and Hellenistic periods; (4) a comprehensive archaeological field school and state-of-the-art "3-D" documentation of the site that incorporates survey, GIS, excavation, on-site conservation and community outreach; and (5) the conservation and presentation to the public of mound's rich archaeological history, in particular the preservation and integration of the deep sondage in the northern part of the site as part of the visitor's experience to the Tel Akko municipal park. The results of the 2012 and 2013 survey and excavation seasons are the focus of this presentation.
- 198 Kimiaie, Masi 6.2 Reports Themes  
09 Monday  
Evening
- Crop Choice in Neolithic-Aeneolithic Southwestern Turkmenistan: Archaeobotanical Investigations in Monjukli Tepe**
- USA • The Ohio State University • kimiaie.1@buckeyemail.osu.edu
- This paper, which provides ground-breaking study on socioeconomic transformation of Southern Turkmenistan Neolithic village, is part of a doctoral dissertation project being conducted at the Department of Anthropology of the Ohio State University. Monjukli Tepe is a Neolithic-Aeneolithic (6400-4400 BC) period tell located in Southern Turkmenistan which fills the gap between Neolithic Jeitun and Aeneolithic Anau, hence making it particular interesting. This paper investigates the continuity or change in terms of crops cultivation and choice from Neolithic to Aeneolithic period as well as social implications of agricultural development of Monjukli Tepe. Well preserved charred plant assemblages were retrieved by flotation from samples of a variety of contexts including both inside the houses and outside surfaces, destructed layers, middens as well as fire installations/ovens. These botanical assemblages include charred cereal grains such as einkorn, emmer, naked wheat as well as hulled and naked barley. The results of the archaeobotanical investigation are presented here and the usefulness of obtained results for archaeological interpretations and reconstructions will be discussed.
- Key words: Southern Turkmenistan, Neolithic, Aeneolithic, Cereals, Plant macroremains
- 199 Kızıllaranoğlu, Asena 3 Traditions  
12 Thursday  
Midday
- Elaiussa Sebaste: An Ancient City of Harbor and Trade on Southern Coasts of Asia Minor**
- Turkey • Ahi Evran University, Department of Archaeology, Kırşehir • asenakizillarslan@hotmail.com
- The ancient city of Elaiussa Sebaste (Mersin-Ayaş) was an active component of the intense trade in eastern Mediterranean from first century BC until seventh century AD due to its location, rich natural and agricultural resources on a significant coastal route connecting Asia Minor and Syria with each other. In early Roman Imperial period the commercial activities of the city increased with the introduction of wine production in the region. Elaiussa witnessed a period of prosperity when a series of commercial routes gained importance starting from the end of the fourth century AD. Amphora kilns were established both in the town center and in the neighborhood, and special amphorae were produced which became typical products of the Elaiussaeon industry from late antiquity -known as late Roman I- to the collapse of the city. Between fifth and seventh centuries AD imported amphorae from Syria-Palestine, Africa and the Aegean began to circulate in Elaiussa along with local products. Beside the amphorae, red slip table wares from Africa, Phocaea, the Aegean and Cyprus also found their way into the dynamics of local trade.
- The research material dating back to fourth-seventh centuries AD provided concrete data shedding light on the ancient trade relations of the city of Sebaste, and in wider sense, the region of Cilicia. In addition, a comparative data bank for the archeology of the entire region has been initially established.
- Key words: Elaiussa Sebaste, Cilicia, Trade, Amphora, Production, East Mediterranean.

- 200 Kudas, Ergul 2 Travelling Images  
09 Monday  
Evening
- Le socle/cou des crânes surmodelés : une nouvelle approche sur leur «phase d'utilisation»**
- France • ArScAn-VEPMO • [ergulkudas@gmail.com](mailto:ergulkudas@gmail.com)
- Au Proche-Orient, les crânes surmodelés ont été retrouvés à Ain Ghazal, Beisamoun, Jéricho, Kfar Hahores, Nahal Hemar, Yiftah'el, Tell Aswad et Tell Ramad, Çatal Höyük et Kösk Höyük. Le fait que le crâne a été inhumé n'est pas indépendant de l'exposition. Le crâne a pu être exposé avant sa mise en fosse. Nous pensons sur le fait que l'exposition est claire dans le cas de Köşk Höyük mais il ne se doit pas l'exclure ce genre de pratique pour les autres sites. Dans ce cas la nous revenons sur la présence des socles/cous ou des bases de forme plate pour les crânes surmodelés. Cela suggère qu'on souhaite les positionner d'une certaine manière et les exposer. Nous proposons que les socles/cous ou la base plate des crânes n'ont pas été faits juste pour les inhumer. La présence des socles/cous (à Tell Aswad, Tell Ramad et Kösk Höyük), et la base plate d'un certains nombre de crânes surmodelés (à Kfar Hahores, Beisamoun, Jéricho ou Yiftah'el), suggèrent qu'ils ont pu être posés au sol de la fosse, d'un bâtiment ou dans une cavité.
- 201 Koizumi, Tatsundo 6.1 Reports Region  
13 Friday  
Midday
- Preliminary Results of the 2010-2012 Excavations on Salat Tepe in the Upper Tigris: the Ubaid and Late Chalcolithic Periods**
- Japan • The Institute for Cultural Studies of Ancient Iraq, Kokushikan University  
• [tatsundo.k@nifty.com](mailto:tatsundo.k@nifty.com)
- Since the 2010 season I have been joining to excavate Salat Tepe in the upper Tigris valley, southeastern Turkey as the ILISU BARAJI-SALAT TEPE KURTARMA KAZISI PROJESİ. I've been charged with the excavations of the southern step-trenches where we uncovered several occupations of the Ubaid to Late Chalcolithic periods. We have excavated these trenches in order to establish a chronological sequence from the earlier stage of the Early Ubaid to the Late Chalcolithic or the Uruk-related periods.
- In Room 84/M of Trench I12N we discovered sherds of Coba Bowl and Gray Burnished Ware as well as burned clay blocks. And we found several pieces of reddish brown pigments on Floor 81/T of Room 84/M, the room could have been functioned as a workshop of handling the pigments as painting or washing in pottery production. In Trench H12N we excavated such an infant burial that is similar to the Ubaidian standard type of the subterranean structure with the mud brick wall and the shaft behind it. We also recognized a mud brick house of tripartite plan in the same trench. Both from the fills and the floors we found sherds of flint-scraped bowls as well as typical Late Ubaid painted ones.
- 202 Kozbe, Gulriz – Alp, Mesut– Erdoğan, Nihat 7 Islamic  
11 Wednesday  
Morning
- The Excavations in the Citadel of Cizre Castle (Birca Belek)**
- Turkey • Mardin Museum • [gkozbe@yahoo.com](mailto:gkozbe@yahoo.com)
- The archaeological excavations in the citadel of Cizre Castle (Birca Belek) under the auspices of Mardin Museum and financial support given by Governorship of Cizre are being carried out since May 2013.
- Cizre, in its historical name of Jazirat ibn 'Umar, is a district of Şırnak Province in the Southeastern region of Turkey, located at the border to Syria, just to the north-west of the Turkish-Syrian-Iraqi tripoint. It is surrounded by the Tigris from the North, East and South, which has given its name deriving from the Arabic word for island, jazira/jazeera.
- Cizre is always an important town all through the history since it stands as a gateway connecting South, in other words, Upper Mesopotamia to North, to highland Anatolia. Even though its significance, the castle was being used by border guards till 2010 and there was no chance to excavate the area before. After herculean efforts, it was managed to remove the modern debris left from the buildings, use and demolition of the commandery located in this area for 35 years in order to uncover the architectural remains of the citadel. The oversized walls, stone pavements mostly constructed by cobbles lying together gray or white limestone or worked stones used together with baked bricks all imply the features of a inner bailey. Besides of diagnostic Middle and Late Islamic pottery, coins and other artifacts discovered at excavations are clues for the exact date of this occupation which the city walls have been hosted during the Islamic period.

- 203 Kuehn, Sara 2 Travelling Images  
11 Wednesday  
Morning

**Vestiges of the Ourobóros in the Medieval Islamic Visual Tradition**

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The symbolism of the encircling serpent-dragon holding its own tail in the mouth was traditionally known by its Greek name as ouroboros. By tracing its transfer and transformation from late antiquity to the medieval Islamic period, this paper discusses the specific cosmogonic and cosmological development and context within which this motif is embedded in the Western Central Asia region. By reviewing hypotheses concerning the iconography and iconology of the symbolism, it examines the circular serpent-dragon's astrological, magical or alchemical associations, related abstract notions such as eternity, union and infinity as well as aspects of its prosopography. Particularly noteworthy is its geographic link with the outermost boundary of the visible world, for the world-encircling ouroboros is known to mark the boundary between the inhabited world and the waters that surround it, thus between order and chaos around it; thereby appearing as exponent of liminality situated upon the ambiguous dividing line between the divine and the demonic, its manifestly dual nature confers on the ouroboros an intermediate status. The paper moreover examines the iconographical and iconological transformation of the single encircling serpent-dragon of pre-Islamic tradition into the doubled ouroboros in medieval Islamic iconography represented as paired interlaced circular serpent-dragons.

- 204 Kühne, Hartmut 6.1 Reports Region  
12 Thursday  
Evening

**Reflecting 35 Years of Interdisciplinary Research at Tall Sheikh Hamad / Dur-Katlimmu / Magdalu / Magdala, Syria (1975-2010).**

Germany • Institut fuer Vorderasiatische Archaeology, Freie Universität Berlin • hartmut.kuehne@fu-berlin.de

Beginning with a Survey of the Lower Habur valley under the auspices of the "Tübinger Atlas des Vorderen Orients" in 1975 the site of Tell Sheikh Hamad, 70 km nne of Deir az-Zor, was chosen for excavation after Middle Assyrian tablets had been uncovered by local farmers in the course of construction works for irrigation. They revealed that the Assyrian provincial centre of Dur-Katlimmu should be hiding below the surface. 32 seasons of excavation between 1978 and 2010 recovered the Middle and Neo-Assyrian centre of Dur-Katlimmu whose Aramaic name was Magdalu during the 7th and 6th century BC which changed to Magdala during the Hellenistic / Parthian-Roman period of the 3rd century BC to the 3rd century AD. Interdisciplinary studies during 1982-1995 allowed the reconstruction of the regional Late Holocene environment. Regional archaeological research was carried out in a survey in the Wadi Ajj and in rescue excavations at Tell Ajaja, Tell Bderi, and Tell Dgherat-South. In addition to the archaeological record some 1500 texts in four languages ranging from the 13th to the 5th century BC reveal a vivid picture of Assyrian and Post-Assyrian provincial life and politics.

- 205 Kunze, René 6.1 Reports Region  
13 Friday  
Midday

**Interdisciplinary Studies on the Small Finds from the Settlements of Udabno I-III (Eastern Georgia)**

Germany • Curt-Engelhorn-Zentrum Archäometrie, Mannheim • rene.kunze@cez-archaeometrie.de

Die Siedlungen von Udabno in Ostgeorgien sind bereits seit den 1980er Jahren durch sowjetische Luftaufnahmen bekannt. In der baumlosen David Garetschi Steppe befinden sich die drei Siedlungen in strategisch günstiger Lage zueinander. Archäologische Untersuchungen von 2000-2007 durch die Universität Tübingen erbrachten hervorragend erhaltene Siedlungsbefunde auf den systematisch erforschten, einphasigen Fundplätzen Udabno I-III, die am Übergang vom 2. in das 1. Jt. v. Chr. errichtet und nur für kurze Zeit Bestand hatten. Im Rahmen einer nun abgeschlossenen Promotionsarbeit fand die Analyse der Kleinfunde aus den insgesamt 25, vollständig untersuchten Häusern statt. Eine erste zusammenfassende Darstellung ergab weiterführende Einblicke in die Chronologie, in das Siedlungsverhalten, sowie in die Siedlungsorganisation und Gesellschaftsstruktur der Spätbronze-/Früheisenzeit in Kaukasien, insbesondere Ostgeorgien. Die naturwissenschaftliche Betrachtung einiger ausgewählter Kleinfunde, wie der Metalle, der Obsidianartefakte und einiger Mahlsteine ergab – aufgrund ihrer chemischen Charakterisierung – wichtige Hinweise zur Herstellungstechnik (Metalle) und zu möglichen Handelswegen (Mahlsteine, Obsidiane).

- 206 Kzzo, Ahmed Fatima 5 Dealing with the Past  
**The Ancient Past in the East, from the East: an Oriental Perspective** 11 Wednesday  
 Italy • Sapienza Università di Roma • ahmedkzzo@gmail.com Evening
- People are proud of their own cultural heritage that becomes part of the current political and cultural life and often contributes to the shaping of national cultural identity. However, in the present study, different points of view will be taken into consideration, in particular for what concerns the heritage of another (foreign) culture or the remote past of ancient civilizations. How is this distant past perceived? How is it interpreted and understood? This paper discusses how antiquities (in particular those belonging to the pre-classical civilizations) have been and are dealt in the Near East, from an Oriental perspective.
- 207 Laleh, Haeedeh 4 Reconstructing  
**Nishapur's Historical Urban Landscape** 13 Friday  
 Iran • University of Tehran • haeedeh.laleh@gmail.com Midday
- Nishapur, one of the most important Iranian and Islamic cities is situated in the plain of Nishapur, between the mountains of Binalud in the North and Kashmar in the South. Natural and environmental characteristics of the area had a key role in the sustainable development of man in the plain for a longtime. Written primary sources give precious information about Nishapur and describe many sites, monuments and villages in the plain that are still existent or no longer exist. Today, isolated and scattered vestiges present in the area cannot properly demonstrate the old urban landscape of this ancient metropolis as well as its socio-economic life.
- Human and natural factors were essential to the evolution and transformation of Nishapur and the successive displacement of the city center from East to West in the plain. A landscape approach leads us to a better understanding of the vital interaction between man and the environment in this region. The aim of the present study is to clarify the historical landscape of Nishapur since its foundation and during the Islamic period based on the results of recent archaeological fieldwork and systematic research on written primary sources as well as novel data on some aspects of its subsistence economy.
- 208 Lange, Eva 1 Egypt  
**Phoenician Gods and Crafts in the Nile Delta: A Glimpse into the Micro-Stratigraphy of Elite Society at Bubastis in the 1st Millennium BC** 11 Wednesday  
 Germany • University Wuerzburg • eva.lange@uni-wuerzburg.de Midday
- The famous „treasures of Bubastis“, two hoard finds made in 1907, contained several pieces of vessels and jewellery, dating back to the 19th dynasty. While until very recent years scholarly attention focused mainly on the excellent craftsmanship, those objects are not only outstanding in terms of their unique virtuosity but show a remarkable mixed Egypto-Phoenician style, revealing the influence of Early Phoenician stylistic traditions on Egyptian art and the significant presence of Phoenician deities in the southeastern Nile Delta. But most importantly, the hoard finds of Bubastis hint to the presence of a distinctive class of representatives of a special social and/or ethnic Egypto-Levantine background at Bubastis.
- The paper aims to investigate the archaeological and cultural context of those objects, starting with a new investigation of the rather mysterious findspot, and reaching to a focused discussion of the identity of their ancient recipients. They offer an intriguing possibility to get an insight into the multirouted and well-thought cultural expressions of the elite of a Delta-metropolis, which can be considered a key player in the cultural and political network of the so-called “International Age” of Ancient Egypt.

- 209 Langin-Hooper, Stephanie 3 Traditions  
10 Tuesday  
Midday
- Both Hellenized AND Native: Common Ground and Mutual Acceptability in the Cross-Cultural Figurines of Hellenistic Babylonia**
- USA • Bowling Green State University • slangin@bgsu.edu
- Due to their abundance and their responsiveness to social change, terracotta figurines are one of the most ideal forms of material culture through which to study the richly multi-cultural world of Hellenistic Babylonia. Traditionally, scholars have used categories of “Hellenized” versus “native” figurines to postulate a Hellenistic Babylonian social structure in which Greek and Babylonian ethnic identities were oppositional. In this paper, an alternative approach to the figurines is proposed, which deemphasizes the categorical rigidity of typology and substitutes a flexible methodology of accessing multiple entanglements between objects. A particular case study of “nude heroic” figurines (which are often considered evidence for display of cultural difference) is explored in detail, utilizing the entanglement approach. This research reveals that the hybrid qualities of objects were often selected with a sensitivity to both Greek and Babylonian cultural traditions, becoming both Hellenized AND traditionally “native” at the same time. Such figurines built upon common ground between these cultures, with the aim of mutual acceptability. The evidence presented indicates that ethnicity-based concerns were actively minimized in Hellenistic Babylonian society, through a process of mutual “Hellenization”/“Babylonization” that acknowledged the traditions (and the power) possessed by both cultural groups.
- 210 Lavi, Ron – Barzilai, Omry (2) – Hershkovitz, Israel (3) – Marder, Ofer (1) – 6.2 Reports Themes  
10 Tuesday  
Morning  
Goder, Mae (4) – Herzlinger, Gadi (4)
- Manot Cave**
- Israel • 1 Ben-Gurion University; 2 Israel Antiquities Authority; 3 Tel Aviv University; 4 Hebrew University, Jerusalem • ronlavi@gmail.com
- Manot is an active karstic cave situated in the Upper Galilee, Israel, approximately 30 km. north-east of the Prehistoric Mt. Carmel sites. The site was discovered in 2008 during construction work. A short survey uncovered a rich concentration of flint artifacts and animals bones attributed to the Upper Paleolithic period, and a part of a human skull. Following this discovery, four years of excavations (2010-13) were conducted, involving a multi-disciplinary team of researchers in various fields. Rich concentrations of flint artifacts, animal bones, bone tools and shells were uncovered so far, as well as a few human remains. In-situ layers of human occupation, including at least three well preserved hearths (Area E), were also recently uncovered. Most of the lithic finds were attributed to both Ahmari and Aurignacian Upper Paleolithic traditions, with few Late Upper Paleolithic finds as well. In addition, few scattered Middle Paleolithic and Epipaleolithic (Kebaran) artifacts were collected. Preliminary results of 14C and Uranium thorium (U-Th) dating range between 30,000-41.000 BP. The cave is becoming a key-site in relation to the current debate about the dispersal of Modern Homo Sapiens out of Africa.
- 211 Le Bihan, Amélie 3 Traditions  
11 Wednesday  
Midday
- Les pratiques religieuses en Syrie romaine: entre traditions locales et influences gréco-romaine**
- France • University of Paris 1 • lebihan.amelie@gmail.com
- La pratique de la religion implique l'existence de sanctuaires, d'objets de vénération, de dédicaces, d'offrandes, autant d'éléments qui montrent la place de la religion dans le quotidien des populations de l'Antiquité. Les religions antiques ne cessent d'évoluer et d'accueillir de nouvelles divinités ou pratiques cultuelles. Elles ne sont pas statiques et imperméables aux influences extérieures et permettent parfois de mesurer les échanges culturels entre différentes populations. Au contact de la Méditerranée et de la Mésopotamie, le vaste territoire de la Syrie romaine mêle depuis la plus haute antiquité des influences multiples qui se reflètent dans la religion et ses pratiques. La diversité des communautés présentes et les contacts permanents avec la culture gréco-romaine nous amènent à nous interroger sur les échanges possibles entre les populations locales et le conquérant romain. Diverses questions peuvent alors être abordées : Quelles ont été les réactions des populations locales vis-à-vis de l'environnement grec et romain ? Peut-on parler d'hellénisation et/ou de romanisation des cultes ? Peut-on observer la continuité ou l'évolution des traditions locales ? Existe-t-il une identité religieuse commune à l'ensemble des populations de la Syrie romaine ou bien s'agit-il de communautés variées ayant des pratiques cultuelles diverses ?

212 Lehmann, Manuela

1 Egypt

**Ethnicity and Archaeological Reality: Material Culture in Tell el-Dab'a during the Late Period**

09 Monday

Evening

Germany • Free University, Berlin • manuela.lehmann@googlemail.com

During the Late and Ptolemaic Periods, Egypt received permanent influx from other cultures. This is best reflected in the mixed population of Egyptian cities during these two periods. Current research at Tell el-Dab'a has focused on the settlement of this later period, although the city had already reached its peak during the Second Intermediate Period and New Kingdom as capital of Egypt. After a Hiatus during the Third Intermediate Period, the site was resettled in a widely extended area. This later settlement reveals new insights into a typical Delta town during this period; something unparalleled in the archaeology of Egypt so far.

As an example, the introduction of the tower house during this period, a new type of architecture in Egypt, dramatically altered the characteristics of Late Period urban design.

Many objects of the material culture like texts, textiles, food residues, and body decoration, which help to identify ethnicities in other parts of Egypt, are barely preserved in the Delta. Nevertheless the conserved material culture of Tell el-Dab'a provides further insights into the perception of other ethnicities living in the town or being contacted by terms of trading.

This paper will utilise the later remains found at Tell el-Dab'a to begin the discussion of ethnicity at the site and try to get an understanding of urban life in the Delta during the Late Period.

213 Lester, Ayala

7 Islamic

**Roman and Byzantine Influence on the Consolidation of Fatimid Jewelry**

09 Monday

Afternoon

Israel • The Israel Antiquities Authority • ayalales@bezeqint.net

The Fatimid period is characterized by a wealth of impressive jewelry which reflects a flourishing economy. This prosperity was the result of an efficient system of tax collecting, thriving trade across the Mediterranean basin and the East, and the Fatimid control of the gold mines in Nubia.

Seven Fatimid jewelry hoards were uncovered in Israel between the early 1960s and the first decade of this century. This is in sharp contrast to the Umayyad and Abbasid periods in Palestine, in which evidence of jewelry is very limited. The hoards were hidden due to the turbulent political events in Palestine during the 11th century.

Fatimid jewelry is prominent in the use of gold and the adoption of morphological and manufacturing traditions from the Roman and Byzantine periods. However, beyond this influence and the adaption of traditions, we witness the consolidation of a style which is set off by the use of gold, pearls and precious stones. Stylistically, Fatimid jewelry reflects the prominent use of the palmette pattern and the floating, symmetrical spiral S-shaped patterns, which were conspicuous within a group of jewelry pieces made of filigree and granulation. The paper will examine these aspects and try to characterize Fatimid jewelry within the framework of Islamic jewelry.

214 Linke, Julia

2 Travelling Images

**The Kings of Urartu in the Visual World**

11 Wednesday

Midday

Germany • Albert-Ludwigs-Universität Freiburg • julia.linke@orient.uni-freiburg.de

When looking at Urartian art and its motives it is eye-catching that depictions of kings – the probably most prominent motive in the contemporary neo-Assyrian art – are almost completely missing. The only depictions of kings we actually have are to be found on seals and seal impressions, and these depictions resemble strongly the royal images in Assyria (where – in contrast - pictures of kings appear above all in monumental art works). The Urartian king is shown as a person in a long garment, with a conical headdress and a kind of crook, standing under an umbrella, and at times accompanied by animals. In my paper I will take a closer look at the Urartian seal impressions that show kings (so far they all stem from Rusa, son of Argišti), the stylistic influences in these depictions and the varying motives that appear with the king in the Urartian glyptic. In a second step I will try to examine the reasons for the lack of monumental depictions of kings in Urartu and offer some possible reasons for this phenomenon.

- 215 Lippolis, Carlo – Messina, Vito 4 Reconstructing  
12 Thursday  
Evening
- Mega Sites Impact on Central Mesopotamia. The Case-Study of the Al-Mada'in Area**
- Italy • University of Torino • carlo.lippolis@unito.it; vito.messina@unito.it
- The area of Al-Mada'in, in central Mesopotamia, has been recently reconsidered in a contest of landscape and eco-system studies, for it has been deeply involved in a process of urbanization from the Hellenistic to the Sasanian period. Indeed, in this area the most important capitals of the Seleucid, Parthian and Sasanian empires, such as Seleucia, Ctesiphon and Veh Ardashir, were founded and led to a radical change in the natural landscape, land use and environment. Whereas the localization and urban layout of these mega sites have been the subject of many contributions, the impact of their foundation on the region has been only recently and provisionally considered. The purpose of this paper is to investigate the ancient landscape, changing watercourses and route system of Al-Mada'in on the basis of remote sensing analysis, historical sources and archaeological data collected over the last decades by the Italian Expedition at Seleucia and Veh-Ardashir.
- 216 Lorenzon, Marta 2 Travelling Images  
10 Tuesday  
Midday
- The Iconography of Mudbrick Production throughout the Mediterranean**
- Scotland • University of Edinburgh • M.Lorenzon@sms.ed.ac.uk
- Throughout the images depicting Near Eastern and Egyptian mudbrick production there are a few number of constantly repeated iconographic motifs, visible in the glyptic and in the paintings as the one in the tomb of Rekhmire in Egypt. This iconography can all be encompassed within a very simple theme in which the role of mudbrick production is at the base of building industry throughout the East Mediterranean and Egypt. However, a number of questions might be asked concerning such images, as well as the later paintings and reliefs documenting mudbrick creation as a visual theme that has been transfer from one context to another. This is equally relevant both to the question of the knowledge economy in the Mediterranean and to the nature of image transfer in this region: to what extent were these earliest depictions of mudbrick production always an oversimplification of the real situation, and to what extent might they misrepresent the true detail of the economic fabric of mudbrick construction?
- This paper first looks at the surviving visual information about mudbrick production and consequentially to the chronological transformation in the iconography. It also compares the visual ideas in order to try to get a sense of what might be described as the 'most well- spread building material' used during the Bronze Age.
- 217 Loreto, Romolo – Charloux, Guillaume 6.1 Reports Region  
13 Friday  
Midday
- The Saudi-Italian-French Archaeological project at Dûmat al-Jandal (ancient Adummatu): Results from 2009-2013 Seasons**
- Italy/France • University of Naples "L'Orientale"; CNRS, Paris • romololoreto@gmail.com
- This paper attempts to summarize current knowledge on the oasis of Dûmat al-Jandal (ancient Adummatu) and the al-Jawf region (northern Saudi Arabia).
- Although our understanding is still limited, this geographical area appears to be one of the richest in the Arabian Peninsula for historical periods (Nabataean, Roman, Byzantine, Islamic), as well as pre- and proto-historic ones.
- The first archaeological era are dating back to the Lower Paleolithic and Middle Paleolithic (Mousterian). Recent discoveries allow to recognize a Neolithic era follow by evidences of the Bronze Age which came abundantly from the megalithic site of ar-Rajâjîl, 10 km south-east of Sakâkâ, and maybe from Dûmat al-Jandal itself.
- As a matter of fact the early Iron Age as well as the whole 1st millennium BC is still a terra incognita for the North of the Arabian Peninsula. The only traces to outline a broad timeline of the history of Dûmat al-Jandal during this period lie in the external sources of the Neo-Assyrian annals.
- The archaeological activities conducted by the Saudi-Italian-French archaeological project are providing new data concerning the Nabataean occupation of "al-Jawf" as well as from the Roman-Byzantine era to the rise of Islam.
- In this paper, the development of the oasis will be summarized and the most significant preserved archaeological evidence will be presented and discussed.

- 218 MacGinnis, John 6.1 Reports Region  
**Excavations in the Lower Town of Ziyaret Tepe** 13 Friday  
 UK • University of Cambridge • johnmacginnis@aol.com Afternoon
- This lecture summarises the results of the 2012 and 2013 seasons of fieldwork at the site of Ziyaret Tepe in southeastern Turkey, the Neo-Assyrian provincial capital of Tušhan. Conceived within the framework of Ilisu Dam salvage projects, the aim of the mission has been to learn as much as possible about this extraordinary site before access comes to an end. The specific objectives of the campaigns, which were the final excavation seasons at the site, were to investigate a major building complex on the western city wall revealed by magnetometry in 2011, a suspected barracks or storeroom complex inside of the southern city gate, an area of low status housing, a residence lining a street through the town, and possible grave structures cut into the pebble mosaic of courtyard 11. Other objectives were to investigate the possibility of the existence of a lower range of administrative chambers in the complex and to continue the geophysical survey of the lower town. The successful completion of all these objectives has contributed materially to our understanding of the nature of Assyrian rule in this key sector on the northern edge of the empire.
- 219 Mäntylä, Lauri 2 Travelling Images  
**"Modeled after a Palace of the Land of Hatti": hilani Suites in the Neo-Assyrian Empire** 12 Thursday  
 Finland • University of Helsinki • lmantyla@welho.com Morning
- The 'hilani' reception suite, which originates in Early Iron Age Syro-Anatolia, has commonly been associated with ornamented column bases. The building type was named after the term "bīt ḫilāni", which appears in Neo-Assyrian royal inscriptions that refer to such column bases in Neo-Assyrian royal palaces. However, the only clearly identifiable Neo-Assyrian examples of the building type are found not in the royal capitals, but the western provinces of the empire. This paper, based on the author's master's thesis, examines two distinct ways in which the hilani building concept, and elements thereof, were adopted from Syro-Anatolia into the Neo-Assyrian Empire. In Neo-Assyrian royal palaces, the Syro-Anatolian column base was freely adapted and used in novel ways in various architectural contexts as a decorative visual element. In contrast, hilani suites in the Neo-Assyrian provincial cities closely match their Syro-Anatolian antecedents in terms of spatial arrangement. It is proposed in this paper that such hilani suites represent the deliberate adoption of not merely an exotic, attractive architectural element, but also the social functions and ideas associated with the building type.
- 220 Mahfroozi, Ali – Piller, Christian 6.1 Reports Region  
**Preliminary Report on the Joint Iranian-German Archaeological Survey and Excavation Project in the High Mountain Valleys of Eastern Mazandaran, Iran** 13 Friday  
 Iran/Germany • Cultural Heritage Organisation of Mazandaran Province; Ludwig-Maximilians-Universität München • christian.piller@gmx.net Morning
- Since 2009, Iranian and German archaeologists are working together at the large Bronze and Iron Age site of Gohar Tepe in the coastal plain of Eastern Mazandaran. Besides that, one of the main aims of this joint project is the investigation of additional sites in the adjacent high valleys of the Alborz Mountains. In 2011 and 2012, archaeological prospections by the Cultural Heritage Organization of Mazandaran revealed hitherto unknown evidence for Chalcolithic and Early Bronze Age sites in this region. Therefore, an intensive joint Iranian-German survey was carried out in 2013. During these investigations, a considerable number of sites from the Chalcolithic, Bronze and Iron Ages up to the Sasanian Period were discovered. Of particular importance is the detection of Neolithic contexts at Qaleh Pey Tepe, of Cheshmeh Ali levels at Tepe Sad and of a large Bronze Age Grey Ware settlement at Terkam. In this paper, the authors would like to give a short overlook over the results of these investigations.

221 Makharadze, Zurab

6.1 Reports Region

### **Early Bronze Age Anauri #3 Great Kurgan: New Discovery from eastern Georgia**

13 Friday

Morning

Georgia • O. Lordkipanidze Center of Archaeology of the Georgian National Museum •  
z\_makhar@hotmail.com

In 2012 expedition (directed by Zurab Makharadze) of GNM, in Eastern Georgia, in village Chabukiani (territory of Lagodekhi municipality) was discovered and excavated two huge Kurgans ("Chinchriani Gora" and Anauri #3 Kurgan). Both ones dated as early as second half of 3rd millennium BC. Special interests of scholars attract the Anauri #3 Kurgan, diameter of which was up to 100m. Height of the clay embankment was 12m., which was overlapped by a stone armor. Under the clay embankment was exposed the space totally covered by the oak timbers. It was roof of the burial chamber. In pit 2.2 m. was placed wooden construction, consisted with hewed timber walls, the floor with same type and three timber pillars for holding the roof. Inner space of this construction was 9,5 X 6 m. Nevertheless, that this huge burial mound was robbed in ancient times, there were discovered lots of unique artifacts.

In the burial chamber were placed two four-wheeled chariots, both in good condition, design of which represents fine ornamental details of various styles.

In the Kurgan #3, beside this materials were discovered richly ornamented clay and wooden vessels, flint and obsidian arrowheads, leather and textile artifacts, wooden armchair which is unique, carnelian and amber beads and 23 golden items, among them rare and high artistic crafted jewelry.

Burial had contained large amount of wild and other sort of fruits. All palaeobotanical remains were preserved very well and analyses are proceeding in the laboratory of GNM.

Anauri Kurgan #3 is the distinguishable site, which keeps huge scientific information and its importance is undoubtedly obvious for Caucasian and Near East archaeology.

222 Makinson, Martin

2 Travelling Images

### **Self-portrayal and the Image of the "Other": Ethnicity, Costume and Outside Influences in the Depiction of Aramaeans and Hittites in North Syrian and Assyrian art of the First Millennium BCE**

12 Thursday

Morning

Switzerland • University of Geneva • harranaya@yahoo.fr

The reliefs in palaces of Assyrian capitals portray with particular detail the various groups that were subjected to the yoke of Assur in some way or another as from the early ninth century BC. Costume, attire, hairdo, postures and attitudes were depicted with minute attention to inform on identities and to convey a message to specific audiences congregating in palace rooms. North Syrian populations of Aramaeans and Luwians frequently appear in narrative reliefs. Yet North Syrian sculpture and carvings, whose emphasis was usually not narrative, often reveal the very same details of costume and attitude interacting in complex and varying form with notions of ethnicity, kingship, political alliances and self-perception. Trends in self-portrayal and changing details over four centuries in Syria in the early first millennium BC reveal evolving self-perceptions of identity, alterations in political affiliation and in the relationship to Empire. This paper attempts to interpret the relationship of costume and appearance with identity, either self-perceived or encapsulating "the other". Moreover, it aims at clarifying the political undertones and messages concomitant with changes in costume as shown on official art from both North Syria and North Mesopotamia. Keywords: Assyrians, Luwians, Aramaeans, reliefs, sculpture, identity, ethnicity, politics, self-perception, the "other", message.

223 Makvandi, Leila

6.2 Reports Themes

### **Royal Road in Achaemenid Heartland: Persepolis Fortification Texts and Archaeological Data**

12 Thursday

Evening

Iran • University of Tehran • Leilamakvandi@gmail.com

Persepolis fortification archive dates to the reign of Darius I (509- 493 B.C), gives us much information on the economic and social organization of the Achaemenid heartland (modern Fars and Khuzestan). One of the most important aspects of archive is a lot of toponyms that mentioned in texts, but when it comes to putting them on the map, uncertainty abounds. Whereas, part of Royal Road between Susa to Persepolis and somehow to Pasargadae is in under administration of Fortification archive, Scholars hardly agreed upon a map of it and in some cases clash of their ideas got you confused, that she achieved such results or gave such a commentary, in spite of other scholar she extends administrative system of archive until Shushtar. When putting those maps next to each other hardly can you find a place that they have unanimity about it, unfortunately mostly they ignored archaeological data. So it would be better if we combine results of archaeological data with the data that we got from texts. Aim of this paper is to compare and analysis the maps that other scholars gave, and compare with archaeological map of area to give a new and probably different view of previous research of Royal road.

224 Manassa, Colleen

1 Egypt

### **Another Enigmatic Eastern Desert Locale: A Late Roman/Byzantine Site near Debabiya, Egypt**

11 Wednesday

Midday

USA • Department of Near Eastern Languages and Civilizations  
Yale University • colleen.manassa@yale.edu

In December 2010, the Moalla Survey Project discovered an extensive late Roman/Byzantine site (M10-11/S1) in a roughly northeast-southwest wadi (the Wadi Schech Nassr) cutting through the high desert south of the large Wadi Debabiya. Within this wadi are nearly one hundred structures, consisting of several concentrations of dry-stone buildings, ranging from single room structures to multi-chambered buildings, stretching over half of a kilometer of the wadi. The predominant ceramic forms at M10-11/S1 are Egyptian amphorae, including Late Roman Type 7; these and the fine wares from M10-11/S1 suggest that the main use of the site can be dated approximately to the fifth through seventh centuries CE. The architecture and ceramic remains are comparable to nearly fifteen other late Roman/Byzantine sites in the Eastern Desert. Despite the geographically widespread phenomenon of these sites, their function remains enigmatic. In addition to presenting the new results from the discovery of the site in the Wadi Schech Nassr, the presentation will evaluate possible functions for these "enigmatic" sites, including habitations for semi-nomadic Blemmyes or monastic settlements.

225 Maraqtan, Mohammed

6.1 Reports Region

### **Writing History of pre-Islamic South Arabia from inscriptions: Epigraphic Discoveries at the Awām Temple/Maḥram Bilqīs, Yemen**

13 Friday

Afternoon

Germany • University of Heidelberg • maraqtan@online.de

The purpose of this paper is to present the recent epigraphic discoveries yielded by the excavations of the American Foundation for the Study of Man (AFSM) at the Awām temple (modern Maḥram Bilqīs) in their archaeological context and to give attention to their historical significance. The discovery of hundreds of inscriptions in Yemen in the last three decades changed the whole picture of our knowledge about the history of pre-Islamic Arabia in general and South Arabia in particular. The Awām temple, which is located near Mārib, the capital of the kingdom of Saba<sup>2</sup>, was the state and national temple of this kingdom. It was built in the second half of the second millennium BCE and continued to be the central temple until the end of the 4th century CE. It was dedicated to the Sabaeen national god Almaqah.

This temple was not only, a place of purity, a healing and an oracle temple, but also a pilgrimage place par excellence. Nine seasons (1998-2006) of excavations have been hitherto accomplished. The researcher is the epigrapher of the AFSM and joined all seasons and documented all epigraphic discoveries in this temple. One of the most important discoveries in this temple are inscriptions. More than 500 Sabaeen inscriptions engraved primarily on bases of statuettes have been discovered. Some of them contain more 50 lines and dated from the 8th century BCE to the end of the 4th century CE. The majority of the texts are dedicatory inscriptions mentioning offerings to the god Almaqah. Further, war reports, women's, medical, legal texts such as temple laws and penitential texts as well as royal inscriptions have been also discovered. These inscriptions are a rich source of material about pre-Islamic Arabian culture and represent the primer substance for writing history.

- 226 Marchand, Florine 6.2 Reports Themes  
**L'industrie lithique de Tell 'Arqa (Plaine du Akkar, Liban Nord)** 10 Tuesday  
 Belgium • Université Libre de Bruxelles • fmarchan@ulb.ac.be Morning  
 Tell Arqa, situé au Liban Nord, dans la partie Sud de la plaine du Akkar, est connu pour ses ensembles architecturaux de l'âge du Bronze et sa collection céramique. Toutefois, ce site renferme une riche industrie lithique comprenant plusieurs milliers de pièces (outillage et débitage) en silex et en obsidienne. Dans cette communication, nous présenterons notre recherche qui s'articule en trois volets : l'étude technologique, les analyses tracéologiques et l'expérimentation des techniques de débitage (levier). Sur le site de Tell 'Arqa, plusieurs chaînes opératoires (laminaires, lamellaires et industrie sur éclats) ainsi que plusieurs techniques de débitages (directe dure et tendre, pression) coexistent. Les analyses tracéologiques réalisées sur les artefacts de l'âge du Bronze sont généralement des outils liés aux travaux agricoles. Dans la collection, les outils lustrés utilisés pour la coupe de céréales sont majoritaires. Suite aux analyses effectuées, d'autres fonctions sont à présent connues sur le site telles le travail de la poterie, de la matière dure minérale, de la matière osseuse, etc. L'enjeu de cette étude est d'obtenir des résultats sur le rôle de la taille du silex, son statut et sa fonction au sein d'un site de l'âge du Bronze, où l'utilisation de métal est largement prépondérante.
- 227 Marchetti, Nicolò 6.2 Reports Themes  
**Karkemish: Results of 2012 and 2013 Turco-Italian Excavation Campaigns** 12 Thursday  
 Italy • Università di Bologna • nicolo.marchetti@unibo.it Morning  
 The second and third campaigns of renewed archaeological excavations and restorations at Karkemish (modern Karkamış Höyük, Gaziantep) took place in 2012 and 2013 under the joint auspices of the Universities of Bologna, Gaziantep and Istanbul and in cooperation with the Turkish Ministry of Culture and Tourism, with funding also from the Italian Ministries for Foreign Affairs and for Education, University and Research and from the Kaplan Fund. Several new finds from the Inner Town, the Outer Town and the Yunus necropolis supply a new in-depth picture of settlement dynamics during Iron II and III, besides providing a wealth of new art and epigraphic finds. The site, included within a military area, is going to open to the public as an archaeological park in Autumn 2014.
- 228 Maresca, Giulio 3 Traditions  
**Echoes of Regional Traditions plus Western Typological Influences: Some Notes about the Post-Achaemenian Pottery Assemblage from the Italian Excavations at Qal'a-ye Sam (Iran, Sistan)** 09 Monday  
 Italy • Università degli Studi di Napoli "L'Orientale" (UNO) • giuliomaresca@hotmail.com Afternoon  
 In the frame of the archaeological researches carried out between the 60's and the 70's of the past century in Iranian Sistan by an Italian team of IsMEO (Istituto Italiano per il Medio ed Estremo Oriente) directed by Prof. Umberto Scerrato, some trial trenches were excavated at Qal'a-ye Sam to obtain data to be compared with the information which the same team was retrieving at the nearby Achaemenian site of Dahana-ye Gholaman.  
 Since then, the pottery recovered during those excavations was just hinted at in some preliminary reports regarding the main field activities at Dahana-ye Gholaman. The present reappraisal of the pottery assemblage from Qal'a-ye Sam (in the frame of the WebGIS project "Archaeo.Pro.Di.Mu.S: Archaeological Project Digital Multimedia Sistan", based at UNO) is centred on the study of over one hundred fragments stored in Italy (previously in Rome at IsMEO/IsIAO and nowadays in Naples at UNO) on the basis of an agreement between IsMEO and the former Imperial Service for the Antiquities of Iran. From the analysis of this unpublished assemblage, interesting details emerge regarding a pottery production which, despite evident Hellenistic morphological influences, still holds strong ties with the ceramic tradition attested in the region during the Achaemenian period.

- 229 Marghussian, A.K.– Coningham, R.A.E. 6.1 Reports Region  
11 Wednesday  
Morning
- Investigation of Neolithic Pottery from Sialk in the Central Plateau of Iran, Utilising Chemical and XRD Analysis**
- UK • University of Durham • a.k.marghussian@durham.ac.uk
- A collection of the newly excavated (2008 & 2009) pottery from the C14-dated sequence of Tepe Sialk in the Central Plateau of Iran were investigated using X-ray fluorescence (XRF) and X-ray diffractometry (XRD) analyses to determine the chemical and mineralogical compositions and the sample microstructures were also studied by Scanning electron microscopy (SEM), Energy dispersive spectrometer (EDS) to bridge the gap in our knowledge regarding the manufacturing development of pottery making on the Central Iranian plateau and investigate the nature of changes in ceramic production in the Late Neolithic period (ca. 5700-4800 BCE) in the Central Plateau of Iran and evaluate the social and economic changes identified during this period were accompanied by innovation within ceramic manufacture and firing techniques.
- 230 Margueron, Jean-Claude 6.2 Reports Themes  
11 Wednesday  
Afternoon
- Les grandes étapes de la création d'une architecture urbaine (IVe-IIIe millénaires)**
- France • E. P. H. E. IV, Paris • jean\_claude.margueron@sfr.fr
- Partant de l'architecture monumentale de la fin de l'époque néolithique (vers 4000 av. J-C) caractérisée par le modèle tripartite, on veut commencer par préciser la nature de l'architecture urbaine avec l'apparition des premières villes à l'époque d'Uruk ; les architectes ont alors développé au maximum les potentialités du plan tripartite, mais sans inventer de nouvelles formules.
- La ville implique une transformation drastique des modalités de l'habitat, dans un cadre assez contraignant où va se développer une nouvelle architecture qui répond aux exigences transformées de la vie politique, sociale et économique. Une période de transition (fin du IVe, début du IIIe mill.) voit le quasi-abandon du plan tripartite comme base d'un bâtiment autonome au profit d'une architecture vernaculaire sans doute issue du milieu villageois, mais qui sera vite abandonnée pour un nouveau modèle d'architecture domestique, sur plan carré avec étage. Au même moment deux monuments, malheureusement incomplets et différents l'un de l'autre, à Uruk dans le Sud et à Mari dans la Mésopotamie du Nord mettent l'accent sur un nouveau type d'architecture qui met en œuvre une « architecture complexe ».
- L'épanouissement de ce que l'on peut considérer comme la première architecture urbaine se réalise dès le début du second tiers du IIIe millénaire. Dans un espace urbain clairement délimité, on voit se mettre en place des monuments spécifiques correspondant aux activités fondamentales – régaliennes, politiques, économiques, culturelles. Les maisons d'habitation sont conçues sur un principe commun autour d'un espace central ; toutes ces constructions ne doivent pas cacher l'existence de travaux plus collectifs comme les ponts, les quais, les silos régionaux ou les forteresses militaires.
- 231 Marro, C. – Bakhshaliyev, B. – Berthon, R. – Dessène, F. 6.1 Reports Region  
12 Thursday  
Evening
- The Earliest Kuro-Araxes Pottery Known to Date: New Discoveries from Ovçular Tepesi (Nakhchivan, Azerbaijan).**
- France • CNRS - UMR 5133 " Archéorient - Environnements et Sociétés de l'Orient Ancien", Maison de l'Orient et de la Méditerranée, Lyon • catherine.marro@mom.fr
- Recent archaeological excavations at Ovçular Tepesi have yielded typical Kuro-Araxes pottery in a Late Chalcolithic habitat that is dated to the last quarter of the 5th millennium (datation secured through the stratigraphy and a series of 14C dates). This discovery marks the earliest occurrence of Kuro-Araxes artefacts ever attested, but more importantly, it casts new light on the formative processes of the Kuro-Araxes phenomenon, while raising a number of interesting issues: since the early Kuro-Araxes pottery from Ovçular Tepesi has been found together with buff-coloured Chaff-Faced vessels belonging to the Ovçular faciès, does this mean that the Late Chalcolithic Kuro-Araxes vessels were produced by the same potters as the Chaff-Faced ware ? Or are we faced with two distinct communities, co-existing to a certain degree ? After a presentation of the available data, this paper will discuss the significance of this discovery and its implications for the study of the long-lived Kuro-Araxes complex.

- 232 Mas, Juliette 4 Reconstructing  
12 Thursday  
Afternoon
- Production, Private Economy and State Entanglement in Early Northern Mesopotamia**
- Belgium • Université de Liège • juliettemas@hotmail.com
- Ancient economic systems from Southern and Central Mesopotamia have been quite well cleared out when Northern Mesopotamia ones remain less known from this point of view. If we already know that, during Bronze Age, households played a deciding role in several kinds of production, their degree of dependence or independence to the State still has to be cleared. The archaeological data clearly show that private workshops, set up in private houses, could be very efficient and specialized. Furthermore, these economic entities could be assimilated to private enterprises, which were able to handle their own administrative duties. On the other hand, we know from the texts that the Palace and the temples were also a main element of ancient economic systems. If public administrations should, in some cases, have supplied raw materials, hired workforce, and dealt with the distribution of produced goods, it seems that the production didn't take place in the palace itself. Dealing both with archaeological and textual data, could help to better define the role and the importance of both public and private components in early Mesopotamian economic systems.
- 233 Mashkour, M. – Lhuillier, J. – Gritsina, M. – Bendezu-Sarmiento, J. – Mustafakulov, S. – Khasanov, M. with two possible other co-authors 4 Reconstructing  
12 Thursday  
Morning
- Bronze and Iron Ages Subsistence Economies in Southern Uzbekistan**
- France • UMR 7209, Archéozoologie, archéobotanique: sociétés, pratiques et environnements; CNRS (Centre national de Recherche Scientifique) et MNHN (Muséum national d'Histoire naturelle • mashkour@mnhn.fr
- Recent excavations by two French–Uzbek joint teams have yielded considerable amount of archaeozoological data from the Bronze Age and Iron Age settlements in southern Uzbekistan: Dzharkutan in Surkhan Daria province near Termez, Padayatak-tepe and Sangir-tepe in Kashka Daria province near Sharh-i Sabz and Koktepe in Sogdiana near Samarkand. Preliminary studies of the material show the important role of the wild and domestic Equids in the economy of these sites. Also Bovids (sheep/goat -Caprini- and cattle Bos spp.) played a central role in the subsistence economy. The presence of cattle in a significant amount indicates the existence of relatively humid areas and a controlled domestic environment. On the other hand hemione (Equus hemionus) and gazelle (Gazella spp.) remains indicate the exploitation of the natural steppe and arid environments around the site. The information on wild and domestic taxa suggests an optimised management and exploitation of agropastoral potentials of the territories inhabited by the past human communities, in addition to the natural environment resources. In Dzharkutan, the high frequency of red deer (Cervus elaphus) worked antlers and the quasi absence of post-cranial skeleton within the consumption refuses, is one of the highlights of this material; It seem to be an important raw material procured probably from other ecological zones, through direct or indirect trade.
- 234 Massafra, Angela 1 Egypt  
11 Wednesday  
Morning
- The Egyptian Presence in Southern Palestine at the Dawn of the Late Bronze Age as reflected by Pottery Imports**
- Italy • Sapienza University of Rome • angela.massafra@uniroma1.it
- Among the several classes of Egyptian/Egyptianizing artifacts attested in the Levant during the Late Bronze age, pottery is probably the best indicator of cultural affiliation. Neither usually utilized for containing transportable goods, nor considered a prestige or a very popular good in the Levant (on the contrary of weapons or scarabs), Egyptian pottery could highlight the real extent of the Egyptian presence in the Levant during the first part of the Late Bronze age. This is particularly true for one of the most debated areas of Palestine, its southern part, severely affected by the destructions at the end of the Middle Bronze age and possibly occupied by Egyptian garrisons since the beginning of the following period. A key site is Tell el-'Ajjul, where the archaeological finds of Cities II-I have revealed an Egyptian stable presence. A comparative study of these pottery vases and their classes, shapes, quantity and contexts could be useful for a better understanding of the Egyptian occurrence in Tell el-'Ajjul at the beginning of the Late Bronze age and of the possible way the Egyptian culture reshaped itself in a foreign context.

- 235 Matthews, Wendy – Matthews, Roger (with CZAP team colleagues) 4 Reconstructing  
09 Monday  
Afternoon  
**Reconstructing Neolithic Eco-Systems in the Central Zagros of Iran and Iraq**  
UK • University of Reading • r.j.matthews@reading.ac.uk  
Current fieldwork and research in Iran and Iraq is generating new evidence and interpretations concerning the earliest phases of the Neolithic transition in the eastern Fertile Crescent. The Central Zagros Archaeological Project applies integrated scientific and social approaches to the reconstruction of Neolithic eco-systems, through analysis of architecture, material culture, and multiple components of the Neolithic environment. In this paper we will present new evidence regarding Neolithic societies of the Central Zagros region, including developments in sedentarisation, animal and plant management, and the environmental contexts.
- 236 Matthiae, Paolo 2 Travelling Images  
11 Wednesday  
Afternoon  
**Power and Prestige: Egyptian Images for Old Syrian Gods and Kingship**  
Italy • Università di Roma "La Sapienza" • paolo.matthiae@mclink.it
- 237 Mazzoni, Stefania – D'Agostino, Anacleto – Orsi, Valentina 6.2 Reports Themes  
12 Thursday  
Morning  
**Researches at Uşaklı Höyük (Central Turkey).**  
Italy • University of Florence • anacleto.dagostino@gmail.com  
The Uşaklı Höyük archaeological project in central Anatolia in the years 2008-2012 has carried out an intensive archaeological, geomorphological and geomagnetic survey of the site and its territory, producing a rich corpus of materials and information to investigate the landscape and settlement pattern of this distinct catchment area over the the Early Bronze Age - Byzantine lengthy period. A further operation of scraping on the slopes of the central mound of Uşaklı in 2012 added further data and new fragments of Hittite tablets that confirm definitely the importance of this site as a Hittite centre in the Late Bronze Age. In 2013 excavations started in Area A, where scattered large granitic blocks are preserved on the surface and where the geomagnetic survey registers the presence of a large building. This paper will present the final results of the survey and a preliminary overview of the results of the 2013 season of excavations.
- 238 McRae, Iona Kat 3 Traditions  
09 Monday  
Afternoon  
**Assessing Change and Continuity. Achaemenid and Post-Achaemenid Ceramic Traditions in the Achaemenid Heartland**  
Australia • The University of Sydney • iona.kat.mcrae@gmail.com  
The introduction of "Late Plain Ware" c. 550/520 B.C (or later), marks a sharp break in the preceding Iron II (c. 1000 – 800/700 B.C) painted traditions of the Achaemenid heartland. This chronological gap, and the apparent continuity of "Late Plain Ware" well into the post Achaemenid remains one of the crucial concerns in our understanding of the archaeology of Iran in the first millennium B.C.  
The recent archaeological investigations in the Mamasani District (2003 – 2009), specifically the excavations at Tol-e Spid, Tol-e Nurabad and Qaleh Kali, have begun to address this issue. This paper will examine the seeming continuity of Achaemenid traditions into the post Achaemenid/Hellenistic 'dark ages', with a specific focus on Achaemenid, and post Achaemenid ceramics. Using the results of recent petrographic and instrumental neutron activation analysis (INAA) performed on a collection of samples from Qaleh Kali, as well as a renewed examination of the Achaemenid and post Achaemenid levels at Tol-e Spid, Tol-e Nurabad and Qaleh Kali, it is possible to analyse this crucial juncture in Iranian archaeology. This study allows a more comprehensive analysis than has previously been possible, offering an opportunity to examine the nature of this cultural continuity.
- 239 Meijer, D.J.W. 2 Travelling Images  
12 Thursday  
Afternoon  
**Mesopotamian Temple Roofing and Realism and Naturalism in Art**  
The Netherlands • University of Leiden • d.j.w.meijer@arch.leidenuniv.nl  
The paper will deal with how we perceive depictions of objects from other cultures than our own. The terms Realism and Naturalism are discussed, and on the basis of this discussion a case study presents some thoughts on the roofs of especially early Mesopotamian temples. These are supported by actual archaeological evidence.

- 240 Merlino, M. – Giannessi, D. 6.1 Reports Region  
**Gird Bardastee: an Early Ninevite V Site in Northern Iraq** 09 Monday  
 The Netherlands • NINO • M.Merlino@uva.nl Evening  
 Gird Bardastee, located close to Tell Shemshara, was excavated by Iraqi archaeologists in 1959 as part of the Dokan Dam Salvage project. The excavation uncovered material from the "ED I" period, but otherwise results have not been reported. In spring 2013 the NINO project on the Rania Plain began new investigations at Gird Bardastee. The site was apparently only occupied in two brief phases of the early Ninevite V period. The paper reports on the stratigraphic, architectural, and ceramic evidence retrieved.
- 241 Messina, Vito – Mehr Kian, Jafar 6.2 Reports Themes  
**The Religious Complex at Shami. Preliminary Report of the Research Conducted by the Iranian-Italian Joint Expedition in Khuzestan at Kal-e Chendar** 13 Friday  
 Italy/Iran • Università di Torino; Iranian Center for Archaeological Research • vito.messina@unito.it; mehr\_kian@yahoo.com Morning  
 In 2012, the Iranian-Italian Joint Expedition in Khuzestan started fieldwork at Kal-e Chendar (valley of Shami), a site investigated in 1936 by Aurel Stein after the accidental discovery of a bronze statue portraying a Parthian nobleman and never visited again. The site must have been one of the most important sanctuaries of Hellenistic and Parthian Elymais, and this is confirmed by the present research, which revealed the presence of monumental stone architecture and tombs over an area extending for about 50 ha. The structures recognized can be defined as undressed stones terraces, built for supporting stone or baked brick buildings. Almost nothing remains of the latter but re-used or loose on surface blocks of masonry, column bases and brick fragments, even if Aurel Stein's excavation shows that their layout could be traced on the basis of their foundations. The wide extension of the terraces points to the presence of large buildings or complexes of buildings, even if it may be supposed that not all the terraces were built for cult purposes: in any case, the building size and monumental setting lead to assume that the sanctuary at Kal-e Chendar could have rivalled those at Majid-e Sulayman and Bard-e Nechandeh.
- 242 Mielke, Dirk Paul 1 Egypt  
**Egyptian Paradigms about the Hittites – Past and Present** 10 Tuesday  
 Germany • Westfälische Wilhelms-Universität Münster • dirk.mielke@uni-muenster.de Evening  
 One of the most remarkable events in the Ancient Near East in the second half of the 2nd Millennium BC was the struggle for supremacy between Hittites and Egyptians in the Levant. The famous battle of Qadesh (1275) and the following peace treaty between Hattusili III and Ramesses II (1258) produced a variety of contacts between Hittites and Egyptians. Regarding the perception of alterity from Hittite perspective no hints in the material culture are observable so far. In contrast, from the Egyptian perspective a number of pictorial representations in the form of reliefs are known, which seem to have an almost paradigmatic character. Here, however, it must be questioned critically what exactly lay behind these images. In doing so a comparison with the self presentation of the Hittites and the record of the their material culture will offer the basis for a discussion. Regardless of this, the paradigmatic images of Hittites representing the Egyptian view have been largely uncritically adopted from modern researchers and therefore still influence – in the true sense of the word – the image of the Hittites in the present.

- 243 Milevski, Ianir – Gandulla, Bernardo – Jaruf, Pablo 4 Reconstructing  
09 Monday  
Evening
- Eco-Systems or “Socio-Systems”? The Case of the Chalcolithic of the Southern Levant**
- Israel • Israel Antiquities Authority • [ianirmilevski@gmail.com](mailto:ianirmilevski@gmail.com)
- The Chalcolithic Ghassulian culture of the southern Levant lasted for about 800 hundred years starting in the second half of the 5th millennium BC. A great deal of research has been involved in the southern facies of this culture, mainly in the Northern Negev. Changes in settlement patterns at the end of this period and the dénouement of the Ghassulian culture has been interpreted in relation to the influence of eco-systems on the material culture of the southern Levant in that particular semi-deserted area. In this paper we will offer our interpretation on the developments concerning the end of the Chalcolithic from a socio-economic context, without discarding the influence of the environment and natural sources on the development of the rural communities of the southern Levantine Chalcolithic.
- 244 Milevski, Ianir – Getzov, Nimrod 6.1 Reports Region  
12 Thursday  
Afternoon
- Ein Zippori, an Early Bronze Age Town in the Lower Galilee**
- Israel • Israel Antiquities Authority • [ianirmilevski@gmail.com](mailto:ianirmilevski@gmail.com)
- The site of Ein Zippori has been excavated for the last three years due to the enlargement of one of the main roads in the Lower Galilee, Israel. The excavations revealed the existence of several layers of a late prehistoric site; the estimated size of it is ca. 25 ha. The site is located near a series of springs known as Einyot Zippori and Nahal Zippori, a perennial stream in the region. Among the remains two periods produced an outstanding evidence: the Wadi Rabah culture (Late Neolithic/Early Chalcolithic periods) and the Early Bronze Age I. We will focus in this presentation on the remains of the Early Bronze Age which include several layers of domestic buildings and installations, and the town wall. Some of the building techniques include the utilization of stone and mud-bricks and the plastering of the walls with mud. Pottery vessels, flint tools, basalt vessels, seal impressions and a corpus of animal figurines are some of the main findings of the Early Bronze Age I. Ein Zippori represents one of the earliest examples of a southern Levantine settlement in the process of urbanization occurred around 3,000 BC and even earlier.
- 245 Mohammadkhani, Kourosh 6.2 Reports Themes  
12 Thursday  
Evening
- Dahaneh-e Gholaman: One Achaemenid City in Eastern of Empire  
“Magnetic Survey in Dahaneh-e Gholaman, Sistan-Iran”**
- France • Université Louis Lumière Lyon 2 • [kourosh.mhmdkhani@gmail.com](mailto:kourosh.mhmdkhani@gmail.com)
- Dahaneh-i Gholaman is located eastward of Sistan-Baluchistan (Iran). The site was first recognized by Umberto Scerrato, who conducted surface surveys and undertaken excavations there between 1962 and 1965. The first excavations have shown that the site would have been occupied only in Achaemenid period. In this research we used different method for study: field walking archaeological survey, geophysical surveys (magnetic method) and aerial photointerpretation. Magnetic exploration has been completed in two zones on remains parts of site: one zone in north and one zone in south. Magnetic survey covered the space between the excavated buildings, on the non-excavated buildings that were shown in the map of buildings of Scerrato. In the southern zone, we carried out magnetic survey on the structure named "Padegan". The results show one square inside the big square that was visible on the surface. In the magnetic map we founded anomaly of one building (50\*55 m) that is similar to Achaemenid royal residences in Fars. The presence of such a building in south of Dahaneh-e Gholaman, may also show links between the heart of the empire and the periphery, whether political influence or cultural influence, or the presence of Persians in the region.

- 246 Monamy, Elisabeth 2 Travelling Images  
11 Wednesday  
Evening
- Images. Mouvements imagés. Les orthostates araméens**
- Austria • Université de Vienne • elisabeth.monamy@univie.ac.at
- Les orthostates assyriens sont l'apogée d'une expression, artistique, d'un message de puissance. Or les motifs sont-ils bien assyriens ou empruntés à des nations et peuples soumis lors des conquêtes des régions limitrophes ? Les premiers exemples de cette méthode de démonstration de pouvoir (politique et / ou religieux) se trouvent, entre autres, chez les Araméens. Dans cette conférence, il sera question, dans un premier temps, de classification des scènes, des images mouvementées. Dans un second temps, sera étudiée l'évolution des scènes sous l'angle de transfert d'idées. Et, finalement, l'auteur démontrera que les images ont été transposées et transformées pour répondre à de nouvelles attentes de la part des nouveaux conquérants et des nouveaux maîtres de la Syrie et de la Mésopotamie, mais que l'idée visuelle de base reste inchangée. Le transfert d'images et d'idées s'est surtout fait au niveau artistique et non pas dans le message transporté par ces images.
- 247 Morandi Bonacossi, Daniele 6.1 Reports Region  
12 Thursday  
Midday
- The Land of Nineveh Regional Project. The Formation of the Assyrian Empire in the Land behind Nineveh between Middle Bronze and Iron Ages.**
- Italy • University of Udine • daniele.morandi@uniud.it
- The presentation will discuss the first results of the 'Land of Nineveh Regional Project' (LoNRP), initiated in 2012 by the Italian Archaeological Mission to Assyria of the University of Udine. The LoNRP aims to reconstruct the formation and transformation of the cultural and natural landscapes of the piedmont region to the east of the Upper Iraqi Tigris Valley and to provide for their protection and management in innovative ways.
- The paper will focus on the formation process of the Assyrian empire between the Old and the Neo-Assyrian periods in this core region of Assyria as mirrored by the landscape and settlement systems emerging from the LoNRP field work. This new important information from the hinterland of Khorsabad and Nineveh, the two last capitals of the Assyrian empire, is of great interest for the reconstruction of the occupation and exploitation of the political and geographical centre of the Assyrian empire, thus integrating the data available so far only from neighbouring regions located mainly in the Western Assyrian homeland and along its northern frontier.
- 248 Morgan, Kathryn – Fabian, Lara 2 Travelling Images  
12 Thursday  
Afternoon
- The Assyrians Abroad: Space Syntax Analysis and Administrative Architecture at Zincirli, Turkey**
- USA • University of Pennsylvania • morgk@sas.upenn.edu
- This paper uses space syntax analysis to compare the architectural plans and likely functional areas of two administrative complexes at Zincirli Hoyuk: Palace G, on the citadel mound, and Building C, in the lower town. Both date to the eighth century BCE, the period of direct Assyrian administration at Zincirli, Iron Age Sam'al; and both integrate distinct local attributes while remaining discernibly Assyrian in plan. By contrasting the plan of Palace G with Assyrian palace architecture, this paper highlights the differences in use patterns and spatial function that emerge in these hybrid provincial buildings. Rather than simply producing room-level permeability maps, as in traditional space syntax analysis, we employ the open-source software Depthmapx to generate visibility and angularity maps. This approach provides a more nuanced and granular analysis of spatial function, which more closely reproduces the phenomenological experience of individual movement through space. This paper aims to suggest possible directions for the interpretation of the lower-town complex Building C, still under excavation. It further explores the potential of this methodological framework for the investigation of the multidirectional nature of cross-cultural interaction as interpreted through the social implications of spatial organization.

249 Mortzaei, Mohammad – Sadraei, Ali

6.1 Reports Region

**New Findings from the Second Phase of Salvage Excavations of Rayy Fortifications in 2012 (Eastern Section)**

13 Friday

Midday

Iran • Iranian Center for Archaeological Research • m\_mortezayi2008@yahoo.com

Rayy is among the major ancient Iranian urban centers and its earliest settlements, represented by the archaeological site of Cheshmeh Ali and its outstanding culture, date from the prehistoric times. The city likewise flourished during the historical periods. J. de Morgan began the first systematic archaeological investigation in Rayy in 1291 that was to be followed by several generations of foreign and Iranian scholars who have tremendously expanded the extent and scope of the field work in this momentous region.

The most recent excavations in Rayy conducted in two western and eastern sections of the defined excavation area. The work in the eastern section is involved opening 18 trenches at the base of the Rashkan fortress, while in the western section 5 trenches were cleared at the base of the second Fortification wall. The present paper reports the results of the excavations of the eastern section during the second phase wherein the Imam Ali Highway is under construction and extends up to the modern Rayy city. The excavation was conducted by the present authors in summer of 2012 in the area where the cultural remains were exposed and partially destroyed as a result of the construction operation of the mentioned highway. The excavation brought into light the main structure of the wall built of brick bricks and pise, and the pottery an assemblage that is contemporaneous with the settlement from the early Islamic period that had been unearthed in the western section during the first phase of the excavation. In addition, the stray sherds of distinct burnished gray pottery of the 1st millennium B.C. in an alluvial context without settlement evidence suggest a yet unknown contemporary settlement in the surrounding area. This article outlines the latest results of this excavation and the analysis.

250 Mousavi Haji, Seyyed Rasool (1) – Shirazi, Ruhullah (2) – Zour, Maryam (3) – Farzin, Saman (1)

7 Islamic

13 Friday

Morning

**Survey of The Pottery Samples Collected from the Islamic Ages in Nikshahr and Chabahar (South-East of Iran)**

Iran • 1 University of Mazandaran; 2 University of Sistan &amp; Baluchestan; 3 University of Tarbiat Modares • ma\_zoor@yahoo.com

Regarding to the fact that Baluchistan land has had abundant settlements during the Islamic periods, however, unfortunately investigation of Islamic potteries have been rarely considered by the scholars and archeologists of the Islamic Ages. In order to meet this purpose, it was decided to survey and examine the Islamic potteries collected in the survey performed in the towns of Nikshahr and Chabahar in Sistan & Baluchistan province. Consequently, it was tried to study (classify, perform typology, and typological comparison) all the 474 pieces of the Islamic potteries obtained from Nikshahr and Chabahar region. Results of the present study shows that the pottery with Sgraffito decorated is the common pottery of the Islamic period in Baluchistan that regarding the typological comparison with regions such as Neishaboor, Jiroft, Sirjan, Peshavar, Bamian, and Koosh in the period of the fourth and seventh AH century they have been popular in this region and they had been prevalence in this area.

With regard to survey and comparison of the quality of designs in species such as "painting under turquoise glaze" and "Blue and White" having designs of the potteries in other regions, it can be clearly realized that in sum, Islamic potteries are ranked in lower levels regarding the quality of the decorated designs- color adornment- compared to main pottery centers in Iran and other Islamic countries and lack of even one piece of pottery with painting on glaze like Zarinfam, Silhoto, and enamel potteries, denotes the fact that Baluchistan's potters had insufficient skill and specialty in this decorative technique.

Generally, it can be stated that according to the performed studies, Baluchistan (Nikshahr and Chabahar region) has had a relatively good advancement in the field of pottery and it has had an expanded cultural and artistic relations with the neighboring regions and far reaching lands during the Islamic Ages (the 4th to the 9th centuries).

Keywords: Archeological survey, Baluchistan, Pottery, Islamic Period, Typology.

- 251 Mudd, David 2 Travelling Images  
09 Monday  
Evening
- The Symbolic World of Wadi Faynan 16**
- UK • University of Reading • dmudd@btinternet.com
- Excavations from 2008-2010 at the PPNA site of Wadi Faynan 16, southern Jordan, yielded 47 decorated stone and bone artefacts. This exciting assemblage, one of the largest from the PPN Near East, consists of decorated utilitarian tools and ornaments, incised bone items, and pattern-incised stones. The decorated tools were used and then deliberately fragmented, but show signs of continued handling before eventual discard. Some of the pattern-incised stones were manufactured to represent fragmentation. Many of these artefacts were discarded in the midden fill of a large communal structure. The same motifs are seen in each category, and have stylistic affinities to decorated items from other PPNA sites in the Levant. Using analogy with decorated artefacts from Aboriginal Australia and from Saudi Arabia I will suggest that the artefacts had three inter-related functions. First, they demonstrated social identity and lineage from a kinship group. Second, they symbolised the link between people and the place where they lived. Third, in a society where travel and contact with other communities was common, they symbolised and maintained the association between an individual, his/her kinship group, and their native settlement. Fragmentation was a metaphor for the establishment of new social groups.
- 252 Mühl, Simone 4 Reconstructing  
12 Thursday  
Afternoon
- The Development of Irrigation in the Land of Ashur**
- Germany • Institute for Near Eastern Archaeology, LMU Munich • Simone.Muehl@vaa.fak12.uni-muenchen.de
- The suggested paper focuses on Assyrian irrigation practices in the region of Ashur and south of the Lesser Zab. This area has only been studied rarely whereas the landscapes of the neighbouring late Assyrian capitals (e.g. Nimrud or Nineveh) and the large irrigation systems connected to them have been analysed in great detail. Therefore the roots, evolution and transformations of the Late Assyrian landscape in the Tigris region still lie in the dark. The comprehensive study of Assyrian settlement patterns based on an analysis of satellite imagery and results of regional Iraqi salvage excavations can shed new light on the questions of when, where and why certain aspects of irrigation technology were implemented in this part of Assyria.
- Therefore, the study also involves a critical look at existing Iron Age climate proxies that can be combined with emic information such as Assyrian historical texts and iconography. The evidence that is won by this approach emphasizes differing environmental conditions in Late Bronze and Early Iron Age north-eastern Mesopotamia. Based on this discussion it can be shown that the situation between middle and late Assyrian irrigation landscapes defers remarkably, even though both systems may look similar to some extent at first.
- 253 Müller-Neuhof, Bernd 6.1 Reports Region  
13 Friday  
Morning
- Jawa's Hinterland: Mining, Farming and Settling in the Chalcolithic/Early Bronze Age Northern Badia of Jordan**
- Germany • Deutsches Archäologisches Institut, Orientabteilung, Berlin • bernd.mueller-neuhof@dainst.de
- After four years of surveys in the Jawa hinterland in the framework of the archaeological survey project "Arid habitats in the 5th to the early 3rd millennium B.C.: mobile subsistence, communication and key resource use in the Northern Badia (NE-Jordan)" which ends in March 2014, a highly diversified character of the C/EBA socio-economy in this region can be stated, which even shows possible contacts to coeval cultures in the desert regions in the south of Jordan and in the Sinai. The paper will discuss these final results of the Jawa hinterland project and the possible supraregional connections of the C/EBA hinterland of Jawa.

- 254 Müller-Wiener, Martina 7 Islamic  
11 Wednesday  
Morning
- Regionalism and Interaction: ceramic traditions as indicator of sociopolitical and economic transformations in early Islamic Syria and Iraq**
- Germany • TU Berlin - FG Historische Bauforschung • muewie@uni-bonn.de
- The paper will present first results of a research project that deals with the relations between Northern Syria, the Jazira and Iraq under late Umayyad and early Abbasid rule based on Umayyad and Early Abbasid pottery from archaeological sites in Northern-Syria and Mesopotamia. The project aims at a refinement of the current view on Umayyad pottery, which is dominated by the comparatively vast and well-known material from the Southern bilad al-sham. This somewhat biased view neglects developments in the first half of the 8th century when under the caliph Hisham ibn Abd al-Malik and his successors the geographical focus of power shifted to the north. Furthermore the concentration on the material culture of southern bilad al-sham and the relative ignorance of the north prevents us to realize the far-reaching differences between the material cultures of the two areas. Actually, as regards the material culture, southern and northern bilad al-sham are two separate cultural landscapes and one factor that informed their respective cultural identities is the network of transregional trade routes.
- 255 Müller, Maya 1 Egypt  
11 Wednesday  
Midday
- Decorated Tunics from Late Antique Antinoe reflecting the Egyptian Perception of Near and Middle Eastern Exotic Peoples**
- Switzerland • Basel • maya.u.mueller@bluewin.ch
- A number of fragmentary tunics found in Middle Egyptian necropoleis are decorated with tapestry woven panels depicting the story of anonymous heroes or the troupes of Dionysos conquering the Amazons or Indians, both considered to be dangerous and equally attractive peoples, from an artistic point of view. Egyptian written sources, such as the Demotic narrative of the ‚Amazon‘ Queen Serpot, or the ‚Dionysiaca‘ by Nonnos of Panopolis basically relate the same stories, even if in great detail and with different accents, connecting the Amazon to the Indian theme as do the textiles. While the Indus and Oxus valleys were well-known trade-routes, even the Amazons were not thought to be mere products of imagination, in Late Antiquity, as demonstrated by the Alexander romance of Pseudo-Callisthenes who associates them with the (historically well established) Meroitic female ruler, the Kandake.
- The archaeological material, the ‚illustrated‘ tunics, can be identified as belonging to upper class inhabitants of flourishing Middle Egyptian cities of the 5th/6th centuries. Wearing pictures with an interesting combination of mythological and political connotations, they made a public statement on a point of Weltanschauung, thus allowing the modern researcher to reconstruct the relevance of ideas about strange peoples in everyday reality.
- 256 Müller, Miriam 1 Egypt  
09 Monday  
Evening
- Differences in Settlement Structure and Burial Customs as Perception of Alterity at Tell el-Dab'a I**
- USA • Oriental Institute Chicago • mmuller@uchicago.edu
- Tell el-Dab'a, famous for its mixed Egyptian-Asiatic population has yielded a variety of cultural expressions that show a blend of Egyptian and Near Eastern traditions and thus a very specific approach of how to deal with the respective other culture. The archaeological record gives remarkable insight into the inhabitants' cultural affiliation, their disposition to adopt new concepts, their answer to changing environments and their very own interpretation of certain customs. My paper will present the results of a detailed household analysis of different properties in a neighborhood (Area F/I) of the late Middle Kingdom. Since the inhabitants used to bury their deceased within the settlement, not only domestic contexts but also data from the mortuary landscape could be taken into account. Both architecture and finds revealed a strong focus on ancestor cults displaying Egyptian and Near Eastern customs, but essentially forming a new concept of venerating deceased family members at home and at the tomb. The archaeological record allows us to deepen our understanding of how the inhabitants of Avaris perceived their own cultural affiliation and identity and it sheds light on the socio-cultural structure at a time that was essential for the formation of the Hyksos kingship.

- 257 Muhesen, Sultan – Naimi, Faisal 6.1 Reports Region  
**Recent Archaeological Discoveries from Qatar** 13 Friday  
 Qatar • Qatar Museums Authority • smuhesen@qma.org.qa Afternoon  
 Systematic excavations in Qatar started in the 1950's with the Danish Expedition to the Arabian Gulf. Further fieldwork followed in the 60's and 80's by teams from Qatar, Britain and France. The archaeological research into Qatar's past has increased significantly in recent years, driven by ambitious projects of the Qatar Museums Authority (QMA), focusing on research, preservation and presentation of Qatar's archaeology.  
 The results have expanded our knowledge of Qatar's past and in some cases changed and challenged our perceptions. Under the auspices of the QMA national and international excavation projects from Copenhagen, Birmingham, Wales Universities and DAI, are now active in all parts of the country, producing new knowledge of both prehistoric and historic periods. This research combines modern excavation techniques and large scale survey with a wide range of approaches from paleoenvironmental and geomorphological research to archaeological sciences. In order to clarify prehistoric settlement types, contacts with the wider region during the 3rd to the 1st millennium and the occupation pattern of the Islamic Periods to name a few.  
 From prehistory to the late Islamic era, this paper will briefly outline the state of archaeology in Qatar, presenting recent archaeological discoveries and perspectives.
- 258 Muller, Béatrice 6.1 Reports Region  
**Panneaux d'incrustations de Mari, Ville II: Implications des matériaux et des techniques** 12 Thursday  
 France • CNRS, Nanterre • jean\_claude.margueron@sfr.fr Evening  
 Faits d'un agencement de pièces en matériaux divers comme on sait, les panneaux historiés de Mari, malheureusement retrouvés dans un état de conservation qui ne permet pas d'en restituer de façon sûre la composition comme pour l'Etendard d'Ur, se distinguent dans la production syro-mésopotamienne du DA III tant par leur quantité que par leur qualité d'exécution. Le récent démontage et la restauration, en vue de l'exposition sur le temple d'Ishtar occasionnée par le 80e anniversaire de la découverte du site, du panneau restitué par André Parrot et conservé au musée du Louvre, a permis des observations inédites sur l'identification de la coquille et sur les procédés de découpe, amorçant une réflexion sur les savoir-faire et les ateliers mariotes par comparaison avec ceux de Kish, Ur ou Ebla.
- 259 Naderi, Rahmat – Heydari-Guran, Saman 6.2 Reports Themes  
**The Paleolithic Archeology of Kurdistan** 10 Tuesday  
 Iran/Germany • Department of Archaeology, the Azad University of Mahabad; Universität Tübingen, Institut für Naturwissenschaftliche Archäologie • zagrosnaderi@gmail.com; saman.heydari@ifu.uni-tuebingen.de Morning  
 The land of Kurdistan is vast region that politically distributed in between four countries of Surya, Turkey, Iraq, and Iran. From the geographical perspective, this region connects the high plateau of Iran towards to the east, the Anatolian Plateau to the north, the Levant Region to the west, and finally to the south, the Mesopotamian lowland. Based on this regional location, Kurdistan is an important intersection area for early human occupations and even pathway all over the Western and Eastern of the Middle East. The archaeological evidences also have shown that the land of Kurdistan has been occupied by early human from lower to late Paleolithic periods due to its local environmental circumstances such as Mediterranean climate, abundance of water sources, and existing a large number of caves and rockshelters and finally stone raw material availability. One remarkable example is the worldwide known site of Shanidar Cave, because of its spectacular remains of Neanderthal skeletons and long history of human settlements from Middle Paleolithic until middle Holocene. In this paper, while we review the geographical pattern of the sites in the Kurdistan Region, we try to present a chronological framework from Lower to later Paleolithic stages as well.

260 Naeh, Liat

1 Egypt

### **Thrones and Equids: A Typology of Levantine Royal Imagery during the Bronze Age**

11 Wednesday  
Morning

Israel • The Institute of Archaeology, The Hebrew University, Jerusalem  
• liat.naeh@mail.huji.ac.il

Late Bronze Age ivories from Megiddo and Tell el-Fara'a (South) feature some of the rarest examples of complex royal images found in Levantine contexts. These ivories, mostly believed to represent the lifestyle of local rulers, show an anthropomorphic figure seated on a throne in midst of a court scene, much like similar examples found throughout the Ancient Near East as early as the 3rd millennium BC. However, while royal images are not easily identified as such in the absence of written evidence, it seems that additional visual manners of portraying Levantine rulers did exist during the Bronze Age. Among them, the ruler as riding an equid - most probably a donkey - seems to be of particular importance. Perhaps tellingly, this tradition is best known by the depictions of Levantine rulers by Egyptians, as found, for example, on monuments at Serabit el-Khadem, Sinai. Building on the Late Bronze Age ivories as a test case, this paper explores these two different visual traditions of depicting Levantine rulers, in an attempt to suggest their typology and compare them. Through such a typology, questions regarding the cultural identities associated with each of these traditions and their geographical and chronological scopes will be raised.

261 Nia, Abbas Rezaei

6.1 Reports Region

### **The IWAN in Ancient Iranian Imperial Tradition**

11 Wednesday  
Afternoon

Iran • University of Tehran • rezaeenia@yahoo.com

In architectural tradition of Iran, Iwan has always had a special status. Enthusiasm in building Iwan during thousands of years has made this element of architecture the index and symbol of the Iranian culture. Although the genuine concept of this symbol has lost its importance, it is still alive, dynamic and the forehead of the Iranian architecture.

One of the most important sections in palaces, Iwan has been a focal point in all of them. Iwan is a non- separable section in palaces and power centers during many years. It actually seems that palace must be identified by Iwan. Iwan is the significant symbol of kingdom and the index of monarchy. Iwan is the special and the official stand of the kings and the governmental officials. It seems that Iwan has still kept its function and original meaning in the beginning of the Islamic period.

This paper aims at investigating Iwan with regard to concept, situation and importance. The paper also considers the political and social functions of Iwan based on the historical and Islamic periods texts and the archaeological documents.

Key words: Iwan, Iranian Kingdom, concept, symbol, function

262 Nilsson, Maria

1 Egypt

### **Early Caesars in Gebel el Silsila: Quarry Activity under Divine Protection**

11 Wednesday  
Midday

Sweden • Lund University • maria.nilsson@klass.lu.se

The ancient Egyptian site of Gebel el Silsila has been a place of scientific pilgrimage ever since the days of Napoleon; admired for its Pharaonic stelae, cenotaphs and speos. It also features ancient Egypt's largest series of sandstone quarries running for approximately 2.5 km on both sides of the Nile, providing information on quarrying techniques and transportation of blocks extracted for the building of numerous Upper Egyptian temples. Presented is also a great variety of carved and painted commemorations – textual and pictorial – recorded from Prehistory and throughout all subsequent ancient periods. However, the site has never been properly documented, and even after R. Caminos' epigraphic study in the mid 20th century, large areas of material remained unpublished. So, a long-term comprehensive survey project was initiated in 2012 under the patronage of Lund University, endeavouring to document all archaeological features of the site, including a revision of the epigraphic material.

This paper aims to present a summary of results achieved so far, with a focus on physical and religious changes in the landscape during the early Roman period based on archaeological and epigraphic attestations. It will explore Roman extraction and Egyptian divine protectors called upon by the quarrymen for safekeeping.

- 263 Norouzi, Ali Asghar – Heydari, Mohsen 6.1 Reports Region  
10 Tuesday  
Evening
- Saki Abad: A Nomadic Camp Site in Southern Zagros**
- Iran • University of Hamedan; University of Sistan and Baluchestan • Norozi71@yahoo.com; mohsen.heidary4@gmail.com
- Saki Abad is one of the many important sites in the choghakhor wetlands which indicate the nomadic settlement in the chalcolithic period. Rescue Excavations, which was lasted for two months in fall and winter 2010 under supervision of A. Norouzi. Rescue Five trenches were established in order to have a better understanding of life style and subsistence of Chalcolithic people in the above region, a number of nomadic architecture evidence such as stones and mud brick, which are very similar to architecture of present nomad groups, were uncovered during the excavations. The Appeared architecture is similar to modern nomadic "camp ", which its sample was remaining in 400 meter of the south of Kallar Mount. This article will be present to the description and excavation methods, brief description of findings and the results of their relative dating. Keywords: Southern Zagros, Choghakhor wetland, Nomadic camp site, chalcolithic period.
- 264 Özfirat, Aynur 6.2 Reports Themes  
12 Thursday  
Midday
- New Urartian Fortresses in the Mt. Ağrı and its Vicinity (Eastern Anatolia)**
- Turkey • Mustafa Kemal Üniversitesi, Alahan-Antakya • aynurozfirot@yahoo.com
- Around of the Mt. Ağrı region, more than 150 sites have been surveyed which concentrated within the Late Chalcolithic-Late Iron Age timespan. Most of them dated to the Early and Middle Iron Age (Urartu) periods. This paper contains new Urartian fortresses and province center of Mt. Ağrı which is conquered by Urartian king Minua (MÖ 810-785/780). Minua captured Luhiuni which is capital of Eriqua in the first instance. Eriqua is an Early Iron Age kingdom located on the northern slope of Mt. Ağrı. Minua established a new Urartian province center nearby Luhiuni which called Minuahinili. It was also on the via Transcaucasia.
- Results of survey indicate that Mt. Ağrı was important for the regions of Eastern Anatolia and Southern Caucasia. It is surrounded by Araxes valley on the north side and Doğubayazıt plain on the south side. Fortresses and cemeteries highly concentrated on the slopes of the Mt Ağrı where the mountain lava streams meet the plains. Most of them lies in the Araxes valley which is fertile and suitable for agriculture. Early Iron Age fortresses mostly used until Urartu or built neighboring a new fortress by Urartean Kingdom. The fortresses are surrounded with large fortification walls. All fortresses show similarities: location, architecture and material. The fortresses stand on the high lava hills. They are surrounded with large fortification walls. The cemeteries lies foot of the fortresses and between the lava hills.
- 265 Ornan, Tallay 2 Travelling Images  
10 Tuesday  
Evening
- Reshef and his Enemies on a newly-found Canaanite Cylinder Seal**
- Israel • The Hebrew University of Jerusalem • tallay.ornan@mail.huji.ac.il
- A cylinder seal found during 2013 excavation season at Gezer (Israel), carried out by the Tandy Institute of Archaeology, shows a complex war scene headed by the Levantine god Reshef. Revealed in a cache of a Late Bronze Period destruction level, the seal shows Reshef – identified by his gazelle-head diadem – drawing his large bow towards a group of falling enemies and prisoners. This unique mythological belligerent depiction may serve as an intriguing case for exploring the dynamics of the transfer of visual themes from Egypt to the Levant on the one hand, and the manner of transmission of pictorial compositions from monumental to miniature art on the other hand. Within this complex process of artistic borrowing there is a major ideological religious conversion of the Levantine agenda: the mighty Pharaoh becomes a major Near Eastern god.

- 266 Osborne, James – Ur, Jason 6.1 Reports Region  
09 Monday  
Evening
- Results of the Erbil Plain Archaeological Survey (EPAS), Kurdistan Region of Iraq**
- USA • Johns Hopkins University; Harvard University • josbor24@jhu.edu
- The Erbil plain (Kurdistan Region of Iraq) preserves a wealth of archaeological remains. Habitant sites range from small villages to imperial cities, and from the Neolithic to the present. The archaeological record is, however, far more substantial than just settlement sites; it also includes diverse and abundant off-site features. For example, pre-modern trackways (“hollow ways”) extend for several hundred kilometers in aggregate, and relate mostly to sites of the Bronze Age. The hydraulic landscape is particularly vivid, including open canals of varying scale and date particularly well preserved for the Neo-Assyrian through Early Islamic periods, and a rich record of qanat/karez systems (largely Medieval through Ottoman). This paper will review the field and remote sensing methods of the Erbil Plain Archaeological Survey (EPAS) and then discuss results from two seasons of field work. We present preliminary settlement patterns of major periods of occupation in targeted areas of field survey as well as a description of our current understanding of off-site features in the region.
- 267 Ovadiah, Asher 5 Dealing with the Past  
12 Thursday  
Midday
- Mt. Carmel, Pythagoras and Elijah's Cave. Context and Meaning**
- Israel • Tel Aviv University • asher.ovadiah@gmail.com
- Literary sources suggest that Mt. Carmel was a sacred site for the pagans, for the veneration and worship of Ba'al, as practiced there since the ninth century BCE through the erection of altars and temples/shrines in his honour. According to Iamblichus, the Greek philosopher Pythagoras, on his way to Egypt, visited the mountain in the second half of the sixth century BCE and sought solitude in a temple or perhaps a temenos. In the days of the Achaemenid king of Persia, Darius I (521-486 BCE), the mountain seems to have been sacred to Zeus.
- The Elijah's Cave, on the western slope of Mt. Carmel, appears primarily to have been a natural cave, which over the course of time was elaborated, enlarged and adapted for religious purposes. The earliest written testimony, recording the existence of Elijah's Cave on Mt. Carmel, is the laconic description of the Russian Abbot Daniel, who made a pilgrimage to the holy Land in 1106-1107. Circumstantial evidence suggests that the Cave had been used as a pagan cultic place or a shrine to Ba'al Carmel, with Pan and Eros as secondary deities, in Antiquity and Late Antiquity.
- 268 Palermo, Rocco 3 Traditions  
10 Tuesday  
Morning
- Local Traditions and Regional Influences: Hellenistic Mesopotamia in Context. The Data from the first two Seasons of the Land of Nineveh Regional Project**
- Italy • University of Udine • roccoplrm@gmail.com
- After the collapse of the Assyrian Empire, Northern Mesopotamia experienced a transitional period during which the central role it had enjoyed in the previous centuries was partially lost because of the new dynamics brought about by the Achaemenid power. The picture somehow changed after the Seleucid conquest of the region. From the late 4th century BCE to the mid 1st century BCE the area grew quite wealthy and prosperous. The interaction of western cultures with the local traditions certainly brought the area to become a sort of mixed region both on the social and the cultural point of view. The aim of this paper is therefore to track the main characteristics of the Hellenistic Northern Mesopotamia, through the analysis of the data retrieved by the first two campaigns of the Land of Nineveh Regional Project in Iraqi Kurdistan. Both the pottery and settlements patterns will be presented and contextualized within their environmental and historical framework in order to preliminarily define some aspects of the urban and rural development of the region. Change and persistence in ceramic traditions will be also discussed in the paper, focusing on the continuity both from the previous and into the following periods, as well as the overlapping of local traditions with western cultural impulses throughout the whole region.

- 269 Palmisano, Alessio – Altaweel, Mark 4 Reconstructing  
12 Thursday  
Evening
- Understanding Past Human Settlement Hierarchy in Central Anatolia during the Old Assyrian Colony Period**
- UK • University College London • a.palmisano@ucl.ac.uk; m.altaweel@ucl.ac.uk
- This paper highlights a spatial interaction model to forecast and understand past human settlement hierarchy in Central Anatolia during the Old Assyrian colony period (ca. 1970-1718 BC). We propose applying a novel method to forecast, firstly, which sites would have been occupied in the Middle Bronze Age and, secondly, which sites and areas would have become prominent in this period using an entropy-maximising spatial interaction model (“retail model”) that will use known archaeological sites as point data and textual evidence for calibration purposes. The case study’s modelling results can be checked against empirical results of archaeological survey undertaken in Anatolia in the past years. The model addresses to which extent geography, transportation, external contacts, and factors make locations attractive for trade and settlement and why some archaeological sites become relatively major settlements in the period discussed. This includes how political and geographic constraints affect regional settlement transformations, while also accounting for uncertainty in the archaeological data. The results not only demonstrate how major settlements emerge, but how such emergence develops at the expense of other sites and because of political circumstances or external factors affecting a region. At a more general level, the results demonstrate a quantitative model that is useful in explaining past human settlement patterns across landscapes at different scales.
- 270 Paterakis, Alice Boccia – Omura, Sachihito 6.1 Reports Region  
12 Thursday  
Morning
- Gold Cloisonné from the Assyrian Colony Period in Central Anatolia**
- Turkey/Japan • Japanese Institute of Anatolian Archaeology, Kaman, Kirsehir • alicepaterakis@yahoo.com
- A unique example of a gold cloisonné object dating to the 19th c. BCE was discovered in the Kaman-Kalehöyük excavations in Central Anatolia. The gold object (KL10-1) was unearthed in Room 409 that has been identified as a workshop dating to the Period of the Assyrian Trade Colonies by the Japanese Institute of Anatolian Archaeology. Initial reconstruction reveals a lion rearing up on its hind legs. A row of tubular stringing holes at top and bottom, the empty cloisons, and the unchased gold surface suggest an unfinished arm band, bracelet, or belt ornament. The gold is 0.5 mm thick and weighs 104 grams. The iconography and function of the artifact as well as the analysis by XRF and other techniques of the metal composition and method of manufacture (hammering, casting, diffusion bonding or soldering to create the cloisons) will be presented. Technological parallels of contemporaneous Egyptian Middle Kingdom jewelry consist of a gold cloisonné pectoral (ECM 1585) in the collection of Eton College and gold plaque (Carter no. 585s) from King Tutankhaman’s tomb. Similar Assyrian iconographic motifs have been recovered in seals at Kaman-Kalehöyük. Such a gold find is unparalleled in Central Anatolia to date.
- 271 Pedrazzi, Tatiana 1 Egypt  
09 Monday  
Afternoon
- Identity and Alterity in the Early Iron Age Northern Levantine Coast: a Hypothesis of “Code-Sharing” in the Material Culture**
- Italy • Istituto di Studi sul Mediterraneo Antico (ISMA), Consiglio Nazionale delle Ricerche (CNR), Roma • tatiana.pedrazzi@isma.cnr.it
- This paper has the main aim of discussing the existence of a true dichotomy between local and non local elements in the material culture of the Northern Levantine coast, at the beginning of the Iron Age, with particular regard to the pottery. Beyond the well-known “pots and peoples” problem, we try to suggest a new taxonomy, based on a scale of values moving from the fully local objects to the fully non-locals ones. Some pottery classes, such as the so-called Handmade Burnished Ware or the “Aegeanizing” local ware, are good examples of objects usually considered as “non-local”. Instead of judging “foreign elements” all the strange and unfamiliar features appearing in the Northern Levantine pottery during the Early Iron Age, we will propose that the “identities” of peoples behind the objects can be analysed only taking into consideration the different degrees of hybridity. The final hypothesis is that we can adopt in the study of the origin of pottery classes of this particular period the theoretical construct of “code-sharing”, frequently used in linguistics but rarely taken into account in the study of the material culture.

- 272 Petit, Lucas 6.1 Reports Region  
13 Friday  
Afternoon
- Tell Damiyah. A Small Settlement Mound in the Jordan Valley with a Remarkable International Role**
- The Netherlands • National Museum of Antiquities, Leiden • l.petit@rmo.nl
- In the years 2004 and 2005 the speaker conducted excavations at Tell Damiyah, a small settlement mound located on the eastern bank of the river Jordan. The encountered occupation remains, dating from the 10th until the 5th century BC, were extraordinary and different from finds on neighbouring sites. Measuring only 40x25 meters, this tiny village had played a national and even international role. Egyptian pharaoh's were proud to have captured it, the Assyrians placed a governor at the site and also the writers of the Old Testament knew the place. But why? In order to clarify this remarkable role, the Dutch National Museum of Antiquities started new excavation in 2012. The two seasons produced again interesting and unexpected results.
- 273 Petrovsky, Karin 3 Traditions  
11 Wednesday  
Morning
- The Tomb Complexes of Petra: Cross-cultural Encounters, Innovative Developments and Ancient Concepts**
- Germany • Humboldt-Universität zu Berlin • kpetrovsky@yahoo.com
- The rise of the Nabataean kingdom found its expression in the formation of a material culture that, to a certain extent, reflects the location of its political and economic centre around Petra at the crossroads of the trade routes crossing the Arabian Peninsula from south to north and east to west. As evidenced for Palmyra, the strategic position and the economic interrelations provided for an intercultural context that produced a unique blending of various traditions of "Near Eastern", Egyptian, Hellenistic and Roman origin. Unlike Palmyra, however, no former sedentary local tradition was preexistent in Petra: it was newly established – a circumstance which complicates the challenging task to reconstruct the sources and interacting factors underlying this process.
- The public and private architecture, especially the tomb architecture, belongs to the most remarkable achievements of the Petraean heritage, given its monumentality and originality. This paper focuses on the evidence of an Egyptian "input" within the eclectic formal language of the tomb monuments. Beyond individual architectural elements and stylistic features that have already been examined for the purpose of a stylistic and typological classification, the building type of the tomb complex will be pursued in order to trace back the origin of possible prototypes, their concepts of use and their involved social and religious conceptions. For this attempt the traditional Egyptian as well as the younger Hellenistic and Roman tomb architecture will be included into a comparative structural analysis.
- 274 Philip, Graham 6.2 Reports Themes  
11 Wednesday  
Morning
- Death and Burial in the Ancient Near East: the "Big Picture"**
- UK • Durham University • graham.philip@durham.ac.uk
- Formal disposal of the dead is widely practised today and it is often assumed that this was also the norm in the past. However, research being conducted by the "Invisible Dead" project (funded by the John Templeton Foundation) suggests that the situation was rather different. An analysis of long term changes in burial practice in the Levant from the mid-4th to mid-1st millennia BC indicates marked temporal and spatial discontinuities in the burial record. Some periods have produced so few burials that the practice appears to be the exception rather than a norm, while contemporary societies in neighbouring regions can demonstrate very different mortuary records. While these patterns might once have been dismissed as reflecting the uneven pattern of fieldwork, this view is no longer tenable, and we must now reconsider the variable significance of the dead to past populations, and take this opportunity to explore how changing trends in treatment of the human body and attitudes towards death might reflect wider developments in society, economy and belief.

- 275 Pinnock, Frances 5 Dealing with the Past  
11 Wednesday  
Midday
- Dealing with the Past at Ebla. Ancestors' Cults and Foreign Relations**
- Italy • Sapienza – University of Rome • frances.pinnock@uniroma1.it
- Recent discoveries and researches brought to the identification of cult places related to complex ceremonies, sometimes performed outside towns, and possibly involving bi- or multi-lateral relations among polities. Within the sphere of the Project “Ebla and Its Chora”, funded by the European Research Council (FP7–IDEAS 249394) the role of Ebla in some of these rituals will be taken into account, trying to identify the range, and hierarchy, of its foreign relations. The starting point will be the analysis of the Ritual of Kingship, and its meaning for the control over the territory of the Chora of Ebla, but also the relations between Ebla and Northern Syria will be taken into account in this perspective.
- 276 Pizzimenti, Sara 6.1 Reports Region  
13 Friday  
Morning
- A Reassessment of the Iron Age I-III Pottery in Northern Levant. The Contribution of the Iron Age Levels of Tell Mardikh-Ebla**
- Italy • Sapienza University of Rome • sara.pizzimenti@gmail.com
- Systematic studies on Northern Levant Iron Age pottery started in the 1980s, when Stefania Mazzoni constructed an Iron Age periodization thanks to the stratigraphical sequence from Tell Afis. Furthermore, Gunnar Lehmann in his work of 1996 explored the development and distribution of local pottery production of the later Iron Age and Persian Period. Lastly, Matthew R. Whincop made in 2009 a general work on Northern Levant Iron Age pottery, analyzing the pottery assemblages of 54 sites with the purpose to make a historical and cultural reconstruction. Aim of this paper is a general reassessment of the Iron Age pottery in Northern Levant thanks to a preliminary account on the Iron Age evidence recovered in Ebla especially during the latest archeological campaigns, and the related pottery material.
- 277 Poggio, Alessandro 3 Traditions  
09 Monday  
Afternoon
- The Hellenic Impact on the Dynastic Figurative Language in 4th-Century Lycia**
- Italy • Scuola Normale Superiore, Pisa • poggio.alessandro@gmail.com
- Lycia is a well-defined region located in the southern part of Anatolia with a peculiar artistic production, notably sculpted funerary monuments dating back to the timespan between the 6th and 4th centuries B.C.E. The majority of them are recognized as the tombs of local dynasts, thus their analysis may cast light not only on artistic issues but also on the ideology of power that Lycian rulers promoted.
- Although Lycia offers a well-studied context with respect to the interaction of local cultures with Hellenic and Persian elements, more attention should be devoted to identifying different phases of these cultural phenomena. The 4th century B.C. E., for instance, is a crucial point for a wider diffusion of Hellenic artistic tendencies across the Mediterranean, affecting Lycia as well.
- Starting from the Nereid Monument from Xanthos, a dynastic tomb displaying a complex decoration including friezes and free-standing sculptures, my paper will put into context the role of the Hellenic artistic impact in shaping the Lycian tradition into a new dynastic language in the 4th century B.C.E. Further monuments from this region and the Eastern Mediterranean will be considered in order to draw a cultural picture of the Western part of the Achaemenid Empire.

- 278 Polcaro, Andrea – Muniz, Juan – Alvarez, Valentin 6.1 Reports Region  
**The New Spanish-Italian Expedition to the EB I site of Jebel al-Mutawwaq, Middle Wadi az-Zarqa, Jordan: Preliminary Results of the 2012-2013 Campaigns** 13 Friday  
Morning  
 Italy/Spain • Università degli Studi di Perugia • andrea.polcaro@gmail.com  
 Jebel al Mutawwaq is an Early Bronze Age I site located along the Middle Wadi az-Zarqa, excavated since the 1982 by a Spanish Expedition led by Fernandez Tresguerres Velasco of Oviedo University. Since 2012 a joint project of Perugia University, Italy, and the Sant Esteban Faculty of the Pontificia Universidad of Salamanca, Spain, restarted the excavation to the site, focalizing mostly on the large dolmen field around the EB I village, which has more than seven hundreds of megalithic monuments still preserved. The paper will present the preliminary results of the 2012-2013 campaigns: these were concentrated in the southern sector of the necropolis, characterized by the particular good state of preservation of dolmens and the proximity to the village. The two first years of excavations gave important results on the dolmens architecture, use and also the stratigraphical and chronological relationship between the megalithic necropolis and the EB I village.
- 279 Poli, Paola 6.1 Reports Region  
**Seals and Sealings from Tell Masaikh-Kar-Assurnasirpal, New Results.** 12 Thursday  
Midday  
 Italy • University of Ferrara • poli.p@libero.it  
 The site of Tell Masaikh, identified as the Neo-Assyrian colony of Kar-Assurnasirpal, was excavated by a French team under the direction of M. G. Masetti-Rouault from 1996. Founded on an ancient tell by Assurnasirpal II, the site has been reorganized at the beginning of the 8th century by Nergal-Eresh, governor of Rasappa, and transformed again probably under Tiglath-pilese III's rule. A collection of more than one hundred of seals and impressions of cylinder and stamp seals have been brought to light on the acropolis of the site. On the basis of the iconographic analysis the material can be divided into three groups: examples characterized by typical imperial Neo-Assyrian tradition, examples with iconographic details of the Middle-Assyrian repertory, examples that seem reflect local or foreign traditions. Aim of the paper is to present some of the most significant pieces, not yet published, in relation to other glyptic items found at the site in order to shed light on the role of a colony on the Syrian Lower Middle-Euphrates during the Neo-Assyrian and, in all likelihood, during the Neo-Babylonian period.
- 280 Politis, Konstantinos D. 7 Islamic  
**The Origins of the Sugar Cane Industry in the Eastern Mediterranean** 10 Tuesday  
Morning  
 Greece • European Social Fund (ESPA) Researcher, University of Athens • kdpolitis@hsnes.org  
 Although the method of making sugar originated in south-eastern Asia over 3,000 years ago, its industrial production was developed during the early Islamic period (7th–10th centuries AD) by Arab scholars with knowledge of ancient Greek and Persian science and technology. Sugar manufacturing increased with the European Crusaders in the Levant (11th- 12th centuries AD) and the trade flourished in the subsequent Islamic Ayyubid-Mamluk era (13th -15th centuries AD). Recent archaeological evidence and new research indicate the possibility of an establishment of the sugar industry in the eastern Mediterranean as early as the 8th or 9th centuries A.D., substantiating Arab accounts of that time. In the 11th century European Crusaders dominated the region and maintained large factories to produce it, exporting much of it to Europe. When the Ayyubid-Mamluks recovered Arab control of the lands in the 12th – 13th century, they expanded these complexes particularly in the well-watered Jordan and Nile river valleys and profited enormously through the trade of sugar until around the 15th century when intense European interest in sugar led to the establishment of factories to produce it on the islands of Cyprus, Rhodes and elsewhere.

- 281 Prosser, Miller 5 Dealing with the Past  
**Re-imagining Imaging for Archaeological and Philological Projects** 12 Thursday  
 USA • University of Chicago • m-prosser@uchicago.edu Morning
- Capturing, organizing, and displaying accurate and useful images is a challenge for any research project. This paper will present a field-tested comprehensive system for digital imaging for archaeological and philological research projects, from image capture, to integration, to presentation and preservation. Powerful methods for capturing field and object photos will be presented, including recently field-tested approaches to aerial photography for photogrammetry and reflectance transference imaging for low relief objects like inscriptions and seal impressions.
- Creative and powerful approaches to integrating project data and digital images will be presented in detail, with examples from active research projects such as the Neubauer Expedition to Zincirli and the Persepolis Fortification Archive Project. In these examples, project data and images are integrated in a comprehensive hierarchical item-based database system called OCHRE, the Online Cultural and Historical Research Environment, where thousands of images, plans, artifact descriptions, analyses, and notes are organized and interconnected through various strategies.
- Within this highly atomized and systematically organized approach, project data can be easily retrieved and displayed together online as a digital publication. This approach to data organization also allows for easy preservation of data, a consideration which has already become a requirement by most granting institutions.
- 282 Pustovoytov, K. – Riehl, S. 4 Reconstructing  
**The Early Bronze Age/Middle Bronze Age Transition and the Aquifer Geography in the Near East** 10 Tuesday  
 Germany • Universität Hohenheim • Konstantin.Pustovoytov@uni-hohenheim.de Morning
- The transition from Early to Middle Bronze Age in the Near East has been accompanied by dramatic changes in political, economic and cultural life of ancient societies. The driving forces of these processes are still debated. An ecological shift in the region towards more arid environments has been proposed by many as a potential trigger, however testing this hypothesis is complicated by the scarcity of local paleoenvironmental records. Here we overview the spatial relationships between the Early and Middle Bronze Age archaeological sites and productive aquifers in the Near East on the basis of the literature and our own data. The analysis shows that the historical transition involved pronounced changes in the arrangement of settlements regarding aquifers. During the Early Bronze Age, about 65% of settlements in the Levant and 74% of settlements in Upper Mesopotamia were located more than 20 km away from productive aquifers. In the Middle Bronze Age, this proportion dropped down to 53% and to 47% in the Levant and Upper Mesopotamia respectively. Although other factors may have played a role, this change suggests a stronger dependence on water in the Middle Bronze Age. The less obvious change in the Levant can be explained by higher proximity to the Mediterranean Sea.
- 283 Puturidze, Marina 6.1 Reports Region  
**The Development and Continuity of Mid IV – Late III Millenniums BC Ceramic Assemblage: View from Eastern Georgia** 13 Friday  
 Georgia • Tbilisi State University • marinaarchaeology@yahoo.com Morning
- The period spanning between the mid IV - mid III Millenniums BC was a time interval of wide occupation of Caucasus and beyond south by the population of Kura-Araxes culture. Most wide distribution and long term continuity of kura-araxes, since the mid 30s of XX century, attracts great attention of many scholars. Keen interest of different archaeological schools of Western and Asiatic world has become increasingly obvious lately. It raises hopes that still unclear issues of this Early Bronze Age culture might be studied with the help of well coordinated scientific projects.
- Kura-Araxian ceramic assemblage which is a main identifier of this culture, showing above all, definite phases of its development and traditional peculiarities of local variants of distancing from each other areas of the vast territory distribution of Kura-Arax culture. Therefore, detail study and special comparative analyses of ceramics of eastern Georgia, which is admitted as a territory of origination of this culture, is an urgent necessity for better understanding of still unclear problems.
- Three (according to some scholars four) different phases of Kura-Arax culture was distinguished on base of ceramic production. Nevertheless, continuity and development of typological groups, especially at the end of kura-araxes and followed to it cultural unites (Marqopi and Bedeni), still requires to be studied. Kura-Arax culture, as well the followed ones, brought many innovations in all spheres of life across the vast territory of its occupation. Most clear evidences about this innovations concentrates the ceramic assemblage, by the help of which can be sure indicated process of changeovers in cultural development of eastern Georgia.
- Our main goal is to uncover the process of continuity of ceramic production through the IV – III millenniums BC.

- 284 Rafiei Alavi, Babak 6.2 Reports Themes  
12 Thursday  
Afternoon
- The Relation of Khuzestan with Zagros and North/Northwest Iran during the Middle Elamite Period in the Case of Metal Artifacts of Haft Tappeh**
- Germany • Goethe-Universität, Frankfurt am Main • babak5617@yahoo.com
- Bei neueren Grabungen in Haft Tappeh seit 2005 wurden mehrere Metallartefakte, unter anderem verschiedenen Typen von Äxten und Dolchen, geborgen. Diese neuen Objekte können, zusammen mit den in den siebziger Jahren publizierten Metallexemplaren, Hinweise auf die Beziehungen zwischen Haft Tappeh und den so genannten „Luristan-Bronzen“ sowie den Exemplaren aus dem Norden Irans – aus den Talesh-, Amlash- und Deilaman-Gebieten – innerhalb der Spätbronzezeit und zu Beginn der Eisenzeit I vermitteln. In diesem Vortrag sollen Möglichkeiten aufgezeigt werden, die den Einfluss von Khuzestan – dem Zentrum von Elam – auf die westlichen und nördlichen Gebiete verdeutlichen. Damit wird ein Beitrag zur Rekonstruktion der wirtschaftlichen und politischen Verhältnisse im Iran während der Spätbronzezeit und Beginn der Eisenzeit I geleistet. Stichworte: Haft Tappeh, Metallartefakte, „Luristan-Bronzen“, „Amlash-Bronzen“, Spätbronzezeit/Eisenzeit I
- 285 Raiano, Fabiana 6.1 Reports Region  
13 Friday  
Afternoon
- Pottery from the Joint Uzbek-Italian Archaeological Activities at Koj Tepa (Samarkand Area - Uzbekistan)**
- Italy/France • Università degli Studi di Napoli “L’Orientale” & École Pratique des Hautes Études, Paris • f.raiano@gmail.com
- The report presents the results of the study of the ceramic coming from the excavation of the joint Italian-Uzbek Archaeological Mission, directed by Prof. B. Genito of the Università degli Studi di Napoli “L’Orientale” and Dr. K. Abdullaev of the Institut Arkheologii Ya. Guliamov at Koj Tepa. The site (2,62 ha) is located in the Pastdargom district (Samarkand area) close to Chandyr village, 27 km S-W from Samarkand, and consists of a central citadel (tepe) delimited by walls. Since 2008, the excavation was conducted on the southern and eastern encircling walls, the central area between southern walls and the central tepe and on its top. The analysis of ceramic materials were conducted on the basis both of an archaeometrical approach, in order to observe the mineralogical compositions of the body clay, and a typological, in order to propose a relative chronology of the artifacts. Up to now, also on the basis of comparisons with the pottery coming from other close areas, the chronological time span of Koj Tepa seems to go back to the late 2nd BC and 5th AD.
- 286 Rashid, Nargis 7 Islamic  
11 Wednesday  
Afternoon
- Sgraffito Pottery from the First Muslim Conquered City of Debal (Banbhore), in South Asia-Pakistan**
- Pakistan • University of Karachi • nr2ky@hotmail.com
- Muslim Civilization is normally known for borrowing and assimilation of ideas from the conquered non-Muslim empires, to put into more exquisite and appealing innovations. Sgraffito pottery is generally known as the invention of western world specifically Italy but it was introduced by Muslims, during the times of Abbasid Caliphate in 11th or 12th century. This type of pottery manufactured and distributed in the west or the corners of the world by the Muslims. It was rather considered to be the vessels of kings; from the Muslim empires to the courts of France, Byzantine or Russian czars it was favorite and preferent to all. Contacts between the non-Muslim and the Muslim World were close; furthermore, excavations in Greece (Corinth), Bulgaria, Oman, Crimea (Chersonesos) and in Cyprus (Nicosia), India, Pakistan yielded its various forms. The trade of Sgraffito pottery to the West was first carried out by the Byzantines. This Abbasid innovation head its way to the south Asia- Pakistan; the famous site of Debal (city conquered by Muslims in 711C.E), presently known as Banbhore- (1st BCE to 13th century CE). This paper will inquire the hidden esthetic and cultural elements of Sgraffito pottery with special reference to Banbhore.

287 Rassmann, Philipp M. 5 Dealing with the Past

**Repurposing and Re-depositing Levantine Neolithic Ground Stone Tools**

09 Monday

USA • University of Washington • prassmann@gmail.com

Afternoon

This paper discusses how northern and southern Levantine Neolithic ground stone tools served applications different from the ones they usually are known for and did so within new contexts. The study of prehistoric Levantine ground stone tools traditionally focuses on their role as processors of raw materials and food, emphasizing the mechanical processes by which they operated and how design traits served to improve functionality. However, the incorporation of a number of tools within atypical contexts, such as the inclusion of querns and small processing tools within architectural support structures and pits, suggest that they served non-mechanical functions as well. This paper suggests that re-depositing tools might have served as a symbolic representation of associating the original functions of the tools with their new contexts.

To fully understand how the tools were incorporated into these contexts, this paper discusses new methods of evaluating tool surface modifications to reveal how the tools were reshaped to serve new applications. The result is a picture of tool rejuvenation that served as a means of preserving highly esteemed items within a complex interplay of context and function. Both PPNA and Halaf examples are discussed to illustrate the findings of this study.

288 Rattenborg, R. (1) – Brøndgaard Jensen, M. (2) – Thing, E. (2) – McPhillips, S. (3)

7 Islamic

10 Tuesday

**Urban Spaces of Early Islamic Jarash: Recent excavations of the Danish-Jordanian Islamic Jarash Project, Jarash, Jordan**

Morning

UK • 1 Durham University; 2 University of Aalborg; 3 University of Copenhagen • rune.rattenborg@durham.ac.uk

On-going investigations of the Danish-Jordanian Islamic Jarash Project, jointly undertaken by the Department of Antiquities of Jordan and the University of Copenhagen since 2002, have uncovered a substantial transect of Early Islamic urban structures, with major new findings made in 2012 and 2013.

A complex sequence of rebuilding and altering existing structures, and an extensive pottery horizon exist for the 7th – 10th centuries characterised by a remarkable degree of settlement continuity. Highlighting the dynamics of continuity and transformation of urban spaces during the late Byzantine and early Islamic Periods, this paper presents an integrated overview of stratigraphic, architectural and ceramic data. Viewed in a regional context, with an appreciation of similar complexes found in north Jordan and within Jarash itself, the resilience of social life through the transformative coalescence of the different ideological and cultural traits of late Byzantine and early Islamic tradition lends important correlates to traditional historical narratives. Coupled with a discussion of the changing arrangements of domestic, religious, and economic urban spaces observed in the archaeological record, these data lend important insights into the character of Early Islamic social life in the Bilad as-Sham.

289 Rattenborg, Rune

6.2 Reports Themes

**Land of Behemoths: Altering Concepts of Political Power and Territoriality in the Middle Bronze Age Fertile Crescent**

11 Wednesday

Midday

UK • Durham University • rune.rattenborg@durham.ac.uk

The dialectic of contemporary notions of political power and social space has seen some substantial conceptual revision in recent decades. Studies in political science and human geography of the post-Cold War era have made important contributions towards a fragmentation and spatialisation of political power (e.g. Biersteker & Weber 1996; Elden 2009). This centres in particular on the dismantlement of our traditional notion of sovereignty as emanated through spatially contiguous political power, itself an idealised derivative of the much more complex historical development of the nation state (Murphy 1996; Agnew 2005; also Smith 2003).

In light of emerging new approaches to social complexity in the Bronze and Iron Age Fertile Crescent (Liverani 1992, Ristvet 2008, Brown 2013) I propose here to review traditional historical assumptions about the nature of early state power, namely through an examination of the socio-spatial relationship between localised economic infrastructures and regional polities of Bronze Age 18th century Upper Mesopotamia. By reviewing concepts of centralisation and control through the combined study of administrative cuneiform documents and settlement patterns detected through archaeological survey and remote sensing, this paper argues for a much-needed re-configuration of our understanding of territory and political power, and the need to appreciate the workings of multiple social power networks embedded within the same physical landscape.

- 290 Razee, Soroush (1) – Ravari, Amir Hashamdar (1) – Bemî, Mahyar Khademi (2) 7 Islamic  
12 Thursday  
Evening  
**Qal.è Dokhtâr and Qal.è Ardêšîr of Kerman as a Fortress Complex. A Study Based on Archaeological Evidences and Historical Texts**  
Iran • 1 University of Tehran; 2 Tarbiat Modares University, Tehran • soroush.razee@gmail.com  
South-East of Iran that the ancient region of Carmania (recent Kerman) is located, due to its strategic situation and unique environmental conditions has always been the point of interest among human societies. Two fortresses of Qal.è Dokhtâr and Qal.è Ardêšîr (Girl's fortress - Ardeshir's fortress) are placed in a strategic position in both ancient city of Kerman and its modern reconstruction. Qal.è Ardêšîr, which is placed in a higher altitude than Qal.è Dokhtâr, has a better martial condition and could be considered as the citadel of a fortress complex that is dominant to the area. The architectural structure and surface findings of both fortresses indicate their long background of being inhabited from Sassanian era up to Islamic Medieval times. According to the study of surface findings and historical texts, this essay attends to clarify the significance of these two fortresses as a complex and recognize their identity in historical periods.  
Keywords: Qal.è Dokhtâr, Qal.è Ardêšîr, Kerman, Fortress Complex, Historical Texts, Surface Findings.
- 291 Reali, Chiara 1 Egypt  
09 Monday  
Evening  
**Sealings and Sealing Practice at Avaris, Tell el-Dab'a**  
Austria • Universität Wien • reali.chi@gmail.com  
Recent research at Tell el-Dab'a brought to light a large late Second Intermediate Period city compound of the ancient Avaris. In this district were recovered approximately 1200 scarab seals impressions and further administrative material: a fairly new entry in the study of the material culture on this site.  
The broadening of borders, affecting the whole Near East in the first half of the 2nd millennium BC, impacts also on Egypt, shifting Avaris during the Second Intermediate Period from a peripheral into a central position between the Nile land and the Levant. The city becomes a crossroad of cultures and an Egyptian capital city run by "Rulers of the foreign countries".  
What happens if what is "out of doors" is not so foreign anymore?  
The administrative material from Tell el-Dab'a reflects this acculturation process, and the situation of the 2nd millennium BC, helping in their understanding in terms of exchange, appropriation, and sharing of iconography, goods, and practices.
- 292 Reichel, Clemens 2 Travelling Images  
10 Tuesday  
Morning  
**Far-Reaching Consequences: the Impact of Transferring Symbols and Visual Narratives through Seal Impressions in Late Chalcolithic Northern Syria**  
Canada • University of Toronto • clemens.reichel@utoronto.ca  
This paper addresses the level and extent to which shared iconographic elements and themes from glyptic assemblages reflect inter-regional interactions in proto-urban political landscapes. Recent excavations at Hamoukar, an urban settlement in northeastern Syria that was destroyed around 3,500 BC, uncovered several large administrative complexes. Within these buildings and largely in good context, more than 2,300 clay sealings with seal impressions and several dozen seals were found. Using quantitative and locational analyses, this study compares the relationship between sealing types and iconographic themes at Hamoukar with contemporary assemblages from Anatolia and Southern Mesopotamia. Although most of the seal designs reflect the iconographic repertoire of local northern Syrian stamp seals known from Tell Brak, there are clear parallels with seal motives from the upper Euphrates (Hacınebi Tepe) and Southern-Central Anatolia that betray inter-regional contact with northern and western polities. The presence of cylinder seal impressions and of motives on local stamp seals that are known from Southwestern Iranian glyptic art indicate that, long before the Uruk conquest, Hamoukar's role in long distance trade resulted in the transmission and ultimate amalgamation of certain symbolic and ideological elements from Southern Mesopotamia and the Susiana into the local iconographic repertoire.

- 293 Reifarth, N. – Pümpin, Ch. – Doutrelepont, H. – Vrydaghs, L. 6.2 Reports Themes  
11 Wednesday  
Morning
- Archaeological Micro-Structures in Different Light: Reconstructing Funeral Activities in the Royal Tomb of Qatna, Syria**
- Switzerland/Germany • microArchaeology – Textiles and Organic, Saarburg; Integrative, Prähistorische und Naturwissenschaftliche Archäologie (IPNA), Basel; Research Team in Archaeo- and Palaeo Sciences (ROOTS), Brussels; CreA Heritage – Université Libre de Bruxelles (ULB) • nicolereifarth@gmx.de; christine.puempin@unibas.ch; hugues.doutrelepont@skynet.be; luc\_vrydaghs@yahoo.co.uk
- The study of remains from the Royal Tomb of Qatna, a Late Bronze Age palace complex in Syria, integrates the analysis of soil thin sections, textiles and plant vestiges (woody tissues and phytoliths). The preliminary results raise complex taphonomical issues resulting from the interplay of cultural and postdepositional processes. Micromorphological studies of soil structures from the burial chambers provide evidence for various phases of construction and other human activities. Precious textiles have been preserved due to diagenetic processes in most areas of the tomb. Surprisingly, the majority of the textiles, completely mineralised into gypsum, exhibit extremely fine multicoloured weaving patterns dyed with Royal Purple. Of particular interest are tiny textile fragments directly connected with human bones, indicating a post-treatment of the deceased. Chemicophysical and microscopic analyses revealed the presence of oils, earth pigments and distinctive traces of a heating procedure. The associated plant material probably relates to these rituals. Based on these results, the paper aims to open new perspectives for the scientific examination of micro-traces by means of a close cooperation with an interdisciplinary analytical approach.
- 294 Rembart, L. – Peloschek, L. 3 Traditions  
11 Wednesday  
Midday
- The Influence of the Hellenistic World on the Local Ceramic Production in Syene/Upper Egypt**
- Austria • Österreichisches Archäologisches Institut, Zentrale Wien • laura.rembart@oeai.at
- When Egypt was conquered by Alexander the Great in 332 B.C., an increased Greek-Hellenistic influence spread over Egypt. Apart from few imports from the Mediterranean, the shape repertoire of the Hellenistic prototypes was stylistically imitated, as for example in Syene at the southernmost border of Upper Egypt, by using locally available clay raw materials. Most dominantly, tableware such as the “Echinusbowls” had been reproduced in Syene, testifying to the adoption of Greek vessel shapes. However, the ceramic fabrics of the imports and local imitations naturally clearly differ: While the former are characterised by a high degree of fineness of the clay paste utilized, the latter generally do not follow this tradition but rather seem to be products of poor quality. A comparative thin-section analysis of vessels of both provenances will precisely reveal physical and as such functional properties of the ceramics consumed in Syene. Nonetheless, besides innovations from the Greek-Hellenistic world, Egyptian traditions – such as the polychrome painting of vessels – continued throughout the Roman Imperial Period. Furthermore, Syene developed into a major ceramic production centre disseminating its products all over Egypt.
- 295 Rey, S. – Lecompte, C. – Colonna d’Istria L. 6.1 Reports Region  
10 Tuesday  
Midday
- Tello (Ancient Girsu) and its Countryside: Topographic Layout and Regional Setting of an Early Dynastic Sumerian City**
- Belgium/France • Université de Liège/CNRS • sebast\_rey@yahoo.fr
- This paper’s primary purpose is to present a general overview of the new research project Mesopotamian cities and their hinterlands hosted since 2013 at Liège University and led by L. Colonna d’Istria and S. Rey in collaboration with C. Lecompte (CNRS). The interdisciplinary study of Girsu-Lagaš by S. Rey (archeologist) and C. Lecompte (philologist) is the first focus of this project. It is one of a number of periodically contending city-states that characterized Sumer in the Early Dynastic period. It lay in the south-eastern edge of the Mesopotamian alluvium directly facing the ancient coastline of the Arabic-Persian Gulf and bordering rival city-states of Umma (present-day Jokha) and Uruk (modern Warka). Although the pre-World War II wide-scale French exploration of Tello (ancient Girsu) produced a wealth of pre-Sargonic religious-political data – that is, large-scale public-cultic elite-related architecture, royal statuary, and cuneiform tablets – and the pioneering surveys of the past century led to the identification of Early Dynastic archaeological sites in the environment of Tello, only a few studies are in fact devoted to its urban landscape and hinterland. Hence, the principal aim of this paper is to reconstruct, through a re-assessment of the pre-Sargonic epigraphic records and a re-examination of the archaeological evidence, including declassified Cold War-era satellite imagery, the city’s topographic layout and regional setting in the Early Dynastic period.

- 296 Rezaei, Zahra – Rajaee, M. 6.2 Reports Themes  
**Archaeological Survey of Khonj, Fars, Iran** 13 Friday  
 Iran • Fars Cultural Heritage Department • rezaei.rf@gmail.com Afternoon  
 Khonj -an ancient area in southern Fars province, Iran- is located at the conjunction of Fars cultural zone to the Persian Gulf coast area, specially Siraf which has been a critical mercantile port during different eras. Despite its geographical situation through ages, yet no archaeological survey has been conducted there.  
 First season of Khonj survey carried on in its central district, leads to identification of 121 sites from chalcolithic to late Islamic period. The prehistoric evidence of settlement in Khonj, includes rock shelters, monophasic and polyphasic sites.  
 Furthermore, as a result of kiln making tradition -containing pottery shreds- in Khonj, minor distinctive surface pottery of lower layers is found; this demonstrates lack of Achemanid and Parthian artifacts in the studied regions. Although, there is a sharp increase in Sassanid and Islamic settlements mainly due to management of water sources using qanats, dams and canals. Remarkable presence of archaeological finds such as glasses, slags and architectural structures introduce Khonj as a rich place for studying Sassanid and Islamic periods. Further field researches in Central and Mahmaleh district of Khonj will improve our understanding of prehistoric, historic and Islamic periods and their relationship with other contemporary sites.  
 Keywords: Khonj, Sassanid, Islamic, Fars, Archaeological Survey.
- 297 Rezayi, Mohammad Hossein – Basafa, Hassan – Dehghani, Zeinab 6.1 Reports Region  
**The Effect of Hydrology and Geographical Environment on Development** 11 Wednesday  
**Process of Prehistoric Settlements in Kazeroun Plain, Iran** Midday  
 Iran • Neyshabur University • hbasafa@gmail.com  
 Environment (geography) and culture have been considered as the factors concerning the distribution and spread of prehistoric settlements. In addition to environmental factors, a number of other factors affect the development of settlements. In a field study, the whole area was systemically surveyed, and 24 prehistoric sites (Neolithic to Bronze periods) were identified. SPSS16 was used to analyze the correlation between surface area of the layers and number of sites in each layer. Due to quantitative values, Pearson's correlation with a significance level of 0.01 was used. The results showed that correlation between elevation levels, precipitation and temperature layers and the number of sites on them was insignificant. The correlation between the variable of distance from water resources and correlation between vegetation and the number of sites was significant and strong. Therefore, vegetation and distance from water resources were found to be more effective in distribution of archeological sites than the other natural factors. Keywords: Hydrology, Geographical Environment, SPSS, Prehistoric Site
- 298 Richard, Suzanne 6.1 Reports Region  
**Recent Excavations at Khirbat Iskandar, Jordan: The EB III Settlement and** 13 Friday  
**Fortifications** Morning  
 USA • Gannon University • RICHARD002@gannon.edu  
 Although known primarily for its EB IV multi-phase occupational stratum, this south central Jordanian plateau site also includes a multi-phase EB III stratum that is now coming into sharper focus with the latest excavations in 2013. For the past three seasons at Khirbat Iskandar, work has concentrated on exposing more of the EB III occupation and its relationship to the two previously exposed defensive walls: a Phase C outer wall and (relatively insubstantial) western perimeter wall line, and an earlier Phase D inner wall line. In 2013, exploration of the defenses in a section against the outer Phase C and D lines revealed a third fortification line. Although it runs parallel to the Phase C line and also abuts the northwest square tower, the new EB III wall line is clearly earlier and certainly more substantial. This unexpected discovery resolves several outstanding questions about the construction history of the fortifications and their respective dates. This paper focuses on the history of continuous rebuilding of the fortifications at the site and proposes that, given accumulating data sets, it is likely that the insubstantial Phase C western perimeter wall evidences the rebuilding and reuse of the fortifications by the EB IV population.

- 299 Richter, Tobias 6.2 Reports Themes  
10 Tuesday  
Morning
- The Late Epipalaeolithic in Jordan's Black Desert: Recent Fieldwork at Shubayqa 1**
- Denmark • Department for Cross-Cultural and Regional Studies, University of Copenhagen • richter@hum.ku.dk
- The late Epipalaeolithic in Jordan's Black Desert has to date been poorly understood. Although a number of late Epipalaeolithic Natufian sites are known from the Azraq Basin and adjacent areas, only two have been comprehensively excavated to date. Few radiocarbon dates or information on economy, interaction and social life have been available to date. Since 2012 a team from the University of Copenhagen has carried out new fieldwork at the late Epipalaeolithic site of Shubayqa 1, which addresses some of the gaps in our understanding of the last hunter-gatherer societies in eastern Jordan. Excavations have to date produced evidence for a substantial site that includes architecture, burials, a rich material culture assemblage, as well as a fascinating archaeobotanical assemblage. This contribution summarizes the recent findings and results of this ongoing fieldwork and what they can contribute to our understanding of the late Epipalaeolithic of the eastern Levant and beyond.
- 300 Riehl, Simone (1) – Asouti, Eleni (2) – Starkovich, Britt (1) – Zeidi, Mohsen (3) – Conard, Nicholas J. (3) 4 Reconstructing  
09 Monday  
Afternoon
- Subsistence Change and Environmental Patterns at Aceramic Chogha Golan (Ilam Province/Iran)**
- Germany/UK • 1 University of Tübingen & Senckenberg Center; 2 University of Liverpool; 3 University of Tübingen & Senckenberg Center • simone.riehl@uni-tuebingen.de
- The aceramic tell site of Chogha Golan in the foothills of the Zagros Mountains in Iran provides a rich archaeological record over 8 metres of stratigraphy, stretching over a chronological sequence of 2.400 years. Archaeobotanical, zooarchaeological and stable carbon isotope data from each of the 11 archaeological horizons allow a detailed reconstruction of subsistence change in relation to palaeoenvironmental development from the end of the Younger Dryas until 9.700 BP. Currently the seed remains, including stable carbon isotope data, show three major fluctuations from cultivation of wild barley over increasing small-seeded grasses to the appearance of domesticated-type emmer wheat, potentially correlating with an increase in grinding tools and sickle blades. Ongoing analyses of the faunal remains indicate that inhabitants at the site consumed a range of large and small wild animal taxa, including gazelles, sheep/goat and others. Preliminary anthracological analysis provides indication for changing ecology and management strategies of the Rosaceae-dominated woodland in this part of the Irano-Anatolian biodiversity hotspot region during the late Pleistocene and the early Holocene. With continuing investigations it is expected that the anthracological and faunal remains will provide critical insights on the significance of the changes observed in the seed and chaff remains.
- 301 Ristvet, Lauren 3 Traditions  
10 Tuesday  
Midday
- Between Theater and Ritual: Public Events as a Middle Ground in Seleucid Babylonia**
- USA • University of Pennsylvania • Iristvet@gmail.com
- In the Seleucid Empire, cultural symbols were not fixed, but were translated, appropriated, and applied in strikingly new contexts. In this colonial context, cultural misunderstanding and mimicry created hybrid spaces where colonial strategies were both performed and questioned. Some of the most productive of these institutions for a consideration of tradition and innovation in Seleucid Babylonia are the temple, theater, and ritual, all of which were constructed as a middle ground between the diverse populations of this empire. "Greek" theaters were constructed to look like Babylonian temples, and both institutions served as loci of civil authority. Similarly, the staging of the Babylonian Akitu influenced the mise-en-scène of the Greek pompe at Daphne, and exposure to Greek drama shaped audience response to Babylonian religious ceremonies. In this complex polity, state rituals were more than occasions for kings to assert their legitimacy, they were also events in which the Babylonian priesthood, Greek politai, and Babylonian citizens could debate Seleucid hegemony and imagine an alternative to the empire.

- 302 Robert, Beatrice – Daverat, Loïc 2 Travelling Images  
**Modeling Images by Shaping Ceramics** 13 Friday  
 France • France Archéologie • bealithic@yahoo.fr Morning
- As the early ceramics from the Middle East, the recent Halaf production reflects their craftsmen. Technically achieved, richly decorated, with varied shapes, it conveys several messages: economical, social... but also emotional (the maker's sensitivity, the audience's feeling, but also our own reaction nowadays)... but above all it reflects the communities and their social mutations.
- From domestic dishes to remarkable potteries such as zoomorphic and/or anthropomorphic vases, via a form of social emulation (shapes and patterns more and more sophisticated within different contemporary communities/villages), we will develop several concepts and how to collect informations about them:
- technology as an answer to creative ideas, by the review of the chaîne opératoire;
  - techniques as illustrations of physical and bodily relationships with the item. Through the fabrication, the contact is firstly symbolic, thus the evolution of techniques alters these relationships;
  - shapes and patterns as a mode of communication: by any use of the item..., by the way of pressure and the value of exchange, but also transmission of exclusive know-how and social links. Halafian production, while posing as a didactic medium, calls for several prerequisite cognitive tools.
- In tacking into account several collections (including Yarim Tepe II sherds), we will propose a new interpretation going beyond the stylistic approach and typological considerations, and we will demonstrate that they can reveal a knowledge to an enlightened audience. So, we can sense a whole cultural complex set.
- 303 Rössner, Corinna – Deckers, Katleen – Riehl, Simone 4 Reconstructing  
**The Origin of Agriculture in the Northern Fertile Crescent – Possible Food** 11 Wednesday  
**Plants at Körtik Tepe, SE-Anatolia** Afternoon  
 Germany • University of Tübingen • corinna.roessner@ifu.uni-tuebingen.de
- The origins of agriculture are one of the most intriguing fields of research within archaeology. There are currently few sites in the northern Fertile Crescent that are intensively investigated. The PPN site of Körtik Tepe offers the opportunity to study the transition to agriculture in detail. More than 20 14C dates in combination with Bayesian modeling, provide an excellent stratigraphy of occupation from the final Younger Dryas to the Early Holocene (9600-9300 cal. BC), the crucial period for understanding the Neolithisation process. Since 2009, we retrieved 537 archaeobotanical samples. Until now, more than 140 different taxa were identified from more than 15.000 plant remains.
- The first results show only a few wild progenitors of today's crops and hardly any chaff remains. It appears that the inhabitants of Körtik Tepe used a wide variety of plant resources in their subsistence strategy and the diet was not focused on wild cereals. In this presentation we will investigate the reasons for these differences through comparison with some other contemporary sites like e.g. Abu Hureyra and by focusing on potential food plant resources other than wild cereals.
- 304 Rouault, Olivier – Masetti-Rouault, Maria Grazia 6.1 Reports Region  
**French excavations in Qasr Shemamok, Iraqi Kurdistan (2013 and 2014** 12 Thursday  
**campaigns): the Assyrian Town, and Beyond** Midday  
 France • University & UMR 5133, Archéorient, Lyon; Sorbonne University, Paris; UMR 8167, Orient & Méditerranée, Paris; • masetti.rouault@wanadoo.fr
- Identified as the Neo-Assyrian town of Kakzu/Kilizu since the first exploration by Layard, the large site of Qasr Shemamok, in the Shiwazor river plain, in Iraqi Kurdistan, has been excavated, in the early '30ies, by an Italian team, lead by G. Furlani. Since 2011, thanks to the support of the Iraqi and Kurdish authorities, a French archaeological mission has developed a new program of researches, aimed to the study of the formation of the Assyrian empires. Excavations have started by the exploration of the "tell" itself, the acropolis, while the lower town, now covered by fields, is studied through surface and geomagnetic surveys.
- The paper sums up the preliminary results of the researches carried out in the site in the last two years, 2013 and 2014, as well as information collected by geologic and geomorphologic studies, in progress in the natural environment of the valley. The archaeological levels identified and studied by the French mission, and the ceramic and epigraphic material, belong not only to Iron II, but also to the Middle –Assyrian period, as well as to the Hellenistic, and later on Parthian and Sassanid periods.

- 305 Rousset, Marie-Odile 7 Islamic  
10 Tuesday  
Midday
- Discovering the fatimid mosque of Tyre (Lebanon)**
- France • CNRS - GREMMO - Lyon • marie-odile.rousset@mom.fr
- Since 2008, archaeological work has been conducted at Tyre by a French-Lebanese team led by Pierre-Louis Gatier (CNRS - HiSoMA, Lyon, France). The aim is to study a part of the city which had been excavated in the 1960's and 1970's and never really published. Two areas were selected: the huge baths (the so-called colonnated street) and the Frankish cathedral. Cleaning of this last one, drawing of the plan and soundings showed that a previous medieval building existed before the large 12th century church. None of the scholars who have worked on this very emblematic building of the Crusaders (it was supposed to shelter Frederic Barbarossa's tomb) has ever mentioned an older building at the same place. The discovering, during the 2011 season, of what was considered to be a small bath, partly destroyed by a cistern contemporaneous of the cathedral building, awarned the team that it could be one of the islamic monuments of Tyre. The 2012 season confirmed this and brought to light several characteristics of a fatimid mosque. This building was almost completely destroyed by the Crusaders to erect the cathedral.
- 306 Roustaei, Kourosh 4 Reconstructing  
12 Thursday  
Morning
- Ancient Nomadic Occupations of the Bakhtiari Highlands, Southwestern Iran**
- Iran • Iranian Center for Archaeological Research • kouroshroustaei@gmail.com
- Bakhtiari highlands in southwestern Iran are famous for being the summer homeland of the Bakhtiari nomadic confederacy. The Bakhtiari nomads used to spend summer in high, cool-weathered mountains of inner Zagros Mountains between Khuzestan and Isfahan, while in winter time they enjoy the moderate weather of Khuzestan, where their flocks could well-fed by rich pastures of the rolling hills and foothill plains of eastern Khuzestan. One of the main summer destinations of the migrating Bakhtiari nomads is Kouhrang area, in the heart of the Zagros Mountains east of Isfahan. Until recently the Kouhrang area could not maintain even a moderate sedentary population because of its harsh winters, rough landscape and its remoteness from major communication routes between fertile, large plains of Fars, Isfahan and inner parts of the Iranian Plateau. With a high altitude more than 2000 m asl in most parts, rich pastures and numerous water resources, the Kouhrang area has hosted Bakhtiari nomads and their anonymous ancestors for millennia.
- The Kouhrang area has never been surveyed systematically until few years ago. Since 2007 the area has been the focus for archaeological surveys by the author, resulted in identification of more than 760 sites, spanning in time from Middle Paleolithic to the recent times. By far the most frequent sites are the Middle Paleolithic open sites and ancient nomadic camp sites. In this paper we introduce and describe nomadic occupations from recent times to as far back as the Neolithic period. In this review, our emphasis is on site formation process, site location, land use and water management. To make some inferences from archaeological data we use observations on recent interaction between Bakhtiari nomads and their environment in Kouhrang area. While archaeological data suggest a more or less uniform pattern in land use and site location of the Bakhtiari nomads, there are striking fluctuations in density of camp sites during different periods.
- 307 Rubini, Claudio 7 Islamic  
10 Tuesday  
Evening
- Antakya urban fabric. A living transformation process**
- Italy • ICAR Department - Bari Polytechnic University • rubiniclaudio@libero.it
- This contribution aims at the investigation of the Antakya urban morphology as shown in the French cadastral maps of last century 30's.
- At ICAANE 8th we have presented a partial study on a small urban fabric frame where more clear were the clues of what we have supposed to be the roman forum, suggesting as evidences of archaeological traces could be inferred through typical urban fabric layouts the present city is still able to surface. This further paper is going to extend the analysis at the whole city centre as resulting from the mutual influences between the roman designing thought and the later ottoman one. The study is focused on the Islamic transformation of the ancient nucleus of the city, primarily dealing with the residential buildings as basic modules of the urban organism. Courtyard houses generate an urban net where their mutual position, their each orientation, the empty spaces encroachment and hierarchies reveal the urban transformation historical process from an actus based grid until the late Ottoman urban structure.
- The analysis is based on the assumption that building types have to be intended as the lively and spontaneous cultural instrument by which societies build their own space of identity. Keywords: Antakya, islamic, type, urban morphology

308 Sabri, Hossein

3 Traditions

**Ideology, Coinage and Islamic Identity**

12 Thursday

Iran • University of Mazandaran • h.sabri@stu.umz.ac.ir

Afternoon

The Greek coinage tradition was accepted internationally all around the ancient world. Different states with wholly different culture embarked to mint their own coins in a same way. Greek coinage traditions penetrated not as political dominance but as an international convention accepted by nations. After Sassanid emergence it is evident how an indigenous tradition replaced the Greek coinage tradition and made an identity and it was the first time that different Ideologies appeared in coins. The ancient coinage traditions moved in two different ways, Sassanids' and Romans'. Coin became an ideological media. Islam emerged in the area at the time that the two previous traditions challenged each other and frazzled. Within the first decades of limbo, Islamic governors learned how to use coinage trumpeting religious motto. Naturally, political and different social aspects effect on coins.

In this article it is argued the first coinage traditions as an international convention, and the Ideological effects that changed it to an identical media. Keywords: Ideology, identity, Coinage, international convention.

309 Saca, Iman

5 Dealing with the Past

**Against All Odds: Community Archaeology Efforts in Palestine**

11 Wednesday

USA • Saint Xavier University-Chicago • saca@sxu.edu

Evening

Community archaeology aims at engaging and involving local communities and stakeholders in safeguarding, enriching, interpreting, promoting, as well as benefiting from the archaeological and heritage sites within their communities. The dialogue between local communities, archaeologists and heritage workers is of great benefit to the field of archaeology and heritage and is essential for the protection and appreciation of sites. This dialogue is multifaceted and is best approached through what is referred to here as Community Archaeology.

This paper will focus of community archeology efforts in Palestine, mainly the West Bank. Prior to 1992 the Palestinians have been almost completely excluded from the archaeological process, but since 1993 the Palestinians have been tirelessly working to protect, preserve and promote the archaeological/cultural and natural heritage of Palestine. Even with the difficult economic and political situation there are some success stories that are worth noting. Involving local communities through various participatory and collaborative efforts is one of these success stories. Within the last 20 years there have been a number of efforts in Palestine to engage communities in archaeology and heritage projects. In this paper I will discuss some of these efforts including the sites of Mafjar, Tell Balata, the Old Town of Bethlehem, Nablus and Hebron. Difficulties and successes will be discussed in the hopes of creating a roadmap for a comprehensive community archaeology program in Palestine.

It is evident that through the practice of community archaeology in Palestine, archaeologist and heritage specialist were able to enrich their investigations and preserve sites, at the same time give the local communities a sense of pride, ownership and identity through exploring their heritage and the heritage on their lands. I argue that through community archaeology we can insure, for the first time, a real participation of the Palestinians in the archaeological process. This will no doubt lead to a sense of pride in their heritage and the heritage on their land, and ultimately a sense of responsibility to preserve and protect this nonrenewable fragile heritage.

- 310 Sadozai, Chamsia – Gandreau, David 6.1 Reports Region  
**Conservation des Vestiges Archéologiques en Terre. L'exemple de l'Asie Centrale** 13 Friday  
Afternoon  
 France • Laboratoire CRATerre-ENSAG - Centre international de la construction en terre • ch.sadozai@gmail.com  
 Les archéologues fouillant à l'étranger sont souvent confrontés aux questions de conservation des vestiges par les gouvernements locaux. Dans la plupart des pays du Proche-Orient ancien ces structures sont faites de terre crue, matériau en apparence fragile. L'expérience du laboratoire CRATerre, de l'Ecole Nationale Supérieure d'Architecture de Grenoble et détenteur de la Chaire UNESCO pour l'architecture de terre, a montré que de petites interventions peuvent préserver les vestiges et les informations scientifiques qu'ils détiennent, notamment d'une campagne à l'autre. Ces pratiques de bon sens ont été mises en oeuvre sur de nombreux sites proto-historiques d'Asie centrale, comme Merv et Ulug Dépé au Turkménistan ainsi que Sarazm au Tadjikistan, et seront présentées ici. Une exposition à long terme, s'il y a une volonté réelle de mise en valeur, nécessite une autre approche. Conservateurs et archéologues peuvent ensemble prévenir les dégradations et programmer avec les autres parties prenantes les objectifs à atteindre. Le plan de gestion de Sarazm est un bon exemple de cette collaboration de même que la conservation du site de Fayaz Tepa en Ouzbékistan. Nous montrerons ainsi que la conservation des vestiges architecturaux en terre crue est possible, facile et sert souvent de tremplin pour le développement local.
- 311 Samadi, Omid (1) – Ghasemi, Mohsen (1) – Riahiyan, Reza (2) 6.2 Reports Themes  
**Survey of Parthian Settlements Pattern in Kahnouj Plain, Kerman Province, Iran** 13 Friday  
Midday  
 Iran • 1 Higher Education Institute of Golestan; 2 Tehran Azad University & Culture Heritage Organization in Kerman Province • mohsen.ghasemi.1982@gmail.com  
 Kahnouj City located in South Eastern part of Kerman Province and is one of the Southwest Cities in Kerman. In Historical sources we can find the name of Kahnouj as countryside of Roudbar. In recently Archaeological Surveys many sites were discovered. There are a lot ashkanian sites in this plain which have the features of askanian local potteries as Londo & Namord. Although many sites exist in this plain but there is no investigation about them and we don't know how Was Settlements Pattern of Ashkanian sites in Roubar. According to the importance of Ashkanian and little information about their period in this area this paper tries to find out the Parthian Settlements Pattern in Kahnouj Plain. By research between the information of the sites we find out that most of them in this plain developed beside Rivers and they have linear pattern.
- 312 Sapir-Hen, Lidar – Ben-Yosef, Erez 6.2 Reports Themes  
**Social Status, Ethnicity and Animal Economy at the Late Bronze/Iron Age Copper Smelting Sites at Timna, Israel** 09 Monday  
Afternoon  
 Israel • Institute of Archaeology, Tel Aviv University • lidarsap@post.tau.ac.il  
 The new excavations at the Timna region of southern Israel (<http://archaeology.tau.ac.il/ben-yosef/CTV/>) are carried out in an attempt to elucidate various aspects of ancient societies engaged in the exploitation of copper ore in the Late Bronze / early Iron Ages of the southern Levant. Here we present results of a zooarchaeological study of the recently excavated smelting camp of Site 34 ("The Slaves' Hill"). The faunal assemblage, collected with a tight control over context and fine (wet) sieving of the excavated material, consists of livestock animals common in this period in the southern Levant. The analysis of meat procurement method revealed two distinct groups of people at the site: (1) workers engaged in direct smelting, who were provided with the better meat, and (2) workers engaged in auxiliary activities, including preparation of food. Based on these results we suggest that, probably in contrast to miners, workers at smelting sites were highly skilled craftsmen of high social status. In addition, based on comparisons to faunal assemblages from other contemporary smelting sites in the region, our research provides new insights regarding the ethnic identity of the metal workers, contributing to an ongoing debate regarding socio-political processes at the mining districts of the southern Levant at the turn of the millennium and suggesting no Egyptian presence at the early Iron Age. Finally, these comparisons enabled us to target the introduction of the camel as a pack animal to the southern Levant to no earlier than the last third of the 10th century BCE, using the sites of the Wadi Arabah as a proxy.

- 313 Sarianidi, Victor – Dubova, Nadezhda 6.1 Reports Region  
**Types of Graves at Gonur Depe Bronze Age Site in Turkmenistan** 13 Friday  
 Russia • Institute of Ethnology and Anthropology, Russian Academy of sciences, Moscow • Afternoon  
 dubova\_n@mail.ru  
 Bronze Age (2300-1500 CalBC) Gonur Depe site is a typical and the brightest monument of Bactria-Margiana archaeological complex (BMAC) and has some cultural parallels with Near East and with Indus civilization as well (Sarianidi, 1990, 2002, 2005, 2007, etc.). It is excavating from the 1974. About 5000 tombs at some cemeteries are now excavated there: 2831 at the Main Gonur necropolis, 1618 in the different territories of Palace temple complex, 109 at Royal Gonur necropolis and 106 at some sites close to Gonur. All graveyards show diversity of burial constructions. Shafts (pits with shaft in one wall), cist (pits with mad-brick walls), ordinary pits, chambers (underground models of one-two room houses) graves, sepultures (large houses under the ground), burials in jars and in ovens, one dakhma and five fractional burials were found. Only 12,8% of funeral constructions cannot be identified. Shaft graves (55,2%) make up the majority of total amount of found graves, ordinary pits (32.1%) take second place and cists (6,6%) third one. Very rare burial were made in huge (diameter about 5-7 m) pits (0,15%) and in sepultures (0,22%). The distribution of types of graves in different cemeteries are discussed.
- 314 Sataev, R. 6.2 Reports Themes  
**Horse, Donkey, Onager in the Life of Ancient People of Gonur-Depe (Bronze Age, Turkmenistan)** 09 Monday  
 Russia • Bashkir State Pedagogical University, Ufa • rob-sataev@mail.ru Afternoon  
 Gonur-Depe was large capital centre of Ancient Margiana. The settlement existed from 2300 to 1600 BC. Animals played an important role in the economy and sacred life of Gonur inhabitants. Among these representatives of the genus Equus are a special place. On settlement there were revealed 8 reliably determinable bones of the domestic horse. Now these remains of horses are the oldest in Central Asia. Apart buried skull of the horse represent a special interest. Age of the animal was older than 5 years. Reconstruction height in the wither was 134 – 136 cm. Using of horses confirmed of various imaging findings the horse. Paucity of horse bones indicates its elite role. Probably only local aristocracy used horse. Donkey played an important role in people's life. Bones of donkey were more numerous. Donkey was used in economy, in the funeral rites and as a sacrificial animal. Their remains are 0,5% of kitchen-waste and 1,5% of ritual objects. In our material, bones of onager (Equus hemionus) were not identified. Some researchers (Moor, 1994) indicate their presence on the settlement. Perhaps part of the bones of the genus Equus unidentified to species belong to onager.
- 315 Sataeva, L. 6.2 Reports Themes  
**Wood Using at the Bronze Age Site Gonur-Depe (Ancient Margiana, South Turkmenistan)** 09 Monday  
 Russia • Bashkir State Agrarian University, Ufa • rob-sataev@mail.ru Afternoon  
 Numerous remains of wood from Gonur-Depe, the capital city of Ancient Margiana, are presented by coal from furnaces, burnt parts of building constructions and fragments of products, conserved by copper salts. Microscopic analysis of wood showed that saxaul (Saxaul sp.) was used as main fuel. Arboresced thistle (Salsola sp.), camel-thorn (Alhagi pseudalhagi), tamarisk (Tamarix sp.), maple (Acer sp.), Spiraeanthus Shrenkii was used less as fuel. Poplar (Populus sp.) and willow (Salix sp.) were used in buildings structures (beams in the palace, floors of the external walls of the Kremlin). Most of these species grow now on area of Karakum Desert. This suggests that the climate in the area has not changed much since the Bronze Age. On the settlement there was founded a few "royal tombs" with carts. The study of the rich burial 3900 showed that the wheels of the cart were made from elm (Ulmus sp.). A bronze shovel was discovered there too. Stalk of shovel has been made of the Cotinus corrygria, which wood is resistant to decay. It is not currently found in Turkmenistan. But maybe it was imported together with a shovel from the Caucasus and the Himalayas.

- 316 Sauvage, Caroline 2 Travelling Images  
**Late Bronze Age Regional Identities and Distribution of Motifs: Mycenaean Pictorial Ceramics in their Cypriot and Levantine Contexts** 09 Monday  
Afternoon  
 USA • Pitzer College, Claremont, California • caroline.sauvage@mom.fr  
 Mycenaean Pictorial ceramics were highly appreciated certainly for their “added on value” materialized by their shape complexity, elaborate figurations, and care in production. These striking depictions, from animals to humans, stand out in comparison to the bulk of Mycenaean ceramics, with linear and abstract motifs. Their specific uses, for instance kraters for drinking fermented beverages, embedded them in social bonding activities while their imagery was certainly conspicuously displayed. Although iconographic and “Morellian” stylistic perspective lead to the identification of several hands, they have been analyzed with other Mycenaean ceramics, but never as unique trade commodities (iconographic ceramics). I will explore other aspects of Pictorial ceramics, namely their motifs’ acceptance and rejection in Cyprus and the Levant, as well as the rhetorical weight of their images as regional identity markers. Through their presence, number and context per period, I aim to better characterize their perceptions, and uses. Did the exchange of pictorial ceramics triggered acceptance and enthusiasm for new motifs that would later develop? Does local assemblage reflect the desire to acquire significant images (such as chariot kraters), was it linked with cultural background related to social identity: was there motif repetitions in specific places, echoing depictions on other medias?
- 317 Schiettecatte, Jérémie (1) – Mouton, Michel (2) – Siméon, Pierre (1) 7 Islamic  
**Al-Yamâma. Excavation of an Islamic city in Central Arabia.** 11 Wednesday  
Morning  
 France/Saudi Arabia • 1 CNRS, UMR 8167 ‘Orient & Méditerranée’, Paris; 2 CEFAS, Jeddah • jeremie.schiettecatte@cns.fr  
 For the past three years (2011-2013), the Saudi-French archaeological mission in the oasis of al-Kharj has been excavating one of the largest archaeological site of the Riyadh Province (Saudi Arabia), al-Yamâma, the ancient city of Jaw al-Khidrima. The city went through several phases of growth and decline from the Late Antiquity to the 18th century reported both by Arabo-Islamic sources and by archaeological data. Topographic and geomagnetic mapping of the site, surface pottery sampling and archaeological excavations shed light on the way the site evolved through time. Geomorphological studies yielded evidence on how human communities watered cultivated areas and ensured their subsistence. Finally, the excavation lead to the unearthing of the great mosque of the site in its final architectural stage (15th-18th cent.).  
 The purpose of this paper is to present this urban site by setting it in its historical and environmental context.
- 318 Schmidt, Conrad 6.1 Reports Region  
**Mobile Pastoralists as Global Players in the 3rd Millennium BC: Excavations at Bat, Sultanate of Oman** 13 Friday  
Afternoon  
 Germany • University of Tübingen, Institute for Ancient Near Eastern Studies (IANES) • conrad.schmidt@uni-tuebingen.de  
 This paper will present the results of the excavations in Bat, Sultanate of Oman, in 2012 and 2013. During that time investigations took place at the well-preserved settlement of Bat-al-Zebah as well as in the necropolis of Bat itself. Both date to the so-called Umm an-Nar period (3rd millennium BC). New insights regarding the social organisation of the people of the Omani Peninsula during the 3rd millennium BC will be provided. Specifically, the paper will focus on transhumance. Furthermore, a series of remarkable finds, such as a cylinder seal, imported pottery, and carnelian beads, demonstrate the relations to Mesopotamia, Iran, and the Indus valley.

- 319 Schoch, Chiara 4 Reconstructing  
10 Tuesday  
Midday
- Early Wool in the Ancient Near East**
- Germany • Freie Universität Berlin • schoch@zedat.fu-berlin.de
- First evidence for the domestication of sheep in the Near East appears around 8000BC. Most of the wild sheep species and presumably also early domesticated sheep have a hairy fleece. The development of long staples of wool is probably a result of selection and controlled breeding under human influence. Cuneiform documents of the 4th and 3rd millennium BC show clearly that by this time wool, woolly sheep and wool textiles are often owned, traded and inventoried. Due to the organic nature of the material under examination the archaeological record does not support the textual sources with a lot of direct evidence. This opposing evidence leads to the question, if wool starts to play a role as raw material already before the written evidence documents its use.
- Since the production of linen and other plant fiber textiles is already established by the time the first hints on wool use appear, a direct conclusion from the use of textile tools to wool use is erroneous. The present paper will be treating the evaluation of multiple different strands of evidence, including textile tools, animal bones and textile remains to reconstruct the early use of wool in the Ancient Near East.
- 320 Şerifoğlu, Tevfik Emre – Glatz, Claudia – Casana, Jesse 6.1 Reports Region  
09 Monday  
Evening
- Between the Mesopotamian Plains and the Zagros Mountains: The Sirwan (Upper Diyala) Regional Project 2012-2014**
- Turkey/UK/USA • Bitlis Eren University; University of Glasgow; University of Arkansas • teserifoglu@beu.edu.tr
- The Sirwan Regional Project is an international survey project conducted along the Sirwan (Upper Diyala) River valley at the southern edge of the Kurdish Autonomous Region of Iraq. The main aim of our project is to investigate the region's landscape and settlement history. In particular we are interested in the long-term cultural development and identity of this archaeologically little explored transitional region which is situated between the irrigated plains of lowland Mesopotamia and the Zagros highlands. This multidisciplinary project uses a range of approaches to accomplish these goals, including remote sensing, systematic extensive and intensive survey, geophysical prospection, geoarchaeological and palaeoenvironmental research. In this paper, we present the results of the first three survey seasons conducted between autumn 2012 and spring 2014, during which we documented a series of previously unknown sites ranging in date from the late Neolithic to the Ottoman periods.
- 321 Shafiq, Rula 6.2 Reports Themes  
11 Wednesday  
Morning
- An Overview of Jericho Graves and Skeletons**
- Turkey • Yeditepe University, Istanbul • rula.shafiq@gmail.com
- Jericho is located to the north west of the Dead Sea in the Jordan valley and has received continued scholarly attention, which was mostly motivated by its citation in the Bible (Jaques 2005). The site is divided into two parts: Tell Es-Sultan which represents the city settlement itself, and the associated large cemetery that contain numerous shaft burials cut directly into limestone (Kenyon 1975). Jericho is distinguished by the continuous occupation and the presence of skeletal assemblage, amounting to 998 individuals, representing fractions of past populations from most of the different archaeological periods: Early Bronze I, Early Bronze II-III, Early Bronze IV, Middle Bronze II, Middle Bronze III, and Iron Age II. This paper will examine the changes in burial practices throughout these periods, with special emphasis on age and sex profile for each archaeological period in relation to mortality rates. In addition, there is ample evidence of skull trauma that points to consistency in the prevalence of interpersonal violence throughout the aforementioned different archaeological periods, with no difference between the recipients being males or female. This paper proposes an association between the prevalence of skull trauma and the surgical treatment of trephination that was practiced at Jericho.

- 322 Shobairi, Seyed Abazar 7 Islamic  
12 Thursday  
Afternoon
- New Evidences of Early Islamic and Late Sassanid Periods in the Marvdasht Plain**
- Greece • University of the Athens • Abazar.parse@gmail.com; sshobairi@arch.uoa.gr
- The Parse Pasargadae Research Foundation, with collaboration of the Archaeological research center of Iran carried out archaeological rescue excavation for the study of the early Islamic period in the Mohammad Abad Archaeological site in Fars. Our information about common life in late Sassanid period to the early Islamic period on the Marvdasht plain is not very reach. Except of Estakhr city which is urban life, this period, of which so little is known in Fars, nevertheless, very important as phenomena of good cultural significance developed. The influence of the Sassanid heritage and of the incoming Islamic culture also, the cultural interaction on the common life in the village is not very clear in the Marvdasht plain. In the Mohammad Abad site showed that there are some occupations from late Sassanid period until Safavid period. The impressive remnants of the excavation were other small findings which included the daily routine life in the site. The paper contribution reports on these first excavations. Furthermore it is a base for chronology, and comparing of the variety of the early Islamic period pottery in Marvdasht plain and Fars province especially south of Iran.
- Key word: Rescue excavation, Late Sassanid, Islamic period, Marvdasht
- 323 Shojaei, Seyed Mostafa (1) – Moosazadeh, Behrooz (2) – Moosazadeh, Reza (3) 7 Islamic  
13 Friday  
Morning
- Iranian Architecture, is the Reflection of Mysterious Patterns & Façade**
- Iran • 1 Azad University, Abhar; 2 Islamic Azad University, Kazeroon, Abhar; 3 Islamic Azad University, Sepidan • sadatshojaei@gmail.com, b.m801@yahoo.com
- Architecture is one of the most primitive human's achievements and an indicative of endeavoring to adjust with environment. Along with this achievement and because aesthetical sense of human makes him to create masterpieces, he has always tried to make promotions and culminations in architecture and in this direction he has demonstrated his attempts to generate motifs on architecture configuration from inscribing pictures on stone to flexible elements. Especially, from the motifs of plants to geometrical pictures all have their certain themes, which natural elements have demonstrated their meaning language through developing patterns and motifs on architecture configuration. The art of texturing like other precedent arts has not been away from the path of evolution and has passed meaningful shifts along with technical progress and specializing of this profession. The reason for this claim can be proved by surveying and comparing the initial versions of motifs with recent motifs. Motifs have been influenced by descending and ascending changes affecting factors on whom can be accounted for by political and social reasons. Keywords: Architecture; Motif; Ornaments; Field Elements; Meaning
- 324 Siméon, Pierre 7 Islamic  
11 Wednesday  
Midday
- New Data on Islamic Material Culture from the Central-Asian margins : Dehistan and Balkh ceramic studies**
- France • UMR 8167 'Orient & Méditerranée', Paris • pierresimeon@club-internet.fr
- Historians and archaeologists agreed that Islamic ceramics from Central Asia form a major handicraft domain, to understand part of the economic history and activities of the civil society in the far Eastern Islamic lands. Nevertheless due to partitioning of the area among seven countries, a certain expression of nationalism and fieldworks difficulties, mediaeval material culture still barely systematically studied.
- Two projects, presented in the 9th ICAANE as well, first in Turkmenistan within the Swiss-Turkmen team (SCA Genève) second within the British team (BACH Project, Oxford University) offers the opportunity to renew our general knowledge on these topics.
- Ceramic corpus from Dehistan in western Turkmenistan is an important pre-Mongol set with luxury types of Iranian pottery, generally sparsely found in excavations (Mina'i, reticulated turquoise glaze...). Long term occupation of the North Afghan city of Balkh including Iraquian importation (monochrom lustre) allows studying the complete range of regional slip painted wares trough Timûrids and Safavid types, the latter little known until now.
- Purposes of this paper are to present innovative researches and fieldworks (2012-2013) about Central Asian ceramics from the 9th to the 17th: specificities and typology, distribution and long distance trade. We will focus on first results regarding pottery production centre and origin of raw materials in Mediaeval Central Asia.

- 325 Skuldbøl, Tim B.B. – Colantoni, Carlo 6.1 Reports Region  
**First Results of the Rania Plain Survey - Salvage Operations in the Dokan Dam Inundation Zone** 10 Tuesday Morning  
 Denmark/Turkey • University of Copenhagen – Bitlis Eren Universty • tbbs@hum.ku.dk  
 This paper presents the first results of a new salvage survey project being conducted on the Rania Plain in Iraqi Kurdistan. The Rania Survey Project (RPS) was initiated in late 2013 as a follow up to recent salvage excavations conducted at the archaeological sites of Tell Shemshara by Jesper Eidem (NINO) and Bab-w-Kur by Tim Skuldbøl (University of Copenhagen). Both these sites have suffered tremendously from seasonal flooding by the nearby Dokan Lake - a dam project constructed in the late 1950s.  
 Preliminary observations from the analysis of satellite imagery have identified more than 40 potential sites along the shores of the Dokan Lake that are threatened with destruction within the inundation zone of the dam waters. In addition, the wider Rania Plain has abundant archaeological settlement that is under threat from rapid modern development.  
 The aims of the RPS are two-fold: firstly to identify and record the archaeological sites in danger of destruction by the Dokan Dam's waters and modern development, and secondly, placing these and other settlements on the plain into a wider analysis of the development of settlement complexity on the urban fringes of the Mesopotamian heartlands.
- 326 Sollee, Alexander 6.1 Reports Region  
**Taking a New Look at Neo-Assyrian City Gates** 12 Thursday Morning  
 Switzerland • University of Bern • alexander.sollee@iaw.unibe.ch  
 The Assyrian capitals are not only known for their magnificent temples and palaces, but also for their monumental city walls. The most impressive and at the same time most delicate features of all the town defenses were the city gates. As they interrupted the line of defense, they were always a vulnerable spot of every system of fortifications. However, the walled cities' economic needs demanded these gateways to be built, in order to ensure the steady flow of goods and provisions. Apart from that, they also had a significant ideological meaning, which is emphasized by many cuneiform texts.  
 During the excavations of the Assyrian capitals of Ashur, Dūr Šarrūkīn, and Nineveh, a fairly large number of Assyrian city gates were brought to light. By re-examining the archaeological reports and employing remote sensing, many details of these structures can still be revealed. The paper aims at illuminating the different considerations that went into constructing these gates, as well as the development Assyrian city gates underwent and what may have influenced this process.
- 327 Somma, Lorenzo 5 Dealing with the Past  
**Glass Small Finds from Nimrud, Inside and Outside their Contexts** 11 Wednesday Midday  
 Italy • Università degli Studi di Torino • lorenzo.somma@alice.it  
 The excavations in Nimrud, both Italian and British, led during the 20th Century by illustrious archaeologist, gave us the possibility to know a very large number of small finds, together with other kinds of finds such as pottery, ivories, metal objects and architectural material. Among the small finds we can see a wide variety of glass paste inlays, Egyptian blue and frit beads, and other minor categories of objects. All these were found both in their original contexts and outside them; in this paper I will try to draw a typological system (which will be part of my current PhD project) and some considerations about where they were found: some of them come from some Fort Shalmaneser's rooms, some other from the palaces of the Citadel, but a certain amount was found near the walls or in the lower city surveys; here I will attempt to say what these objects can tell us and if it is possible to tell if they were laid for intentional (daily use, sacred, funerary) or accidental reason.

- 328 Spurrier, Tracy L. 5 Dealing with the Past  
11 Wednesday  
Midday
- Disregarded Royalty: A Study of the Bronze Coffins outside Tomb III at Nimrud**
- Canada • University of Toronto • tspurrier@gmail.com
- During the late 1980's, the Iraqi Antiquities Department discovered several tombs belonging to Queens from the Neo-Assyrian Period. They contained stone sarcophagi, luxurious elite goods, and an unparalleled wealth of gold and jewelry. As the excavators began work in Tomb III, they encountered a curious cache of bronze coffins sealed into the antechamber. When first discovered, it was thought they contained the fragmentary remains of numerous individuals with lavish grave goods in secondary burial contexts. This is clearly the case for coffin 3 which held the partial skeletons of 6+ people. However, the context for the other coffins is more difficult to establish. The palaeopathological evidence for coffin 2 proves that the sole occupant, a young woman found wearing a delicately crafted gold crown, was initially interred in this bronze coffin. Using a combination of archaeological, skeletal, and textual analyses, this paper will identify a previously unknown queen and suggest that the coffin burials date to the early 8th century BC – a period of internal strife and weakened royal leadership for the Neo-Assyrian Empire. A duck-weight of Tiglath-Pileser III, the man who subsequently became king and re-established hegemony, gives a potential date for the deposition of the coffins.
- 329 St. Laurent, Beatrice – Awwad, Isam 7 Islamic  
09 Monday  
Afternoon
- Archaeology & Preservation of Early Islamic Jerusalem: Revealing the 7th Century Mosque on the Haram al-Sharif**
- USA/Israel • Bridgewater State University; Chief Architect and Conservator of the Haram al-Sharif (1972-2004) • BStLaurent@bridgew.edu; isamawwad@yahoo.com
- After becoming Governor of Syria in 639/40, Mu'awiya I either expanded a mosque of the Caliph 'Umar (638) or constructed a new mosque from Roman and Byzantine spolia in adaptive reuse on the former Temple Mount, Bayt al-Maqdis (7th century) and now the Haram al-Sharif. This mosque was completed for his investiture in that mosque in 660 as the first Umayyad Caliph. Isam Awwad (Chief Architect & Conservator of the Haram 1972-2004) and I proposed elsewhere that this mosque survives to today as the Marwani Musalla (1996) and that the Golden Gate on the eastern Haram wall was the royal ceremonial entrance to the mosque courtyard. This paper summarizes and expands this thesis. The Musalla also known as 'Solomon's Stables' was designated a musalla or prayer space in the 1990's to expand the enclosed prayer areas of the Haram. It also occurred at a time of considerable pressure from Israeli archaeological pursuit of control of the space. This paper will emphasize the evidence provided by Israeli archaeology in assisting to identify the site as early Islamic and in the Awqaf's revealing and preservation of the major 7th century north entrance and spatial interior now identified as the Mosque of Mu'awiya.
- 330 Sternitzke, Katja 6.1 Reports Region  
10 Tuesday  
Morning
- Babylon in the Old Babylonian and Kassite Periods – New Insights from Old Material**
- Germany • Freie Universität Berlin • Katja.Sternitzke@gmx.de
- In 1897 an awakened interest in Ancient Mesopotamia gave rise to a German expedition to the Orient in search of a potential Babylonian site for archaeological excavations. As a result archaeological excavations under the direction of architect and historian Robert Koldewey opened at Babylon in 1899 and continued until 1917 when World War I ended the work ahead of schedule. Parts of excavated material were published later, presenting the results in an exemplary and extensive but not exhaustive manner and with a clear focus on the magnificent buildings of Nebuchadnezzar II. Unfortunately we know little about the stratigraphy, chronology and urban lay-out of this important metropolis in the 2nd millennium B.C. With the kind permission of the Vorderasiatisches Museum Berlin and Deutsche Orient-Gesellschaft a PhD project has taken place to fill that breach. The thesis re-examines the 2nd millennium B.C. levels and associated finds at Babylon; uses published data and hitherto unpublished archival documents and objects; re-evaluates the stratigraphic evidence; and provides a synthesis of all available data with the intention of rendering an integrated picture of the ancient city of Babylon in the Late Old Babylonian and Kassite periods. This paper presents the results of that dissertation project.

- 331 Stone, Elizabeth C. 4 Reconstructing  
12 Thursday  
Afternoon
- Social Differentiation in Southern Mesopotamia: Changing Patterns of Housing from the Fourth to the First Millennium B.C.**
- USA • Department of Anthropology, Stony Brook University • elizabeth.stone@stonybrook.edu
- There has existed a long-standing debate among archaeologists as to whether high levels of social differentiation are present in all early complex societies, as argued most recently by Marcus and Flannery, or whether there existed a greater degree of variability, as proposed by Crumley and Trigger, among others. High resolution imagery which records broad patterns of domestic housing over a wide range of southern Mesopotamian sites, in terms of both size and of date, provides a more representative sample than data recovered from excavation alone to explore long term patterns of social change in Iraq. Measurements of nearly 10,000 rooms, two-thirds from satellite imagery, one third from excavations, dating to Protoliterate, late Early Dynastic, Old Babylonian and Neo-Babylonian periods, together with more limited samples from Kassite and Post-Kassite sites, were used to track changes in residential patterning over the course of some four millennia. Similarities in patterning between excavated houses and their counterparts seen in the imagery make it possible to relate patterns of rooms to actual houses.
- 332 Stork, Leigh 4 Reconstructing  
11 Wednesday  
Afternoon
- On Pins and Needles, the Relationship between Pins and Textiles in the Carchemish Region during the EB I-II**
- Scotland • University of Edinburgh •
- Among the metal artefacts excavated from EB I-II contexts in the Carchemish region, pins were the most frequently found metal items and demonstrate a widespread typological continuity with other areas of the Near East. What sets the use of metal pins in the Carchemish region apart from other areas, however, is that nearly all of the pins were found in mortuary contexts. While the use of metal in burials is likely related to the conspicuous consumption and expressions of social identity, it is less clear as to why pins in particular seem to have been so popular with the inhabitants of the region around Carchemish. It is proposed here that the prevalence of pins in these burials is tied to the increased importance of secondary pastoral resources to the local and regional economy of Carchemish. By integrating the study of metal use with faunal, botanical and other artefact studies, a more comprehensive picture of the impact that land-use patterns had on consumption patterns can be seen.
- 333 Streit, Katharina 6.1 Reports Region  
12 Thursday  
Afternoon
- The Ein el-Jarba Excavation Project: A Settlement in the Jezreel Valley from the 6th and 4th Millennia BC and its Transregional Interaction**
- Israel • The Hebrew University of Jerusalem • katharin.streit@mail.huji.ac.il
- In 2013, Hebrew University started a new excavation project focused on the Wadi Rabah culture of the 6th millennium BC at the site of Ein el-Jarba, ca. 25 km south-east of Haifa, Israel. The site is known from a salvage excavation carried out by J. Kaplan in 1966, yielding at least three phases of architectural remains dating to the Early Chalcolithic period and the famous holemouth jar with two applied, masked figures in a dancing (?) scene. A first test-excavation uncovered two occupational phases at the site. The upper dating to the Early Bronze Age I and consisting of four oval houses. The lower phase dates to the Early Chalcolithic and yielded a living surface associated with architecture. This excavation project aims to shed light on the protohistory of the Jezreel Valley, and particularly focuses on trans-regional contacts detectable in the material culture of both periods. Therefore, a joint project with the Oriental Department of the German Archaeological Institute attempts to reconstruct the trade in tabular scrapers, which could help tracing exchange networks extending between the coastal and inland regions of the southern Levant in the Chalcolithic and Early Bronze Age.

334 Studer, Jacqueline

7 Islamic  
09 Monday  
Afternoon

**The Importance of Archaeological Context in Understanding Human Diet: Animal Bone Accumulations from Early Islamic Qasr al-Hayr al-Sharqi, Syria.**

Switzerland • Museum d'histoire naturelle, Geneva • Jacqueline.Studer@ville-ge.ch

The isolated settlement of Qasr al-Hayr al-Sharqi, established by the Umayyads in the arid steppes of Syria, has provided a large quantity of animal remains. They derive from several large mudbrick buildings situated in the northern area of the site. The 6,000 identified bones correspond to 41 different animal species that are attributed to 21 mammalian species, 16 species of birds, 2 reptile and 2 fish species.

The discovery of bone accumulations in different archaeological features within the buildings, such as latrines, pits or rubbish areas, provides information as to their origin. This analysis has led us to conclude that small wild birds were part of the human diet, in contrast to the domestic pigeons, cats and dogs which were not consumed.

335 Tabatabaei, Negin

7 Islamic  
13 Friday  
Morning

**A historic-comparative study on four Safavid inscriptions of The Old Gama Mosque of Isfahan**

Iran • University of Tehran • nstabatabaei@gmail.com

The reign of Shah Tahmasb I is a decisive period of high sensitivity during the Safavid period. When Shah Tahmasb I came to power, the Safavid dynasty was exposed to different dangers. Under such circumstances, Tahmasb I had to adopt some new policies to defuse crises. The change in Shah Tahmasb I's attitude brought about that the Safavids could avert their overthrow.

These actions of Shah Tahmasb I led to a fresh evolution in all political, social, and cultural organizations in the society. The new form of the above-mentioned organizations manifested themselves in some cultural materials such as inscriptions. Four of these inscriptions which date back to Shah Tahmasb I's reign and were found in The Old Gama Mosque of Isfahan are to be introduced in the present paper. however, the date of these inscriptions were disappeared. In this paper, considering that safavid texts, for these inscriptions suggest an exact dating. then with analysis these cultural materials investigate the economic, social, and political structures of the Safavid period over Shah Tahmasb I's reign.

Key words: Shah Tahmasb, the Safavid dynasty, Old Gama Mosque of Isfahan, inscription

336 Taghavi, Abed – Farzin, Saman

4 Reconstructing

11 Wednesday

Evening

**Environmental Geography Impacts on the Distribution Patterns of Archaeological Sites in Makran in Southern Iran (Case Study: The Cairn Burial's of Parthian Era)**

Iran • University of Mazandaran, Babolsar • abed.taghavi@umz.ac.ir;  
saman\_farzin2006@yahoo.com

Basically, Human Settlements and distribution patterns of archaeological sites depended with geographic conditions. Several factors have been important role in formation and prosperity of their area such as geographical position, Altitude, climate, soil texture, vegetation and nearby to terrain, such as mountains, plains and rivers.

Typology of graves have been included two major forms : 1) square form 2) circular form. These graves distributed on the scopes and located to average 1.20cm until 1.50cm surrounding lands. The roof of graves covered by rock sheets without any t mortar such as Damb-e-Kouh.

In this article tried that environmental factors impact has been determined in formation of environment in Parthian graves in southern Makran region. Thus, this region survived by systematic archaeological method that evidence has identified a large number of ancient sites, cemeteries from Parthian era. According to environmental studies and archaeological evidence can be emphasized that cairn burial of Makran region have located adjacent to water sources and rock scope. Graves's location presented a type of nomadic settlement.

environmental conditions and their effects on the dispersion of the graves' settlement pattern it can certainly asserted that the factor of water and existence of rocky heights have had the main roles in dispersion of this type of burial approach and with more precision in the countries of Pakistan and Oman. it is perceived that all of these cemeteries are located in proximity of water resources and also the presence of abundant highlands beside them are among other ecological characteristics in the quality of cemeteries' dispersion. Keywords: human environment, distribution patterns, cairn burial, Parthian era, Makran region.

337 Taghavi, Abed – Mehrafarin, Reza

3 Traditions

12 Thursday

Midday

**Jundi Shapur: The Urbanization Heritage of Roman in Iran under the Sasanian Empire**

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The ancient city of Jundi Shapur has considered one of the constructed cities in Sasanian era that it erected by Shapur I in 271 CE. Nowadays, its remains located 18 Km Southeast of Dezful city in beside of Siah Mansour river in Khuzestan province.

One of the important factors in formation of city can be indicated to transition of roman captures from Antioch by Shapur I. So that, it exchanges to Military camp for Romans.

Jundi Shapur formed as orthogonal plan like a chess board covering 3.0 X 1.5 Km that it divided to two main streets and completed four major quarters. This city organized to major three parts. Kuhandezh , Sharistan and Rabaz. Kuhandezh considered as place of Ruler while that Sharistan situated as administrative organization of city. In Rabaz region were positioned people and farmlands. Undoubtedly, jundi Shapur considered the social hierarchy of Sasanian society.

The heritage of Romans in Jundi shapur can be indicated that irrigation system by earthen barrel drain. In this system performed by construction of dam on the river and conducting of water to earthen canals according to earth slope measure.

In this article tried that important indicators between Iranian and Roman cultural interactions has recognized in urban planning Jundi Shapur by Historical texts and Archaeological evidence.

Keywords: Jundi Shapur , Roman Urbanization , Cultural interactions , Military camp, Sasanian Empire.

- 338 Taha, Buchra – Sidéra, Isabelle 5 Dealing with the Past  
**Caprine's Tibias Cutting-edges and the Associated Bone Objects through Near-East, Asia, Europe and Balkans: Signs of Neolithic Dispersal and Networks** 09 Monday  
Afternoon  
 Spain/France • University Autónoma of Barcelona – CNRS, France • isabelle.sidera@mae.u-paris10.fr  
 The aim of this presentation is to point out a special type of cutting-edge tool frequent in Mediterranean Neolithic and Chalcolithic. The characteristics of these objects are to be made with a whole caprine tibia which provides a natural handle and a long bevel with a sharp active part.  
 We will present this special tool in a morphological, technological and functional approach to be able to understand if in the different cultural contexts it is exactly the same type with the same know-how and the same function. In this goal, the complete vision of the technical sequence of fabrication and use, and our experimentations will be presented.  
 Also, we would like to measure and discuss the spread of this special type of tool through chronology and space, which, for us, signs the Neolithic dispersal. We will try to localize its origin.  
 Our last point is to examine other types of bone objects that accompany these Caprine's tibias cutting-edges, in a perspective of understanding better Neolithic expansion and people networks.
- 339 Tarafdari, Ali Mohammad 3 Traditions  
**The Position of Greek Poleis in Government System of the Arsacid Empire** 10 Tuesday  
Midday  
 Iran • Islamic Azad, Science and Research branch, Tehran • tarafdary@yahoo.com  
 The Greek Poleis have a long and unstudied history in Iran during the time of Arsacid Empire, and also a main role in formation of political structure of Iran in the same era. In fact, the main characteristic of Iran during the Arsacid period was the lack of political centralisation and the proliferation of provincial states. Two factors were responsible for this situation: first was the invasion of Alexander breaking up of the strong central state of the Achaemenids and set up Greek Poleis throughout the ancient Middle East and Iran, and second is the accession to the Iranian throne of the Parthians who had kept their tribal ties and customs more than any other tribes in Iran. This phenomenon was referred to as parakandeh shahi and in later Arabic sources as muluk al-tawa'if and referred to as feudalism in Europe.  
 At the present paper, the development of Greek Poleis' position in Iran during the time of Arsacid dynasty will be investigated and scrutinized in details.
- 340 Tourovets, Alexandre 2 Travelling Images  
**Unreliability or Stereotype in the Representation of the People of the Zagros in the Assyrian Reliefs** 12 Thursday  
Evening  
 Belgium • University of Louvain-la-Neuve/Center of Oriental Studies. Dept. Archaeology of Iran • atourovets@yahoo.fr  
 The Assyrian sources tell us how the political situation in the Zagros was so unstable mainly due to the internal political instability that prevailed in the area. Regularly Assyria was forced to send troops to put an end to conflicts by defeating the troublemakers. However and contrary to what has been recorded from the written sources, only a very little number of reliefs depict the many victories of the Assyrian army. The Assyrian seemed to feel uncomfortable to illustrate something they were not used to see or some political situation they didn't control firmly. The didn't grasp the real nature of these strange people for which the written sources often point out –sometimes with irony - that they live in little villages poorly defended and under very primitive state of administration.  
 To render the victory of the Assyrian army over these little military unorganized people as resounding as possible the imperial propaganda imposed exaggerated images of powerful walled cities and their strongly armoured and military well trained defenders that have no connection with the historical reality of any of the petty states encountered by the Assyrian armies.

- 341 Truex, Lise 1 Egypt  
10 Tuesday  
Morning
- Returning the Egyptian Gaze: Earning Status and Enacting Syro-Palestinian Identity**
- USA • University of Chicago • liset437@uchicago.edu
- The late 12th and early 13th Dynasty Syro-Palestinian settlement at Area F/I Tell el-Dab'a grew from an egalitarian settlement into a socially stratified community, seeking a balance between cultural assimilation and ever present perceptions of alterity in an environment of Egyptian political control. While Egyptian representations of Levantine "otherness" (Beni Hasan, Serabit el-Khadim) contrast with Egyptian portrayals of their own ethnic identity, emphasizing the incorporation of ethnic Syro-Palestinian elites, soldiers, tribute-bearers, and workers into the Middle Kingdom Egyptian polity and economy, wealthy Syro-Palestinian elites, growing more confident within this Egyptian power structure, displayed their ethnicity with increasing independence, embedding Levantine cultural practices, artifacts, and iconography into Egyptian modes of living, ruling, and dying. Archaeological data from the late 12th Dynasty residential area and necropolis (Stratum H, d/2 stratum) and the early 13th Dynasty "palace complex" and necropolis (Stratum G-4, d/1 stratum) provide support for the intersection of Egyptian and "Asiatic" identities and the enactment of Syro-Palestinian perceptions of separate ethnicity, evident in contracted human burials, burials of donkeys in the entrance pits of tombs, the use of "Levantine Warrior" bronzes in elite male burials, and the funerary statue of a Syro-Palestinian man. Lower Nubian cemetery data from New Kingdom pharaonic, Pan-Grave, C-Group and "Transitional Burials" lend insight into the Tell el-Dab'a example by suggesting how social status within the Egyptian colonial power structure in Teh-khet mediated the interplay of emulation and rejection of Egyptian identity, thus shaping the Nubian perception of self and the other.
- 342 Tsuneki, Akira 6.1 Reports Region  
11 Wednesday  
Morning
- Tappeh Sang-i Chaxmaq and the Neolithization of Northeastern Iran**
- Japan • University of Tsukuba • tsuneki.akira.gf@u.tsukuba.ac.jp
- Tappeh Sang-i Chaxmaq is a Neolithic site in northeastern Iran. It consists of two mounds (west and east tappehs), situated c. 200 m from one another. Both mounds were excavated in the 1970s by the late Professor Sei-ichi Masuda. Five construction layers in the west tappeh and six in the east tappeh were exposed, all of which belong to the Neolithic period. The finds indicate that the uppermost layer of the former is older than the lowest layer of the latter. This dating of the strata reveals that a series of early farming villages existed for long periods at Tappeh Sang-i Chaxmaq, which is, in fact, the site of the earliest village with fully domesticated plants and animals and the most extensively excavated Neolithic settlement in northeastern Iran. However, the results of the excavations have not yet been fully reported.
- We are now re-examining the excavation results, and I would like to employ our new results to discuss absolute dates, the mode of subsistence, the Pre-Pottery Neolithic phase, the emergence of pottery, and the development of pyrotechnology. This presentation thus seeks to facilitate the discussion of the Neolithization process in northeastern Iran.
- 343 Tucci, Giulia 1 Egypt  
11 Wednesday  
Morning
- Egyptian Royal Statues and Stelae from Late Bronze Palestinian Public Buildings**
- Italy • Università di Roma "La Sapienza" • giuliatucci@live.it
- During nearly three centuries (1460-1170 B.C.E.), since the end of 18th to the 20th dynasty, Palestine was directly held by Egypt. This long domination imposed by a country whose prestige was directly proportional to its demographic, cultural, economic and military values, really had a decisive influence on various aspect of life of the region.
- Through the study of this kind of Egyptian materials found in major public buildings of the Late Bronze Age, it will be created a map of the Egyptian presence in the sites located along the main crossing routes of the Levant, trying to figure out whether the Egyptian presence was limited to elites who occupied official positions being auditors and brokers for the pharaonic court, or if there was also a presence of populations units coming from Egypt, more or less permanently resident in Southern Levant.
- This analysis may will lead also in understanding how and by which means these artifacts came in their final context of recovery.

344 Turchetto, Jacopo

7 Islamic

10 Tuesday

Evening

**Among 'Underground Granaries', Fortresses and 'Built' Churches.  
Territorial Markers for the Reconstruction of the Road Network of Post-classical Cappadocia (Turkey)**

Italy • University of Padua • jacopo.turchetto@libero.it

Within the context of the ancient road network of Anatolia, Cappadocia has, over the centuries, been a quasi-obligatory crossing point between the uplands and the Mediterranean coastal strip. It is because of its strategic position that central and southern Cappadocia became an important point of contention between the Byzantine Empire and the Arab armies.

The aim of this paper is to try and determine the possible pathways followed by the road routes of post-classical Cappadocia, analysing, also through a GIS-based approach, a series of 'territorial markers' which dotted the territory. Particular attention will be given to garrisons, fortresses and castles, which were built in strategic positions all over the landscape, certainly overlooking road arteries and passing places; as well as to underground cities - whose existence and inhabitation are attested at least from the eighth century AD when they became the object of attacks from invading Arab forces - and 'built' churches, which usually stand at the main routes' junctions.

Moreover, a fresh analysis of Byzantine/Arab sources, the study of historical cartography and of remote sensed images, will give more reliable evidence to the reconstructive hypotheses referable to the post-classical road network of that frontier territory.

345 Ünsal, Nur Deniz

6.2 Reports Themes

11 Wednesday

Evening

**What can Mycenaean pottery of Çine Tepecik tell us?**

Turkey • Uludağ University-Bursa • nurdenizunsal@hotmail.com

Çine-Tepecik, which is located in the province of Aydın-Turkey, is a mound which provides findings of material culture from Chalcolithic period to the Iron Age. Architectural remains of the mound dated to the second millennium B.C., revealed a settlement which has a defense system. Within the ceramic finds associated with the architecture in the settlement, Mycenaean pottery, reflects the Mycenaean culture tradition of pottery of the Aegean world in terms of material-technique, decoration style and also vessel forms. The archaeological excavations of Çine-Tepecik which were started in 2004, give the chronological development parallel with the cultures of Western Anatolia, Aegean and Eastern Mediterranean. As well as the domestic ceramics, both locally produced and imported Mycenaean pottery at Çine-Tepecik are an important group. Çine-Tepecik has the distinction of being the only center now located in the inner parts of Western Anatolia on the basis of quantitative and varied repertoire of Mycenaean pottery. Mycenaean pottery of Çine Tepecik can be dated to the LHB1 to LHIIIC period (ca. 1320/1300-1190/1090 BC) in terms of decoration style and pottery forms.

Both locally produced and imported Mycenaean pottery of Çine-Tepecik which is important for the relative chronology of this period and comparison with other settlement and cemeteries in the region will enable us the creation of a relative chronology and understanding of the Late Bronze Age Mycenaean pottery of Çine-Tepecik.

Keywords: Western Anatolia, Çine-Tepecik, Late Bronze Age, Mycenaean Pottery

346 Uygun, Çilem

3 Traditions

### Roman Pottery from Üçtepe Excavation in South-East Anatolia

10 Tuesday

Turkey • Mustafa Kemal University, Archeology Department Hatay • cilemuygun@hotmail.com

Morning

Üçtepe mound located on the Upper Tigris valley, southeast of Diyarbakır, Turkey. Excavations at Üçtepe mound were carried out by Prof. Dr. V. Sevin between 1988-1992. Üçtepe is one of the largest mounds south of the Upper Tigris. It is formerly known as Kurkh, Kerkh or Kerh-i Dicle. Üçtepe also known as NeoAssyrian province center Tusha or Tushan, the fame of the mound is due to two stelae of the Neo-Assyrian kings, Ashur-nasir-pal II (883- 859 B.C.) and Shalmaneser III (858-824 B.C.), that were found here in 1865 which are now being displayed in the British Museum (Kurkh Monoliths). Also, it is understood that Üçtepe and its surroundings were at that time the central region of the state of Mitanni.

The stratigraphy of Üçtepe is as follows: 1-4: Roman Imperial, c. AD 2nd-4th; 5-6: Hellenistic, 4th-1st c. BC; 7-8: Neo Assyrian Empire, 8th-7th c. BC; 9: Middle Assyrian Period, 10th-9th c. BC; 10: Late Bronze Age, mid second millennium BC; 11: Middle Bronze Age (Colonies), first half of the second millennium BC; 12 (A-B?)–13: Early Bronze Age, end of the third millennium BC. However, taking into consideration that few potshards were found on the surface and the virgin soil could not be reached, it can be accepted that the first settlement at the mound may go back to the Early Chalcolithic Period.

Hellenistic (5-6) and Roman periods (1-4) of the Üçtepe mound are quite strong. The earliest coin belongs to Tigranes Younger has been dated to 70-66 B.C. On the other hand, the latest one dated to 4th centuries A.D. Roman pottery found between first and fourth levels on the mound consisted high quality table-wares such as ESA and low quality common-wares which are storage-bin and cooking-wares. Within Roman pottery context fragments belong to ESA are less, though Üçtepe is near to Antiocheia and Samosata, accepted as production centers of ESA. On the other hand, fragments having low quality clays and slips can be defined as local productions from Üçtepe in spite of their typology belongs to ESA. Additionally, the diversity of form and typology in common-wares supports the notion that this group may be produced in Üçtepe.

To sum up, this study aims to define analogy of ceramics seen in Anatolia and Syria as well as the local effects on ceramics typology of Üçtepe in Roman Period.

347 Vacca, Agnese

6.1 Reports Region

### New Data on the EB III Pottery Materials from Old and Recent Excavations at Tell Mardikh/Ebla and Tell Tuqan, Syria

12 Thursday

Afternoon

Italy • Sapienza University of Rome • agnese.vacca@gmail.com

EB IVA (ca. 2400-2300 BC) in Central Inner Syria is documented in several stratified contexts. In particular at Ebla this phase (Mardikh IIB1) is represented by the Royal Palace G, which yielded a large amount of materials and epigraphic documents found in situ in the destruction layers. On the contrary, the relative chronology of the first half of the 3rd millennium BC, is less defined, due to the lack of extensive excavations and publications of stratified contexts.

Earlier occupational phases at Ebla (Mardikh IIA) are documented by evidence coming from different areas of the site and, in particular, from earlier levels uncovered beneath the floors of the Royal Palace G. The present paper focuses on the analysis and definition of the EB III ceramic horizon at Ebla, integrated with new data coming from the deep sounding located in the Lower Town of Tell Tuqan (Area P). The goal of the study is the realization of a seriation of ceramic materials based upon the stratigraphies of these two sites, in order to establish a relative chronology, which may serve as a starting point for comparisons with other published contexts.

348 Vahdati Nasab, Hamed – Kazzazi, Mandan – Nayebi, Samira

5 Dealing with the Past

### Venus Figurines: Paleolithic vs Neolithic. Metric Analysis of Female Figurines from Europe and the Middle East

09 Monday

Afternoon

Iran • Department of Archaeology, Tarbiat Modares University, Tehran • vahdati@modares.ac.ir

Prehistoric human figurines in general and female figurines in particular have been of long-standing interest to archaeologists, but there has been considerable debate about their function. Although early human figurines are often viewed as a corpus, there is considerable variety in body proportions, forms and artistic styles across the vast geographical areas and temporal periods for which they are attested. Here, a metric analysis using the Root Mean Square Deviation (RMSD) technique is used to compare a figurine from Tepe Sarab with contemporaneous and earlier figurines from a broad geographical area. The results of this analysis indicate that there is a clear division in style and body proportions between the female figurines that are made during the Paleolithic and Neolithic periods. Moreover, our results indicate that there are clear differences in style and body proportions between figurines found in Central Europe and the Near East.

Key words: Tepe Sarab, female figurine, metric analysis, Upper Paleolithic, Neolithic

- 349 Varoutsikos, Bastien (1) – Mgeladze Ana (2) - Gabunia, Manana (2) – Agapishvili, Tata (2) – Chataigner, Christine 6.1 Reports Region  
12 Thursday  
Evening
- Bavra-Ablari: a Chalcolithic Rock Shelter in the South Caucasus.**
- USA/Georgia/France • 1 Harvard University; 2 Georgian National Museum; 3 CNRS • b. varoutsikos@gmail.com
- The Chalcolithic rock shelter of Bavra-Ablari, located on the Djavakheti Plateau in Georgia, provides a glimpse at the important socio-cultural and economic processes that arose during the late prehistoric period in the South Caucasus. The existing record available on the Chalcolithic period in this region (early 5th to mid-4th mill. BCE) emphasizes the development of a number of new behaviors, including territorial mobility, dispersal of settlements, large-scale pastoralism, and increased cultural heterogeneity. However, insufficient chronological, economic, and environmental data has thus far impeded the development of a framework that explains the cultural mechanisms at the origins of these new behaviors and their connections to earlier (Neolithic) and later (EBA) periods.
- The rock shelter of Bavra-Ablari is located at the intersection of the Chalcolithic cultural areas of Western Georgia, the Kura Valley, and the Armenian highlands. Ongoing excavations (2012-2013) offer insight into Chalcolithic cultural developments and provides a useful chrono-typological framework to address the new behaviors that took place during the late 5th/early 4th mill. BCE. This rock shelter (1700m ASL) was a seasonal camp for fishing, herding, and the hunting of large mammals, where the lithic assemblage shows technical behaviors that were both conservative and innovative.
- 350 Vered (Rosenblum), Ariel 2 Travelling Images  
09 Monday  
Evening
- The Birth of a Myth? Incised Motifs on Female Figurines from Neolithic and Chalcolithic Southern Levant**
- Israel • Israel Antiquities Authority & Ben-Gurion University of the Negev • ariel\_rosenblum@yahoo.com
- The millennia that followed the transition to agriculture in the Levant and Mesopotamia saw the consolidation of subsistence strategies and social institutions, as well as the crystallization of symbols that gave rise to the Ancient Near Eastern civilization. Our knowledge of the symbolism of this formative era in the southern Levant is limited, however, and derives mostly from anthropomorphic figurines, particularly of women. This paper presents a hitherto little-discussed aspect of this tradition, namely the various motifs incised on female figurines. The transition from the Pottery Neolithic period (ca. 6,400–5,800 BC) to the Early Chalcolithic period (ca. 5,800–5,300 BC) involved an increase in the variety of those incised motifs, and the replacement of individual patterns by composite scenes. The growing complexity of the incisions stands in sharp contrast to the design of the figurines, which tends toward abstraction over time. It is suggested that the transformation of this visual concept may be interpreted as reflecting the emergence of a myth.
- 351 Verhulst, Astrid 5 Dealing with the Past  
11 Wednesday  
Morning
- One Seal, Multiple Souls. A Study on Old Babylonian Seals from Sippar as Markers of Identity based on the Agency Model**
- Belgium • Ghent University • astrid.verhulst@ugent.be
- The recently refined agency model, based on the premise that all humans have the capacity or even the need for motivated actions with consequences, has – quite surprisingly, only rarely been applied by scholars studying the ancient Near East. When the model is considered in the context of the expression of identity it could be stated that the materials which are studied by archaeologists can be considered as the result of (conscious) actions and aspirations of an individual; as such, material things may to some extent be regarded as representative of this individual's identity and the society to which he or she belongs. This study uses the concepts of agency and identity to analyse the iconography, legend, and use of Old Babylonian seals from Sippar, based on a corpus of over 7,000 impressions, and the information from their accompanying texts, offering a sneak peek into the individual level of a society of which only very little is known. Since seals were specifically made to function in a social context, i.e. as tokens of one's presence at or agreement with a transaction, they were a useful 'tool' for their users to position themselves in their society by emphasizing certain aspects of their identities through the reuse of someone else's seal, the mention of a family deity, a king, or a professional title in the seal legend, and/or the representation of seal scenes that were either dictated by familial or contemporary preferences. As such, the seals can not only be considered as the results of conscious actions (i.e. the choice of the seal owner to conceive his seal in a certain way), but may also have generated certain activities through the perception of identity that was created by its users.

- 352 Vermaak, Fanie 1 Egypt  
09 Monday  
Afternoon
- The Ancient Persians in Egypt – Focus on the Kharga Oasis**
- South Africa • University of South Africa • Vermaps@unisa.ac.za
- The Kharga Oasis on the gateway of the Western Desert of Egypt played a major role in the pharaonic history, especially during the 27th Dynasty which has been regarded as the stepchild of Egyptology. The traces of Cambyses and Darius I cannot be ignored and their impact on the Egyptian cultural history becomes gradually clearer as scholars focus more on the details of the region. The enigma of the “Forty Days Road” (Darb el-Arbein) from Asiat and Darfur still needs to be fully understood and the use of this avenue before and after the Persian Period still creates challenges to scholars. This presentation will focus on several items which could be regarded as typically ancient Persian and the possibility of Persianization in North Africa will also be addressed.
- 353 Völling, Elisabeth 2 Travelling Images  
12 Thursday  
Midday
- Transfer and Transformation of a Notation System from Mesopotamia to Bronze Age Anatolia**
- Germany • mikroArchäologie • Lisa.Voelling@gmx.de
- Heinrich Schliemann’s excavations at Tell Hissarlık, conducted between 1871 and 1890, produced a total of 10-12.000 so called spindle whorls. Identically clay items are well known in the Chalcolithic period of Central Asia and widespread through the entire term of non-written Bronze Age Anatolia. Only 2500 of Schliemann’s clay objects are kept today in the State Museum of Berlin, where they have been evaluated statistically and archaeologically. Half of them are incised with a great variety of signs, which are interpreted on the basis of three-dimensional clay tokens in Mesopotamia as a notation system. The way of transfer and transformation took place from three-dimensional objects to two-dimensional signs. But the essential of all processes is nevertheless the understanding of these visual codes. This shall be made clear in the EBA context of Troy’s importance as a metallurgical centre in the second half of the 3rd millennium BCE and its close cultural and economic ties to Anatolia and Mesopotamia as well as the Aegean and the Balkan regions during the late EBA II and EBA III.
- 354 Wachtel, Ido 6.1 Reports Region  
12 Thursday  
Evening
- ‘Jethro Cairn’ - An Early Bronze Age Site in the Upper Galilee, Israel: Function and Significance**
- Israel • The Institute of Archaeology, The Hebrew University of Jerusalem • Idowachtel@gmail.com
- This study focuses on 'Jethro Cairn', a unique and enigmatic Early Bronze Age (EBA) site located in the upper Galilee, Israel. The main feature of the site is a monumental lunate-shaped cairn, which was previously interpreted as a fortification of an EBA city.
- Two seasons of excavation conducted at the site yielded the basic archaeological and environmental data which helped to determine the site’s chronology and character. The results of the excavations support the initial EBA date, but negate the interpretation of main edifice as a fortification. Calculation of the cairn’s volume shows a remarkable investment in manpower, no less than that found in the well-known Rujum el-Hiri structure. However, there is no actual evidence for a permanent settlement nearby the cairn. Examination of contemporary sites in the vicinity, and comparison to other Early Bronze Age fortified sites in northern Israel, often termed 'enclosure sites', helps to situate the phenomenon of Jethro Cairn in its cultural and social context, emphasizing its unique nature. The proposed interpretation for the site is that it constituted a prominent landmark in its natural landscape, serving to mark possession and to assert authority and rights over natural resources by a local rural or pastoral population.

- 355 Wagner-Durand, Elisabeth 2 Travelling Images  
11 Wednesday  
Evening
- Visual Narration in Assyria versus Static “Art” in Babylonia – Making a Difference in the First Millennium B.C.**
- Germany • University of Freiburg i. B. • elisabeth.wagner@orient.uni-freiburg.de
- Beyond doubt, there is no known ancient near eastern society but Assyria - except maybe for Egypt- in which visual story telling (understood as “true” narratives) gains such an outstanding status in the visual world. This observation becomes even more remarkable if one takes into account that Assyria’s southern neighbor Babylonia barely produced visual narratives on large size “art”. In this respect, the paper presented deals with theoretical concepts of narration and with the perception of images in the material world as vital instruments for the understanding of ancient visual culture(s). In this vein the contributions aims to explain the fundamental differences between the empires of Assyria and Babylonia in the first millennium focusing on the presence and absence of large scale narrative images. Looking at the different “Sitze im Leben” of images and their perception by the societies in question, the study seeks to explain why historical narrations were part of the material visual culture of Assyria but did never transcend - neither ideologically nor physically - into the Neo-Babylon empire.
- 356 Wagner, Marcin 6.1 Reports Region  
13 Friday  
Midday
- Topaz Gala Depe. Excavations on Site Dated to Early Iron Age**
- Poland • University of Warsaw • m.wagner@uw.edu.pl
- Since 2009 Polish Archaeological Mission in Turkmenistan has been carrying out excavations at Topaz Gala depe in southern Turkmenistan. This small mound is located east of a road from Serakhs to Mary (ca. 12 km from Sarakhs). Archaeologists uncovered remains of fire temple, dated to the early Iron Age, especially on Yaz II period. The building consists of 4 rooms. In the west side of building was excavated the main rectangular chamber with round clay altar in the center. South part of main room was divided in four pieces by three antas. One of them was filled up with ashes. In the SW corner was put a storage jar with the hole in the lower part. It seems, that priests used this jar for cooling ashes from the altar. Building was surrounded by corridor and external walls with semicircular towers. During the last archaeological season between the mudbricks of external walls two bronze arrowheads were found, similar to that uncovered in Margiana, dated to the 9th century BC.
- Remains of an uncovered fire temple are close to the temple excavated in northern Afghanistan on Tillya tepa. Topaz Gala depe is the most southerly Yaz II site in Sarakhs oasis. The settlements was concentrated in northern part of oasis, where is located one of the biggest site – Oyukly depe, which seems, to be an administration center during the Yaz II period.
- 357 Wasmuth, Melanie 1 Egypt  
09 Monday  
Afternoon
- Egyptians in Iron Age Mesopotamia: Reconstructing their Socio-Cultural Settings**
- Switzerland • University of Basel • melanie.wasmuth@unibas.ch
- The non-literary texts from Mesopotamia in the first half of the 1st millennium BCE allow a detailed insight into the workings of the multi-cultural society at that period of imperial interaction in the wider Near East including Egypt. Based on the documents mentioning Egyptians, a summary will be given of the outcome of the post-doc project on "Constructions of Identity: the case of the 'Egyptians' in (early) Iron Age Mesopotamia" (University of Basel: Egyptology). The paper is going to focus on the tablets as archaeological objects highlighting two aspects of research: a) the presentation of specific sources for which the reconstruction of the archaeological setting of the tablets and their contents significantly added up to new results regarding the relevance of being (perceived as) a foreigner in daily life; b) the limits of interpretation due to the nature of the written documents and/or their lack of properly documented archaeological record.

358 Weigl, Michael – Bartsch, Markus

6.1 Reports Region

**The Development of Specialized Industries at Khirbat al-Mudayna ath-Thamad, Central Jordan**

13 Friday

Midday

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Organized industrial production can be evinced from the presence of equipment and installations related to a particular form of production. Criteria for the distinction between daily domestic work, intensive cottage industry and state organized industry has yet to be distinguished for small town sites in central Jordan. The discovery, at Khirbat al-Mudayna ath-Thamad on the Dibhan Plateau, of hundreds of loom weights, along with spindles, spindle whorls, weaving spatula, tablets used for weaving, weights of different of various functions and raw materials for dyeing is remarkable, but not unique. However, the assemblage of these tools within an aligned sequence of tripartite pillared buildings fitted with limestone basins and pillars in alternating arrangement, workers' stools, loom fragments, industrial querns and vessels implies a rather sophisticated and high level of organization and production, most likely textiles. This paper will focus on the analysis of the buildings, their installations and find distribution as likely evidence for intentional development of an industrial quarter.

359 Whincop, Matthew

4 Reconstructing

**Reconstructing the Bronze and Iron Age Ecosystems of Western Inland Syria: Accounting for Variability in Existing Population and Sustainability Models.**

09 Monday

Evening

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Models for estimating ancient populations of tell sites in Syria have been developed using data from the Jazira and Khabour regions of Syria. Applying these models to tell sites in the Tell Nebi Mend hinterland, with its relatively rapid decrease in rainfall estimates and low levels of surface water, must also account for significant variability in production and sustainability. Aided by GIS, this paper will explore the validity of population and sustainability models for the tell sites of the Tell Nebi Mend hinterland. The paper will present population and sustainability zone estimates for these tell sites based on existing models and will then identify different stresses on these estimates by simulating variation in annual rainfall. What effect will decreases in annual rainfall have on the area of land necessary to sustain the population and its way of life? Is there sufficient land between the many tell sites to sustain the estimated populations in times of sub-optimal rainfall? Do the existing models sufficiently account for variability in the local ancient eco-system? Is it time to consider alternative models?

360 Whitcomb, Donald

7 Islamic

09 Monday

Evening

### **The Mosques of Mafjar: A Sequence and some implications for understanding Qasr Hisham**

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Religious faith in Jericho may be seen in Biblical and Christian traditions, usually in the architectural forms of synagogues and churches. The mosque is also a distinctive religious building, denoting the presence and worship by Muslims in this place. There are rarely symbols aside from fine inscriptions, an aspect very rare in Jericho. The earliest mosque in Jericho was in the Umayyad Palace at Khirbet al- Mafjar (Qasr Hisham). This mosque has only recently been discovered by Ignacio Arce during the new archaeological project of the Department of Antiquities of Palestine and the University of Chicago. Arce realized that the south wall of the Palace was a broad mosque, with four rows of columns, a mihrab, and an external entry through the qibla wall. The conversion to four narrow rooms and a small chapel or bayt al-salah is an Umayyad alteration, one of many that were introduced into this finished palace.

This mosque was replaced by a second mosque at Mafjar, the famous structure situated between the palace and the audience hall and beside the shadwan or ornamental pool (as described by Baramki). This mosque had a covered haram with columns and a mihrab of the same size and spacing as the original palace mosque. There was an entry from a corridor attached to the palace for access of the Caliph or imam. The change from a broad style of mosque to a more normative deep mosque during the Umayyad period seems to be present in this site.

The most recent mosque was discovered during the 2013 season of excavations near the center of the Northern Area of the site. The mosque has a deep mihrab with plastered surfaces and a rectangular external face. The floor of the mosque was covered with reused burnt brick tiles. An external structure on the western side was probably the foundation for a staircase minaret. The northeast corner had not been excavated in the 1960s and revealed a set of fine bowls, small storage jars and basins, all datable to the early Abbasid period (late 8th – early 9th century). In front of the mosque was a large yard and a deep vaulted cistern with a plastered pool, possibly for ablutions before prayer. East of the mosque was an entryway leading past a possible hammam and toward the large Abbasid residence.

This third mosque is the latest found at Khirbet al-Mafjar and completes the picture of a continuing Muslim community in this palace and town.

In Baramki's dissertation (1953), he states one of the contributions of this site would be "the evolution of the plans of mosques." This paper will offer some preliminary observations on this sequence of mosques and the implications of these religious buildings in view of Hamilton's interpretations and broader urban development of Khirbet al-Mafjar.

361 Wicke, Dirk

2 Travelling Images

11 Wednesday

Evening

### **Assyrian or Assyrianising? Reflections of Assyrian imperial art in southern Anatolia**

Germany • Johannes Gutenberg-Universität Mainz • dwicke@uni-mainz.de

Images of the Assyrian king and his officials were used as models for the depiction of local rulers in northern Syria and southern Anatolia. Major sources of inspiration certainly were the numerous rock-reliefs and stelae left by the Assyrian king as well as the art in the provincial capitals.

More surprising is to find various adaptations of Assyrian artistic traits in territories outside the direct Assyrian rule and a strong Assyrianising trend even in religious and non-official monuments. This can be considered as an expression of overt political appeasement, but as well as an indication for a new construction of personal identity – or as the advent of a new fashion. There is no need to assume a priori Assyrian pressure in these phenomena. In particular the depiction of private persons on funerary-stelae are quite often neglected in this respect and indicate a phenomenon of elite emulation.

This paper presents examples of the various kinds of Assyrian influence on local monuments during the 10th to 7th cent. BC, in particular viewed against their local and political background between Hittite legacy and Assyrian possibilities.

- 362 Wicks, Yasmina 2 Travelling Images  
12 Thursday  
Morning
- The Journey of a Visual Idea: Bronze “Bathtub” Coffins in Elite Neo-Assyrian, Neo-Babylonian and Neo-Elamite Funerary Contexts**
- Australia • University of Sydney • ywic3402@uni.sydney.edu.au
- During the course of excavations in Iraq and Iran over the past century a small number of unique bronze “bathtub”-shaped coffins have been discovered in archaeological contexts dating to the 8th-6th centuries B.C.E.. Their use by Assyrian, Babylonian and Elamite elite raises interesting questions regarding the possibility of shared funerary practices amongst these groups, yet they have rarely garnered scholarly attention for anything more than their function as containers for holding a corpse and grave goods.
- Engaging with the theme of Transfer and Transformation of Visual Ideas this paper explores the most striking visual aspects of the corpus of bronze coffins: their surface decoration, their distinctive “U” shape and their shining bronze material. It will be argued that because burial receptacles are a central feature of the funeral and intended to hold the physical remains of the deceased for “eternity”, the material and visual properties of the coffins were not incidental, but held special significance for the burying societies. At its conclusion, this paper will consider the question of whether the visual ideas embedded in the bronze coffins and their meanings in elite funerary contexts were transferred or transformed as they travelled from their Assyrian home towards Babylonia and Elam.
- 363 Wilkinson, Toby C. 2 Travelling Images  
13 Friday  
Morning
- Clay, Skin and Cloth: a Diachronic Study of Ancient Near Eastern Modes of Body Metaphor and the Transfer of Pottery-Borne Image**
- Turkey • TÜBITAK/Istanbul University • work@tobywilkinson.co.uk
- The notable plasticity of clay as an aesthetic medium allowed the material to provide a central field for the expression of social needs and ideas since its discovery. In recent years, the metaphorical synergy between clay vessels and the human body has become a subject for study for those interested in material culture or craft and their role in sustaining social systems. The most intense research on the topic has been undertaken by ethnographers studying contemporary smaller-scale societies in Africa. But the evidence from ancient myths suggests that the connection between body and pot has a deep history, certainly within a 3rd and 2nd millennium Mesopotamia world-view, and likely to stretch further back into prehistory. This paper builds on this observation to examine the mostly non-figural ‘images’ carried on certain early Near Eastern pottery types, their significance and their mobility. The paper will argue that the geographic transfer of ‘images’ on clay—a relatively immobile medium—relied precisely on the mobility of their metaphorical prototypes, namely the adorning ‘images’ on human bodies. The nature of the adornment—inscribed on the skin or woven into cloth—may also reflect diachronic changes in systems of social hierarchy and organization.
- 364 Winkelmann, Sylvia 2 Travelling Images  
10 Tuesday  
Evening
- Transfer and Transformation of a Religious Symbol System from Southeast Iran to Bronze Age Margiana**
- Germany • Halle • dr.sylvia.winkelmann@hotmail.de
- A newly discovered Bronze Age urban culture - the BMAC (Bactria-Margiana Archaeological Complex) arose in the second half of 3rd millennium B.C. in Bactria and Margiana that had a highly developed religious symbol system found on seals, weapons, vials, wall mosaics, toreutic and in form of stylized stone objects as well as in stone and terracotta statues showing a large number of mixed beings, heroes, goddesses and symbolic as well as scenic depictions.
- This religious symbol system has only little precursors in Central Asia but shows strong similarities with the symbol system in earlier and contemporary Iran. The paper will discuss 1. the possible origins of the religious symbol system of BMAC in the Kerman Culture of Southeast Iran as well as in the foregoing Proto-Elamite Culture that both possess same or similar divinities, mixed beings and motifs, 2. the way of transfer and transformation of these ones into the BMAC and 3. differences between the symbol systems of both regions that are expressed in newly developed forms and appearances of gods, heroes, mixed beings, symbols and motifs, in changed artefact groups presenting the symbol systems and in new burial practices.

- 365 Wygnańska, Zuzanna 2 Travelling Images  
11 Wednesday  
Afternoon
- A Bun and a Headband – the Shifting Motive of the Royal Headdress**
- Poland • Polish Centre of Mediterranean Archaeology, University of Warsaw  
• wygnanska@tlen.pl
- A distinctive headdress – a bun encircled by a headband appeared in the southern Mesopotamian iconography in the second half of the third millennium BC. It was worn mostly by male but sometimes also by female individuals. Such coiffure girded by a headband is depicted on the king Meskalamdug's helmet. The contexts of appearance of this specific headdress indicates that in the third millennium Mesopotamia it was a status marker reserved for a king or high ranking individuals associated with the royal court. It seems to be a ceremonial dress used to signal power in both, secular and religious sphere. The set – the bun and the headband, appeared rarely also beyond the southern Mesopotamian sphere, for example in Tell Halawa, where it was adapted for a cultic representation indicating that far from the place of origin this symbol underwent a transformation. With a flow of time the bun with the headband still occurred in Mesopotamian iconography in unchanged form but disappeared from the official depictions and shifted toward a private sphere. The forgotten motive reappeared as the royal symbol far from its place of origin in the second millennium Qatna, where a hero-type individuals wearing a bun and a headband were presented on a quiver.
- 366 Yağcı, Remzi 6.1 Reports Region  
13 Friday  
Afternoon
- Rhodian Soli: Geometric, Orientalizing and Archaic Periods at Soli**
- Turkey • Dokuz Eylül University • remzi.yagci@deu.edu.tr
- Ancient sources suggest that Soli was a Rhodian- Lindian colony in the 7th century BC. Accordingly, archaeological evidence uncovered during the recent excavations provides data revealing close relations with Rhodes and other colonies. Bird Bowls, Rosette Bowls and Wild Goat Style pottery from the Geometric and Early Orientalizing periods are among the most remarkable finds. These types of pottery are largely found in Rhodes although the place where they were manufactured is highly controversial. All these pottery types are abundantly represented at Soli, Yumuktepe, Tarsus in Cilicia. In this paper, Rhodian archaeological material belonging to Geometric, Orientalizing and Archaic periods excavated at Soli will be comparatively evaluated and presented.
- 367 Yashmi, Ramin 5 Dealing with the Past  
11 Wednesday  
Morning
- The Weird Sisters: South-East of Iranian Plateau vs. Surrounding Regions. The Process of Internal Cultural Development of Civilization Centers during the Fourth and the Third Millennia BC**
- Iran • Islamic Azad University, Central Tehran Branch • r.yashmi@gmail.com
- Temporal continuity of forming contexts to flourish the first civilizations at the end of the Fourth Millennium BC in South-west and South of Asia, shows a west-east trajectory; as the outcome, this phenomenon had influenced importation of cultural traditions and fundamental characteristics amongst societies of the region, since formation of stratified societies to city states. Meanwhile, central and south-central part of Iranian plateau, besides BMAC, could be considered as a link between east and west that in higher dimensions, play the role of a cultural buffer zone. The existence of homogeneous cultural elements such as architecture, status material culture, etc. in different environmental and ecological bases, clarifies interactions between cultures such as Third-Millennium BC Southern Mesopotamia, Khuzestan and South-east of Iranian plateau. The theory of “sister societies”, cultural derivation along with independence and “internal development” of human societies in different ecological basis could be well distinguished in South and South-eastern Iran. According to recent publications on the results of archaeological studies in the region, this essay attends to indicate the cultural individuality of the area and interpret the circumstances of its relations with surrounding regions at the end of the Fourth Millennium and the Third Millennium BC.  
Keywords: Internal Development, South-east of Iranian Plateau, Cultural Buffer Zone, Sister Societies, Third Millennium BC.

368 Yedidağ, Turgay Yaşar

3 Traditions

**Hellenistic Moldmade Bowls from Phrygia Epiktetos: New Evidence from Dorylaion**

10 Tuesday

Morning

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The excavations conducted between 1989 and 2011 at Dorylaion had revealed a Hellenistic quarter, formed by a series of mud-brick structures and courtyards, covering an area of 900 m<sup>2</sup>. The studies in this three-layered Hellenistic quarter provided a great amount of Hellenistic pottery, including a serious number of moldmade bowls, following the simple coarse ware which forms the majority of the findings. Most of the moldmade bowls belong to the 3rd and 2nd centuries BC, the period when this type of vessels were popular in ancient Greece and Anatolia. According to the decoration patterns, three main groups have been identified amongst the studied examples: "Floral", "Figured" and "Concentric Semicircle Bowls". The "Floral" group can be examined under three sub-groups: "Imbricate Bowls", "Long Petal Bowls" and "Alternate Floral Bowls", and the "Figured" ones frequently bare idyllic figures such as birds, eros, dolphins and tritons.

The moldmade bowls studied in this paper are mostly import goods, however, the findings of some mould fragments at Dorylaion exhibit the existence of a local production at the site. Since the popular pattern seem to be imbricate decoration, some moulds with simple and local patterns have also been attested.

369 Yener, K. Aslihan – Akar, Murat

6.1 Reports Region

**A Decade of Excavations at Tell Atchana/Ancient Alalakh**

13 Friday

Afternoon

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Following the excavations by Sir Leonard Woolley at Tell Atchana/ancient Alalakh during the 1930s and 1940s, renewed excavations revealed the settlement history and chronology of the site as well as the 2nd millennium BC cultural landscape of the Amuq Valley (the Mukish Kingdom) in Hatay, Turkey. The new round of excavations, now totaling 34 squares, exposed a series of palatial and domestic building complexes and fortification systems dating to the Middle and Late Bronze Age as well as the Iron Age.

With an effort to revise the chronological and contextual shortcomings from Woolley's excavations, new squares have been strategically located within the Royal Precinct of Alalakh in order to establish their stratigraphic connections with the standing remains of the Level VII and IV Palaces. To understand the wider cityscape of Alalakh, a series of new squares was located in areas never explored thus providing a comprehensive dataset from contextually distinct sections of the settlement. This paper will give an overview of 10 years of archaeological fieldwork and the implications towards a new understanding of 2nd millennium BC chronology.

- 370 Yousefi Zoshk, Rouhollah – Foruzan, Frida – Miri, Javad 4 Reconstructing  
11 Wednesday  
Evening

**Pastoral Nomad Bureaucrats and Managers: Research on the Proto Elamite Period in Central Iranian Plateau**

Iran • Department of Archaeology, Islamic Azad University of Varamin  
Tehran • pezuzo@yahoo.com

Reading archaeological literature on ancient Iran, one cannot fail to be impressed by the momentous achievements with which the societies of the 5th and 4th millenniums B.C. have been credited. Interests in and interpretations of this period have focused on its credential as early state and urban society. In recent decade, the Proto Elamite period of the late 4th millennium B. C. in Iran has been the subject of considerable research by archaeologists.

The Proto Elamite highlanders of Iranian were a highly bureaucratized, late 4rd millennium B.C.E. tribal federation centering in southwestern Iran. Its bureaucrat superstructure, known almost from many hundreds of Numero-idiogram tablets and unique glyptic art, has long been studied. However, these sources deal only indirectly or not at all with the bookkeeping of cattle and agricultural products.

It is widely and erroneously believed that people with an essentially mobile way of life do not engage in administration and management of human labor and wealth. Therefore, whether the spatial distribution of the specific style of glyptic art and Numero-idiogram tablets in Fars, Zagros Mountains, Central Plateau, and lowland Susiana can be attributed at least partially to the ancient mobile pastoralists, or whether items of exchange in regions with a mixture of mobile pastoralist and settled farming populations is a question that seems to depend on the degree of residential mobility that imposes restriction on administration system.

In this article, I first present a brief historical background on the study of this period, followed by a critical review of common believes about the nature of Proto Elamite period that has had significant impacts on current directions of research and understanding of the late fourth millennium in Iran. Finally, I suggest a new research avenue currently being tentatively explored by the author that may be especially appropriate for developing our understandings of this period.

KEYWORDS: Central Iranian Plateau; states; Proto Elamite; Pastoralist; exchange; Bureaucrats

- 371 Yousefi Zoshk, Rouhollah (1) – Baghizadeh, Saeed (2) 4 Reconstructing  
11 Wednesday  
Evening

**A GIS-Based Analysis of Settlement Pattern of Dargaz Plain in Northeastern Iran**

Iran • 1 Islamic Azad University, Varamin-Pishva Branch; 2 Islamic Azad University of Tehran, Central Branch • pezuzo@yahoo.com; baghizadeh@gmail.com

Since Khorasan province and in particular Dargaz plain is located in three cultural areas (southwestern Central Asia (Turkmenistan mountainous region), northeastern central plateau of Iran, and northeastern Iran), it is considered one of the important but unknown regions in archaeological investigations. Climate features, geographically special location, and important position of this region have caused this fact that the region had received attention from human groups since long time ago. However, our information about changes of the region in different periods of prehistory and the mode of communication of Dargaz plain with other cultural areas is so incomplete.

Therefore, performing archaeological investigations and especially archaeological excavation is really necessary.

Archaeological survey and the analysis of settlement pattern is one of the known methods in archaeology to understand the cultural relations in prehistory period. Awareness of settlement patterns of Dargaz plain could increase the perception of the quality of geographical-cultural regions. In the past, this analysis was carried out with traditional methods but nowadays the analysis of settlement patterns is done with different software programs like ArcGIS which result in more real and obvious information. In this article, we deal with the results of archaeological surveys of Dargaz plain and analyze these results by ArcGIS. Keywords: Dargaz plain, archaeological survey, prehistoric settlement, settlement pattern, ArcGIS software program

- 372 Yousefi, R. (1) – Golche, M. (2) 6.1 Reports Region  
11 Wednesday  
Morning
- Tepe Gabri: A Pre-Pottery Neolithic Village from the 8th Millennium B.C. in Eastern Iran**
- Iran • 1 Islamic Azad University, Varamin-Pishva Branch, Tehran; 2 Islamic Azad University, Abhar Branch, Zanjan • mehdi\_golcheh@yahoo.com
- During an inspection conducted by the authors in 2007 in eastern region of Iran to study the marginal prehistoric settlements of the central Iranian desert, the mound of Ghabri was discovered in Ferdows County in Southern Khorassan province and over 200 chipped stone artifacts were collected on the surface. These artifacts underwent a thorough examination including washing, sorting, typology, measurements, and attribute analysis. The investigation presented in this article designate to help characterize the chipped stone industry recovered from tepe Ghabri and to make an inter-intra regional comparison to the other Neolithic sites in Iran and adjacent area. The mound of Ghabri throws considerable light on some problems connected with the early food-producing stage of this part of Iran. Chronologically it helps to introduce the earliest phase of semi-sedentary practice in an important archaeological sequence by revealing an 8th millennium B.C. occupation which is unique of its kind. **KEYWORDS:** Tepe Ghabri, Ferdows, Pre-pottery Neolithic, stone assemblage
- 373 Zaina, Federico 5 Dealing with the Past  
11 Wednesday  
Morning
- Deep down in the Earth. The 3rd Millennium BC Levels at Tell Ingharra/Kish Revisited**
- Italy/France • Sapienza - Università di Roma/Université de Paris 1 - Panthéon Sorbonne • zaina.federico@gmail.com
- The excavation of the 3rd Millennium BC phases at Tell Ingharra/Kish, carried out between 1926 and 1931 by the Anglo-American Expedition, revealed a complex archaeological stratification as well as glimpses on the urban and architectural development of the city. These data have been mistakenly interpreted and cursorily published by the excavators, while recent studies did not agree upon the general stratigraphical sequence as well as the architectural and urban layout of Ingharra. The reexamination of the documentation from four areas, the Z trenches and the Y, YW and YWN soundings, all located along the western flank of Tell Ingharra E, provided substantial evidence for the reassessing these issues. The aim of this paper is to understand the urban and architectural development in the western part of Tell Ingharra from the Jemdet Nasr to the Ur III periods. To this aim, new synchronized stratigraphical sequences of the four areas, together with renewed plans will be provided on the basis of the unpublished documentation and materials kept in the Ashmolean Museum of Oxford and the Field Museum of Chicago.
- 374 Zamua, Dlshad A. Marf 6.2 Reports Themes  
12 Thursday  
Midday
- Back to the Land of Ardini/Muşaşir – New Archaeological Evidence on Fieldwork 2005-2012**
- Iraq/Netherlands • Salahaddin University-Erbil, Kurdistan of Iraq/ Leiden University • dlshadazamua@gmail.com
- There is agreement among the scholars that the land of Ardini/Muşaşir located in the northeastern corner of Iraqi-Kurdistan, in the triangle bordering with Turkey and Iran. This remote area, after the late 1970s for decades due to the military unrests remained almost closed to archaeological activity. This paper, deal with some new archaeological evidence which comes from a field work undertook by the presenter during 2005-2012, in addition to unpublished collection of archaeological evidence uncovered accidentally over the past few decades by the local people. These evidence delivered to the local museums and collections which have been studied by the presenter during this field work. These new evidence include 17 column bases, several human size funerary statues, a small bronze statue bearing cuneiform inscription, a stamp seal impression, and several vessels. Some of the column bases are the Urartian column basis style, very probably of the long-lost temple of Haldi of Musasir, these column basis uncovered in the Mdjeser village in Sidekan-Bradost area. Also, some of the statues can consider surely as Scythian funeral statues. The ceramic shows influence from Hasanlu and the surrounding area or vise versa. On the base of this field work I add some notes on the probable location of Musasir and its architecture, also, the results of this field work sheds light on the issue of cultural and ethnic interaction that took part in the land of Ardini/Muşaşir during the Iron Age. Since 2011, this field work has been conducted as part of a doctoral research project being carried out by the presenter at the department of Assyriology at Leiden University.

- 375 Zehbari, Zohreh (1) – Mehrafarin, Reza (2) – Moosavi Haji, Seyyed Rasool (2) 6.2 Reports Themes  
**The New Studies of Potteries in Dahan-E Gholaman, Sistan, Iran** 12 Thursday  
 Evening  
 Iran • 1 Sistan & Bluchestan University; 2 Mazandaran University • z.zehbari@yahoo.com  
 At 44 Km of south east of Zabol, eastern Iran, of the known Achaemenid sites Dahan-E Gholaman is located. Recovered archaeological records and evidence, including residential, public, and administrative-religious structures, indicate preplanned and intensified urbanization. Dahan-E Gholaman is a single-period site that causes lesser error in chronology of potteries; meanwhile, lack of systematic studies on Achaemenid's potteries apparently demands such investigation. Regarding to the case, lots of characteristic potteries, among huge amount of evidence, have been studied. The results, based on researches characteristic potteries, show that the potteries of the site were made on given standards. For the potters were skilled in controlling the kiln temperature, they were able to produce high quality wares while various forms were commonly in use in the site. Innovation and demands in ware industry, caused in creation local types of cups, jars, and so on. Study on the different types of wares and their structural and technological characteristics indicate similarities with the other Achaemenid satrapies. Keywords: Dahan-E Gholaman, Achaemenid period, Pottery, Typology.
- 376 Zeynivand, Mohsen (1) – Niknami, Kamal-Aldin (2) – Mazaheri, Khodakaram (3) 6.1 Reports Region  
**Chalcolithic Period Settlement Patterns of the Seymarreh Valley, Central Zagros, Iran** 10 Tuesday  
 Evening  
 Iran • 1 Islamic Azad University, Central Tehran Branch; 2 University of Tehran; 3 Islamic Azad University, Ilam Branch • zeynivand@gmail.com  
 Central Zagros is a keypoint in prehistoric studies, especially Neolithic and Chalcolithic periods. Early human societies took their first steps of plant and animal domestication in this region of Iranian plateau; also formation of the first settlements with pastoralist subsistence and herding could be seen there. Seymarreh Valley's strategic situation as the link between lowlands of Khuzestan and Zagros highlands, also favorable biological potentials such as pastures, fertile lands, great water supplies - Seymarreh permanent river, etc. - and to benefit from natural defenses increase the importance of this Zagros region's role and its human attraction. Two recent archaeological surveys held in the valley of Seymarreh, besides the writers' review, show that 36 prehistoric sites in this region include evidences of Chalcolithic period. Therefore a huge increase in the number of settlements in the Seymarreh river's flood plain is clear. This research mainly aims to study Chalcolithic period archaeological sites up to their surface findings, settlement patterns, spatial and temporal distribution and an analysis based on their relations with surrounding environment. In addition, regional interactions between lowlands and Central Zagros highlands, and the role of Seymarreh valley among them will be discussed at the end.  
 Keywords: Central Zagros, Seymarreh Valley, Prehistory, Chalcolithic Period, Settlement Pattern.
- 377 Zimansky, Paul 6.1 Reports Region  
**Tell Sakariya and GA.EŠ: Investigation of a Rural 2nd Millennium BC Site in Southern Iraq** 10 Tuesday  
 Morning  
 USA • Department of History, Stony Brook University • paul.zimansky@stonybrook.edu  
 A six-week field season co-directed by Elizabeth Stone and the author at the 5ha site of Tell Sakariya, was intended to elucidate the relationship between a village and the nearby urban center of Ur in the early 2nd millennium. In this it was a disappointment, because the tell yielded no village architecture. Instead, its fragments of royal and other inscriptions, mud platforms, and general stratigraphic configuration suggests that it may have originally been constructed as the extra-mural focus of Ur's Akitu festival, GA.EŠ. Later in the 2nd millennium, the raised ground of its decayed temple platform provided temporary refuge for mobile populations exploiting the marsh environment of the area. This paper will present and evaluate the evidence for associating Tell Sakariya with GA.EŠ.

378 Zolfaghari, Sara

3 Traditions

**The Figure of Parthian Women on Archaeological Remains**

10 Tuesday

Iran • • sarazolfaghari\_persia@yahoo.com

Midday

Little is known about the role and status of women as portrayed in the remains of the Parthian era. The main reason for this is the lack of written sources which can shed some light on different aspects of daily, religious and court lives of these women.

The present research is going to survey the ways in which a woman's appearance was used to be presented in Parthian era.

150 Parthian works have been described and analyzed which embodied female figures in forms of heads, busts, figurines, ....

This survey shows that the Parthian presentation of a female is completely different from the preceding periods. The artistic objects are highly eclectic and do not follow a certain style. In the villages, have retained their local taste and style and it seems that Hellenic tendencies have only affected the main cities.

The images of the Queens and other women on the coins and reliefs express the social role and presence of the women living in that era. Although this role is not very vivid, but it is present the influence of oriental culture and its maintenance even after a century of Seleucid dominance. It all reveals the fact that in Parthian society the status of woman as the symbol of benevolence and grace was still important and highly respected. Key words: Parthian Era (Arsacids), Female, Hellenism. Parthian Art, image

379 Zolotnikova, Olga

2 Travelling Images

**A Storm-God with a Battle Axe on Neo-Hittite Reliefs: Change of Weapon – Changes in the Concept?**

10 Tuesday

Greece • Hellenic Open University • olga\_zolotnikova@hotmail.com

Evening

The paper intends to discuss the questions that arise regarding the change of the weapon of the Hittite storm-god – from mace to battle axe – which is attested on Neo-Hittite reliefs during the early first millennium BC in Southeastern Anatolia – Northwestern Syria.

During the second millennium BC the Hittite storm-god (Tarhunda/Tarhunda-Teshub), being visually likened to the Syro-Phoenician storm-god Baal, was widely represented as a Near-Eastern smiting/striding god brandishing a mace or scimitar (?). In the conditions following the disintegration of the Imperial Hittite cultural context and infiltrations of new cultural elements in the Near East at the end of the 2nd millennium BC, the Hittite storm-god appears on many Neo-Hittite reliefs (as those from Karkemish, Zinçirli, Til Barsip / Tell Ahmar, Tell Ashara, Marash, and oths.) as a striding god brandishing a battle axe, single bladed or double, in his upraised right hand. This visual concept was quite dominant in the Syro-Anatolian region for more than three centuries (from the beginning of the 1st millennium BC until the early 7th century BC); it presupposes a certain powerful image or verbal prototype, distinct from that of Baal, which caused the change of the Hittite storm-god's weapon. It is also very likely that the change of weapon in the representations of the Hittite storm-god expressed certain alterations in his religious-mythological concept.



# Posters



## 1 Adachi, Takuro – Fujii, Sumio

**Dating of the Bishri MBA Cairn Culture: A Reassessment from Diagnostic Finds**

Japan • Kanazawa University, Ishikawa • mppnb@staff.kanazawa-u.ac.jp

Our previous investigations at the cairn fields on the northwestern flank of Mt. Bishri suggested that the unique cairn culture in central Syria falls into four phases and is dated, on the whole, to the early half of the Middle Bronze Age. This paper pursues the details of the perspective on the basis of comparative study of diagnostic finds including a toggle pin, a small short-necked jar, and a bronze dagger. A series of evidence suggests that the Bishri MBA cairn culture began with MB IB, not IA. Several C-14 data also support the dating. The question is the end of the culture, but the lack of diagnostic finds and radiometric data in the last two phases makes it difficult to define it clearly. The only clue to the issue is the fact that the number of Phases 1 and 2 cairns in a single cairn field balances roughly with that of Phases 3 and 4 cairns in the same cairn field. This fact seems to imply that the Bishri cairn culture lasted another couple of centuries and ended with the MB IIB.

## 2 Al Qadi, Amjad (1) – Bourguignon, Laurence (2) – Besse, Marie (1)

**The Middle Paleolithic in the Middle East**

Switzerland – France • 1 Laboratory of Prehistoric Archaeology and Anthropology, Forel Institute, Section of Earth and Environmental Sciences, University of Geneva; 2 Institut national de recherches archéologiques préventives (Inrap) • Amjad.AlQadi@unige.ch

The Yabroudian is a regional archaeological culture of the Levant, stratigraphically situated between the Acheulean and the Mousterian. Dating to around 350,000 years BP, this industry recognized and known today under this name in Syria, Lebanon, Palestine and Jordan.

In this scientific communication, we will present our ongoing research about the technological approach of the archaeological site of Yabroud (Syria)\*. The Yabroudian material of the eponymous site of Yabroud and in central Syria presenting a debitage mainly oriented to the production of thick flakes which have a wide and smooth butt, obtained by heavy, hard-hammer percussion. Soft-hammer technique was used during the operations of retouching and resharpening the scrapers. Typical scalariform/yabroudian retouch dominates. Bifacial pieces present in the assemblages of central Syria and the eponymous site of Yabroud, normally are marginally worked and clearly distinct from Acheulean handaxes. Bifacial pieces present in the assemblages of central Syria and in Yabroud, normally are marginally worked and clearly distinct from Acheulean handaxes.

The technical characteristics of the Yabroudian in central Syria and the eponymous site of Yabroud lead to the conclusion that this culture is a distinct culture, closer to the Middle Paleolithic than to the Lower Paleolithic.

\*Financial support : Swiss National Science Foundation SNF (grant 100012-143415)

## 3 Alaura, Silvia – Nadali, Davide

**Gruppo di Ricerca Interdisciplinare di Storia degli Studi Orientali (GRISSO)**

Italy • CNR - ISMA Istituto di Studi sul Mediterraneo Antico; Sapienza Università di Roma • silvia.alaura@isma.cnr.it; davide.nadali@uniroma1.it

The Group for Interdisciplinary Research of the History of Eastern Studies (GRISSO) was founded in 2013 by Silvia Alaura, as a permanent initiative at the Istituto di Studi sul Mediterraneo Antico (ISMA), CNR, Rome, in collaboration with the Dipartimento di Scienze dell'Antichità dell'Università di Roma "La Sapienza", as well as with other Italian and foreign universities and research centers.

GRISSO focuses on the history of archaeological, philological and historical studies of the ancient Near East, and their reception in contemporary and modern society. One of the most important aspects of GRISSO's work is the study and evaluation of unpublished archive materials.

Some of GRISSO's current research centers around the life and scientific activities of archaeologists, assyriologists and hittitologists (Otto Puchstein, Felix von Luschan, Bruto Teloni, Gerardo Meloni, Alfred Boissier and Friedrich Hrozný) and around the history of museums and academic institutions they belonged to. Further studies deal with the historical, political and socioeconomic contexts in which the archaeological explorations (Hattusha, Zincirli) took place and their reception by the public (nineteenth century melodrama, twenty century architecture).

One of GRISSO's distinguishing characteristics is its interdisciplinary approach: its members represent various disciplines such as archaeology, philology, ancient and modern history, the history of ideas, philosophy, anthropology and archival science.

- 4 Alidadi-Soleimani, Nader (1) – Shafie, Mojgan (2) – Eskandari, Nasir (3)

**Khaje Askar: A 4th Millennium BC Cemetery in Bam, Southeastern Iran**

Iran • 1 University of Jiroft; 2 University of Tehran; 3 Université Louis Lumière Lyon 2 • shafie.mozhgan@yahoo.com

Khaje Askar cemetery is located on the east bank of Chelleh Khane River in Bam plain, Southeastern Iran. In early 2011 the site was excavated by a team of archaeologists of Iranian Center of Heritage and Tourism Organization (ICHTO) of Kerman Province. Khaje Askar cemetery is the earliest excavated cemetery of the region that has known so far. During rescue excavation of the site, 9 graves were uncovered; two of them had been bulldozed previously. The tomb structure of all graves is simple pit and in each grave there was just one burial. There were various Funerary gifts with Burials including; ceramic vessels, Stone vessels, Metal objects, Beads, shells and so on. Preliminary observation on the basis of relative dating, typological parallels and stratigraphic sources indicates that the cemetery can be assigned to the first half of 4th millennium BC. This paper presents the results of the excavation and compares them with those of the cemeteries of 3rd millennium BC of the region. Keywords: Southeastern Iran, Bam, Khaje Askar, cemetery, ICHTO

- 5 Angevin, Raphaël

**Interregional Trade and Economic Relations between Egypt and the Levant in the IVth Millennium BC: the Lithic Evidence**

France • Université Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn • raphael.angevin@culture.gouv.fr

In the IVth millennium, in different parts of the Middle-East, some Chalcolithic communities knew a significant social evolution, which saw the transformation of dispersed Neolithic populations in complex societies sufficiently unified and hierarchical to accept the domination of a group then one individual. In the Nile Valley, the emergence of a dominant minority, enjoying the development of a full-agriculture system and a mutation of production modes (specialization of craft activities, concentration of productive forces in workshops, establishment of a redistribution economy), is expressed in an obvious inflection of technical practices and forms of economic organization. Despite these powerful trends, exchanges seem to be organized according to the pattern of a "down-the-line trade" and the demand for imported goods appears at once weak and diffuse. In this context, Predynastic societies of Upper (Naqada) and Lower Egypt (cultural group of Maadi-Buto) seem unresponsive to some technical innovations that reach their neighboring regions. However, this reality change radically between Naqada IID and IIIC: the demand for statutory goods, formulated more clearly by the Egyptian elites, leads to exponential development of interregional trade which find an echo in the process of grave goods accumulation that affects the most important cemeteries of the period. Consequently, new typological corpus were developed by adding exotic models whose consensus transcends all mobilized assemblages: great "tabular scrapers" and Canaanite blades, which appear in Egyptian domain around 3400 BC, refer to some technical "globalizations" that affect the Middle-East at the beginning of the Bronze Age. In the context of habitat, new equilibrium solutions are also being established, in connection with the reorganization of major centers of production and consumption, in Egypt and in the Levant. In the field of lithic industries, the studied collections show original systems of production and distribution, in capacity to stimulate or relay large import flows but also to boost "reproduction workshops" of the most requested objects into the commercial circuit. This talk proposes to reconsider the economic contacts between Egypt and the Levant during the IVth millennium under the specific prism of chipped-stone production, highlighting the success of some technical forms and its impact on the socioeconomic organization and the orientation of trade.

- 6 Baccarin, Cristina – Catanzariti, Antonietta

**The Qara Dagh Survey Project (Sulaymaniyah, Iraqi-Kurdistan)**

Italy/USA • University of Venice; University of California, Berkeley • cristinabaccarin@hotmail.com

Since the last survey conducted by the Iraqi Antiquities in the 1940's, the Qara Dagh district has been little explored. This area, located 41 km away from the main city of Sulaymaniyah, consists of a valley surrounded by two mountain ranges, the Baranand Dagh and the Qara Dagh. The occupation of this region commenced in pre-historic times and continued into the modern era. Archaeological remains and written texts document its historic importance. To the late III millennium BCE is dated a relief for long time attributed to Naram Sin, and written texts from the Sassanid period (224 -651 A.D.) document the area as a major passageway. This poster will provide an historical overview of the Qara Dagh district and present the future plans for the investigation of the area. A detailed survey of the district will be performed to provide an accurate assessment of its archaeological relevance and site coordinates will be recorded. Data related to the distribution of the sites will be collected and studied in relation to the landscape of the Qara Dagh district. This project will contribute significantly to the history of the region.

7 Battini, Laura

**How can Birds in Art be Classified? Geese's Examples**

France • UMR -5133- Archéorient-CNRS, University of Lyon • laura.battini@mom.fr

The artistic imagery disagrees with a simple copy of reality and is differently perceived. This poster focuses on past birds' identification, mainly geese, and on new possible methods for more promising results.

8 Bernardoni, Silvia – Trojanis, Raffaele

**A Topographical and Chronological Study of the Northern Fortifications at Karkemish (Turkey)**

Italy • STUDIO KULLA • raffaele.trojanis@gmail.com

The northern fortification system of ancient Karkemish, which includes the North Wall, the North-West Fort and the Mill Tower (as Woolley called those structures), present several riddles and interesting features, starting from its original construction. During the 2012 campaign of the joint Turco-Italian Expedition of the Universities of Bologna, Gaziantep and Istanbul directed by Prof. N. Marchetti, the authors started a new topographic survey, made with modern technologies. Some preliminary soundings have been carried out in 2013, in order to further study a mixed fortification system, in which earthen ramparts were joined to built forts and casemates located above a rock ridge offering a natural salient for defence.

9 Bonomo, Antonio (1) – Zaina, Federico (2)

**New Finds on the Iron Age II-III Pottery Assemblage from Karkemish and Yunus**

Italy/France • (1) Alma Mater Studiorum - Università di Bologna; (2) Sapienza - Università di Roma/Université de Paris 1 - Panthéon Sorbonne • zaina.federico@gmail.com

During the 2011-2013 campaigns at Karkemish, the aims of the Turco-Italian archaeological expedition were those of exposing extensively the Iron Age town in order to understanding the urbanism of the site in detail and better defining its urban history. The survey and excavation also conducted at Yunus provided information on the history of the graveyard as well as the funerary rituals.

The pottery assemblage from the excavations in Lower Palace area and the Outer Town at Karkemish together with the vast array of vessels uncovered in the Yunus cemetery so far retrieved dates to the Iron Age II-III period. Different types of contexts have been so far explored, notably domestic, religious, palatial, funerary and military. Such variety also allows to perform detailed functional interpretations of the spaces and the pottery assemblage.

The aim of this poster is that of providing a preliminary typological analysis and a chronological attribution of the Iron Age II-III pottery assemblage from Karkemish and Yunus. Connections with neighbouring areas such Northern Syria and Southern Anatolia as well as the Levantine coast and the Tigridian region will be also explored.

10 Bretschneider, Joachim – Van Peer, Ph.

**The Saudi-Belgian Research in the Al-Ghat Region, Saudi-Arabia**

Belgium • KU Leuven • Greta.Jans@arts.kuleuven.be

The Saudi-Belgian research in the Al-Ghat region – in the Alhamada valley in North Central Saudi Arabia – is conducted under the aegis of the Saudi Commission for Tourism and Antiquities, Riyadh and the KU Leuven, in cooperation with the UC Louvain.

The project of the first two excavation campaigns in the Jebel Markh and Jebel-al-Samar region was mainly two-fold. Firstly, the survey project looking for early human activity in the area, which was confirmed by the ca. 1600 collected artifacts – like cores, hammer stones, flakes, blades and roughouts - suggesting the image of prehistoric quartzite production and exploitation centers. The results clearly show that the quartzite hills were used as such during the Middle Paleolithic and Neolithic period. Secondly, the survey for iconographical and textual material incised on rocks ascertained ca. 80 quartzite stones with Old North Arabian and Modern Arabic inscriptions and figurative drawings. Consistent with these results, the first joint Saudi-Belgian research campaigns surely confirm the archaeological, historic and epigraphic high potential of the Al-Ghat region.

## 11 Brosh, Naama

**Mamluk Glass Workshops in Jerusalem – Marvered Glass**

Israel • Israel Museum, Jerusalem • [naamab@imj.org.il](mailto:naamab@imj.org.il)

In the course of excavations in the Jewish Quarter of the Old City of Jerusalem conducted in the 1970s by the late Prof. N. Avigad, under the auspices of The Hebrew University of Jerusalem, large quantities of Mamluk glass fragments were uncovered in almost all areas of the Jewish Quarter. The most important and largest quantity came from a dump in Area T, near the Nea Church, at the southern end of the Cardo in the Jewish Quarter. The dump, most probably, served as a trash collection for broken glass vessels. Of the approximately 140 fragmentary vessels in the group, the shapes of about 125 (some 90 percent) could be reconstructed— some almost in their entirety.

The most prevalent decorative technique in this group was trail-marvering, in which white opaque threads were pressed into a transparent matrix in various patterns. The present poster focuses on this decorative technique.

Marvered vessels of this period are known mainly from Syria and Egypt and dated between the 12th–14th centuries.

Until now, Jerusalem has not been mentioned as a place for the manufacture of this decorative technique. However, the large number of marvered vessels that were found in Jerusalem, and in various sites in Israel that reinforces the assumption that Jerusalem was a center for marvered glass production.

## 12 Burnett, Joel S. – Parker, Don

**Handheld XRF Testing of Ammonite Monumental Objects in Basalt**

USA • Baylor University • [Joel\\_Burnett@baylor.edu](mailto:Joel_Burnett@baylor.edu)

Two Iron Age monumental objects were discovered in near proximity to the Amman Theatre: a larger-than-life royal statue (2010) and the Amman Theatre Fragment Inscription (1961). Both were discovered without associated archaeological context and are made of black basalt. In 2012, the authors conducted handheld XRF (X-ray fluorescence) analysis of both objects and of potential quarry sources (Zarqa, Umm Qais, Wadi Zarqa Main, and the Wadi Mujib rim), indicating that the two objects originated from different sources and thus represent two royal monumental display objects at a focal point of Iron Age Amman, downhill from the Citadel (Jebel al-Qala'a) and on the site of the later Roman Theatre. Testing of additional basalt sources in Jordan will provide further data allowing a precise determination of sources of basalt used in monumental royal projects in Iron Age Amman. These results have implications for our understanding of technological capabilities and artistic traditions of Transjordan during this period, the nature of Iron Age Amman, and political relations between the Ammonite kingdom and neighboring polities of Iron Age II.

## 13 Calini, I.– Herr, J.-J.

**Qasr Shemamok/Kilizu: Ceramic Material from the First Four Campaigns**

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The study of the ceramic material discovered during our first campaigns in the site of Qasr Shemamok/Kilizu gives us the opportunity to get a clearer vision of an important part of the material culture of northern Mesopotamia, in particular since the Late Bronze and Iron ages. Information collected about production, use, continuity and evolution of this kind of material in the heart of Assyria itself – however not from a political capital –, especially during the Middle- and Neo-Assyrian period, may be compared with forms and models shared also with other cultures, allowing a more precise reconstruction of its evolution and of the dynamics of the contacts. Focusing as usual on formal and technical characteristics, our analyses consider diagnostic shapes, typical wares, occurrence and frequency seriations, as well as data concerning technological and organizational aspects of the ceramic production. Even if a large part of the ceramic assemblages from the site shows a clear unity and coherence, for example in the material found in the Middle-Assyrian levels, forms and typologies belonging to other periods are also clearly recognizable: fragments of fine pottery and pot-stands from Mitannian vessels, Palace Ware Neo-Assyrian goblets, as well as later Hellenistic and Parthian-Sassanian decorated sherds.

- 14 Campbell, Stuart – Moon, Jane

**Tell Khaiber – New Excavations in Babylonia**

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Tell Khaiber is an Old Babylonian settlement lying 20km north-west of Ur, in the southern Iraqi province of Thi Qar. Manchester University's Ur Region Archaeology Project has just completed a second season of excavation there. Work has concentrated on a prominent administrative building (80x50m), which occupies a significant area of the mound, and has several unusual features. Until very recently, no major international archaeological project has taken place in the Ur region since the 1940s, so the application of contemporary methods of retrieval and recording is producing a corpus of material which will offer new light on academic views of Babylonian life.

- 15 Casadei, Eloisa

**The Ur III Pottery in Northern Contexts: Reconsidering a Chronological Periodization**

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A sound archaeological periodization for the 3rd millennium BC in the Khabur river basin and the Syrian Jazirah has recently been put forward on the base of the ceramic sequences of the main sites. On the contrary, a lack of data impacts the construction of a sound ceramic periodization for Southern Mesopotamia. Nevertheless, recent studies on the period between the 3rd and 2nd millennium BC have shown that those two regions were historically related, though experiencing different trajectories. The identification of a post-Akkadian phase, characterized by changed in settlement patterns at the major sites of the Khabur river basin and the Syrian Jazirah, has allowed to identify some parallels between the pottery repertoires of Northern and Southern Mesopotamia. Moving from those data, the poster focuses on correlations between the two areas and proposes preliminary hints for an archaeological/ceramic periodization for the late 3rd millennium BC pottery of Southern Mesopotamia.

- 16 Cateloy, Cydrisse

**Trade Amphorae and Capacity Study in Eastern Mediterranean**

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In 2010, I finished my master degree under the direction of J.-P. Thalmann and P. Butterlin. My research was about Levantine trade amphorae and, more precisely, about their capacity range. I primarily worked with amphorae from the Southern Levant during Iron Age II and achieved with interesting results. This is a first step concerning the study of capacities in Near Eastern archaeology. Until now, only a handful of scholars and publications have focused on such data.

Therefore, I am pursuing the same investigation for my PhD thesis. I will work on amphorae from Eastern Mediterranean dating from the Late Bronze Age to the Iron Age. My principal area will be Levantine coast but I would like to extend it to neighboring regions like Cyprus, Egypt, Turkey.

I will begin my research with the so-called "Canaanite jar", which is considered by most scholars to be the first known trade amphora. I will inventory as many jars as possible which are complete enough to have their capacities measured. With these data, I will be able to determine the different capacity ranges used during the Bronze Age. I will then carry on this same work on different Levantine amphora types from the Iron Age in order to ascertain if there is an evolution of capacities and trade processes between the two periods.

- 17 Chiriu, Daniele (1) – Nadali, Davide (2) – Ricci, Carlo (1) – Polcaro, Andrea (3)

**Time through Colours: Results and Affordances of Raman and Micro-Raman Spectroscopy in Near Eastern Archaeology**

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Recently the importance of Raman and micro Raman spectroscopy analysis on archaeological artefacts had been widely recognized, with specific case of studies mainly on painted materials. Actually, the Raman technique has a great potentiality in archaeological field and museology: it allows several non-intrusive and non-destructive analyses of the objects, thus preserving their shape and integrity.

This paper stems from an Italian three years research project started in 2013 (Rome Sapienza University, Perugia University, Archaeology Departments and Cagliari University Physics Department) with a joint classical and scientific approach. The research is mainly focalized on items from Syria (Ebla, Sapienza University) and Mesopotamia (Kish, Ashmolean Museum). In this work, we report Raman spectroscopy analysis on Near Eastern objects (pottery, cuneiform tablets and figurines) and stone (Assyrian reliefs). The measurements were performed with different excitation wavelength from the near UV (405 nm) up to infrared excitation (1064 nm). The multiline approach is utilized to suppress and avoid luminescence effects but also for an innovative application based on the selective excitation of different layers over the clay. Moreover, the Raman spectra can be acquired with an home-made assembled portable device that mounts simultaneously the different excitation sources and acquisition set-up.

The Raman measurements were associated with a fluorescence microscope that allows the choice of a proper Raman excitation and helps the operator to better evidence the eventual existence of trace elements (note visible to the naked eye).

The knowledge of the effective structures of the materials (from a chemical and physical point of view) and hence the reconstruction of the original appearance of the items imply the possibility of better understand the context where, when and how those objects were perceived and utilized.

- 18 Corfù, Nicolas

**Esotericism at Persepolis-Really?**

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When we are honest, we have no clear idea of the function of the terrace at Persepolis. Esotericism could be included. Here we are using the term “Esoteric” in its purest Greek sense: “for inner reasons”. Looking at a plan of the terrace at Persepolis, one might consider that there was an underlying concept in the arrangement of single buildings, walls, etc. The plan shows an awareness of proportions. The proportions of the main West Wall display a strict adherence to the concept of the “sectio aurea”. This ratio was applied four times in a row to the west front, unifying all important points of the West Wall. This concept was inherent in the plan from the beginning. These inner ratios would not be apparent to a visitor approaching the terrace from the West: they are thus truly esoteric - for inner reasons. Were these inner reasons religious? The golden ratio is closely connected with the pentagram, which is full of such ratios. The pentagram itself is firmly associated with the planet Venus, which follows such a pentagram in the course of its eight-year orbit - a fact already recognised in the old Babylonian period.

- 19 D’Agostino, Franco et al.

**Abu Tbeirah**

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Abu Tbeirah: Graves from Area I – the Faunal Remains. Authors: Francesca Alhaique, Franco D’Agostino, Licia Romano

This poster presents the preliminary results of the zooarchaeological and taphonomic analysis of the faunal remains recovered in association with the graves excavated in Area I at Abu Tbeirah. The data obtained will provide further details on the burial rituals adopted in this region as well as on the cultural use of animals beyond mere subsistence.

20 D'Andrea, Marta

### **New Data from Old Excavations: Preliminary Study of the EB IVB Pottery from Area H at Tell Mardikh/Ebla, Syria**

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The poster focuses on the Early Bronze IVB (EB IVB, ca. 2300-2000 BC) pottery from Tell Mardikh, ancient Ebla, in Northern Inland Syria, retrieved in the 1970-1971 excavations and recently subjected to re-examination and new analyses within the Ebla Chora Project, funded by the European Research Council (FP7-IDEAS 249394). Area H, on the Western Rampart, has yielded a substantial amount of EB IVB sherds from the massive ashy fillings accumulated to erect the Middle Bronze I fortification system at the very beginning of the 2nd millennium BC. Those materials provide a considerable corpus of pottery from Ebla's post-palatial phase, representing the whole typological and functional ranges of vessel shapes. Furthermore, they offer a substantial sample for technological and petrographic analyses. Finally, though they derive from secondary contexts, they can be assigned to relative chronological phases within local EB IVB by linking them to the long stratigraphic and ceramic sequences excavated in 2004-2007 in Area HH, in the Lower Town south-east.

Preliminary results of those studies are presented and discussed in a regional perspective, comparing data with those from other EB IVB sites in Northern Inland Syria.

21 Defendenti, F. – Obreja, S.

### **Le site de Qasr Shemamok/Klizu**

France • École Pratique des Hautes Études, Sorbonne, Paris; University Paris 1 Panthéon-Sorbonne, Paris • fede.defe@gmail.com

Qasr Shemamok, located around 25 km SW of Erbil, in Iraqi Kurdistan, in the valley of the Shiwazor river, was identified as a city called "Kakzu," a toponym today read as "Kilizu", a Neo-Assyrian provincial capital, heavily reorganized during the reign of king Sennacherib. Having possibly a history much more ancient, settled in an area occupied since the Chalcolithic period, Kilizu, during the second half of the second millennium B.C., was integrated into the territory of the Middle- and later of Neo-Assyrian Empire, constituting an important urban center on the itineraries between the capitals on the Tigris and the region of Erbil/Arbeles. The French Archeological Mission directed by Prof. Olivier Rouault (Lyon University) and Prof. Maria Grazia Masetti-Rouault (EPHE- Sorbonne University, Paris) started working on the site in 2011, with an international team, opening a large stratigraphic trench (A) on the southern slope of the "citadel". Since then work has been going on in different areas of the tell. The exploration of the "lower town" and of the environment of the site is carried out mainly thanks to magnetic surveys, and the mission has also recently started the study of the geomorphologic evolution of the environment of Shiwazor river valley around it.

22 Di Paolo, Silvana

### **King as Bearer of Animal Offerings: Sacrifice or Meat Consumption? Translation of an Ambiguous Representation from Babylonia across Syria to Cyprus**

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Old Babylonian glyptic art is characterized by a rich repertoire. It includes many representations of the king (probably not a specific ruler but a symbol of the kingship), either dressed in a kilt as a warrior or wearing a long ceremonial robe and holding an animal offering. In this latter case, the presence of the sun-god Shamash holding a knife or saw has led to the hypothesis that the scene is the representation of an animal sacrifice required by the god himself. But the subject is perhaps open to a wider range of interpretations. It is attested across a wide area including Northern Syria, Levant and Cyprus during the Middle and Late Bronze Age and exhibits some meaningful local variants. This fact gives the opportunity to reflect on the original meaning of this scene and its transformation or translation in different cultures.

23 Döpfer, Stephanie

**Expressions of Collective memory – The Reuse of EBA Tombs in the Necropolis of Bat, Sultanate of Oman**

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This poster will present two 3rd millennium tombs in the necropolis of Bat, Sultanate of Oman, which were reused during the 1st millennium BC. This is attested by burials and diverse objects found within, which date to the Iron Age. Following Maurice Halbwachs, such reuse can be interpreted as an expression of the collective memory of a certain social group. They carried out burials and rituals as a means of collective remembrance, a performed narrative. Groups that jointly recall and construct memories through communal actions bind themselves together and hence share memories, which are the key aspect in shaping group identities. Nevertheless, collective memories need locations to be evoked and thus, apparently, the 3rd millennium tombs in the necropolis of Bat offered such a location to the Iron Age people.

24 Douche, C. – Tengberg, M. – Willcox, G.

**Plant Use at PPNB Tell Aswad in Southern Syria**

France • • Caroline.Douche@malix.univ-paris1.fr

The aim of this poster is to present new archaeobotanical finds from Tell Aswad, in southern Syria. This site coincides chronologically with other early agriculture sites across a wide area of south west Asia.

The settlement was occupied during the Early, Middle and Recent PPNB (8700-7000 cal BC), during which we have found evidences for an increase in the frequencies of domestic plants and animals. Building techniques also change with a shift from modelled to moulded bricks, and the development of rectangular structures as opposed to round. Complex funeral practices such as plastered skulls have also been discovered.

The extensive dataset obtained from charred plant remains has provided detailed knowledge on plant use. For example spatial analysis yield information on the specificity of plant assemblages which has allowed us to identify explicit activity areas. The long stratigraphic sequence enables us to trace the evolution of plant management strategies in relation to other sites in south west Asia. Plant processing can be approached by examining the use of chaff and other by-products.

Finally of particular interest is the on-going process of plant domestication. Aswad with its continuous occupation has provided data on changes in the frequencies of morphologically wild and domestic crops.

25 Dusting, Amanda

**“O that I too could be made of stone.....”. The Case for Wooden Columns at Achaemenid Qaleh Kali?**

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Often excavation reports and publications of Achaemenid sites suggest that a lack of extant stone column shafts and drums indicates that the columns would have been constructed of timber, without ever being really sure. In rare instances wooden columns, sometimes protected by a plaster covering, do survive in situ giving a clear picture of the use of timber for those columnar structures. Following the careful examination of the campaniform column bases from the Achaemenid “way station” at Qaleh Kali in Fars Province Iran, and evidence from published architectural elements from within the Persian Empire, this paper will propose that it is no longer necessary to be uncertain whether columns were made of wood or stone as the form of the bases themselves can accurately indicate the nature and material of the columns originally resting above them.

- 26 Ebrahimi, Saeed (1)– Zare, Mosa (1) – Abolahrar, Alireza (2)

**The Neolithic Period in the Mianrood Tepe, Fars, Iran: New Results on Recent Researches**

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 • sd.ebrahimi@gmail.com; alireza.abolahrar@gmail.com; mousa.zare59@gmail.com

MianroodTepe is located northwest of Marvdasht in Fars province, southwest of Iran. This Tepe situated in the intermontane plain of Kor river basin. We conducted three seasons of excavation at the site which led to define three cultural periods.

Primary findings of this excavation indicate that unlike other excavated site in Marvdasht plain, Mianrood contains all three well-known prehistoric cultural periods of Fars. Furthermore investigating these cultural periods gives us an opportunity to study their transitional phases. Although the earliest layer of Mianrood includes potteries which are contemporary with those of the Neolithic Jari period (ca. 6000 B.C.) but they have different tempers, forms and motifs. On the other hand some potteries of this layer are unique among the prehistoric ceramic corpus of Fars province. This issue describes a local culture in Mianrood during 6th Millennium B.C. Moreover characterizing a distinct architecture which continues well into Shamsabad phase (5500 B.C) is another important finding of the Mianrood excavation.

Keywords: Iran, Fars, Prehistoric, Excavation, Neolithic, MianroodTepe.

- 27 Esfandiari, Azarmidokht

**New Prehistoric Discoveries in Gharbalbiz in Yazd Province, Iran**

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Yazd Province is situated in the center of Iran, next to the Great Desert. The Yazd region is like a ring that connects the northeastern and central regions of Iran to the centers of civilization in the southeast and southwest. The ancient site of Gharbalbiz is located about 30 kilometers south of the city of Yazd. Its western parts are delimited by a high and calcareous part of the Shir-kooch Mountains. The existence of the Gharbalbiz spring which flows from the foot of the northern part of the western mountains, mild weather, fertile soil, relatively more underground water resources compared to other areas of Yazd, good resources in vegetation and animals, and large metal and stone mines are the reasons this region has seen a lot of attention and settlement.

Archaeological excavation in Gharbalbiz took place between 2000 and 2004; These activities were supervised by the author. In Gharbalbiz excavation we found a building with mud-brick structures from the early Acheminian to Partian period in the southern section, and an ancient cemetery from the Chalcolithic period in the northeastern section.

- 28 Furlan, Daniele

**Analyse taktischer und strategischer Aspekte der neuassyrischen Kriegskunst**

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Gegenstand meines Posters, das auf meinem Dissertationsvorhaben beruht, ist eine Analyse taktischer und strategischer Aspekte der neuassyrischen Kriegskunst, welche sich aus den auf den Reliefszyklen von Assurnasirpal II in Kalhu und von Sanherib sowie Assurbanipal (SW und NW Palast) in Niniveh dargestellten Kampfszenen ableiten lassen.

Dabei werden insbesondere die Typologie sowohl der jeweils dargestellten Hauptabteilungen (Streitwagen, Reiterei und Infanterie) als auch der geschilderten taktischen Situationen (z.B. Einmarsch, Verfolgung, Belagerung usw.) sowie die technologischen Merkmale des dargestellten Kampfmateriells betrachtet.

Da es sich dabei um zwei schriftlich und bildlich sehr gut dokumentierte Abschnitte von zwei verschiedenen Phasen der technologischen und taktischen Entwicklung der neuassyrischen Streitkräfte handelt, erlaubt uns ihr Vergleich, ein Bild dessen zu gewinnen, was man in der Kriegstheorie oft als Diskontinuität bezeichnet. Darunter fallen alle jene Neuerungen oder Änderungen - ob im Bereich der angewendeten Kampfmittel oder bezüglich der Wahrnehmung, Durchführung und der Umstände des Krieges -, die nicht auf eine lineare Entwicklung der Kriegskunst, sondern vielmehr auf spezifische, meist unerwartete Ereignisse zurückzuführen sind (z.B.: Entstehung mehrerer Fronten, Kriegsführung in Kriegstheatern, an deren Geomorphologie sich die Truppen noch zu gewöhnen bedürfen, Einführung neuer Mittel, wie Reitpferd oder später das Martingal, usw.).

- 29 Hassas, Najmeh – Razavi, Leila

**Tāq-Strukturen im Iran von der Elamite Periode (1250 B.C.) bis zur Qajar Dynastie (1925)**

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Der Tāq ist ein Gewölbe bzw. ein Bogendach, das auf zwei parallelen Fuessen gebaut wird. Die Fuesse koennen in Form von Waenden oder Saeulen sein. Der Bogen ist die Grundlage solcher Strukturen und garantiert durch die richtige Verteilung der Schwerkraefte die Stabilitaet solcher Strukturen. Die traditionellen iranischen Tāqs haben in Bezug auf Form und Art und Weise, wie die Schwerkraefte verteilt sind, eine direkte Beziehung zu ihren geometrischen Formen. Beim Ausfuehren und Stabilisierung solcher Tāqs hat die Stagnation eine fundamentale Rolle. Die Tāqs werden aufgrund ihrer Nutzung in zwei Arten „tragend“ und „dekorativ“ unterteilt.

Die Bilder im Posterformat werden zeigen, wie ein Tāq entwickelt und anschliessend gebaut wird.

Schlüsselwort: Arch, Static, Tāq, Traditionelle Architektur.

- 30 Jauss, Carolin (1) – Correa Ascencio, Marisol (2) – Evershed, Richard P. (2)

**Taking the Lid off Uruk Period Pots. Results of an Analysis of Organic Residues Preserved in Pottery from Southwest Iran and Northern Syria.**

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Food was a crucial element in the process towards urban lifeways in 4th millennium Mesopotamia, and control over food represented a powerful instrument in the hands of elites. However little is known on foodways in the Uruk period. As containers for the storage, preparation and consumption of food pottery vessels represent an important source of information on culinary practice. The vessels themselves can yield information on e.g. food processing techniques and organic residues preserved in pottery walls have the potential to provide direct evidence for commodities that were processed or stored in ceramic vessels. This poster will present a first attempt to assess the potential of organic residue analysis in the study of Uruk period pottery from Southwest Iran and Northern Syria. Residues absorbed in pottery walls and surface residues were investigated using state-of-the-art chromatographic techniques (HTGC, GC-MS and GC-IRMS). The results provide a new dimension to research on commensal practice in the Uruk period and generated a range of new questions concerning food processing in 4th millennium Mesopotamia.

- 31 Kouhi Gilavan, Majid

**Archaeological Survey of Naghan Area, Southwestern Iran**

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In December 2009 an archaeological survey was conducted by the author aiming at identifying all archaeological sites of the Naghan Area. This area is located in the one of the mountainous provinces of Iran which is famous both for having harsh winters and also homing one of the largest nomadic populations of the country.

Altogether, 216 sites of various types including typical nomadic site, open-air Paleolithic sites, caves, rock-shelters, bridges, water mills and stone-paved roads have been identified which span a time range from the Middle Paleolithic to the late 19 century.

The most frequents sites were nomadic camp sites which are characterized by their weak sherd/flint scatters. The area is still as summer camp sites for the Bakhtiari nomads. The rather rarity of the mounded sites, not surprisingly, indicate that the settled communities were in least concentrations in this landscape. Actually, most sites fit well with the nomadic land use and mode of life which thought to be pervasive here since very early times. Current studies on the recovered surface collections indicate a close affinity between them and those we know from lowland Khuzistan, where today Bakhtiari nomads used to encamp there during winter months.

## 32 Kufterin, Vladimir V.

**Cremated Skeletal Remains from Buston VI – A Sapalli Culture Cemetery, Uzbekistan**

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Cremated skeletal remains from the Bronze Age cemetery Buston VI (southern Uzbekistan, archaeologist N. Avanesova) are described. The burials date back to the Middle – End of the Second Mil. BC (Sapalli culture) and are relevant for reconstructing the culture of the Northern Bactrian agriculturalists. A special role in Buston VI funeral practices was assigned to the cult of fire. The last was expressed particularly in the device of special “crematoriums”. Cremation was performed with subsequent burial of the ashes immediately or shortly after burning (in small pits, in “dummies”, in textile packages and in vessels).

Research of cremated skeletal material was carried out with the purpose of an estimation of species, sex and age characteristics and also reconstruction of cremation conditions. The basic results of research: 1) both human and nonhuman (sheep) cremated skeletal remains were identified; 2) preservation of bones varies (both unchanged bones as well as bone fragments at the stage of gray incandescence with considerable bone shrinkage were described); 3) high temperature of burning was achieved in the brick constructions for cremation; 4) in some cases, there were signs typical of burning the body, not dry, fat-free bone.

The investigations are executing thanks to the RFBR (project 13-06-00233a).

## 33 Luciani, Marta

**Qurayyah and the North-western Province of Arabia: past and future archaeological research in a major centre between Hejaz and Tabuk**

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The site of Qurayyah, located ca. 70 km northwest of the modern city of Tabuk is one of the largest and most significant settlements in North-western Arabia. With an extension of several hundred of hectares, Qurayyah was a strategic trade settlement on the main road in antiquity, connecting the core of the Arabian Peninsula with the Red Sea, Egypt and the Levant. Often described as “the capital of the Kingdom of Midian” (Al-Ghazzi 2010, 211) it was surely (one of) the key producing centres of a specific painted pottery (so-called “Qurayyah painted ware”) attested in the broader region extending from Jordan (Amman Airport) to Sinai (Bir el-'Abd) in the north and west, to Northern Arabia (Tayma and Al Ula) in the east and south. The poster will discuss past archaeological assessments and future research on the site.

## 34 Marchetti, N. – Bassetto, S. – Luglio, G. – Mantellini, S.

**K-Dig. An integrated GIS tool for recording and managing an excavation, its environment, and 3D data**

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Building upon a GIS architecture (an essential tool not only in landscape archaeology, but also in intra-site data management), a new integrated software system has been developed and tested in the excavations of Karkemish (S-E Turkey). The project, called K-Dig, provides archaeologists with a complete recording and visual tool both at the dig - through client devices (10" tablets) connected via wi-fi to a server - and at the excavation house. Operational protocols include creation of records and extensive photogrammetry on the field, transformed almost in real time into high-precision 3D textured models. Within these georeferenced models, any information concerning finds, stratigraphic units, archival and photographic documentation can be accessed by combining Cad, MySequel, GIS and 3D visualization tools. Queries typical of GIS may be performed, as well as data retrieval and filtering, while for example an historical 3D visualization of the progress of the excavations through time and even the virtual combination of dismembered monuments may be obtained (although at present not yet from within the system). K-Dig is an open source project, based on libraries supported by a community of developers.

The software may be freely downloaded from [www.orientlab.net/kdig](http://www.orientlab.net/kdig).

35 Merlino, Matteo

### **Space Syntax Analysis of a Late Bronze Age Palace of Qatna**

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Between 1999 and 2011, excavations led by a Syrian-Italian team took place at the site of Tell Mishrifeh that shed new light on the capital of a Bronze Age kingdom in Inner Syria. The discovery of a Late Bronze Age Palace in the Northern part of the acropolis, that contained an archive and various prestige objects, provides new insights into the lay out of the settlement and the socio-political function of this structure. The aim of this poster is to analyse this significant building using space syntax methodologies to investigate both how it compares to other LBA palaces and to assess the use of the different compounds that together form this structure. The analytical method transforms the architectural plan into a graph that facilitates quantitative and qualitative analysis. Further, the plan will be analysed with Depthmap software that will permit a better understanding of the possible uses of various spaces in the palace. This poster is part of a PhD study at Amsterdam University which aims to clarify the relationship between spatial organization and urban societies in Syria during the Bronze Age.

36 Merlonghi, Marzia

### **Denied Sites, Violated Layers. Anthropic Damage in Southern Levant (Israel and Palestine) in the 21st Century: a Report**

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In the last twelve years the area archaeologically known as Palestine (the present territories of Israel and Palestine) has been a place of armed conflicts and geopolitical tensions. This situation of instability creates the problem of the protection of cultural heritage (especially the most problematic and debated heritage, the preclassical archaeological sites) respecting international conventions and national laws.

In this poster I like to explain how it is possible to record the situation of preclassical sites in Israel and Palestine through the use of the "Form for immovable cultural heritage in crisis areas" created by professor Fabio Maniscalco. Using this form and through the direct observation and study of the modern history of the archaeological heritage, 103 sites were observed and registred ( using photographs

interviews to local peoples and experts, comparing the excavation report with the observable situation).

Goal of the research is understand how the various factors involved in the Israeli- Palestinian conflict affect the conservation of archaeological heritage, its management and the work of local and foreign archaeological expeditions.

37 Miyauchi, Yuko

### **The Neolithic Burials from Tappeh Sang-i Čaxmaq**

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Human skeletal remains of over 140 individuals were unearthed from the Neolithic site of Tappeh Sang-i Čaxmaq in Northeastern Iran. Over 80% of the skeletal remains were non-adults, the majority of which were fetuses, neonates, or 1 year old infants. Moreover, perinatal were predominate within these skeletons, which shows an extremely high rate of neonatal mortality. Many of these fetuses, neonates, and one year old infants were buried at the base of the walls or under the floor close to the wall of houses, while the adults were buried in the grave pits, suggesting a distinction between burial rituals for infants and adults.

In this study I will try to determine the position of the children in the Neolithic society, through the study of the infant burials within this site.

## 38 Mohammadifar, Yaghoub

**Rescue Excavations at Two Sassanian Sites of the Seymarreh Dam, Luristan**

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The river of Seymarreh is an important major river in western Iran that affects regional and interregional interactions between Central Zagros and its surroundings. Discovering and locating Sassanian cities of Mās̄bāzan and Mēhrjan-kāzāgh has been of great importance in Iranian archaeological studies during last hundred years. Following construction of the great Seymarreh dam and directing archaeological surveys during its building procedure, many ancient sites relating to Sassanian and other historical periods were recognized that just few of them excavated limitedly in rescue format. An area of about 45 Kilometers long and between nearly 100 to 3000 Meters wide became a massive man-made lake after operating the dam. This article focuses on rescue excavations held at two Sassanian sites of Sārgāndāb and Sērām-Šāh. Sārgāndāb is a middle-size city with the area of nearly 4 hectares that a manor house build up with stone and plaster is found there; and Sērām-Šāh includes remains of a fortress dominant throughout the entire Seymarreh valley. With the results of excavations in these two sites and some other Sassanian period ones, our point of view about cities' locations in the Sassanian state of Mēhrjan-kāzāgh should be reviewed and modified.

Keywords: Seymarreh Valley, Sassanians, Luristan, Mēhrjan-kāzāgh, Archaeology.

## 39 Montero Fenollós, Juan Luis (1) – Montero Ruiz, Ignacio (1) – Renzi, Martina (2)

**La technologie du métal aux premières villes. Les nouvelles évidences de Mari (ville I).**

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Les dernières campagnes de la Mission archéologique française à Mari, au Moyen Euphrate méridional, ont mis au jour des installations artisanales dédiées au travail du métal au chantier L, daté de la ville I (2900-2700 av. J.-C.). L'étude au laboratoire par XRF et SEM-EDX ont permis d'attester (la recherche est en cours) : 12 scories collées sur des creusets, 8 objets et 3 rognures avec une valeur d'étain importante. Nous avons à Mari I (Dynasties Archaiques I) le meilleur dossier sur la première production de l'alliage du bronze en Mésopotamie. Le bronze était fabriqué dans des creusets avec du cuivre métallique et cassitérite. D'autre part, les analyses d'isotopes de plomb montrent l'importation de cuivre de la région anatolienne.

La fondation de Mari vers 2900 av. J.-C. est le résultat d'un choix délibéré, correspondant à une politique d'aménagement régional destinée à faire du royaume une base économique contrôlant l'axe des échanges par voie fluviale entre la Syrie du nord, l'Anatolie et la Mésopotamie. À travers de cet axe circulaient les métaux nécessaires pour une région dépourvue, par sa genèse géologique, de ressources minières. Nous sommes dans les premiers siècles du 3e millénaire av. J.-C., juste au moment où la technologie du métal démontre son importance et manifeste d'immenses possibilités d'application. Son contrôle devient alors vital pour les premières dynasties urbaines. Mari I est un exemple.

## 40 Moradi, Elham (1) – Mortazavi, Mehdi (1) – Mahfuzi, Ali

**Children Burial Traditions in the Area of Gohar Tepe in Mazandaran**

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Gohar Tepe is a large archaeological site located in the Mazandaran province, ca. 5 kilometers west of Behshahr (36° 40'42"N 53°24'07"E). During the Middle Bronze Age (MBA), the settlement covered more than 10 hectares, but was later abandoned in the Late Bronze Age (LBA) and was used again in the Iron Age 2/3 as a cemetery.

Burials of this area are among informational data in the Bronze Age and Iron. Approximately 160 burials have been explored in this area and a considerable number of them belong to the children. The present study is a Cross – Sectional Study on cultural traditions of Children and infants' burial in this site and other areas in South and South-East of the Caspian Sea, which can be considered as a culture area. Burial traditions are Social representations of a society. In fact human behavior toward the deceased (children) is a symbolic act to the extent that he is required to follow certain cultural Norms. children burial method is of two types: in simple oval graves and in crock, in some cases some presents have been discovered with them.

The purpose of this article;

1-To present a cultural pattern of collective behavior of Gohar Tape residents considering the burial rites and customs of children and to do a comparison with neighboring areas.

2-To explain the existence of a class society and the social distance among people with regard to the status symbols considering the presents discovered in the graves of children.

Keyword:Gohar Tepe,Burial Tradations,Burial Children,Status Symbols

## 41 Motarjem, Abbas

**Tepe Pissa – Recent Fieldwork**

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Tepe Pissa is one of the famous sites near Hamadan (ancient Ecbatana) in central Zagros, and it has attracted the attention of archaeologists for nearly a century. Ch. Fossey first began investigating the mound on behalf of the government of France in 1913. His goal was to discover the ancient capital of the Medes, Ecbatana that its location was hinted at in the accounts of Greek historians (Herodotus, book1). His failure to identify Ecbatana, however, led him to abandon his work, evidence of which can still be seen on the satellite pictures of the site.

In the early Bronze Age most of the North West and west of Iranian Plateau was influenced by the cultural phenomenon called Kura-Araxes, or the Early Trans-Caucasian (E.T.C). This culture in central Zagros was first defined by Cuyler Young Jr, during 1967-1973 excavations at Godin Tepe (Young 1969). The mound is located in the Kangavar valley, central western Iran.

Recent fieldwork by Bu-Ali Sina University has identified the existence of E.T.C. material in Tepe Pissa on Hamadan plain, in seasons 2006, 2008 and 2011. These excavations led to the discovery of transitional to mid and late Bronze Age finds.

The First settlement in the beginning of early Bronze Age were people that used a kind of gray-black pottery with incised decoration that after firing were filled by white material.

The main results of these excavation was the abundance of domestic animal Bones, like sheep and goat. The row of large buildings with thick walls that were built in a very regular rectangular form, show signs of a complex society in this period. Also remains of workshop related to stone tools and bones ornaments were found. In the up layer we found a kind of mud Pedestal.

## 42 Niakan, Lily

**Archaeological Excavations of Farash Tepe at Seymare Dam Basin in Lorestan**

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Farash Archaeological site with an elevation of 520 meters from sea level as well as the total catchment area of five hectares in Seymare Dam Basin in the province of Lorestan.

The area first was explored in 2010 by the author and then it was identified, studied, and excavated by a team of archeologists. The results of this study help reach to research objectives which was the same of exploring the true Chronology of the area.

Among traces and remains, we can name stone and rubble as well as mud mortar and plaster that with respect to systematic plans enjoy much importance and value. Likewise, we can point to the acquired pottery types and their comparison with other adjacent tepes in the Zagros cultural domain. The findings such as seal, obsidian blades, and shell indicate that the aforementioned site has had links with neighboring regions in Anatolia and Mesopotamia as well as the Persian Gulf coast.

Presence of thrashers, sickle blades, grindstone, and pestle along with results obtained on plant and animal samples can attest the kind of economy and food of this region that was based on two principles--animal husbandry and agriculture. Keywords: Iran; Central Zagros; Lorestan; Seymare river ; Farash

## 43 Nieuwenhuys, Olivier

**Renewed Excavations at Prehistoric Tell Begum (Northern Iraq)**

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In summer 2013 an international team of archaeologists in collaboration with northern Iraqi institutions began new work at the prehistoric site of Tell Begum, situated in the Shahrizor Valley of northern Iraq (Sulaimaniyah Province). Initial explorations several decades ago by an Iraqi team had already shown that Tell Begum was inhabited in Late Halaf times. Ismail Hijara published photographs of Halaf sherds from Tell Begum in his magnum opus on the Halaf period in Northern Mesopotamia but otherwise this intriguing site remained unstudied. A surface collection in 2012 showed that in addition to Halaf the site was inhabited in the Late Chalcolithic 1 period. The Late Halaf and the early Late Chalcolithic periods have increasingly received scholarly interest over the past decades but remain very poorly understood. As most of this recent work was done in Upper Mesopotamia, ironically, comparatively very little is known about these periods in northern Iraq. In 2013 our team explored the earlier trenches and opened new ones. This presentation will present first results and, perhaps, some first conclusions.

- 44 Nováček, Karel (1) – Melčák, Miroslav (2) – Starková, Lenka (1)

**The Medieval Urban Landscape in Northeastern Mesopotamia: 2nd Year of the Project**

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On basis of preliminary surveys, analysis of satellite imagery and historical research, nearly twenty sites of either confirmed or conjectured urban status appeared in the 6th to the 17th C. AD in the region limited by rivers Tigris, Great Zab and Little Zab. Except of two sites, all of them were abandoned during the Ottoman era at the latest. The state of preservation of the sites and their visibility in the images are very high in average. The forms of towns are extremely diverse in terms of their size, groundplan, presence of fortifications, presence of a citadel, number and size of large structures, appearance of building quarters with formal plan etc. The high degree of urban development in NE Mesopotamia and its huge dynamics during Islamic era offers a great potential for social interpretations and is a point of departure of our archaeological inquiry. The poster will summarize first results of our research.

- 45 Orendi, Andrea – Riehl, Simone – Kamlah, Jens

**Agriculture in the Bronze and Iron Age Southern Levant**

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The Agricultural developments in the Bronze and Iron Age Levant (3600 – 332 BC) have so far not been comprehensively investigated. A new project – “The land flowing with milk and honey”. Development and significance of agrarian resources in Bronze and Iron Age Palestine” – which is part of the recently established SFB “Resource Cultures” at the University of Tübingen will try to fill this gap. The project is characterized by the combination of different scientific approaches namely the archaeobotanical, the archaeological, the iconographical and the philological method. The main aim of this contribution is to analyze all relevant archaeobotanical data that have been published until now, compiled in an archaeobotanical database (ADEMNES). Furthermore the project will include unpublished material from recent archaeological excavations (Tel Burna, Tel Farah, Qubur Walaydah, Tell Fadous, Baalbek, Tell el-Burak and Kamid el-Loz).

Multivariate analyses will be used to illustrate developments and changes in the crop assemblages. Available sources from climatology and ethnography will be investigated to reveal possible environmental and cultural impact on changes observed in the archaeobotanical record.

- 46 Pawlik, Karolina

**What's on your Back? An Analysis of Camels' Depictions in Roman Palmyra and Certain Parts of China**

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The focus of this investigation is the camel and its relationship with humans. It will be interesting to look at the depictions of camels in two different environments, namely the desert oasis of Palmyra and the steppes and highlands of China.

The choice of places was dictated by the availability of the material.

Aims and Objectives: To compare how different civilisations on a camel exploited the camel and how, if at all this is shown in their art. To understand the relation between the camel and the humans.

- 47 Pezzulla, Nadia

**“Where are the Children?”- Children Burials in the Ancient Near East**

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My presentation is based on the preliminary results of a study on the role of children within the burial context. A comprehensive study on infant burials in the ancient Near East is still unfulfilled, therefore I am offering my first results.

The age brackets included in my study are: newborns (birth to four months old), infants (from the fourth month to two years old), toddlers (two to twelve years old) and adolescents (twelve to sixteen years old).

These results were obtained by analyzing 64 sites located across Mesopotamia, Syria and the Levant. The total amount of infant burials were about 2,700. I will show you some graphics about the percentage of burials located inside or outside the sites and the types of burials. I will also show some data about toys and other objects related to those burials and the diseases that stood out by osteological analysis.

Although it is premature to propose a generalization of the results, I suggest some observations, such as the age that characterize the intra- or extra- site burial, the favorite types of burial and grave items depending on the age range.

48 Poli, Paola

### **On the Black and White Chromatic Contrast: a Decorative Form, Symbol of an Ancient Myth**

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The use of black and white chromatic contrast is a decorative medium attested in different kind of architectural buildings erected in Syrian, Assyrian and Babylonian regions during the second and the first millennium. A Babylonian ritual text mention that the white gypsum is identified as the god Ninurta, while the black bitumen as the demon Asakku. Aim of the poster is an attempt to investigate how this myth of the struggle between Ninurta and Asakku has been accepted, or not, and how it has been assimilated and interpreted in the various regions and in different times.

49 Rajaei, M. – Rezaei, Z.

### **Systematic Survey of Bishapur Surface Pottery**

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Bishapur is an ancient city established through Sassanid dynasty which was one of the administrative centers of five districts during this period in Fars province of Iran. Archeological field studies had been carried on in this city since 1935. Due to the importance of pottery as a cultural material in archaeological studies, first season of systematic survey of surface pottery shreds conducted in Bishapur.

Investigation proceeds using extensive survey method (random sampling) in southwest area of Bishapur. Thus, among one thousand 50\*50 meter grids, 162 units selected in order to collect characteristic potteries. Classification of distinctive potteries, identification of internal typology and distribution pattern of Sassanid and Islamic settlements were Main intentions of this survey.

According to survey results a new settlement pattern recognized in southwest section of Bishapur during Sassanid and Islamic period. Furthermore base on given data the theory of transitional period in Bishapur were formed.

Keywords: Pottery, Bishapur, Systematic Survey, Fars.

50 Rambeau C. et al.

### **Arid Southern Levant: New Palaeoenvironmental Archives from Jordan (Holocene-Pleistocene)**

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The Southern Levant is a place of sharp climatic gradients, with environments shifting from Mediterranean to very arid over a few tens of kilometres. Until now, very little is known about the specific palaeoenvironmental and palaeoclimatic evolution of the most arid zones of the region, due to a general paucity of natural archives. In the project "Arid Southern Levant" (<http://p3.snf.ch/Project-136731>) funded by the Swiss National Foundation and supported by the Council for British Research in the Levant, we explore the potential of newly discovered archives in arid Southern Levant to produce complementary palaeoenvironmental data for the Holocene and Pleistocene periods. We particularly study "desert peat" deposits from 1) the mountain belt bordering the Dead Sea to the East (eastern central Jordan), which seem relatively isolated from anthropogenic impact, and 2) the immediate vicinity of Wadi Faynan (eastern southern Jordan) that was during parts of the Holocene a major settlement and mining centre. The peat-like deposits are analysed for their pollen, plant macrofossils and charcoal contents as well as for their chemistry. We hope that results from this project will help clarify the environmental context(s) in which past societies evolved in the Southern Levant.

## 51 Robert, Beatrice – Poulot-Cazajous, Maylis

**Women are Good to Think!**

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In line with Alain Testart's words which, in the manner of Claude Levi-Strauss, notes that "women are good to think", we will put in light a topic still relevant and still very discussed in archeology: the "Mother Goddess" concept and its images during the Neolithic in the Near East.

Following the theme 2 of this conference, we will consider that "Images are created to express ideas. They are created in a specific cultural and ideological environment to transmit a message". We will study, with a diachronic approach, different female representations of the Neolithic Near East and some similar works picked in the fields of visual arts and contemporary design (from the sixties to present days). We will focus on the image of women through its physical and visual aspects (disproportionate shapes, opulent volumes, sexual characteristics displayed) and its different status (individual, lover, goddess and mother). We will ask ourselves about the links between the works (in taking into account the creators, recipients, places of discovery and / or exposure) and symbolic, ideological, political and social messages conveyed.

This analysis will allow us to think about the image of women delivered by archaeological objects and the modalities of its marks in the current artistic production. Moreover, we should also consider the place of man; the one who often is the craftsman, who thinks the woman, who rests himself on her, as testifies Gaetano Pesce's Mamma!

## 52 Sadozai, Chamsia – Gandreau, David

**Basic Habits for Earthen Archaeological Sites Conservation**

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Before running a conservation plan focused on earth-made architectural remains, one has to lay down few questions: which structure will be chosen, why, who is it for and for how long. National rules added to international norms help to define the property values and the preservation principles to respect. According to those facts and with all the actors of the site, conservators suggest their expertise and know-how to choose one or another technic. So each site is unique and has its own recipe. Multiple options, more or less intrusive, are shown here and documented by the worldwide works of the CRAterre Laboratory, Grenoble National School of Architecture (France). We will show that the earthen material preservation is possible and long-lasting thanks to a methodologic approach.

## 53 Sharifi, Mahnaz

**The Archaeological Excavations Report in Rezvan Tepe, Iran**

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Rizwan Hill is located in Hussain Abad area in the northeastern of Semnan province. Rezvan tepe is laid at an altitude of 1379 meters above sea level in the northeastern part of Semnan and 220 miles from northeast of Shahrud in Semnan province. There are several ancient hills in this region. Rizwan I hill is one of them that had been archaeological excavated. The area was placed in business road of Gorgan to Great Khorasan and connected 3 provinces of Semnan, Golestan and Khorasan.

According evidence of Iron Age I, it has very important value and has good capacity to identification and study cultural situation in this area. This study aimed to explore the history and development of pitches, review and to identify the Iron Age cemeteries, graves and burials, and also save a part of building from the probably damages of Kalpush dam. In this article I'll explore the culture data obtained from this. North East of Iran in archaeological studies history, compared with other regions, has taken less attention. The North East of Iran, due to the favorable geographical conditions and sensitive geopolitical situation, was the main place of formation of human pitch from late to today.

Rizwan hill is about 7.5 meters height above surrounding land. Iron Age graves were found in this search that will describe in the article. Pottery found from above level are mainly gray clay and seldom red with little scattering. Due to nearby of burial area to north of Iran and comparing with that area graves, they are similar. Interesting monuments of Iron Age pottery was found near the burial. In Iron Age burial practices (topographic of graves, graves construction type, direction and position objects in the grave) have local characteristics. The area had relation with gray pottery and black ones, there was a kind of burial that was placed out of residential area and used only as a cemetery. Probably they have a sanctified religious imagine of that area which forced them to bury members of their tribe there.

54 Sheikhi, Mahta

### **Hercules Sculpture in Behistun, the Unique Work of the Interaction Between the Near East and Hellenistic Civilization**

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Seleucid's era (312 to 64 BC.) is a turning point in the history of Iran, because it is a period in which a Hellenistic government formed a state in association with the Parsi's grandee for the first time, and leads to the exchanging of ideas and different cultures between the regions around the ancient Mediterranean and Near Eastern. But this era has so far received little attention and few works has remained.

Stone statue of Hercules in Behistun Mountains at Kermanshah (Iran) which has been venerated by Iranians as gods' position since long ago, is in this respect, an exception and prominent work of the Seleucid. This stone statue was accidentally discovered in 1957 during Bihstun's road construction, (sizes: 214 × 76 cm) has a bilingual inscription including Hellenistic and Aramaic languages in which the exact year and the aim of its construction are clearly mentioned. The aim of this study is to investigate the art of sculpture in the Seleucid period based on careful studying of Hercules statue in Behistun Mountains and comparing it with the similar works in the Hellenistic art. In this regard, in addition to providing the detailed information on the characteristics, features and exploration of the statue, Hercules and the god Mars (varsaraghna), which is introduced as the equivalent of Parthian Hercules In a bilingual inscription from the city of Seleucia, is briefly considered from the mythological viewpoint and finally, the tools and methods of manufacturing the statue are investigated.

55 Squitieri, Andrea

### **Calcite Vessels from Sharh-I Sokhta: New Insights on a Specialized Industry in the Prehistoric Iran**

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This poster will offer new insights on the alabaster specialized industry of Shahr-i Sokhta (eastern Iran) presenting the results of GIS and SEM-EDS, AFM and IR-spectrometry analyses. The site considerably developed between 3200 and 1800 BCE, and hosted an intense production of alabaster vessels in standardized shapes. The evidence from this site includes finished, unfinished and slightly worked pieces which have permitted to reconstructed the manufacture process of such vessels. However, questions concerning the identification of the tools employed for the manufacture, and the consumption of such vessels in their contexts still remain to be answered. The first question will be tackled by means of SEM-EDS, AFM and IR-spectrometry analyses to produce high-resolution images of tool marks; the second will be tackled by means of a GIS in-site distribution analyses so as to highlight relevant patterns. This study is made possible thanks to a collaboration with the Museum of Oriental Art "G. Tucci" in Rome, where the alabaster vessels are kept, and the Italian CNR. It is intended to be part of a larger project of revaluation of Sharh-i Sokhta materials found by the Italian mission which excavated there between 1967-1978 under the direction of Prof. M. Tosi (IsMEO).

56 Steinberg, Aliza

### **Barbaric Influences on Physiognomy, Garments and their Accessories: The Case of the Hunters Depicted in Israel Mosaic Pavement**

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This presentation focuses on the hunters' garments and clothing accessories, together with their possible sources, as they appear in the mosaic pavement at Kissufim. These ornamentations and accessories to the figures' clothing are distinctive to hunters' garments represented in other Israeli mosaics.

Israel's location, being at a geographical, cultural and artistic crossroads, meant its exposure to foreign influences including appearances and clothing.

The hunters represented on mosaic pavements in Israel are depicted nude, partially nude, or dressed in various items of clothing, decorated with ornaments, belts, and shoes of varying types. A new mode of clothing design, is evident from the beginning of the 6th century. Research links the belts to the Avarian tribes. Scholars who have studied these belts and tunics consider that they symbolized, from a Byzantine point of view, the class and occupation of the Barbarian figures. In addition, they note that the long hair, the physiognomy, the beard and mustache, all indicate that the artists depicted Barbarian figures and not Byzantine ones.

- 57 Steiner, Margreet

### **The Early Islamic Period at Tell Abu Sarbut**

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Between 1988 and 1992 a team from the Netherlands conducted four seasons of excavations at Tell Abu Sarbut in the eastern Jordan Valley. The aim of the project was to excavate a rural site from the Islamic period in order to collect enough pottery to establish a typo chronology of the common household wares. However, the main occupation layers were from the Ayyubid-Mamluk periods, when the site was a sugar production center. Early Islamic sherds were collected from the surface of the tell, but not found during the excavations.

The Renewed Excavations of Tell Abu Sarbut (2012-2016) have now excavated part of a hard-packed floor with broken pottery on top of it. The sherds can be dated to the Umayyad/Abbasid period. As Abu Sarbut lies in the hinterland of Pella, where a settlement of the Abbasid period has been excavated, this discovery supplies an interesting addition to the Pella material.

- 58 Tavernier, Jan (1) – Gorris, Elynn (1) – Jans, Greta (2) – Bretschneider, Joachim (2)

### **Petroglyphs in the Desert. Rock Art in the Wadi-Markh Basin, Saudi-Arabia**

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A large amount of petroglyphs was recorded in the Alhamada valley in North Central Saudi-Arabia during the first Saudi-Belgian archaeological surveys in 2012-2013. The Wadi-Markh region is researched under the auspices of the Saudi Commission for Tourism and Antiquities, Riyadh and the KU Leuven, in cooperation with the UCLouvain.

Petroglyphs were found on nearly every hill in the now desolated Wadi-Markh basin, but the Jebel Markh yielded the highest amount of iconographical and textual material engraved on 71 quartzite stones. The figurative drawings are various in content, depicting human figures, like hunting men and animals, e.g. camels, horses, ostriches, sheep and snakes. They are often accompanied by Old North Arabian graffiti, belonging to the Safaitic or the Thamudic dialect (8th century B.C - 3rd century A.D.) and consisting of proper names or annotations. Some engraved stones were reused to build circular stone structures, possibly tombs. The study of the Jebel Markh petroglyphs and their context elucidate their implementation in the landscape and the nature of the people creating them.

- 59 Tonoike, Yukiko

### **Technical Comparisons of Halaf and Ubaid Ceramics from Tell Ziyadeh, Syria**

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Questions of continuity from the Halaf to Ubaid periods in Northern Mesopotamia remain unresolved. The Halaf ceramic tradition spans a thousand years and is an indigenous development from the Late Neolithic period. Late Ubaid in the North is intrusive and appears late in the Halaf tradition. Some have argued for a "transitional" phase, but evidence is sparse. A central question is whether the two ceramic wares, which are stylistically different, share a common technical tradition, which would argue for continuity. On the Middle Euphrates River, two sites Umm Qseir and Ziyadeh have Halaf ceramics and the latter has a long late Ubaid sequence. This study, using petrographic and x-ray diffraction analyses, compares formation processes, clay composition, surface treatments, firing methods and sources, and provides perspective on this central question.

- 60 Vernet, Apolline

### **Dwellings transformation and habits evolution after the Islamic conquest in Near East cities**

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The Islamic Conquest was initiated by the Commander of the Faith. After his death in 632, the territories captured during the conquest continued to expand until the Battle of Yarmouk, which took place in Jordan in 636. The Near East became an area of cultural interaction and exchange between people living in former Byzantine territories and people coming from Arabia. Due to the numerous publications that have appeared concerning archaeological finds, we can deal with a corpus of houses standing in the Near East during the first years of Islam.

Through the study of archaeological reports a kind of polymorphism is illuminated in the blueprints of the houses. The aim of this presentation is to contest the archaeological data in order to understand how the dwellings extant and built during this period reflect different lifestyles within the population. Thus I will focus on a group of blueprint showing rooms constructed around a courtyard. Following the unit description that shows an interesting space use and remodeling during this period, we can analyze the transformation of dwellings that reflects the evolution of habits between the 7th and 8th centuries in the Near East.

61 Vos, Daniella

**Phytolith and Geochemical Preservation in Bedouin Camps at Wadi Faynan, Jordan**

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Soil samples from Bedouin camps in Wadi Faynan, Jordan, were analysed as part of a study looking into the taphonomy of phytolith and geochemical soil signatures in ethnographic sites. The Bedouin camps were at various stages of abandonment when sampled, allowing for different durations of time since the camps were relinquished to be considered. Markers of activity areas at the deserted camps and knowledge of the patterns of use of the sites in this area made it possible to understand the context of the soil samples and relate it to the results of the analysis. An additional aim of this study was to use the combined signature of activity areas as reference material for archaeological investigations. However, the results of this study suggest that the influence of abandonment processes may impede the use of ethnographic phytolith material for that purpose.

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## 1. THE CONSTRUCTION OF NEOLITHIC CORPORATE IDENTITIES (MONDAY/TUESDAY, JUNE 9-10)

MARION BENZ – HANS GEORG K. GEBEL – TREVOR WATKINS

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One of the most momentous thresholds in the longer-term evolution of human sociality was neolithisation - the transition from more flexible mobile foraging communities to sedentary and complex corporate societies. For too long Neolithic research has concentrated on the economic side of this transition, while the formation and maintenance of these early large-scale communities could not have developed without unprecedented cognitive and social capacities. More than ever before, in these sedentary milieus the human ability to perceive selectively, to memorize associatively, and to act in a collaborative way, evolved by steadily valorizing, symbolically charging and communicating practices, discourses, spaces and things, including building “traditions”. Corporate identities in the Near Eastern Late Epipalaeolithic and Neolithic were not only formed and sustained by commonly accepted tangible things (images, paraphernalia, practices etc.), they were also promoted and transformed by intangible modes, codes and ideological concepts.

The workshop aims to identify and translate the empirical evidence of the different intangibles that helped to form Epipalaeolithic and Neolithic group identities. One of the approaches might be the concept of (inter-)mediality by which cognitive competences behind corporate strategies can be identified. In addition to prehistoric archaeologists, the workshop invites contributions from specialists in evolutionary and cognitive sciences.

## Programme

### SESSION 1, NEOLITHIC CORPORATE IDENTITIES IN EVOLUTIONARY CONTEXT

- Nigel Goring-Morris & Anna Belfer-Cohen  
Moving Around' and the Evolution of Corporate Identities
- Lisbeth Bredholt Christensen  
Things Animate and Inanimate: Objectification of Things as Part of Corporate Identity?
- Tobias Richter  
The Corporate Group Reconsidered: Counter-power, Cooperation and Agency in Epipalaeolithic Societies in Southwest Asia

### SESSION 2, IDENTITY AND SOCIO-ECONOMY

- Kurt W. Alt & Marion Benz  
Teeth Story Writing: Basta and the Difficult Path to Farming Communities
- Eleni Asouti  
The Role of Climate Instability and Resource Predictability in the Formation of Neolithic Corporate Identities in Southwest Asia
- Amy Bogaard  
Neolithic 'Cooperatives'? An Archaeobotanical Approach to Neolithic Corporate Identities

### SESSION 3, IDEOLOGY AND IDENTITIES

- Gary Rollefson  
"I am we": the Display of Socioeconomic Politics of Neolithic Commodification
- Christa Sütterlin  
Cultural Memory: Symbols and Rituals for the Purpose of Making and Sustaining Group Identity
- Theya Molleson  
Physical Signs of Corporate Identity

## Abstracts

NIGEL GORING-MORRIS & ANNA BELFER-COHEN

### **'Moving Around' and the Evolution of Corporate Identities**

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With the advance of sedentism during the Epipalaeolithic the sense of territoriality was amplified, with group identity increasing on the one hand, while on the other personal and community territories shrank. Indeed, processes of intensifying self-identity can be identified at the group level. These were accompanied by increases in the variety and quantities of material culture remains, which necessitated increased intercourse with neighbouring groups and communities. Such a scenario portrays an intermediate situation that cannot be explained either through reconstructed Palaeolithic modes or through the established rules of the later, fully-fledged agricultural societies of the Near East.

Previous research aimed towards distinguishing and defining overarching monothetic communal patterns of behaviour. There has been little emphasis in research to examine the issue of whether the cultural koines in the Near East reflect diffusion of ideas, as opposed to migration by leapfrogging, reflecting the movements of actual communities or populations.

In our paper we investigate such issues relating to the Epipalaeolithic and Early Neolithic in the Near East, and their impact on the emergence of the new and unique Neolithic existence, the precursor of modern lifeways worldwide.

LISBETH BREDHOLT CHRISTENSEN

### **Things Animate and Inanimate: Objectification of Things as Part of Corporate Identity?**

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In contemporary society, most things are lifeless objects to us: after having been produced in factories we acquire them, use them, and throw them away. Yet, "Even biologists have trouble deciding what is alive. 'Life' is in important ways continuous with other phenomena rather than having clear boundaries [. . . and there] may not be an absolutely rigorous distinction between inanimate matter and matter in a living state." (S. Guthrie *Faces in the Clouds* 1993: 53) Accordingly, to make a distinction at all between alive and lifeless is a cultural enterprise. This is the case for such diverse objects as stones, trees, deceased group members, tools, or pottery. My question is to what extent the increased involvement with humanly produced objects from Late Epipalaeolithic and onwards contributed to an objectification and a lifelessness attributed to both individual objects and perhaps also to fellow human beings. What were the implications of the large production of things for the construction of a group identity, as we may have known it since the Neolithic?

TOBIAS RICHTER

### **The Corporate Group Reconsidered: Counter-Power, Cooperation and Agency in Epipalaeolithic Societies in Southwest Asia**

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In this paper I want to caution against uncritically accepting that Neolithic corporate groups were a novel and fundamental component of early agricultural societies in southwest Asia. My aim is to highlight that the idea of corporate groups as originally formulated by late 19th and early 20th century sociologists and anthropologists is

not uncritically accepted. I will suggest that Neolithic corporate groups are constructs that seem to emphasise differences between gatherer-hunters and agriculturalists that are rooted in the deeply rooted Cartesian nature: culture dichotomy. I will then review the archaeological and ethnographic record to show that cooperation was in fact a key evolutionary characteristic of many Upper and Epipalaeolithic societies in southwest Asia. Rather than thinking that hunter-gatherer groups naturally lacked this kind of social institution, we should be considering why gatherer-hunters preferred looser, more egalitarian structures over more rigidly defined networks of social engagement.

KURT W. ALT & MARION BENZ

### **Teeth Story Writing: Basta and the Difficult Path to Farming Communities**

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The transition from mobile to sedentary life was one of the greatest social challenges of the human past. Yet little is known about the impact of this fundamental change on social interactions amongst early Neolithic communities in the Near East. We systematically recorded epigenetic characteristics of teeth and skull bones from foraging/early farming societies from the southern Levant to the middle Euphrates, and focus herein on a key site, the late Pre-Pottery Neolithic settlement of Basta in Southern Jordan. Additionally, mobility pattern was reconstructed via systematic strontium (Sr) isotope analysis of tooth enamel of most Basta individuals. The frequency of congenitally missing maxillary lateral incisors in the 9,000-year-old community of Basta is exceptionally high (35.7%). A worldwide diachronic comparison of the general rate of this anomaly shows that the enhanced frequency can only be explained by close familial relationships akin to endogamy. This is supported by strontium isotope analyses, indicating a local origin of almost all investigated individuals. The exceptionally high incidence of missing incisors within Basta represents the earliest evidence of a self-imposed exclusive mating system. Our interpretation provides direct and strong evidence for the fundamental social changes that accompanied the transition from mobile hunter-gatherers to sedentary farmers, when flexible social structures were tied into more permanent social bonds.

ELENI ASOUTI

### **The Role of Climate Instability and Resource Predictability in the Formation of Neolithic Corporate Identities in Southwest Asia**

Senior Lecturer in Environmental Archaeology, Department of Archaeology, Classics and Egyptology, University of Liverpool, E.Asouti@liverpool.ac.uk

Empirical scrutiny demonstrates that theories aiming to explain socioeconomic change in terms of final Pleistocene-early Holocene climate deterioration (push theories) or improvement (pull theories) fail. Instead, periods of sustained socioeconomic and cultural innovation appear to be associated with periods of climatic instability, manifested at the timescales of direct human experience of landscape change, that is at the individual, generational and inter-generational scale. It is argued that climate instability generated suitable contexts for the development of inter- and intra-group information exchange and community interaction networks, which were negotiated via "corporate identities" that emerged during the early Holocene across the geographical and socio-cultural divides of Southwest Asia.

AMY BOGAARD

### **Neolithic 'Cooperatives'? An Archaeobotanical Approach to Neolithic Corporate Identities**

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Farming is often linked with the atomization of society into small-scale households. But analysis of the most direct (archaeobotanical) evidence for crop production and use suggests that household storage was deeply intertwined with supra-household cooperation. Using recent data from Çatalhöyük, central Anatolia and other late PPN-PN sites, this paper challenges the assumption that domestic consumption necessarily reflects domestic production, and considers the implications of (at least partially) cooperative farming for understanding the consequences of the agricultural transition in western Asia.

GARY ROLLEFSON

### **“I am we”: the Display of Socioeconomic Politics of Neolithic Commodification**

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Competition for resources (arable land, pasturage) within settled farming populations became increasingly intensive as those populations grew. One strong measure to reduce the tensions that might lead to conflicts over such commodified aspects of the environment was the development of corporate kinship groups that established exclusive access to certain land parcels (among other resources) to their members; abiotic resources were also claimed exclusively, such as names, symbols, and myths. A correlated development was the expression of corporate identities, signs that distinguished one corporate group from all others. While many of those signs may have been lost to prehistorians, others have survived. The site of 'Ain Ghazal provides good evidence of such corporate identities as reflected in architectural clustering and ritual practices, particularly during the Middle PPNB and Late PPNB periods.

CHRISTA SÜTTERLIN

### **Cultural Memory: Symbols and Rituals for the Purpose of Making and Sustaining Group Identity**

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The transition from semi-nomadic hunter-gatherer groups to larger independent communities living in permanent settlements brought more than economic and social changes. On a cultural level, the emergence of forms which reveal a greater emphasis on the symbolic economy may be observed. This includes forms of norms and customs, of religion, and of monuments and sacred objects. We may observe comparable phenomena in traditional cultures that exist today. The construction of group identity depends on myths that explain the group's identity by the cultural creation of common ancestors (Eibl-Eibesfeldt 1995, Suetterlin 2000). This is for the most part territorially defined. Materially, these myths are manifested by sacred objects that combine stylistic singularity with solidarity of form. Stored in central locations of the community, they are continually ritually re-activated. Through such symbols, the group communicates its "identity". The earlier kinship relationships between members of the group are replaced by culturally defined relations.

On another level, artefacts and monuments that derive their expression from the repertoire of ritual "hostility displays" are used to secure the group's territory. Both forms of symbolic practice serve to maintain the group identity internally by binding through common descent and externally by territorial demarcation through agonal symbols. Examples from different cultural contexts will illustrate this discussion.

THEYA MOLLESON

### **Physical Signs of Corporate Identity**

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Corporate identities are constructed in response to need in the face of dispersal or suppression. Physical signs that reflect the need can be interpreted.

Early Neolithic foundation burials may signal a change in focus from the closure deposits of abandoned buildings to a bond with the future. Later immigrants marked their arrival at Abu Hureyra with burials in a new large building within the host settlement. They were physically distinctive. They brought with them successful methods of shepherding and specialist crafts and above all integrated with the host population.

Artificial cranial deformation was a surprisingly early response to the need for corporate identity. A minority group can ensure they are clearly identifiable as a group by cranial modelling imposed at birth. They can emerge as an elite group, risking conflict. Strategies are developed to deal with those outside the norm, to avoid conflict. The function of rites de passage may not be solely to indoctrinate the initiate, but also to confer a special identity (e.g. shaman) on the otherwise intractable individual.

## 2. THE CHRONOLOGY OF TRANSITIONAL PERIODS FROM 3000-1000 BCE: COMPARING ABSOLUTE CHRONOLOGIES BASED ON <sup>14</sup>C TO RELATIVE CHRONOLOGIES BASED ON MATERIAL CULTURE (MONDAY/TUESDAY, JUNE 9-10)

ELISABETTA BOARETTO – FELIX HÖFLMAYER

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As chronology is the backbone of history, secure absolute dates are a prerequisite for understanding political history, trade and cultural interconnections in the Ancient Near East. For a long time chronology was based on changes in the material culture and synchronization with historical chronologies of Egypt and Mesopotamia. Even 60 years after the development of radiocarbon dating, relative chronologies of the Levant, Anatolia, Cyprus and the Aegean are the common basic chronological models used for writing history.

However, in the last decades a major change has taken place based on integrating field work, quality control on the datable material and improvement in radiocarbon dating analysis. This new approach has resulted in high resolution absolute chronologies for certain periods that in turn raise fundamental questions about timing of events, synchronization with historical chronologies, and reliability of material culture changes for absolute dates and diffusion of ideas, trade and so on. This in turn has resulted in some disagreements between traditional chronological models and radiocarbon dating. These differences, which can reach a few hundred years in some cases, occur in several chronological phases and may in part be attributed to the different methodological approaches to absolute dating between science and humanities, a difference that should be addressed in the proposed workshop.

In this workshop we would like to present the current state of research in chronology from the Early Bronze Age down to the Iron Age, both from a scientific as well as from an archaeological point of view in order to detect agreements as well as disagreements. Field archaeologists, epigraphers and radiocarbon experts will be invited to give state of the art research results regarding the chronologies in the Near East region between the 3rd and 1st millennium BC. This would provide new research directions for students and all scholars.

## Programme

### SESSION 1

- Introduction
- Michael W. Dee  
Relative and Radiocarbon-based Chronologies for Egypt during the First and Second Millennia BCE
- Rita Gautschi  
Astronomical Data and their Potential for Chronological Purposes
- Felix Höflmayer  
Middle Bronze Age Chronology, Egypt and Tell el-Dab'a: Where it fits and where it doesn't

### SESSION 2

- Manfred Bietak  
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- Elisabetta Boaretto  
Radiocarbon Chronology of the Early Bronze Age in the South Levant: Improving Time Resolution and Synchronization
- Pascal Butterlin  
Between the East and the West, Chronological Issues at Mari (2900-1760 BCE)

### SESSION 3

- Constanza Coppini  
Evidences for the MBA-LBA Transitional Period in Northern Mesopotamia: Stratigraphic Sequences and Ceramic Assemblages
- Eleonora Carminati  
Towards the Periodization of the Early Kurgan Cultures of Southern Caucasus: State of the Question and Preliminary Results
- Hassan Fazeli Nashli  
The Relative and Absolute Chronology of the Iranian Central Plateau during the Third and Second Millennium BC
- S. Khasswneh, A. Murray & D. Bonatz  
Investigating OSL Dating Technique for Young Archaeological Heated Materials Using Potshards from the Tell Tabqat Fahl (Pella) in the Jordan Valley
- Respondent: Harvey Weiss

## Abstracts

ELISABETTA BOARETTO

### **Radiocarbon Chronology of the Early Bronze Age in the South Levant: Improving Time Resolution and Synchronization**

Weizmann Institute of Science

The end of the Early Bronze Age is often described as being “sudden” in the framework of the archaeological record. This in turn raises questions about the actual resolution of the archaeological record itself and if in fact it is defined by the materials deposited or by the limit in resolution of radiocarbon dating?

The first step is to understand the nature of the site and the site formation processes in order to tailor the strategy for collecting samples for radiocarbon dating. An example of this approach is the recent study of the Early Bronze Age chronology at the site of Megiddo, Israel. A location was found with very fine stratigraphy where we dated sufficient layers such that the fluctuations in the radiocarbon dates could be superimposed on the calibration curve fluctuations (in essence “wiggles matching”). At Tel es Safi we used a different approach when dating seeds from a large Early Bronze jar, where we only dated the seeds located at the base of the jar and must have been in situ. The chronology was extended by dating the layers beneath the jar. These two studies as well as the others that we used to date the end of the Early Bronze III appear to be limited in resolution more by the nature of the archaeological record and less by the resolution of radiocarbon dating. Moreover with this new excavation approach combined with high resolution dating it might be possible to “re-open” some of the past excavated sites and recover radiocarbon samples for resolving other chronological issues.

PASCAL BUTTERLIN

### **Between the East and the West, Chronological Issues at Mari (2900-1760 BCE)**

Université Paris I Panthéon-Sorbonne

Abstract:

ELEONORA CARMINATI

### **Towards the Periodization of the Early Kurgan Cultures of Southern Caucasus: State of the Question and Preliminary Results**

University of Melbourne

The transitional stage between the Early and the Middle Bronze Age in southern Caucasus (ca. mid-end of the 3<sup>rd</sup> millennium BC) is defined by the emergence of the barrow burial (kurgan) horizon, which reached its apogee during the Middle Bronze Age (2<sup>nd</sup> millennium BC) within the frame of the Trialeti culture. Traditionally, the Early Kurgan cultures have been variously dated from the beginning of the 3<sup>rd</sup> to the beginning of the 2<sup>nd</sup> millennium BC, according either to relative chronology models based on the synchronisation of cultures or absolute models, arbitrarily accounting calibrated and uncalibrated dates. Not only is the general chronology of this phase uncertain, but also its internal periodization, differentiating only between an earlier Martqopi-Early Trialeti and a later Bedeni phase. The recent comprehensive re-examination of the pottery repertoire of this phase has allowed distinguishing at least three main cultural stages within the Early Kurgan cultures, represented by the isolated or the joint evidence of the pottery groups detected. The redefinition of the Early Kurgan ceramic collection, through

the autoptic analysis of the finds, their morphology and the results of the archaeometric investigations, allowed for the first time to preliminary systematize and suggest a new periodization for this phase.

COSTANZA COPPINI

### **Evidences for the MBA-LBA Transitional Period in Northern Mesopotamia: Stratigraphic Sequences and Ceramic Assemblages**

Freie Universität Berlin

The so-called MBA-LBA 'Dark Age' is a matter of debate in archaeological studies concerning 2<sup>nd</sup> millennium Mesopotamia: how long did it last, and most of all, is it really distinguishable? Many scholars have tried to understand and prove it, through the use of written sources, astronomical data, archaeological stratigraphic sequences, and means of absolute dating. However, Northern Mesopotamia underwent major changes in a period spanning from the 17<sup>th</sup> to the 15<sup>th</sup> century BC. Such modifications involved on large scale the political organization of the land (emergence of Mittani), but on smaller scale the daily life of people and their internal dynamics. In this paper, and to the aim of the workshop, we are going to illustrate and detect the small-scale changes as a part of the chronology subject, dealing with relative chronology. Stratigraphic sequences and ceramic assemblages from sites situated in the Syrian Upper Euphrates Valley and the Khabur Valley are going to provide the basis for establishing a chrono-stratigraphic diagram for the region. The correlation of ceramic types and relative stratigraphic contexts from the mentioned regions is going to constitute a piece of the large Relative Chronology subject, thus giving new data from Northern Mesopotamia.

MICHAEL W. DEE

### **Relative and Radiocarbon-based Chronologies for Egypt during the First and Second Millennia BCE**

University of Oxford

Dynastic Egypt offers some of the richest relative dating evidence of any Bronze Age civilisation. Artefact sequences, stratigraphy and king-lists all form part of the established archaeological canon. Such records are a valuable resource for scientists interested in refining radiocarbon-based chronologies using Bayesian statistical modelling. However, a precise understanding of how the relative sequences relate to the passage of time is essential before they can be employed for this purpose. In this paper, I discuss the methods by which the ordering of cultural sequences may be chronometrically tested, and then outline the variety of ways such information can be utilised in Bayesian models. Absolute chronologies produced in this manner will then be juxtaposed against conventional historical records with specific emphasis being placed on the periods of transition known as the First and Second Intermediate Periods.

RITA GAUTSCHY

### **Astronomical Data and their Potential for Chronological Purposes**

Universität Basel

To derive absolute dates with a precision of one year for pharaohs and Mesopotamian kings, records of astronomical observations have been frequently used. While the confidence in the astronomical dating method was almost unlimited at the beginning of chronological studies, the situation changed dramatically during the last decades, leading to a denial by several researchers of any usefulness of astronomical data for dating purposes. For the utilization of astronomical data and their reliability different rules of thumb hold in Egypt and Mesopotamia due to the varying nature of the solar Egyptian and the lunisolar Mesopotamian calendar. One type of astronomical observation can provide an absolute date of an event only in exceptional cases, usually further

chronological information is needed. On the other hand, neglecting the available information from astronomical data means wasting useful evidence. When knowing the possibilities and limits of this dating method it is a powerful tool in combination with other dating methods. For four papyri from El-Lahun in Egypt the results of the astronomical and the <sup>14</sup>C dating method can be compared directly. I will address the possibilities and limits of astronomical data for chronological purposes in Egypt and Mesopotamia and discuss the agreements and disagreements with the <sup>14</sup>C determinations.

FELIX HÖFLMAYER

### **Middle Bronze Age Chronology, Egypt and Tell el-Dab'a: Where it fits and where it doesn't**

University of Chicago

Absolute dates for the Middle Bronze Age of the Levant are still mainly based on archeological synchronisms with Egypt and especially with site of Tell el-Dab'a in the eastern Nile Delta. For a long time, reliable radiocarbon sequences were lacking that could be used to check the validity of the proposed synchronisms and the derived absolute dates. Only recently, sequences of radiocarbon determinations on stratified short-lived samples from the sites of Tel Ifshar and Tell el-Dabca were published and together with ongoing research in the framework of the project 'Radiocarbon dating the Bronze Age of the Levant' funded by the Fritz Thyssen-Foundation, the German Archaeological Institute and the University of California, Los Angeles, allow to compare absolute dating based on synchronisms with Egypt and Tell el-Dabca with reliable scientific data. In this paper we will discuss new radiocarbon determinations for the site of Tell el-Burak (Lebanon) and Tel Kabri (Israel) and their implications on Middle Bronze Age absolute chronology.

HASSAN FAZELI NASHLI

### **The Relative and Absolute Chronology of the Iranian Central Plateau during the Third and Second Millennium BC**

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One of the important necessities for archaeology of Iran is to access a calendar date to understand the trajectory cultural development both synchronically and diachronically. Chronological studies within the region back to 1930s when Roman Ghirshman and Erich Schmidt systematically investigated the origin of prehistoric societies (Schmidt 1937, Ghirshman 1935). Later, through the data collected from the excavated sites of Hissar, Cheshmeh-Ali and Sialk, allowed Donald McCown to propose a comprehensive chronological framework for the region (McCown 1942). However, in the second major step Robert H. Dyson focused on the cultural horizons and subdivided the chronology of Iran from 6000-2000 BC into the seven stages from 'Soft Ware Horizon' to the 'Northern Gray Ware Horizon' (Dyson 1965).

The revolutionary stage of chronological studies in the central plateau started from 1990s when many old and new sites systematically excavated by the Iranian and non-Iran archaeologists. Through the secure stratigraphic information and using <sup>14</sup>C dates, archaeologists have proposed a new chronological model for the central plateau of Iran (Sarлак 2011, Nokandeh 2010, Fazeli et al 2009, Pollard et al 2012). From the excavations data such as Tepe Pardis, Qoli Darvish, Sialk South, Arisman, Sagzabad, and kapandeh I will propose a new model of chronology for the Iranian central plateau during the third and second millennium BC.

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S. KHASSWNEH<sup>1</sup>, A. MURRAY<sup>2</sup> & D. BONATZ<sup>1</sup>

### **Investigating OSL Dating Technique for Young Archaeological Heated Materials Using Potshards from the Tell Tabqat Fahl (Pella) in the Jordan Valley**

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This work aims to investigate the precision available from different dose evaluation protocols using known-age archaeological heated materials (potshards) from the tell Tabqat Fahl (Pella) in the Jordan valley and more specifically from the Canaanite Temple (Migdol). The temple has been dated by stratigraphic and stylistic analysis methods using pottery shards, bronze artefacts and by the architectural layout of the site. All this evidence, together with a few unpublished <sup>14</sup>C ages indicate that the horizon from which the potshards were collected belongs to the Iron Age, around 1000 BC.

The sandy burial matrix was relatively free from large clasts, and the site is above the local water table. About 20 shards were collected from each of three superimposed Iron Age layers to test whether it would be possible to distinguish these units within the anticipated short deposition period of ~500 years. At this stage in our investigations we have decided to concentrate on the coarse grain fraction (90-300 µm) and standard separation techniques were employed to extract quartz and feldspar-rich concentrates.

In general, the extracted coarse grains in these shards are low, forming around (0.027%) of the total shard weight. Preliminary measurements suggest that the low-density extracts expected to be feldspar-rich do not show any significant IR sensitivity, and the limited amount of quartz has so far prevented the measurement of large numbers of aliquots. Surprisingly for well-fired pottery (i.e. heated and sensitized quartz) there is a significant contribution from medium and slow components to the quartz blue-stimulated OSL signal, although the standard fast- component is present. Using early background subtraction, recycling ratios and recuperation are all satisfactory, despite considerable sensitivity changes during repeated SAR cycles (up to 20 times); these large sensitivity changes raise significant concerns as to possible changes in the first measurement cycle (during measurement of the natural signal).

We test and compare methods to address these concerns, both using the SARA approach (Mejdahl and Bøtter-Jensen, 1994) and using the 110oC TL peak to monitor sensitivity changes (Murray and Wintle, 2000) and present preliminary results from isothermal TL measurements.

The work also investigated methods of Dose Recovery tests for the heated pottery, where the standard procedure that is used is bleaching aliquots with solar stimulator, we tried to reproduce the signals by heating at different temperature and make comparison with best dose recovery measurement we can achieve (Murray and Wintle, 2003).

With the shortage of coarse grains, we choose to use fine grains in measurements, running the routine SAR measurements and ED evaluating tests, it was satisfactory results with some shards, that we can be sure that they have been heated to high temperatures, other shards raised the intrigue to discuss whether all our samples were really heated to high temperatures or not, and if using other procedures as Pulsed OSL would it be efficient in defining the last heat temperature.

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### 3. DESERT KITES – ARCHAEOLOGICAL FACTS, DISTRIBUTION AND FUNCTION (TUESDAY/WEDNESDAY, JUNE 10-11)

UELI BRUNNER

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Research on Desert Kites has intensified during the last years. These large stone structures are now known from many parts of the Arabian Peninsula, the Levant and Syria but also from Central Asia. They appear in a great variety of forms. Common to all are two or more long stonewalls converging towards an enclosure. Their function is still highly debated. Some scholars see them as hunting traps whereas others think them to be suitable to collect semi-domesticated animals.

The desert kites are the most spectacular remains of a long forgotten culture at the fringe of the desert. It is time to give this culture the status it deserves. The discussion about the controversial ideas of the function of desert kites will help to understand the economy of these cultures.

The workshop is a unique possibility to bring together the leading scientists working on the subject.

## Programme

### SESSION 1, REGIONAL REPORTS

- David Kennedy & Rebecca Banks & Matthew Dalton  
Kites in Saudi Arabia
- Wael Abu-Azizeh & M. Tarawneh  
Out of the Harra: Desert Kites in South-Eastern Jordan. New Results from the South-Eastern Badia Archaeological Project
- Per Storemyr  
The Distribution of Ancient Game Traps in Upper Egypt and Lower Nubia

### SESSION 2, PROJECT STUDIES

- Rémy Crassard  
The Globalkites Project: Multi-proxy Studies of the Desert Kite Phenomenon
- Olivier Barge & Jacques Brochier & Marie-Laure Chambrade & Emmanuelle Régagnon  
First Results of the Globalkites Project: Research in Armenia, Kazakhstan and Jordan
- Dani Nadel & Guy Bar-Oz & Dan Malkinson & Amnon Nachmias & Anna Khechoyan & Boris Gasperian  
New Insights into Desert Kites in Armenia (the Fringes of the Ararat Depression)

### SESSION 3, SOCIAL AND ECONOMIC ASPECTS

- Mohammed Maraqtan  
Hunting in Ancient Arabia in the Light of Rock Art and Epigraphic Material
- Alison Betts  
Beyond the Walls: Social, Economic and Strategic Aspects of Kite Use
- Ueli Brunner  
The South Arabian Form and its Implication for the Interpretation of Desert Kites

## Abstracts

Wael Abu-Azizeh<sup>1</sup>, & M. Tarawneh<sup>2</sup>

### **Out of the Harra: Desert Kites in South-Eastern Jordan. New Results from the South-Eastern Badia Archaeological Project**

<sup>1</sup> ArScAn – UMR 7041, VEPMO, Jordan; <sup>2</sup> Al-Hussein Bin Talal University, Jordan. waelabu@hotmail.com

Kite structures are known in Jordan since the beginning of the last century where they have been first identified by the pilots of the Royal Air Force and the French Army during the mandates period. Since then, although this kind of structures is known from other areas of the Southern Levant and the Near East (Sinai, Negev, Syria, Saudi Arabia...), their distribution have been thought to be restricted in Jordan to the northeastern basalt Harra landscape, despite the fact that no convincing explanation could be provided for such a confined geographical location.

From the point of view of arid peripheries settlement dynamics understanding, the gap left in southern and southeastern Jordan was puzzling in view of the clear continuity in human occupation evidenced by recent research.

The recent discovery of kites east of al-Jafr, in Jibal al-Khashabiyeh area, brings new data modifying considerably our knowledge of these late prehistoric structures. Their remarkable organization in an almost 20 km long chain like continuous feature is reminiscent of the Harra layout of these structures, while they also show clear local specificities and characteristics, as for instance an increased exploitation of the topography for their construction.

Olivier Barge & Jacques Brochier & Marie-Laure Chambrade & Emmanuelle Régagnon

### **First Results of the Globalkites Project: Research in Armenia, Kazakhstan and Jordan**

CNRS, UMR-5133 Jalès 'Archéorient', France; olivier.barge@mom.fr

One of the goals of the Globalkites project is to understand the desert kites phenomenon in the frame of its geographical extension. This goal is addressed by organizing fieldworks in different regions. Kites from Armenia, Kazakhstan and Jordan have been observed and studied in 2013. The preliminary results lead to a precise description of those structures in each region, regarding kites' architecture and spatial organization in the landscape. Chronological data, relative and chronometric, have also been gathered. These data, combined with satellite imagery analyses – the interactive process between satellite images and fieldwork observations enrich both approach – are yielding the first elements of interpretation. The comparison of these data will be presented.

Alison Betts

### **Beyond the Walls: Social, Economic and Strategic Aspects of Kite Use**

Professor of Silk Road Studies, University of Sydney, Australia; alison.betts@sydney.edu.au

This paper will draw on comparative literature in a variety of disciplines to explore some of the wider aspects of the communal hunt. Much of the study on the enigmatic structures known often as 'desert kites' concerns archaeological data and mapping of distributions. However, to understand the background to their creation and use, it is valuable to consider the societies that may have built and used them. They demand much time and energy to build and manage, often require aggregation of disparate social groups, and the distribution of resources following a successful hunt may also be socially and economically complex.

UELI BRUNNER

### **The South Arabian Form and its Implications for the Interpretation of Desert Kites**

Dept. of Geography, University of Zurich, Switzerland; ueli\_brunner@bluewin.ch

The information about desert kites in Yemen stems mostly from fieldwork undertaken within the scope of a project of the German Archeological Institute. The South Arabian desert kite has an open Y-form structure. The head consists of several short walls on the left side, standing at right angles to the continuous wall on the right side. Between these chambers and the wall runs the lane. It is narrowest at the beginning of the head and widens towards its open end. The tails leading to the head are not always compact walls. Sometimes they are only manifested by heaps of stone, which create the impression of a line.

The environment, location and size of desert kites suggest they were traps for game. The different settings in the topography and variety of forms of the desert kites suggest that different animals were hunted, such as gazelle, ibex or onager. Having this in mind, some pre-Historic stone arrangements in Europe could be interpreted as hunting traps.

RÉMY CRASSARD

### **The Globalkites Project: Multi-proxy Studies of the Desert Kite Phenomenon**

CNRS, UMR-5133 Lyon 'Archéorient', France; remy.crassard@mom.fr

Within the last few years, the number of inventoried kites has increased fivefold, and the known distribution zone has been greatly extended. The GLOBALKITES Project is facilitating the study of these structures at the regional and local scale via the GeoExplorer GLOBALKITES Interactive Map, available on the website [www.globalkites.fr](http://www.globalkites.fr). This inventory demonstrates the surprisingly wide geographical range of these structures, both in the Near East and in outlying regions. We refer to the extensive construction of these features as the "Kites Phenomenon", and suggest that it raises questions about kites' origins via diffusion or cultural convergence. The scale of this distribution also has implications for issues of dating and function, which are still very unclear.

Investigation of the Kites Phenomenon is at the heart of the GLOBALKITES project. The team is composed of archaeologists, archaeozoologists, geographers and geoarchaeologists, who implement an interdisciplinary approach previously little used in such studies. Satellite images provide substantial amounts of data that can be subjected to geomatic analysis, with the resulting spatial data used to identify and explain regional differences. To this end, an archaeozoological inventory and environmental characterization are in progress. The fundamental issues cannot be resolved without field investigations. In parallel, a program for automatic recognition of kites in Google Earth is being developed in collaboration with mathematicians and computer scientists.

DAVID KENNEDY<sup>1</sup>, REBECCA BANKS<sup>1</sup> AND MATTHEW DALTON<sup>2</sup>

### **Kites in Saudi Arabia**

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Although it has long been known that Kites were to be found in Saudi Arabia, it is only very recently that the availability of high-resolution imagery on Google Earth and Bing has enabled researchers to identify them far more widely and in greater numbers than previously believed. In particular, imagery for the areas around Khaybar and Al-Hiyat revealed over 200. Now the high-resolution imagery has been extended more widely and a fuller picture can be formed. The Kites are varied in size and shape but many are of a distinctive, angular form not found elsewhere in 'Arabia'. With an increased data set, greater familiarity with the wide variety of other, probably

contemporary, stone-built structures in the region, and with the geological and vegetational environment, there is an opportunity to offer a more detailed analysis and interpretation than previously done by Kennedy and Bishop.

MOHAMMED MARAQTEN

### **Hunting in Ancient Arabia in the Light of Rock Art and Epigraphic Evidence**

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The purpose of this study is to present a general view of hunting in pre-Islamic Arabia such as the hunt of ibex, gazelle, Arabian Oryx, ostrich and wild ass. This paper is depending primarily on the epigraphic evidence gained from the ancient South and Early North Arabian inscriptions. Further, the rock drawings of hunting scenes in North, Central and South Arabia as well as hunting scene reliefs discovered in Yemen are very significant source, especially those that are associated with inscriptions. Archaeological evidence, Arabic Classical sources such as the pre-Islamic specific hunt poetry (*ṭardiyya*) and ethnographic data will be considered.

The hunt was a central institution in ancient Yemen from the beginning of the first millennium BCE to the decline of the South Arabian culture at the eve of Islam and the ritual hunt was practiced by the Sabaean rulers in the relation with the South Arabian supreme deity 'Aṭtar. A recently discovered 20-lines Sabaic inscription relating to the hunt of Oryx and wild ass using the horse will be presented. This text has been discovered by the American Foundation for the Study of Man at the Awām temple/Maḥram Bilqīs, Mārib, Yemen. Safaitic and Thamudic inscriptions and rock art drawings relating to hunt will be also taken into account.

A special attention will be given to the hunting technology such as the so-called 'desert kites' or animal traps and especially those that are presented in the rock drawing.

DANI NADEL<sup>1</sup>, GUY BAR-OZ<sup>1</sup>, DAN MALKINSON<sup>2</sup>, AMNON NACHMIAS<sup>1</sup>, ANNA KHECHOYAN<sup>3</sup> & BORIS GASPERIAN<sup>3</sup>

### **New Insights into Desert Kites in Armenia (the Fringes of the Ararat Depression)**

1 Zinman Institute of Archaeology, University of Haifa, Haifa 31905, Israel ; 2 Department of Geography and environmental studies, University of Haifa, Israel; 3 Institute of Archaeology and Ethnography, National Academy of Sciences, Yerevan, Republic of Armenia; dnadel@research.haifa.ac.il

Desert Kites are found in Southwest Asia from Yemen in the south to Armenia in the north. Though thousands are known, most were only briefly documented using Google Earth images without any fieldwork. So far, less than 20 were excavated in this vast region. We report here of our first season of fieldwork along the fringes of the Ararat Depression (Armenia), where we excavated two V-shaped kites and one enclosure kite within a rich landscape that also includes dwelling sites, burials and petroglyphs.

The architecture of the kites was characterized through excavations in the heads and along the arms. The differences between the two types of kites are analyzed in terms of settings, dimensions, architecture and suggested utilization. No radiocarbon dates are yet available, and the most common finds in the kites are pottery sherds from the Middle Bronze Age. Other rare finds include obsidian artifacts and stone implements.

We also tested a settlement and a ceremonial structure near the kites. The remains from these include typical Middle Bronze Age II artifacts, assigned to so-called Trialeti-Vanadzor Cultural tradition (ca. XXI–XIX centuries BCE). An adjacent burial yielded pottery dated to the Late Bronze Age, ca. XIV–XIII centuries BCE.

PER STOREMYR

### **The Distribution of Ancient Game Traps in Upper Egypt and Lower Nubia**

Archaeology & Conservation Services, Brugg, Switzerland; per.storemyr@hotmail.com

More than 40 years ago James Hester and Philip Hobler reported the discovery of ancient stone-built game traps in the little Dunqul Oasis in the Western Desert of Egypt, some 150 km SW of Aswan. Simultaneously, they announced game trap concentrations along the Nile in Lower Nubia between Aswan and the Sudanese border. These were not published, and until recently it was assumed that the traps had become victims of the rising waters of the Lake Nasser reservoir. However, following the finding of yet another, very substantial concentration of game traps in Aswan 10 years ago, as well as a minor concentration at el-Hosh between Aswan and Luxor, studies of high-resolution satellite images has confirmed that most of the announced Lower Nubian game traps still exist. But there are many more than originally announced and the west bank of the Nile in Lower Nubia now stands out as extremely rich in game traps, with hundreds of km of stone fences. With a focus on distribution, their characteristics, use and dating are the themes taken up in this presentation.

#### 4. ARTIFACTS MADE OUT OF BONE AND RELATED MATERIALS: MANUFACTURE, TYPOLOGY AND USE (THURSDAY/FRIDAY, JUNE 12-13)

CANAN ÇAKIRLAR & HERMANN GENZ

University of Groningen & American University of Beirut

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Artifacts made out of materials of faunal origin (bone, ivory, horn, antler, mollusc shell, etc.) are commonly encountered in excavations in the Ancient Near East. While some groups of artifacts, such as ivory carvings or engraved *Tridacna* shells have received considerable attention, mainly because of their artistic significance, more mundane, yet more abundant objects such as tools and simple jewelry have often been neglected.

To address this imbalanced situation, we would like to organize a workshop focusing on artifacts made of bone and related materials from the Ancient Near East from the Neolithic to the Islamic Period.

The discussion will focus on the following aspects:

- Identification of raw materials and manufacturing methods (including possible workshop remains)
- Retrieval practices on the excavation (how, when and by whom are artifacts identified? Especially ad-hoc tools with limited alterations may only be identified through a detailed faunal study)
- Exchange in raw materials or finished items (ivory, shells)
- Typology and chronology of specific artifact categories
- Functional aspects (including use-wear studies)
- Contextual discussion

## Programme

### SESSION 1

- Canan Çakırlar  
Ivory, elephant bones, and the relationship between the two in Syria and beyond
- Alice Choyke  
Tiny Windows on Household Affairs: a glimpse into Late Chalcolithic Bone-working traditions at Horum Höyük in Southeastern Anatolia
- Rozalia Christidou & Mihriban Özbaşaran  
Early Neolithic bone artifacts from Aşıklı Höyük, Central Anatolia

### SESSION 2

- Hermann Genz  
The Early Bronze Age Bone Object Assemblage from Tell Fadous-Kfarabida, Lebanon
- Haskel J. Greenfield & Annie Brown, Itzhaq Shai & Aren M. Maeir  
Understanding Early Bronze urban patterns from the perspective of an EB III commoner neighbourhood: the excavations at Tell es-Safi, Israel. Bone tool frequencies and the nature of bone tool assemblages in an early urban assemblage: Tell es-Safi, Israel
- Luca Peyronel  
Bone manufacture at Ebla (Syria) during the Early and Middle Bronze Age (c. 2400-1600 BC)

### SESSION 3

- Ariel Shatil  
Bone Carving in Early Islamic Jerusalem

## Abstracts

CANAN ÇAKIRLAR

### **Ivory, elephant bones, and the relationship between the two in Syria and beyond**

Groningen University, Institute of Archaeology, c.cakirlar@rug.nl

The abundance and craftsmanship of the ivory objects in the archaeological record of the LBA and IA Eastern Mediterranean leave no doubt as to their high commercial value. Elephant teeth (tusk and molars) comprise an important raw material used in the manufacture of these objects. Recent zooarchaeological research shows that cranial, dental, and post-cranial remains of Asian elephants (*Elephas maximus*) are as ubiquitous as worked finds of ivory across the northern Levant. In this presentation, I will discuss the nature of these remains in relationship to the demand for raw material for ivory industries.

ALICE CHOYKE

### **Tiny Windows on Household Affairs: a Glimpse into Late Chalcolithic Bone-working Traditions at Horum Höyük in Southeastern Anatolia**

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The now submerged site of Horum Höyük was excavated some ten years ago as part of rescue operations connected to dam building on the Middle Euphrates in Turkey. Most of the bone tool material comes from a large, undifferentiated refuse pit. The assemblage is largely characterized by the ad hoc use of bone with some notable and exceptional pieces. Connections in manufacturing and use traditions will be explored in terms of the nature of the small settlement itself, general bone-working trends in the period and local styles of bone manufacture. Comparisons will be made with material from the EBA I levels at the site of Zeytinli Bahçe and more broadly with the large tell site of Arslantepe.

Research at these tell sites present with a variety of difficulties which are often endemic to the study of sites connected to complex societies, especially ones associated with monumental architecture and the emergence of texts. I would also like to explore some of these methodological issues in light of the three examples listed above and other experiences as well as discuss ways of finding a happy compromise between excavating archaeologists and specialists like bone-tool analysts who work in find materials rarely connected to power and large-scale economic issues.

ROZALIA CHRISTIDOU

### **Early Neolithic Bone Artifacts from Aşıklı Höyük, central Anatolia**

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The new project of excavation of the Aceramic Neolithic site of Aşıklı Höyük, central Anatolia employs the technological and taphonomic view to study bone artifacts. The analysis is based on the identification of the raw materials and morphological and metric traits of the artifacts and on the classification of the wear observed with optical microscopy. Wear measurements using tribological techniques permit refinement of observations. Our study first focused on the earliest levels so far excavated on the site. The present paper discusses blank acquisition for tools, mainly awls and rubbing instruments, and ornaments, such as beads and pendants, and their successive modifications until discard. Tool production was based on bone breakage and shaping with a limited range of techniques and stone tool edges; ornaments are more varied from a technological point of view.

In either case, our analysis permits study of movement organization and variation and thereby fine comparisons between blanks and final products. Technical habits and technicity are considered. These data together with information on tool use modes and maintenance allow us to examine bone artifact production in terms of resource potential and choice and perceptions that structured choice. The next step is to extend the study over time and space variations of the bone industries within the site.

HERMANN GENZ

### **The Early Bronze Age Bone Object Assemblage from Tell Fadous-Kfarabida, Lebanon**

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Despite their relatively limited scale, the excavations conducted at the site of Tell Fadous-Kfarabida on the Lebanese coast between 2004 and 2011 have provided a large and surprisingly varied assemblage of objects made out bone and related materials from the Early Bronze Age levels.

In addition to large numbers of awls and spatula, other objects are attested as well, such as spindle whorls, beads and pendants, a decorated bone tube, a scale beam and several cylinder seals made out of bone or hippopotamus ivory.

This study will present a typological study of the material from the site, investigate the raw material used for the different types, analyze the distribution of the objects in different functional units and finally conclude with some thoughts on the use of specific types.

HASKEL J. GREENFIELD<sup>1</sup> – ANNIE BROWN<sup>1</sup> – ITZHAQ SHAI<sup>2,3</sup> – AREN M. MAEIR<sup>3</sup>

### **Bone tool frequencies and the nature of bone tool assemblages in an early urban assemblage: Tell es-Safi, Israel**

1 University of Manitoba, Department of Anthropology, Canada; 2 Ariel University, Israel; 3 Bar-Ilan University, Israel

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Most studies assume that the faunal remains found within and around structures relate to the subsistence activities of the occupants. In this paper, we will present newly collected data on the frequency of bone tool/ornament remains at the early urban centre of Tell es-Safi, Israel that challenge this assumption. Detailed microscopic and taphonomic examination of the zooarchaeological assemblage collected during the excavation of the EB III (2800-2500 BCE) neighbourhood at the site suggests that formal and informal tools/ornaments are present in far greater numbers than normally described in most contemporary assemblages. This suggests that the distribution of bones in residential areas may be more related to use and fragmentation of modified bone than to subsistence. The focus of the excavations at Tell es-Safi/Gath is on an Early Bronze Age III commoner neighbourhood. While the neighbourhood contained a layout that is common for other EB urban centres, few other such areas of early urban sites have been subjected to an intensive zooarchaeological analysis. Based on these data and analysis, we discuss the significance of identifying use wear polish on even fragmentary remains in order to understand osteological frequencies in early urban settings.

LUCA PEYRONEL

### **Bone manufacture at Ebla (Syria) during the Early and Middle Bronze Age (c. 2400-1600 BC)**

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The corpus of bone objects and tools from Tell Mardikh-Ebla allows investigating the role and development of bone manufacture at the urban centre between 2500 BC and 1600 BC. A preliminary assessment of the bone

production that takes into account typology, distribution, and relation with other broad functional classes of items is presented, trying to underline trends and changes occurring through times.

During the Early Bronze Age III-IV a specific local production of ornaments of a high quality is attested by a large number of decorated sticks/pins, and a decorated bone tube shows that this specific production widely diffused in the Levant and in Anatolia was attested also at Ebla. Bone tools (especially awls and needles, pin-beaters, spindle-whorls) are also widely used together with bronze and especially stone implements (including a variety of lithic and obsidian blades). On the contrary, the craftsmanship of figurative and decorative inlays and beads prefers other kinds of material, such as semi-precious stones and shell.

A trend towards a dichotomy between high-specialized manufacture of valuable objects, such as inlays and incrustations, linked with the ivory industry, and a production of tools that seems to be restricted to spinning and weaving activities (spindle and spindle-whorls, shuttles, pin-beaters, needles) is evident during the Middle Bronze Age, when the number of bone tools sharply decrease and lithics almost completely disappear.

ARIEL SHATIL

### **Bone Carving in Early Islamic Jerusalem**

Hebrew University in Jerusalem, ariel.shatil@mail.huji.ac.il

Excavations at Givati Parking Lot, on the north-west slope of the City of David ridge, have uncovered an Early Islamic neighborhood, dated to the time of the Abbasid Dynasty (8th-10th cent AD). This neighborhood shows both domestic and industrial characteristics. One of the crafts that were practiced in the area was bone carving. Ample evidence was found in and around one of the neighborhood's buildings which was used as the actual bone carving workshop.

The refuse of bone carving found at Givati reveals a complete reduction sequence of the objects produced there, giving new and important insights into the technology of the craft. The selection of special bone elements as raw material, the set of tools used by the carver, his technological knowledge and efficiency, points to a specialized, full time workshop.

The finding of the bone carving workshop in Givati has important insights not only into this unique craft, but also into the economic organization of related professions, establishments and crafts in Early Islamic Jerusalem. With this find, Jerusalem joins a small number of Near Eastern sites where evidence for large scale bone objects production, of any period, was recorded, among them Ashkelon, Alexandria, Caesarea and Petra.

## 5. TRAJECTORIES OF COMPLEXITY IN UPPER MESOPOTAMIA: PROCESSES AND DYNAMICS OF SOCIAL COMPLEXITY AND THEIR ORIGIN IN THE HALAF PERIOD (WEDNESDAY/THURSDAY, JUNE 11-12)

MARCO IAMONI & SALAM AL QUNTAR

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Upper Mesopotamia has been seen until a few decades ago as a region that underwent passive processes of complexity which originated in Lower Mesopotamia. Yet, recent archaeological research has demonstrated that complexity was developing in Lower and Upper Mesopotamia at comparable rates. This reconstruction is based, however, on a patchy understanding of the dynamics affecting Upper Mesopotamia throughout the 7<sup>th</sup>-4<sup>th</sup> millennia BC: most of the data comes actually from the Upper Euphrates and the Syrian Jezirah, whereas the Upper Tigris has been so far only very marginally considered.

Furthermore, the study of such transformation has been based on the analysis of the Ubaid and LC materials, somehow underestimating the importance of the “wider perspective”, i.e. the integration of previous periods, within longer developmental processes.

The scope of this workshop is thus to focus on the processes of complexity from a wider standpoint, that takes into account the dynamics that started already in the Halaf period and continued throughout the Ubaid and the LC in Upper Mesopotamia. Participants are invited to present papers that re-discuss the roots of such processes from multiple standpoints (material cultural, settlement pattern, regionalisation, urbanisation, specialisation and exchange), so that longer trends of complexity may be properly recognized and discussed.

## Programme

### SESSION 1 – GENERAL TRENDS (ECONOMY, CONTACTS, TRADITIONS ... )

- Stuart Campbell  
Persistent Cosmologies in Mesopotamia; What Happens to the Neolithic World?
- Marcella Frangipane  
Halaf and Ubaid: Two Opposite Models of Society. What was the Basis of their Hybridisation in Upper Mesopotamia?
- Salam Al Kuntar  
Economic Opportunities and Interregional Networks in Upper Mesopotamia in the Late Chalcolithic
- Marco Ramazzotti  
Back to the Future. The Analytical Archaeology of the Mesopotamian Urbanism.

### SESSION 2 – LANDSCAPE/SETTLEMENT PATTERNS

- Dan Lawrence & Andrea Ricci  
The Roots of Complexity? Landscapes and Settlement from the Halaf to the Late Chalcolithic in the Northern Fertile Crescent
- Marco Iamoni  
The Dynamics of Complexity and Settlement Pattern: the Eastern Upper Tigris Region between the 6th and 4th Millennium BC
- Simone Mühl  
Where People Meet - The Eastern Tigris Region from the 6th to the 4th Millennium BC
- Tim B.B. Skuldbøl & Carlo Colantoni  
Urbanism on the Edge - Complex Settlement Patterns and Urban Transformations on the Rania Plain in Northeastern Iraq

### SESSION 3 – SOCIAL AND ECONOMIC CHANGES

- Olivier Nieuwenhuys  
Hosting, Eating and Drinking across Boundaries
- Jill A. Weber  
Animals and Complexity: Mapping Urbanized Niche Construction through Sex and Size
- Daniela Arroyo-Barrantes  
Feasting and Mass Production in Early Urban Societies: Tell Majnuna, Tell Brak, Syria
- Final discussion

## Abstracts

MARCO IAMONI

### **The Dynamics of Complexity and Settlement Pattern: the Eastern Upper Tigris Region between the 6th and 4th Millennium BC**

University of Udine, Department of History and Preservation of the Cultural Heritage

The formation of complexity is a key issue that has attracted the interest of archaeologists since the discovery of the earliest settlements in the ancient Near East. The excavation of site sequences in S. Mesopotamia has suggested that the "Land of Sumer" was the area where socio-economic complexity emerged for the first time. Since then, progress in archaeological research modified this picture; we now know that complexity emerged in different regions with autonomous (though sometimes interrelated) dynamics. Yet this reconstruction is still very partial, with regard to both the archaeological details and the regions involved. It is based to a large extent on excavation data from specific areas (mostly the Euphrates basin) and has until very recently, not adequately incorporated evidence from landscape studies. This paper aims to partially rectify these weaknesses by analysing an area (the Eastern Upper Tigris region in modern Iraqi Kurdistan) that has been thus far little investigated. Thanks to the recent research conducted by the Italian Archaeological Mission in Assyria (University of Udine) with the LoNRP project, a significant amount of information on the regional settlement and its material culture is now available: this will help to provide an initial analysis of the formation of complexity in this area of Northern Mesopotamia, with a particular focus on its manifestation in regional settlement distribution.

SALAM AL KUNTAR

### **Economic Opportunities and Interregional Networks in Upper Mesopotamia in the Late Chalcolithic**

University of Pennsylvania

During the Late Chalcolithic period in Upper Mesopotamia, structural elements like settlement type, subsistence economy, and ritual practice became increasingly differentiated while material culture over a vast region became unusually similar. In this paper I argue that social and economic interactions shaped the overall organization of the interregional networks and created significant convergence in technology and style. Efforts of the LC communities to find the most efficient production strategies in this period of economic growth and urban developments led to analogous similarity in material culture. My argument is based on recently examined data from Hamoukar, Brak, and Tepe Gawra and it demonstrates cross-cultural contacts and patterns of interaction along the Euphrates and Tigris in the Late Chalcolithic.

DANIELA ARROYO-BARRANTES

### **Feasting and Mass Production in Early Urban Societies: Tell Majnuna, Tell Brak, Syria**

University of Cambridge

This paper explores the role of production and consumption of pottery during the emergence of early urbanism in Northern Mesopotamia. In this context, craft production is expected to grow and intensify to fulfill the needs of a larger and more complex population, stimulating mass production and standardization. In Tell Majnuna (Tell Brak, Syria) large pottery assemblages from the Late Chalcolithic 3 period (ca. 3800-3500) were found together with vast quantities of human and animal bones. These intensive discard contexts give a

unique opportunity for robust analysis of this typology, as well as to discuss the intensification and ongoing diversification of craft production in the 4th millennium BC.

Through the study of typology, carrying capacity and the quantitative analysis of the assemblage, this research also gives insight into how large feasting events provide opportunities for community engagement and social differentiation.

STUART CAMPBELL

### **Persistent Cosmologies in Mesopotamia; What Happens to the Neolithic World?**

Department of Archaeology, School of Arts, Languages & Cultures, University of Manchester

Archaeologists working on early complexity have tended to start by seeking the roots of later institutions and social adaptations in earlier periods. While logical in some ways, this tends to underestimate the importance of understanding how the distinctive characteristics of earlier periods evolve through time, how some aspects may persist into later periods and how they may shape the way in which later society develops. In particular, this paper argues that we can identify ways in which the world of the late Neolithic in Mesopotamia may have been structured and how agency may have worked within it. By examining how elements of this changed and persisted through time during the subsequent periods, we can better understand the development of societies of different complexity.

MARCELLA FRANGIPANE

### **Halaf and Ubaid: Two Opposite Models of Society. What was the Basis of their Hybridisation in Upper Mesopotamia?**

University "La Sapienza" – Rome

The paper proposal starts from the idea that the Halaf society was basically egalitarian, with almost no real spur towards social stratification, and that this at one point may have become a limit to its development and even survival. The Ubaid society conversely seems to have been founded on a somehow stratified structure since its first appearance in the Lower Mesopotamian plains. The paper will try to analyse the reasons that made it possible for the two communities to mix each other and the contribution given by the Halaf society to the deep changes which took place in Upper Mesopotamia in the course of the 5th millennium BC and brought to a new society based on a hierarchical model of Ubaidian type.

DAN LAWRENCE & ANDREA RICCI

### **The Roots of Complexity? Landscapes and Settlement from the Halaf to the Late Chalcolithic in the Northern Fertile Crescent**

Durham University; German Archaeological Institute

Landscape archaeology, and particularly settlement pattern analysis, has long been used to assess social complexity. The spatial organisation of sites, presence or absence of hierarchies, often based on site size, and variations in population density and long distance trade networks are all regularly employed as evidence in this assessment. However, reconstructing past landscapes requires an understanding of the nature of the archaeological remains visible in the present day. This is particularly true of prehistoric periods in the Northern Fertile Crescent, where dense later occupations have destroyed or masked much of the evidence for earlier cultures. This paper therefore has three aims. Firstly, to examine the evidence available for reconstructing landscapes and settlement patterns from the Halaf period to the Late Chalcolithic, and highlight what may be missing from the record. Secondly, to compare and contrast these landscapes across the Northern Fertile

Crescent using a large dataset of regional surveys brought together by the Fragile Crescent Project (Durham University). Thirdly, to place these landscapes in their long term context in relation to later periods more commonly associated with ideas of social complexity.

SIMONE MÜHL

### **Where People Meet - The Eastern Tigris Region from the 6th to the 4th Millennium BC**

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Older and more recent excavations and surveys in Syria have revealed a great deal of information concerning the late Neolithic and Chalcolithic transitions in upper Mesopotamia. At the same time, our understanding of these periods in the northeastern part of the Fertile Crescent remains fragmentary, especially in those areas where archaeology was largely focused on the late Assyrian capitals and beyond. Between 2001 and 2004, the Iraqi Directorate of Antiquities conducted work at 63 sites, 15 of which were excavated in the Makhul area near the confluence of the Tigris and the Lesser Zab.

Only a small number of Halaf period sites were recorded, whereas there is an abundance of newly founded Ubaid settlements. This picture is also reflected in recent survey results in the Shahrizor Plain of Iraqi Kurdistan.

Therefore, many questions still need to be answered. Furthermore, this also raises a great number of issues that are related not only to the chronology and spatial distribution of pottery groups as well as certain architectural features, but also to the cultural settings and developments during the 6th to the 4th millennium BC.

The paper shall present the results of the Makhul dam salvage excavations and their setting within the wider regional context of the late Neolithic and early Chalcolithic transition in northeastern Mesopotamia. The material study is combined with a GIS-based analysis of the known sites in the eastern Tigris region and their environment.

OLIVIER NIEUWENHUYSE

### **Hosting, Eating and Drinking across Boundaries**

Faculty of Archaeology, Leiden University

Anthropologists and archaeologists exploring social identity emphasize that identities are multiple and situational. In culturally fragmented contexts contact across boundaries is possible to the degree that individual and groups ascribe to institutions facilitating peaceful interaction. These insights are a valuable starting point for discussing the Halaf and Ubaid in the ancient Near East. Scholars have demonstrated much diversity in subsistence, social organization and complexity within these culture groups. Both cultural mosaics are identified archaeologically foremost by their respective pottery styles, which in both cases were similar across considerable distances. I shall adopt Gil Stein's depiction of the Ubaid as an 'interaction sphere', but argue that its origins can be traced to the Late Neolithic of Upper Mesopotamia. As well, I shall follow Phil Karsgaard to argue that Halaf and Ubaid ceramic assemblages were similar in the way vessels were used. Stylistically elaborated Fine Ware serving vessels painted with geometric motifs figured in everyday commensality within the individual household and in community wide feasts. Feasts involved competition, fostering emerging complexity, but also values of equality and hospitality. Ascribing to such values enabled heterogeneous later prehistoric groups to interact, exchanging goods, people and ideas across persisting local identities and adaptations. The primacy traditionally accorded to the southern Mesopotamian lowlands may be questioned; the 'settling of Sumer' may have become possible only after Mesopotamian communities had established institutions capable of transcending localized identities and adaptations.

MARCO RAMAZZOTTI

**Back to the Future. The Analytical Archaeology of the Mesopotamian Urbanism.**

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This paper is a further attempt to apply Artificial Adaptive Systems to the analysis of the Mesopotamian urbanism. The 'urban revolution' in the Land of Sumer and Akkad has been considered as a complex natural and cultural phenomenon, but also the product of cognitive behavior that can be critically discussed both on the historiographical and analytical level. The complementary exploration of these two research's levels leads to a strong diversifications of the Mesopotamian City representations and a progressive human attempt to trace them back to the simulation of cognitive complexity. AAS, as a specific set of Artificial Intelligence (AI) mathematical tools which express these emulative properties, are historiographically animated in the 'connectionist' reaction to 'behaviorism' and therefore are proposed here as an 'analytical model' for to explore the empirical complexity of the southern and northern Mesopotamian urbanism through non-linear programming (NLP) and dynamic algorithms (DA). At the end of the nineteen eighties, numerous studies resurfaced in the attempt to understand complexity no longer as external to man and subject of our predominantly applicative research, but rather as a living expression of our intelligence, of our mnemonic, of perceptive and constructive capacity. In this sense, complexity was almost removed from the undisputed supremacy of external interpretation, able to be analyzed through mechanical and linear systems, and became the subject of specific research which aimed to trace brain's capacity to create it. The analogy between cultural complexity and the complexity of intelligence then gave rise to a new system of theoretical knowledge, methods and applications linking archaeological research to the New Artificial Intelligence. Theories, methods and applications which are already in use and identify a whole new world of archaeology, which is not a paradigm of it, as cognitive archaeology aims to be, but a (contemporary) way to undertake the same historical reconstruction. The AAS application to the ancient near eastern urbanism can be considered a new frontier of the Settlement Archaeology research, but it is rooted 'back to the future' because has been inspired by the Analytical Archaeology application of the System Theory, and moreover by the David Leonard Clarke pioneer approach in connecting the epistemic nature of our contemporary researches to the Cybernetic.

TIM B.B. SKULDBØL & CARLO COLANTONI

**Urbanism on the Edge - Complex Settlement Patterns and Urban Transformations on the Rania Plain in Northeastern Iraq**

Department of Cross-Cultural and Regional Studies; University of Copenhagen, Denmark; Department of Archaeology; Bitlis Eren Üniversitesi, Turkey

This paper discusses the survey and excavation findings from around the twin sites of Bab-w-Kur on the Rania plain of Iraqi Kurdistan and evidence of an increase in the tempo of transformation from the Halaf/Ubaid through the Late Chalcolithic period.

Bab-w-Kur lie in a spatially-constrained environment on the eastern margins of Upper Mesopotamia and in a pristine research region. In the Late Chalcolithic period we see an emerging settlement complexity and the clustering of multiple small sites into larger complexes.

Excavations at Bab-w-Kur show radical transformations from the LC2 to LC 3-4 periods with rapid shifts in social and economic functions with decreased functional capacities. This non-primary centre presumably competed with other urban entities on the plain. This raises the question of whether Bab-w-Kur failed to reach the critical mass of a competitive urban settlement and was subsumed into the demand sphere of a larger nearby centre. Or, is it an example of the varied trajectories of urban development for the period? Complementing these insights are data

from the survey that shows sites occupied in the Halaf/Ubaid periods forming part of the dense Late Chalcolithic settlement network.

This will act as the starting point for a discussion of concepts regarding the trajectories of urban complexity on the edges of Upper Mesopotamia.

JILL A. WEBER

### **Animals and Complexity: Mapping Urbanized Niche Construction through Sex and Size**

Consulting Scholar, Near East Section, The University Museum of Archaeology and Anthropology; Philadelphia, PA 19103 USA

In Northern Mesopotamia, the Late Chalcolithic (LC, ca. 4000 – 3200 BC) is surfacing as an autochthonous, dynamic era of increasing population density and, perhaps causally, emergent cultural innovations and evolving settlement patterns. Within this period, Tell Brak and its immediate environs evidenced expansion of its settled area and settlement reorganization around seemingly-industrialized economic-activities. Concomitantly, analysis of substantial faunal-data from Tell Brak and Tell Majnuna indicates contemporary shifts in animal-management practices and animal health, suggesting larger-scale herding in a resource-constrained environment. Is such spatial reorganization toward segregation of activities and specialized land-use a natural result of increased population density and complexity?

Animal-bone data from Bab w Kur, in Iraqi Kurdistan, is used to broaden the scope of analysis. That system undergoes similar transformation of spatial and cultural attributes – albeit on a smaller scale and later within the LC period than is evident at Brak.

By examining bodies of faunal data from a broader area and asynchronous occurrence, we can develop an understanding of broader patterns of niche construction and organic evolution of land-use and animal-keeping that accompany population dynamics.

## 6. COLLECTIONS AT RISK: SUSTAINABLE STRATEGIES FOR MANAGING NEAR EASTERN ARCHAEOLOGICAL COLLECTIONS (THURSDAY/FRIDAY, JUNE 12-13)

ANDREW JAMIESON

Classics and Archaeology, University of Melbourne, Australia

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This workshop addresses a crucial but often ignored aspect of Near Eastern archaeology: the sustainable management of increasing numbers of archaeological collections. Every archaeological collection is at risk, not only from warfare or civil unrest, but from natural elements such as earthquakes, fire and floods, and from inevitable decay due to climatic conditions or neglect. The workshop aims to share views and raise awareness about archaeological collections management in the Near East as the cultural heritage of this region continues to be threatened by ongoing instability and conflict. Discussion will consider short, medium and long-term approaches to archaeological collections management. In the short-term, the care of archaeological collections during periods of instability and in conflict zones is acknowledged as a high priority requiring urgent attention and needing an immediate response. In the mid-term, there is a need to assess the significance of archaeological collections and develop criteria in order to prioritise available resources to deal with the continuing influx of artefacts into repositories. In the long-term, there is an on-going necessity to develop strategies for sustainably managing archaeological collections in the future, considering access and use, and improving collections management practices. The workshop will stimulate an exchange of ideas and perspectives on the issues involved in Near Eastern archaeological collections management, with a view towards articulating sustainable strategies for the management of Near Eastern archaeological collections.

## Programme

### SESSION 1, CONFLICT AND COLLECTIONS

- Michael T. Fisher & Gil J. Stein  
Aks of War: A Digital Museum Inventory for a War-Torn Afghanistan
- Youssef Kanjou  
Protection Strategies and the National Museum of Aleppo in Times of Conflict
- Cheikhmous Ali & Philippe Quenet  
Syrian Museums at Risk: An Overview. Issues and Solutions
- Hamed Salem  
Palestinian Archaeological Collections and Lessons of Conflicted Situations

### SESSION 2, CURATING, QUANTIFYING AND PRESERVING COLLECTIONS

- Fadi Beyano, Assaad Seif & Tim Williams  
Beirut: The Challenge of Curating Large and Complex Urban Datasets
- Dianne Fitzpatrick  
Quantifying the Problems and Counting the Costs of Near Eastern Archaeological Collections Management: Five Case-Studies
- Nicole Reifarth & Elisabeth Völling  
Textiles as Culture Heritage in Fieldwork, Repositories and Collections

### SESSION 3, MANAGING, ACCESSING AND USING COLLECTIONS

- Antonio Sagona, Claudia Sagona & Aleks Michalewicz  
'Legacy Data' and the Site of Samtavro: Revisiting Archaeological Collections and Archives of the Georgian National Museum
- Anna Stevens  
From Dig House to Digital Humanities: Managing the Archaeological Collection of Amarna
- Silvia Perini  
Syrian Cultural Heritage in Danger: A Database for the National Museum of Aleppo
- Andrew Jamieson  
New Uses for Old Collections: Community and Curriculum Engagement Using Near Eastern Archaeological Collections

## Abstracts

MICHAEL T. FISHER & GIL J. STEIN

### **Aks of War: A Digital Museum Inventory for a War-Torn Afghanistan**

Oriental Institute, University of Chicago, USA; mtf@uchicago.edu and gstein@uchicago.edu

For the past three decades Afghanistan has oscillated between civil war and civil strife, but the last decade of conflict has introduced a new element to the country: U.S. and internationally funded projects in fields such as education, energy and cultural heritage preservation. It is within the context of an uncertain and deteriorating security situation that our project, the National Museum of Afghanistan-Oriental Institute Museum Partnership, is rapidly creating a digital inventory of the National Museum's holdings. The steps toward recording, assessing, and securing the possibly 60,000 objects that have survived the decades of looting and iconoclastic destruction are challenging and numerous. Over the past two years, the Partnership has inventoried and taken photos (aks in Dari) of tens of thousands of objects using a secure, relational, translingual database that functions in both Dari and English. This paper will provide an overview of the National Museum and its collection, demonstrate the structuring principles and efficacy of the translingual database, and present our development strategies specific to the conflict zone of Afghanistan. Our discussion will focus on the challenges of working toward both a complete digital inventory and a sustainable inventorying system within the context of an ongoing civil war.

YOUSSEF KANJOU

### **Protection Strategies and the National Museum of Aleppo in Times of Conflict**

Director of Antiquity and Museums of Aleppo, National Museum of Aleppo, Syria (currently based at the Tokyo University, University Museum, Japan); kanjou00@yahoo.com

This paper discusses the protection strategies for archaeological collections at the National Museum of Aleppo; one of the most important museums in the Middle East. It contains objects from northern Syria, including items from Ebla, Mari and Ugarit. It also houses the archaeological collections of the international salvage excavations from the Euphrates and Tishreen dam areas. Other important artefacts come from the prehistoric sites of Mureybet and Abu Hurayrah. The current conflict in Syria, which has impacted on the city of Aleppo since 2012, has resulted in considerable damage to the National Museum of Aleppo and surrounding areas. When hostilities began it was necessary to prepare and activate a plan to protect the museum and its collections, taking into account the diversity of risks and a need to prioritise tasks. The large number and diverse nature of the archaeological collections necessitated the implementation of a range of protection methods. The Aleppo Museum Collections Management Division initiated a protection strategy comprising four working groups and involving six separate stages. This paper will offer an insight into the protection strategies employed to protect the archaeological collections at the National Museum of Aleppo.

CHEIKHMOUS ALI & PHILIPPE QUENET

### **Syrian Museums at Risk: An Overview. Issues and Solutions**

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Syrian museums have been at risk since the beginning of the armed conflict in Syria. Actually, they had been long before, because of feeble security measures and the lack of proper inventories of the collections. A reinforcement of security, including the displacement of the most valuable masterpieces, occurred in 2011 when the Syrian Prime Minister issued a circular letter warning against alleged trained foreign gangs who were on the edge of putting museums at threat. Many museums underwent heavy destruction (cf. Homs) along the past two years, as well as massive pillage (cf. Homs, Aleppo, Ebla, Dura Europos, Der ez-Zor). Some are occupied, sometimes used as headquarters, by troops of soldiers, either fighting on the side of the opposition (cf. Ma'rat an-Nu'man, Raqqah) or belonging to the army of the regime (cf. Idlib, Aleppo, Der ez-Zor). International institutions have proved to be inefficient to prevent or stop damage to the museological treasures of Syria. Fortunately the local civil society finds strength enough in some occasions to safeguard its heritage: for instance the collections of the Museum of Education of Aleppo have been all sheltered in a safe place. Such achievements could easily and rapidly multiply with a minimum of support from outside.

FADI BEYANO, ASSAAD SEIF & TIM WILLIAMS

### **Beirut: The Challenge of Curating Large and Complex Urban Datasets**

Assaad Seif, Acting Director General, Directorate General of Antiquities in Beirut, Lebanon [asadseif@inco.com.lb](mailto:asadseif@inco.com.lb) or [assaad.seif@dga.culture.gov.lb](mailto:assaad.seif@dga.culture.gov.lb); Fadi Beyano, Directorate General of Antiquities in Beirut, Lebanon, [fadybeyano@yahoo.com](mailto:fadybeyano@yahoo.com); Tim Williams, Senior Lecturer, Institute of Archaeology, University College London, UK; [tim.d.williams@ucl.ac.uk](mailto:tim.d.williams@ucl.ac.uk)

Since the Lebanese civil war archaeological work has been undertaken apace in Beirut, in advance of large scale redevelopment. Stratigraphic excavations have generated large quantities of material, from tens of thousands of context sheets and plans, hundreds of thousands photographs, to millions of artefacts and ecofacts. These complex and inter-related datasets require extensive collections management, presenting a major challenge for the Department of Antiquities, as well as the rescue archaeology teams generating and researching the ancient city. Despite farsighted developer funding for rescue archaeology, post-excavation funding is still a rarity. Nevertheless, strategies are being developed to undertake the analysis and dissemination of this internationally significant material, to plan from the outset it's archival future, and to assess the long-term storage and collection management needs. At present discard policies are difficult to implement: given the exceptional range and quality of this stratigraphically excavated archive of urban archaeology, with its potential to radically change our understanding of issues from ceramic typologies and distribution, to faunal reference collections and the provisioning of the city. We need to ensure that these large and complex datasets are retained, disseminated and curated for present and future users. This paper explores these challenges and the developing responses.

DIANNE FITZPATRICK

### **Quantifying the Problems and Counting the Costs of Near Eastern Archaeological Collections Management: Five Case-Studies**

Collections Manager, Australian Institute of Archaeology, Australia, [dianne11@tpg.com.au](mailto:dianne11@tpg.com.au) ([d.fitzpatrick@student.unimelb.edu.au](mailto:d.fitzpatrick@student.unimelb.edu.au))

To develop strategies for the sustainable and long-term management of archaeological collections it is necessary to understand the processes involved in the creation of these collections. This paper discusses findings from five case studies; sites in Syria and Turkey, spanning the Neolithic, Bronze Age, Iron Age, Hellenistic and Roman periods, were selected for the study. The case studies include a range of site types. Each case study is characterised by different organisational structures reflecting research objectives developed according to the specific needs of the excavation project. The main purpose of the case studies was to obtain data primarily on the creation of these collections. Decisions relating to significance influence the quantification of archaeological collections. Observing the on-site archaeological processes in the collection and curation of material it was possible to identify stages and monitor decision-making in relation to the retention or discard of archaeological material. The case studies yielded important findings enabling five archaeological collections from a representative selection of Near Eastern type sites to be tracked and quantified. These findings, combined with other forms of qualitative and quantitative analysis, are being used to develop a template for an Archaeological Collections Management Plan designed to assist archaeologists in managing collections.

NICOLE REIFARTH & ELISABETH VÖLLING

### **Textiles as Culture Heritage in Fieldwork, Repositories and Collections**

microArchaeology (textiles and organic materials), Saarburg / Würzburg, Germany; [nicolereifarth@gmx.de](mailto:nicolereifarth@gmx.de), [lisa.voelling@gmx.de](mailto:lisa.voelling@gmx.de)

This paper stresses the importance of textile finds and features as part of cultural heritage in the Near East, which is threatened by inevitable decay due to climatic conditions or neglect in general. Textiles are extremely sensitive to environmental influences and may leave only tiny and inconspicuous traces. Hence our knowledge about textiles and textile manufacture in the Ancient Near East is mainly based on cuneiform texts. There has been a strong contrast between the scarcity of textile finds and their importance as highest valued goods in the Ancient World. Textile evidence can be concealed under variable states of preservation, e.g. as mineral replaced structures or as imprints in clay, pottery, seal impressions, and even soil may still exhibit detailed weaving patterns. The first part of the paper discusses textile finds recovered in Turkey, Syria and Iraq from the PPNA up to the Iron Age, and provides questions about strategies for the first aid and on-site record of textile traces during fieldwork. The second part of the paper will discuss the conservation of textile remains, their short- and long-term storage in repositories and collections, as well as researching methods and the future usability of data gained from millimeter-sized scraps.

ANTONIO SAGONA, CLAUDIA SAGONA & ALEKS MICHAŁEWICZ

### **'Legacy Data' and the site of Samtavro: Revisiting Archaeological Collections and Archives of the Georgian National Museum**

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Over the last 20 years or so, countries of the former Soviet bloc have witnessed some major transformations in the organization and management of their cultural institutions and the heritage they oversee. One of the challenges contemporary researchers face is preserving and re-assessing information gathered from earlier

excavations (legacy data). This paper will focus on the vast necropolis at Samtavro, near Tbilisi, which is accorded primacy in the archaeology of the southern Caucasus for several reasons. Covering an area approximately 20 hectare, it is the largest known burial ground in the Caucasus. Its longevity of use is also remarkable. First utilised as a cemetery in the third millennium BC, it peaked during the Late Bronze and Iron Ages, and again in the late Roman and late Antique periods. The bulk of the information we have for this extraordinary site has been gathered over four major and independent projects, stretching over nearly 150 years and crossing several types of approaches and methodologies. This paper will present an overview of the legacy data and how it can be managed and preserved for future generations.

ANNA STEVENS

### **From Dig House to Digital Humanities: Managing the Archaeological Collection of Amarna**

Assistant Director, Amarna Project and Amarna West Project Curator, Department of Ancient Egypt and Sudan, British Museum, UK; aks52@hermes.cam.ac.uk

Excavations at Amarna, the short-lived New Kingdom capital of Egypt, began in the late 19th century and continue today under the direction of Barry Kemp. The site has yielded a vast assemblage of artefacts from the city's temples, palaces, houses and burial grounds, collected against the backdrop of major developments in the management of archaeological assemblages. This collection is now dispersed around the world: partly in museums, large and small, and private collections in Egypt, Europe, the USA and Australasia; and partly in magazines in and around Amarna itself. This paper will explore the challenges of managing a collection that is now heavily fractured, and subject to variable management procedures and storage conditions. It will take into account the backdrop of recent political instability within Egypt, and will outline a new initiative – the Amarna Digital Atlas – that seeks to reunite the collection in an open-source digital environment.

SILVIA PERINI

### **Syrian Cultural Heritage in Danger: A Database for the National Museum of Aleppo**

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Since Syria's spring revolution of March 2011, the management of its archaeological heritage has been weakened and its protection is now in serious danger. This paper discusses a strategy to help protect the archaeological collections of Syria through the creation of a collaborative, open-sourced electronic database aimed at gathering the different artefact assemblages stored at the National Museum of Aleppo. The database for the National Museum of Aleppo will provide a homogenised system, which does not currently exist, allowing the adaptation of multiple incompatible systems to local methodologies so that specific research queries within the miscellaneous body of data can be addressed. The database will offer an accessible and consistent electronic record keeping system for the Aleppo Museum that will ensure ongoing access to the historical archaeological collections, as well as contributing to the protection of the archaeological artefacts, preventing smuggling and illegal trade. Database applications are presented using a case study, namely the objects coming from the site of Tell Ahmar and included in the National Museum of Aleppo collection. The main aim of this paper is to stress the importance, the urgency, and the potentials of such database.

HAMED SALEM

### **Palestinian Archaeological Collections and Lessons of Conflicted Situations**

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After the Oslo Agreement, Palestinians assumed archaeological responsibility in certain areas of the West Bank and all of the Gaza Strip. Several excavations were conducted by the Ministry of Tourism and Antiquity and by

local and international universities, resulting in the assembly of a large body of archaeological material. The two largest collections are located at Birzeit University and the Ministry of Tourism and Antiquity. The Ministry also started building a repository for the collections (including looted items), currently comprising over 15000 objects. However, a lack of research is preventing scholars from accessing this valuable information as only a small portion of the material is fully studied and published. The war between Hamas and Fatah in Gaza, and the Israeli invasions of Gaza and Palestinian cities in the West Bank, has resulted in unknown damage to archaeological material. Several important lessons were learned from this experience. This paper will review the current state of Palestinian archaeological collections management, addressing safety and protection measures, documentation procedures and storage conditions. It is recognized now is the time to formulate a strategy which will train staff appropriately, and implement appropriate procedures to afford maximum protection of the collections in times of conflict.

ANDREW JAMIESON

### **New Uses for Old Collections: Community and Curriculum Engagement Using Near Eastern Archaeological Collections**

Classics and Archaeology, University of Melbourne, Australia; [asj@unimelb.edu.au](mailto:asj@unimelb.edu.au)

The costs involved in managing archaeological collections are substantial and often difficult to justify. Traditionally, many archaeological collections are used for research purposes or as reference collections. Difficulties in accessing these collections can significantly hinder or limit use. Improving access and increasing the uses of archaeological collections can validate the resources required to manage artefact assemblages and at the same time raise awareness about their importance and value. This paper discusses the uses of archaeological collections in the engagement of community, and as an enhancement of education curriculum. The first part of this paper will outline a proposal for the creation of an artefact repository at Qal'at Najm in north Syria which includes opportunities for community engagement incorporating archaeological collections from the salvage excavations in the middle and upper Euphrates valley. The second part of this paper will discuss the integration of archaeological collections in the delivery of the Archaeology Program at the University of Melbourne which is enriching curriculum engagement. Examples of object-based teaching and learning using archaeological collections will be discussed. Both models advanced in this paper demonstrate viable new uses for old collections.

## 7. THE SETTLEMENT LANDSCAPE OF THE ORONTES VALLEY IN THE FOURTH THROUGH SECOND MILLENNIA BCE (WEDNESDAY/THURSDAY, JUNE 11-12)

STEPHEN BOURKE & MELISSA KENNEDY

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In the context of developing urban life and economic interaction in the northern Levant in the Proto-historic periods, the Orontes Valley is often characterised as a 'land between' the better-known coastal entrepot and the dense settlement landscapes of the Euphrates and its tributaries. Often covered by summaries of 'Inland West Syria', the particular characteristics of the Orontes Valley settlement landscape are obscured (if not ignored entirely) by a focus on the spectacular discoveries at Ebla and more recently at Qatna.

This workshop seeks to foreground the role of smaller-scale settlements in the Orontes Valley in the developing inter-regional interaction of the Third Millennium BCE. It aims to identify key networks of inter-action, and evaluate their varying intensities over time. The workshop will also seek to explore the varying effects of the peripheral 'mega-sites' on the smaller settlements of the Orontes Valley. Finally, we will consider the importance of inter-regional trading networks – how they were created, maintained, and the consequences of their disruption. Ultimately we hope to re-assess the varying importance of the Proto-historic Orontes Valley settlement landscape within its Syrian regional and Levantine inter-regional context.

Themes/Questions to be addressed in this Workshop

- The settlement landscape of the Orontes catchment
- Integration of sequences/identification of key settlement phases
- Material cultural markers and relative chronology
- Defining sub-regional settlement 'clusters'
- Identifying networks of communication and interaction
- Assessing the varying role of nomads in networks
- Inter-regional interaction before, during and after the Eblaite state
- Defining transitional horizons

## Programme

### SESSION 1

- Graham Philip  
The Settlement Landscape of the Orontes River Valley during the 4th Millennium BC: Perspectives from Tell Nebi Mend and the Homs Region
- Agnese Vacca  
The Orontes Valley and the Sequences of Tell Mardikh/Ebla and Tell Tuqan in the Early 3rd Millennium BC: A Comparative Framework
- Lynn Welton  
Northern Levantine Spheres of Interaction: The Role of the Amuq in the Early Bronze Age

### SESSION 2

- Marta D'Andrea  
A Matter of Style: Ceramic Evidence of Contacts between the Orontes Valley and the Southern Levant during the Mid-Late 3rd Millennium BC
- Lisa Cooper  
Orontes-Euphrates Synchronisms and Spheres of Interaction and Exchange in the Early Bronze Age
- Frances Pinnock  
Ebla in the IIIrd Millennium BC: Architecture and Urban Planning

### SESSION 3

- Melissa Kennedy  
Militarisation and the Changing Socio-political landscape of the EBA and MBA
- Corrine Castel & Georges Mouamar  
Mid/late 3rd Mill. Inland West Syria viewed from the Arid Margins
- Stephen J. Bourke  
The Land Behind Qadesh: The Orontes Valley and the Wider World in the Middle Bronze Age
- Karin Bartl  
The Bronze Age Occupation of the Hama Region

## Abstracts

GRAHAM PHILIP

### **The Settlement Landscape of the Orontes River Valley during the 4<sup>th</sup> millennium BC: Perspectives from Tell Nebi Mend and the Homs Region**

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Recent work on the 4th millennium cal. BC excavation sequence from Trench VIII at TNM has provided a reliable basis for analysis of the LChal/Early EBA settlement history of the Homs region, and the Orontes Valley, and has provided data against which the more characteristically urban landscape of the mid-late 3rd millennium BC can be understood.

The 4th millennium sequence TNM comprises two main phases of activity. The first dates to the early 4th millennium BC, and the second to its last few centuries. A combination of radiocarbon dates and marked ceramic change suggests that these are separated by a gap in occupation around the mid-4th millennium, at least within the excavated area. Indications of a clear distinction between the size and complexity of the architectural units of the two phases, and in the quality and variety of the two ceramic industries, suggests a shift from a pre-urban village, early in the millennium to an increasingly 'complex' society from 34/3300 cal BC.

This sequence has provided a basis upon which to review the settlement data collected by the Syrian-British regional project Settlement and Landscape Development in the Homs Region, Syria, undertaken between 1999 and 2009. Broadly speaking, early Fourth Millennium BCE hinterland settlements are focused along the Orontes, and the associated seasonal wadi systems, which are incised into the marl landscape that extends eastwards from the river valley. In contrast, the contemporary settlement landscape of the basaltic region to the west of the river, is characterized by a rather different type and scale of settlement, suggesting that the two landscapes were utilized in a rather different manner. The later 4th millennium sees the appearance at TNM, of what may constitute the first of a series of fortifications/terrace expansions. Consistent with this, hinterland settlement across the marl becomes both more intensive and extensive across the region and appears to provide the basis of those developments that attain their peak during EB IV.

This paper will present the new evidence for the 4th millennium cal. BC sequence at TNM, and will then chart the contemporary developments in regional settlement record.

AGNESE VACCA

### **The Orontes Valley and the Sequences of Tell Mardikh/Ebla and Tell Tuqan in the Early 3rd millennium BC: A Comparative Framework**

Sapienza Università di Roma, agnese.vacca@gmail.com

The Orontes Valley is a crucial area, densely settled during the Early Bronze Age, which crosses from north to south the Inland West Syria, linking the Syrian upland (Ebla region) to southern Syria and the northern Lebanese area. Several sites (such as Tell Qarqur, Tell 'Acharneh, and Qal'at el Mudiq) located in the Central Orontes Valley (Ghab basin) yielded early 3rd millennium materials, as well as southernmost sites such as the large tell of Hama and the site of Tell Nebi Mend, the ancient Qadesh. Due to the lack of extensive excavations and publications of stratified contexts, the relative chronology of Inland West Syria during the first half of the 3rd millennium BC is poorly defined. Data from earlier occupational phases at Ebla (Mardikh IIA), together with stratified materials retrieved in the deep sounding opened in the Lower Town of Tell Tuqan (Area P), provide information on the earliest 3rd millennium BC phases, allowing to build a preliminary seriation of stratified ceramic materials, and to propose a relative chronology for these two key sites. This contribution will address the

formative phases preceding the rise of the Eblaite State. Framing the Orontes Valley sites within these two key sequences will provide a comparative framework that will allow to propose a parallel seriation between the two areas.

LYNN WELTON

### **Northern Levantine Spheres of Interaction: The Role of the Amuq in the Early Bronze Age**

University of British Columbia; weltonly@mail.ubc.ca

The chronology of the 3rd millennium in the Northern Levant has been constructed around a small group of key sequences and excavations, including the Amuq Sequence. Information about this sequence has predominantly originated from excavations conducted in the 1930s, but has been expanded by the work of the Amuq Valley Regional Project survey, and the recent excavations of the Tayinat Archaeological Project.

During the Early Bronze Age, the Amuq existed primarily within a sphere of interaction that incorporated inland Northern Syria and particularly the Orontes Valley. In terms of specific forms, however, the Amuq also shows a number of differences from the other assemblages observed in inland Northern Syria. The Amuq, therefore, represents an idiosyncratic local variant of the north Syrian assemblage, interpreting the larger patterns locally and separately from the remainder of inland Syria.

MARTA D'ANDREA

### **A Matter of Style: Ceramic Evidence of Contacts between the Orontes Valley and the Southern Levant during the Mid-Late 3rd Millennium BC**

Sapienza Università di Roma – Missione Archeologica Italiana in Siria; martadandrea@libero.it

Although a few major sites in the Orontes Valley have provided long stratigraphic sequences for the Early Bronze Age, the bulk of archaeological data and materials dates from the mid-late 3rd millennium BC, i.e. Early Bronze IVA and IVB in the regional periodization. Thus, due to the fact that settlement patterns and ceramic series are better known for these chronological horizons, the paper focuses on this time-span, with the goal of analysing in particular the relationship between the Orontes valley and the Southern Levant. As well known, stylistic and typological features of the EB IV Southern Levantine ceramic assemblages argue for contacts with the North, including, besides Western Inland Syria, also other neighbouring areas, particularly the Damascene basin and Lebanon. Within this framework, the Orontes valley, and especially its central and upper sectors seem to have played a central role in the elaboration and transmission of technological and cultural information toward the South, due to their position as buffer zones between those areas. Such an analysis will enable us to include some of the main themes in debate within the workshop: the definition of cultural boundaries and/or provinces; the investigation of networks of communication and interaction; and the analysis of the role of the mobile social components in transferring cultural information. Finally, changing patterns of interaction between the Upper and Central Orontes valley and the surrounding areas through time will be analysed with regard to the major socio-political changes taking place in those regions within the mid-late 3rd millennium BC.

LISA COOPER

### **Orontes-Euphrates Synchronisms and Spheres of Interaction and Exchange in the Early Bronze Age**

University of British Columbia; licooper@mail.ubc.ca

Recent excavations and the continuing study of the artifact assemblages from sites within the Orontes Valley of the Northern Levant have now made it possible to formulate a relatively fine-grained chronological sequence for the last four-five centuries of the third millennium BCE. While the destruction of Palace G at Ebla appears to have

been a major disturbance in the 24th century, much of the available archaeological evidence indicates that EB settlement in much of the Orontes Valley and surrounding regions continued, relatively unabated, until the very end of the millennium. With a fuller understanding of this long Orontes sequence, much of which has derived from synchronisms observed in the region's ceramic sequences, it is now possible to link the Orontes chronology with that of the Euphrates River Valley to the east, this having also recently undergone refinements to its ceramic sequence. This paper outlines the firm temporal relationships between these two regions and explores parallel developments that might reflect similar socio-economic processes, modes of exchange and cultural interaction in these last centuries of Early Bronze Age urbanism.

FRANCES PINNOCK

### **Ebla in the IIIrd Millennium BC: Architecture and Urban Planning**

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The paper will focus on what is thus far known about the urban structure of Ebla from the pre-Palace phases through the age of the State Archives, to the post-Palace phases, until the end of the third millennium BC, giving the state of art of our knowledge about this long period. Evidence is far from being complete and organic, but an attempt will also be made to present a general frame of the evolution of material culture, and of its chronological evolution.

MELISSA KENNEDY

### **Militarisation and the Changing Socio-political landscape of the EBA and MBA**

The University of Sydney; melissa.kennedy@sydney.edu.au

The post-Palace G (ca. 2250-2000 BCE) landscape of western inland Syria witnessed a dramatic socio-political shift, which can be seen primarily in the decline of Ebla's regional hegemony. This appears to have resulted not only in the construction of wider regional networks of interaction and cultural exchange, but as well in an increasingly militarised landscape, manifested both literally and symbolically. This would suggest that although the militarisation of the Levant finds its greatest expression in the Middle Bronze Age, its genesis, at least in the Northern Levant, can be dated to the end of the Third Millennium BCE.

This paper will address the different manifestations of this phenomenon throughout western inland Syria from EB IVB through to the end of the MB I. It will also explore the wider socio-political implications of this development, as well as the impetus for this dramatic transformation in the later Third and early Second Millennia BCE.

CORRINE CASTEL & GEORGES MOUAMAR

### **Mid/late 3rd Mill. Inland West Syria viewed from the Arid Margins**

CNRS – Maison de l'Orient et de la Méditerranée; corinne.castel@wanadoo.fr

The discovery of the mid/late third millenium city of Tell Al-Rawda has highlighted unexpectedly the Arid Zone to the north of the Palmyra mountains.

After nine seasons of excavations (2002-2010), this site appears to be a key-site to understand the development of urbanization of Syria in the region of "Inland Western Syria" and the birth of territorial states. Tell Al-Rawda is a planned city and not only a settlement occupied a part of the year by a semi-nomadic population. Its material culture relates to the western region even if the urban model refers to Northern Syria.

The lecture aims at examining the possible cultural and political interactions of all these different regions in the context of the second part of the 3rd mill. BC.

STEPHEN J. BOURKE

### **The Land Behind Qadesh: The Orontes Valley and the Wider World in the Middle Bronze Age**

The University of Sydney; [stephen.bourke@sydney.edu.au](mailto:stephen.bourke@sydney.edu.au)

The Middle Bronze Age is characterized by the militarization of cities and the fortification of peripheral settlements. During the same period, groups of cities coalesce into regional kingdoms, of greater or lesser extent. The varying roles of landform type, settlement pattern and city fortification in the formation of this militarized political landscape will be explored, at first instance through a consideration of the settlement history of Tell Nebi Mend, sourced to the UCL excavation archive, before moving to a landscape analysis of the changing MBA settlement systems in the hinterland of the 'Kingdom of Qadesh', sourced to the database of the Durham Homs Regional Survey.

Finally, the varying makeup of the kingdom of Qadesh throughout the MBA will be assessed, and compared with contemporary polities along and adjacent to the Orontes, to see if one can discern a specifically 'Orontean' character to the riverine regional groupings under analysis.

KARIN BARTL

### **The Bronze Age Occupation of the Hama Region**

German Archaeological Institute, Orient Department, Damascus Branch; [karin.bartl@dainst.de](mailto:karin.bartl@dainst.de)

Due to its favorable natural resources, the Hama region is one of the most important settlement areas in western Syria. However, the history of settlement region was long known only through the excavations at Tall of Hama. In the years 2003 to 2005, the region between ar-Rastan and Qal Shayzar was prospected to obtain more information about settlement activities in the area surrounding the city.

The results showed that settlements in the periods between the Neolithic and the Iron Age concentrated along the Orontes and its tributary Nahr as-Sarut. It is only since Roman times that the landscapes west of the rivers are populated. Evidence of settlement of the 4th mill. BC and the first half of the 3rd mill. BC are comparatively sparse, a massive increase in sites began during the EBIV period. The maximum settlement density of the pre-Roman periods is attested in the Middle Bronze Age. The most important site of the EV IV and MB periods is Tall an-Nasriyah, located at the confluence of the Nahr as-Sarut and the Orontes. This settlement, consisting of an "acropolis" and large lower town was surrounded by a huge enclosure. Although this site was never mentioned in written sources, it might have been the center of the region in the late third and in the second Millennium BC while the domination of Hama might have started only at the end of the 2nd mill. BC.

## 8. TRACING COMMEMORATION - SOCIAL DIMENSIONS OF THE PAST IN THE PAST (MONDAY/TUESDAY, JUNE 9-10)

SARAH LANGE & AARON SCHMITT

University of Tuebingen – University of Mainz

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To approach the topic of Commemoration in the Ancient Near East (ANE) several general questions need to be asked: What did people in the ANE commemorate? What were the criteria for their choices? For what purpose did they commemorate? By what means did they commemorate – did they use objects and/or places? How did the ways the people in the ANE chose for commemoration depend on the subject that was honored? And thus, are we able to trace these acts of commemoration and how?

To substantiate the expressed questions we constrain the topic to two aspects: The **commemoration of the deceased** and the **commemoration of historical personages, deeds and events**. Concerning the first matter, it has to be asked whether the memory of deceased members of a social formation (from small groups such as the family to larger social groups and the whole 'society') was kept alive purposefully; if so, why and by what means? How did the commemoration of the dead change over time? And, connecting this key issue with the matter of historical commemoration: How were kings commemorated and how can the commemoration of the king as a deceased be differentiated from a commemoration of the king as a historical personage? How and to what extent were objects used to remember historical events, historical places and historical personages? Was there a deliberate choice concerning what was remembered? Who made these choices? In which dimensions do we have to visualize the act of commemoration? And finally, could the act of commemoration have different connotations (negative/positive)?

With regard to the two key issues we are going to address these questions in our workshop on the basis of well documented and self-contained contexts as well as objects coming from those. The cuneiform sources are another crucial element that can contribute to the answers we seek for. Additionally we would like to draw upon theoretical concepts developed in other disciplines – after a thorough investigation concerning their viability – to fill the gaps that exist in the archaeological and textual data and to help us explain our evidence.

We are convinced that a workshop is one of the best formats to bring together different scientists who can contribute to answer these questions from their individual perspective and can help us to trace the social dimensions of commemoration in the ANE.

## Programme

### SESSION 1

- Gebhard Selz  
The State, the Family and the Individual: Funerary Practices and Commemoration Rites in the Light of the late Early Dynastic Mesopotamian sources
- Edgar Peltenburg  
Monuments and Materials: the Development of Commemorative Practices in North Syria in the Early-Middle Bronze Ages
- Sarah Lange  
kispum for Family Members Only? How a “Family Cult” was used to link one’s own History with Historical Personages

### SESSION 2

- Peter Pfälzner  
Keeping Remembrance through Objects - Old Objects in Later Grave Contexts
- Aaron Schmitt  
Thoughts about the Relation between Material Culture and Memory in Ancient Mesopotamia
- Elisa Roßberger  
Things to Remember: Storage und Function of Dedicated Objects in Old Babylonian Temples

### SESSION 3

- Daniel Fisher  
The Misplaced Altar and the Forbidden Serpent: The Problem of Material Culture in Biblical Israel
- Davide Nadali  
Defragmenting Memories: The (ab)used Power of Remembering in the Ancient Near East
- Norman Yoffee (Discussant)  
Final Discussion

## Abstracts

DANIEL FISHER

### **The Misplaced Altar and the Forbidden Serpent: The Problem of Material Culture in Biblical Israel**

Department of Near Eastern Studies, University of California, Berkeley (USA); [dfisher@berkeley.edu](mailto:dfisher@berkeley.edu)

What happens to objects when they outlast the cultural memories that they once commemorated and conveyed? In this paper I consider two examples of objects abandoned by shifting cultural memories in the Hebrew Bible: the Trans-Jordanian altar of Joshua 22, and the bronze serpent of 2 Kings 18:4. Both facilitated the formation and reformation of cultural memory and identity in biblical societies, lending reality to the imagined past through their presumed static presence across time. At the same time, their static presence also frustrated memory. Memory is by necessity dynamic, while objects are by nature unchanging—this is the source of their power. However, it can also be their undoing when they do not fit changing, reformed memories. This paper explores these possibilities and problems posed by material culture. Both objects are initially normative and commemorate significant moments in Israel's shared past, but are discarded in the course of cultic centralization and reformation in pre-exilic Judah. Biblical writings offer a privileged view into how biblical societies grappled with this problem, by redefining the altar and destroying the serpent. The objects continued to be socially and mnemonically generative in new and unexpected ways—the altar through its redefined presence and the serpent through its absence.

SARAH LANGE

### **kispum for Family Members Only? How a “Family Cult” was used to link one’s own History with Historical Personages**

Institute for Ancient Near Eastern Studies, University of Tübingen (Germany) [sarah.lange@uni-tuebingen.de](mailto:sarah.lange@uni-tuebingen.de)

The kispum lists from Mari suggest that the conventional kispum ritual had to fulfill certain conditions: it had to be performed regularly, the addressees needed to be individual ancestors and the offerings were composed of food. Additionally some texts present us with exceptional kispum celebrations that were performed on special occasions and in some instances for dead personages that could by no means be the ancestors of the performer of the offerings; at least not in the common understanding of the term “ancestor” as a deceased family member of high standing. This paper attempts to show how family cult was bent to fit the king’s purpose, not just in Mari but also in Ugarit. In these instances, the kings used the “family cult” to commemorate historical personages by constructing an artificial family relation for political reasons. Thus, as important as it is to find a precise definition of the term “ancestor”, the ways food offerings were performed within the “family cult” show that it is necessary to apply some flexibility to this concept. The presented sources will illustrate that depending on the context and the purpose of the ritual, the “ancestor-concept” was sometimes adjusted to include historical personages who were therewith commemorated within the “family cult”.

DAVIDE NADALI

### **Defragmenting Memories: The (ab)used Power of Remembering in the Ancient Near East**

Dipartimento di Scienze dell'Antichità, Sapienza University of Rome (Italy) [davide.nadali@uniroma1.it](mailto:davide.nadali@uniroma1.it)

Ancient people were conscious of their past and the importance of its legacy in the present and future of societies they were living in. However, how did the mechanisms of remembering and building memories work? Monuments, myths, legends and poems were essential part of the process of building memories, sometimes

implying the destruction and cancellation of a previous tradition. Can we speak of a common mnemonic heritage or did different (sometimes contrasting) memories co-exist? Maybe, the creation of a common shared memory was prerogative of the royal power, while, more probably, several “fighting” memories exist.

In particular the study will take into consideration the commemoration of kings and kingship in the Assyrian period pointing out the mechanisms of commemoration by the Assyrian kings and the events related to the growth of the Assyrian power: while it might be inferred that Assyrian kings and officials shared the same mechanism of commemoration (through written sources, architectures and visual media), it is indeed evident that different operations and perceptions co-existed all along the history of the Neo-Assyrian period: cancellation and forgetfulness were also crucial elements of the process of commemorating.

EDGAR PELTENBURG

### **Monuments and Materials: the Development of Commemorative Practices in North Syria in the Early-Middle Bronze Ages**

School of History, Classics and Archaeology, University of Edinburgh (Great Britain); E.Peltenburg@ed.ac.uk

Commemoration is a term applied to a wide variety of remembrance practices and events. In focusing on mortuary evidence, this paper seeks to clarify criteria by which we may differentiate long term commemorative agendas from events that attended the burial of deceased, ones that usually incorporate short term commemorative agendas. The prolific Early Bronze Age mortuary evidence from the Middle Euphrates Valley furnishes research opportunities for several lines of enquiry. Here attention is given to above ground burial places, from small cairns to imposing monuments, not simply as territorial place markers, but more explicitly as materialities of political legitimacy. In addition, attention is drawn to the exceptional division of burial and commemorative deposits in Jerablus Tahtani Tomb 302 and the potentials for extrapolating from that division to identify long term commemorative deposits in other mortuary contexts. Finally, the paper assesses a possible correlation between the general disappearance of mortuary monuments and the rise of Amorite kingdoms in conjunction with formal *kispu* ceremonies during the Middle Bronze Age.

PETER PFÄLZNER

### **Keeping Remembrance through Objects - Old Objects in Later Grave Contexts**

Institute for Ancient Near Eastern Studies, University of Tübingen (Germany); peter.pfaelzner@uni-tuebingen.de

The study of the inventory of the Royal Tomb of Qatna demonstrates that a large number of “old objects”, dating to the Middle Bronze Age, were still kept at prominent positions during the use of the communal chamber tomb in the Late Bronze Age. It is to be questioned, whether this was done unintentionally, because these objects were pure left-overs from elder uses of the tomb, or whether they functioned as tools of remembering. Possibly, there existed a direct link to specific persons of older periods, who should be remembered through the presence of these objects. Alternatively, a more general approach of commemorating the royal ancestors as a whole could be seen as background for keeping the mentioned objects in the tomb over long periods of time. The different theoretical possibilities will be discussed in this paper with the aim of getting an insight into the attitude of Bronze Age Syrian society towards ancient objects.

ELISA ROßBERGER

### **Things to Remember**

Storage und Function of Dedicated Objects in Old Babylonian Temples

Institut für Vorderasiatische Archäologie, University of Munich, (Germany); elisa.rossberger@vaa.fak12.uni-muenchen.de

The dedication of objects to gods and goddesses is among the best documented religious practices of ancient Mesopotamia. The Old Babylonian period offers particularly rich textual evidence for both royal and non-royal dedications in the form of jewellery, weapons, vessels and other paraphernalia. On occasion, these objects were used for adorning the cult statues and their shrines. But mostly, they were stored in locations adding to the divine "treasure", which could afterwards not easily be disintegrated. Thus, over time specific persons and occasions created a collection of things – a material manifestation of social memory inherent to the temple as focal point of Old Babylonian society.

The paper will contrast our textual knowledge of these practices with the archaeological record taking the Kititum-Temple at Ishchali as its prime example. What is left of these treasures? In which locations were they kept? Are specific object categories present that are not attested in the texts? Can we reconstruct the objects' histories, ritual and social functions?

AARON SCHMITT

### **Thoughts about the Relation between Material Culture and Memory in Ancient Mesopotamia**

Institut für Altertumswissenschaften, University of Mainz (Germany); schmiaa@uni-mainz.de

Memory constitutes an essential part of human life, from the individual memory of a single person to the collective memory of smaller and larger groups. These memories of persons and events are shaped and changed on various interconnected ways. They are used for a variety of different purposes, for example the legitimation of social formations and their hierarchical structures or as the "binding agent" of groups within societies.

Within these processes, objects can play an important role as they are used to remember persons and events even over long periods of time.

In this paper I will investigate and comment on the role of (mainly inscribed) objects from southern Mesopotamia, using the cities of Nippur and Ur as case studies. Both cities yielded comparatively large corpora of inscribed dedicatory objects which were found in the Ekur and the buildings of Ur's temenos area. A special focus will be put on the Kassite period in which a change towards the treatment of "antiques" (objects older than the contexts they were found in) can be observed in comparison to the preceding periods.

GEBHARD J. SELZ

### **The State, the Family and the Individual. Funerary Practices and Commemoration Rites in the Light of the late Early Dynastic Mesopotamian sources**

Institut für Orientalistik, University of Vienna (Austria); gebhard.selz@univie.ac.at

The archaeological and philological evidence of mortuary practices and commemorating rites in Mesopotamia received much attention in the secondary literature. The paper attempts to re-evaluate the well-known evidence from a rather specific perspective. It discusses the mixture of individual, group and state incentives which possibly lie behind the factual surfaces. The hypothesis proposed here is that a careful distinction of the distinct aims of these "actors" may shed additional light on the ideological background of the different Mesopotamian societies and therefore improves our understanding of the various sorts of governance attested in Mesopotamia during this period.

NORMAN YOFFEE

### **Final Discussion**

Emeritus of the Department of Near Eastern Studies, University of Michigan (USA); nyoffee@umich.edu

## 9. ARCHAEOLOGY OF THE NEGEV AND THE 'ARABAH DURING THE IRON AGE (WEDNESDAY/THURSDAY, JUNE 11-12)

GUNNAR LEHMANN, DEPT. OF BIBLE, ARCHAEOLOGY AND ANCIENT NEAR EASTERN STUDIES

**[gunnar.lehmann@gmail.com](mailto:gunnar.lehmann@gmail.com)**

The workshop will be concerned with recent research on the archaeology of the Negev, 'Arabah and Arabia during the early Iron Age. The idea is to discuss settlement, trade and subsistence strategies with special emphasis on issues such as trade with the Arabian peninsula, the copper production in the 'Arabah and the phenomenon of Qurayya Ware ("Midianite pottery"). The presentation of recent archaeological research will shed new light on these questions.

## Programme

### SESSION 1

- Yotam Asscher  
The early Iron Age chronology of the Negev in the Light of Radiocarbon Dates
- Tali Erickson-Gini  
The 2013 Excavation in 'En Hazeva - Strata 8 and 7b

### SESSION 2

- Chaim Ben David  
The Iron Age Road Network in the Negev and Wadi Arabah and the connections to the Arabian Trade Routes
- Thomas E. Levy  
Iron Age Copper Production and Society in Faynan, Jordan - An Overview Based on New Field Data
- Erez Ben-Yosef  
Iron Age Copper Smelting Technologies in the Arabah Valley and the Question of Their Origin

### SESSION 3

- Eli Cohen-Sasson  
Qurayya Ware (Midianite Pottery) in the Southern Levant
- Mario Martin  
Iron IIA Pottery from the Negev Highlands and its Link to the Wadi Arabah Copper Districts
- Dvory Namdar  
Analytical Evidence for Spice Trade between South Asia and the Levant in the Early Iron Age

## Abstracts

GUNNAR LEHMANN

### Introduction to the workshop

Ben Gurion University

EREZ BEN-YOSEF

### Iron Age Copper Smelting Technologies in the Arabah Valley and the Question of Their Origin

Tel Aviv University (ebenyose@post.tau.ac.il)

The material culture associated with copper smelting technologies of the Late Bronze and Iron Ages Arabah Valley was studied in detail during the last 50 years, resulting in a relative good understanding of the technological practice and development in this region around the turn of the 1<sup>st</sup> millennium BCE. However, there are strong indications that the technologies were not a local innovation and the place of their origin is yet unclear. The current talk will present an outline of the technologies used for copper smelting in the Arabah Valley and discuss possible origins, including northwestern Arabia, the Sinai Peninsula and the Eastern Desert of Egypt.

ELI COHEN-SASSON

### Qurayya Ware (Midianite Pottery) in the Southern Levant

Ben-Gurion University (eli.timna@gmail.com)

The paper gives a summary of Qurayya Ware found in the Southern Levant with emphasis on Israel/Palestine. The geographical distribution, chronological issues and functional aspects of the appearance of this pottery style will be discussed. The paper will also present a petrographical analysis of selected vessels and study the links of the Southern Levant with the Arabian Peninsula against the results of this analysis.

TALI ERICKSON-GINI

### The 2013 Excavation in 'En Hazeva - Strata 8 and 7b

Israel Antiquities Authority (talixgini@gmail.com)

In May 2013, a three week excavation took place in the earliest strata of the Iron Age site of 'En Hazeva and was directed by the writer on behalf of the Israel Antiquities Authority in cooperation with Dr. C.D. Bowman (Rochester College), Prof. R.M. Shipp (Austin Graduate School of Theology) and T. Christian. The excavation uncovered the earliest layer of occupation in Strata 8 and evidence of metallurgical activities, probably in the form of the casting of metal objects, and numerous grinding implements of the later part of the 11th century BCE. The occupation discovered in 2013 appears to pre-date the earliest defensive structure in the tell, a square tower (11.5 x 13 m. in size) that was eventually incorporated into later fortresses. A significant amount of ceramic sherds of painted ware vessels that were apparently produced at Qurayya in northern Saudi Arabia were uncovered together with hand-made cooking pots (formerly referred to as Negbite ware) containing copper slag inclusions. An excavation was also conducted inside a room of the Stratum 7a fortress, which was formerly excavated by Cohen and Israel on behalf of the Israel Antiquities Authority in the early 1990s. The excavation of the room produced evidence of occupation of the 9th through 8th centuries BCE. A preliminary examination of the finds

from both strata revealed strong typological connections with those uncovered in the Faynan region of southern Jordan.

THOMAS E. LEVY

### **Iron Age Copper Production and Society in Faynan, Jordan - An Overview Based on New Field Data**

Levantine Archaeology Laboratory, University of California, San Diego, USA (thomasevanlevy@gmail.com)

As part of a deep-time study of the role of ancient mining and metallurgy on social evolution in Jordan's Faynan district, in 2002, the Edom Lowlands Regional Archaeology Project (ELRAP) began an investigation of Iron Age production centers and their landscape. Over a 10 year period, our team carried out 10 Iron Age excavations and 4 major surveys along different wadi systems in the research area. These were the first carefully stratified excavations carried out in Faynan and provide a wealth of new data and information concerning the nature of Iron Age copper production and society. These data have been used to test two generic models concerning the control of copper production during the Iron Age in this region: 1) a foreign control model where ancient Near Eastern core civilizations took charge of copper extraction and production, and 2) local societal control of production based on different peer-polity interaction scenarios. This paper summarizes the results of the ELRAP expeditions that will appear soon as a major monograph.

MARIO MARTIN

### **Iron IIA Pottery from the Negev Highlands and its Link to the Wadi Arabah Copper Districts**

Tel Aviv University (mario\_antonio@hotmail.com)

The paper reports the results of a petrographic investigation of pottery from early Iron IIA settlements in the Negev Highlands. Traditionally interpreted as "Israelite fortresses," these settlements are today understood as compounds of local, pastoral-nomadic groups in a process of sedentarization. A substantial portion of the vessels studied, most notably slag-tempered ware, originated in the copper districts of the Wadi Arabah. It has been suggested that the copper extraction system in these districts was operated by tribal desert groups. Petrographic data adds an additional dimension to this proposition, demonstrating that the subsistence economy of the Negev Highlands sites was supplemented by the participation of at least some of the local inhabitants in this enterprise.

CHAIM BEN DAVID

### **The Iron Age Road Network in the Negev and Wadi Arabah and the connections to the Arabian Trade Routes**

Kinneret College on the Sea of Galilee, <bendavidhm@gmail.com>.

While the Nabataen and Roman road networks connecting both sides of the Arabah rift valley are relatively well known in modern scholar, mapping the Iron age network is quite of a challenge. The physical remains of roads from the Roman period are very clear and especially easy to detect in desert areas. From the Iron age period only few such remains have been lately discovered, mainly in southern Jordan. By understanding the geographical and geological conditions of the area together with historical and archeological clues we will propose the map of the main routes in the Negev and Wadi Arabah. Special attention will focused on the routes leading to and from the copper production sites in Faynan and Timna, and on the connections with the Arabian trade routes.

YOTAM ASSCHER

### **The Early Iron Age Chronology of the Negev in the Light of Radiocarbon Dates**

Department of Structural Biology and the Kimmel Center for Archaeological Science, Weizmann Institute of Science, Rehovot 76100, Israel, <yotam.asscher@weizmann.ac.il>

The paper will present new radiocarbon dates from recent excavations in the northern Negev. The current state of research in the research area will be summarized and discussed against the background of progress recently made in the study of Iron Age chronology.

DVORY NAMDAR

### **Analytical Evidence for Spice Trade between South Asia and the Levant in the Early Iron Age**

Hebrew University, Jerusalem, Israel, and Ayelet Gilboa, University of Haifa, Israel

In our paper we present the results of Residue Analyses performed on small clay flasks that were common in the 11th–9th centuries BCE in Phoenicia, in other Levantine regions and in Cyprus. Their shape, decorations and distribution suggested that they probably contained some precious liquid and that they were part of an extensive commercial trade network. We analyzed the lipid contents of 26 such flasks from five archaeological sites in Israel, using gas chromatography coupled with mass spectrometry (GC-MS). In ten flasks the molecule cinnamaldehyde was well preserved, indicating that presence of cinnamon. We argue that the cinnamaldehyde does not originate from depositional or post-depositional contamination. Since in antiquity the various cinnamon species grew only in south and south-east Asia, these findings are the first indication of spice trade between this region and the 'west' at such an early date. Other compounds hint at the presence of nutmeg, but they are less conclusive.

## 10. LATE NEOLITHIC AT ÇATALHÖYÜK IN THE NEAR EASTERN CONTEXT (TUESDAY/WEDNESDAY, JUNE 10-11)

ARKADIUSZ MARCINIAK (POZNAŃ UNIVERSITY) & LECH CZERNIAK (GDAŃSK UNIVERSITY)

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The session organizers have been conducting intense study of the upper Late Neolithic strata of the East mound at Çatalhöyük. These works have brought about a series of new discoveries that shed light onto hitherto unknown developments in the final phase of the settlement occupation.

Late Neolithic houses comprise a series of small, cell-like spaces, probably used for storage and working areas, surrounding a larger central 'living room'. They show a significantly lesser degree of symbolic elaboration. The most significant changes in burial practices involved a lack of intramural burials, which were replaced by a special burial architecture. Considerable changes occurred also in subsistence practices, including procurement, storage, processing and consumption of different resources.

The session seeks to put up these developments in the second half of the 7th millennium cal BC in a broader Near Eastern context. In particular, we intent to examine parallels and discrepancies in the process of disappearance of Neolithic megasities in the light of new discoveries in other areas of the Near East. Accordingly, by putting up Late Neolithic Çatalhöyük in a broad regional context, the session will facilitate an in-depth discussion on social, economic and ideological changes taking place at the end of Neolithic and beginning of Chalcolithic.

## Programme

### SESSION 1

- Arkadiusz Marciniak – Lech Czerniak  
Çatalhöyük East at the End of the 7th Millennium. The Demise of Neolithic Mega-City
- Gary Rollefson  
Late 8th and 7th Millennium Turmoil in Neolithic Jordan
- Nigel Goring-Morris – Anna Belfer-Cohen  
The Relationship Between the Aceramic and Ceramic Neolithic in the Southern Levant

### SESSION 2

- Patrycja Filipowicz  
The Lake District Groups as Descendants of Çatalhöyük East
- Ian Kuijt – Arkadiusz Marciniak  
A Tale of Two Cities: Revisiting Population Estimates for Çatalhöyük East and Neolithic Communities
- Peter F. Biehl et al.  
The Transition Between the East and West Mounds at Çatalhöyük around 6000 cal BC: a View from the West

### SESSION 3

- Eleni Asouti  
Discussant

## Abstracts

ARKADIUSZ MARCINIAK – LECH CZERNIAK

### **Çatalhöyük East at the End of the 7th millennium. The Demise of Neolithic Mega-City**

University of Poznań; Gdańsk University

In this talk we aim to outline the background of the workshop by discussing causes and mechanisms of the demise of Çatalhöyük in Central Anatolia. The results of ongoing excavations of its uppermost levels, along with use of multiple lines of high resolution archaeological and archaeobiological evidence, made it possible to significantly expand our understanding of the disintegration of constitutive principles binding this large mega-city, emergence of a new social system as well as consequences of this process for the development of fully-fledged farming communities in the region and beyond. In particular, we aim to discuss changes in spatial organization, architecture, burial practices as well as subsistence basis and modes of environment exploitation. They revealed a graduate reduction of the house to its living functions and marked removal of burials and elaborated symbolism out of its realm. New strategies for the acquisition of numerous raw materials imply changes in land use around the site. All these changes imply the beginning of smaller, more dispersed and more independent acquisition, production and consumption units.

GARY ROLLEFSON

### **Late 8th and 7th Millennium Turmoil in Neolithic Jordan**

Whitman College, Walla WA

The second half of the 8th millennium witnessed the emergence of “megasites” (area greater than 10 hectares such as ‘Ain Ghazal, Wadi Shu’eib, and Basta) in Jordan, possibly due to a major influx of immigrants from the Jordan Valley and Palestine. The greatly increased population in the Jordanian highlands posed serious pressure on local environmental resources, and when rainfall amounts dropped severely at the end of the millennium, there was widespread abandonment or precipitous decline in residents in settlements. Some of the farmers turned to the badia, areas of Jordan and Syria that today range from steppe (less than 250 mm rainfall) to hyperarid desert (less than 50 mm annual precipitation). By the middle of the 7th millennium, full-fledged transhumant ovicaprids herding groups were established permanently in the Badia, subsisting heavily on hunting and opportunistic farming. Evidence for this major transformation in the economy of the southern Levant is discussed.

NIGEL GORING-MORRIS – ANNA BELFER-COHEN

### **The Relationship Between the Aceramic and Ceramic Neolithic in the Southern Levant**

The Hebrew University of Jerusalem

We evaluate recent suggestions as regards the assumed sharp division between the Early (so called “Pre-Pottery”) and the Late (so called “Pottery”) Neolithic in the south/central Levant. The traditional division marker was the appearance of ceramics, which became rather an obsolete criterion, since there is growing evidence that ceramics as an established phenomenon appeared earlier and during the Early Neolithic. Is such a division still valid? The answer is equivocal depending on which aspect of the Neolithic human existence we focus. At least in the south/central Levant, it seems that the existence of an independent, Late (Pottery) Neolithic stage is rather of a short and limited duration, as parts of what was previously considered Late Neolithic are currently assigned to

the following Chalcolithic era (i.e., the Wadi Raba phase). Similarly, the Yarmukian phase, which was considered as the first stage of the Late Pottery Neolithic, under close scrutiny and with more information at hand, shows closer similarities with the later stages of the Early Neolithic, namely the PPNB. Finally, even if one can come up with some unique characteristics, are they sufficient to consider the existence of an independent stage in local human history, given the problematic dating of south Levantine sites originally assigned to this stage?

PATRYCJA FILIPOWICZ

### **The Lake District Groups as Descendants of Çatalhöyük East**

University of Poznań

Around 6500 BC, when Çatalhöyük started to disintegrate, the Neolithic rapidly spread out of Central Anatolia, emerging first in the most adjacent area: the Lake District in south-western Anatolia. Recent excavations of the very last phases of the occupation of Çatalhöyük East, bridge the gap between the classic Neolithic of the Konya Plain and the Lake District Neolithic and show that roots of the latter to be seen in the Konya Plain, as judging by gradual changes observed at Çatalhöyük.

In this paper, I will reassess the evidence of the Neolithic in the Lake District in terms of architecture, burial practices and material culture in the light of recent works at Çatalhöyük. I intend to demonstrate that some trends visible in the Lake District originated from the Late Neolithic Konya Plain, arguing that communities from the Lake District, such as Hacilar, could more likely be descendants of Çatalhöyük inhabitants, as they came into being when this large megasite started to fall apart.

IAN KUIJT – ARKADIUSZ MARCINIAK

### **A Tale of Two Cities: Revisiting Population Estimates for Çatalhöyük East and Neolithic Communities**

University of Notre Dame, South Bend, IN; University of Poznań

How many people lived in Neolithic villages? Bayesian modeling of the Late Neolithic strata at Çatalhöyük East allow us to understand when buildings and open areas were constructed, used, and abandoned. With a better understanding of building use life, combined with refined understanding of the total open space between residential and ritual buildings in Neolithic settlements, in this paper we put forth a revised reconstruction of village demography. Drawing upon new population estimates we illustrate a significant population decline from the classic phase at Çatalhöyük East through the last three hundred years of occupation. Bayesian modeling and rigorous consideration of occupational history at Çatalhöyük East demonstrates that widely accepted estimates of population levels in the classic phase of 8,000 to 5,000 people are significantly inflated. A more reliable estimates would be 2,500 to 1,000 people with 50% of the population under 10 years of age and a significantly lower number towards the end of its use.

PETER F. BIEHL 1 – JACOB BRADY 1 – INGMAR FRANZ 2 – DAVID ORTON 3 – SONIA OSTAPTCHOUK 4 – JANA ROGASCH – EVA ROSENSTOCK 6 – ELIZABETH STROUD 7 & PATRICK WILLET 1

### **The Transition Between the East and West Mounds at Çatalhöyük around 6000 cal BC: a View from the West**

1 State University of New York at Buffalo; 2 Christian-Albrechts-Universität Kiel; 3 UCL Institute of Archaeology, London; 4 Muséum National d'Histoire Naturelle, Paris; 5 Flinders University, Adelaide; 6 Free University Berlin; Oxford University

Investigation of the transition between the Late Neolithic (LN) and Early Chalcolithic (EC) around 6,000 cal BC on the two mounds at Çatalhöyük/Central Anatolia is hampered by the erosion of the relevant layers on the East

Mound and the fact that the corresponding layers on the West Mound are buried under developed EC occupation deposits. This paper sheds light on the process drawing on evidence from Trench 7, a 14C-dated deep sounding on the eastern fringe of the West Mound. The extent and method of excavation can only provide a limited picture of this important transition period and gradual move of the settlement from the East to the West Mound; but stratigraphy, architectural remains and artifacts and ecofacts pieced together with evidence from drilling cores, the preceding LN layers from the East Mound and the subsequent EC layers on the West Mound as well as other sites from the region allow for the reconstruction of the transition progress from the 7th to the 6th millennium cal BC.

ELENI ASOUTI

**Discussant**

University of Liverpool

## 11. MUSEUMS AND THE ANCIENT MIDDLE EAST: EXHIBIT PRACTICE AND AUDIENCES (TUESDAY/WEDNESDAY, JUNE 10-11)

GEOFF EMBERLING – LUCAS PETIT

Kelsey Museum of Archaeology, University of Michigan – National Museum of Antiquities, Leiden

**L.Petit@RMO.NL**

Museums represent one of the major ways the ancient Middle East is presented to the general public, collectively reaching millions of visitors each year. This was already noticed by Shanks and Tilley (1987) some 25 years ago. The increasing public prominence of museums since then and the concurrent proliferation of programs of museum studies are further indications of the opportunities presented by museum exhibits.

Current practices of exhibiting the ancient Middle East are structured and constrained in different ways in different museum contexts and cultural settings, yet there has been a nearly complete absence of formal discussion about exhibitions among ancient Near East curators and scholars.

This session will provide a first opportunity for an international group of museum curators to discuss opportunities and tensions in exhibiting art, histories, and cultures of the ancient Middle East. Opportunities may include varied ways of connecting with different audiences and interests; tensions may include differing approaches to the past taken by art museums, history museums, national museums, and university museums, or the roles of curators, educators, and audiences in constructing exhibitions.

## Programme

### SESSION 1 EXHIBIT TACTICS

- Jack Green  
“We’re not an art museum:” Presenting archaeological narratives at the Oriental Institute Museum
- Haim Gitler  
The art of displaying small objects
- Joan Aruz & Yelena Rakic  
Exhibiting Interaction: Displaying the arts of the ANE in their broader context

### SESSION 2 EXHIBIT STRATEGIES

- Beatrice André-Salvini  
Permanent and Temporary Exhibition in a so-called ‘Universal Museum’: The Louvre,
- Holly Pittman & Richard Zettler  
New Galleries at the Penn Museum: Challenges and Opportunities
- Clemens Reichel  
Conflicted Conscience — on Balancing Curatorial, Design, and Marketing Demands for a Blockbuster Exhibit

### SESSION 3 EXHIBITS AND AUDIENCES

- Pedro Azara, Albert Imperial, Marc Marin, Eric Rusiñol, & Joan Borrell  
Ancient “Art” in the White Cube?, or How Contemporary Art Creates Ancient “Art”.
- Irving Finkel  
How to Make People Stop and Look
- Leila Badre  
Museum Exhibits and Education: The AUB Museum as a Case Study

## Abstracts

JACK GREEN

### **“We’re Not an Art Museum:” Presenting Archaeological Narratives at the Oriental Institute Museum**

Oriental Institute, University of Chicago

The current galleries of the Oriental Institute Museum (1999-2006) form a case study, starting with a brief history of collecting and display strategies from the late 19<sup>th</sup> to the early 21<sup>st</sup> century. In addition to a review of the mission of the Museum as part of the Oriental Institute at the University of Chicago, I will review some of the ways in which objects were selected or strategically excluded from redisplay in recent times to present a greater emphasis on the value of archaeological research and Oriental Institute expeditions, than the unprovenanced (usually purchased) objects that played a more prominent role in earlier displays. The importance of archaeological excavation and context remains integral to the manner in which the Oriental Institute presents itself to school groups, the scholarly world, and the wider public. In this sense, the museum presents itself as an archaeological museum filled with visual culture, yet with very limited emphasis on stylistic change or the history of art in the ancient Near East. Yet unprovenanced objects that tend to be valued more in art-historical terms, do continue to play a role in many of our displays. This paper explores some of those value-laden tensions in curatorial selection and exclusion, and explores ways in which unprovenanced “art” objects might be integrated sensitively alongside well-excavated objects.

HAIM GITLER

### **The Art of Displaying Small Objects**

The Israel Museum, Jerusalem

From the museological point of view, displaying artifacts is one of the most important responsibilities of a curator as it enables access to historical objects and assists in creating a link with the general public. Among all of the complexities involved in realizing these goals, working with smaller objects is one of the more challenging. Finding the right combination of design, including lighting, accessibility, and showcasing, is essential for allowing the viewer to focus on the actual object in an optimal way. While texts and images are very important, one must keep in mind that these are meant to be accessories and should not attract attention. In this paper, several ideas that have been implemented at the Israel Museum, Jerusalem will be presented. The test case will focus on several different approaches used in exhibitions on ancient coins at the Israel Museum, showing that there can be various solutions, but all have to take into account the correct balance of elements mentioned above.

JOAN ARUZ AND YELENA RAKIC

### **Exhibiting Interaction: Displaying the arts of the ANE in their broader context**

Metropolitan Museum of Art

Visitors to the Metropolitan Museum of Art have the opportunity to view the collection of ancient Near Eastern art within the broader context of an encyclopedic Museum. A series of special exhibitions organized by the department of Ancient Near Eastern Art - *Art of the First Cities*, *Beyond Babylon*, and the upcoming *From Assyria to Iberia* - reflect this viewing experience in a more focused manner. These exhibitions aim to display the arts of the ancient Near East within their broader context and focus on the extensive interconnections among these rich

and complex civilizations and surrounding areas. This paper will examine the concepts behind constructing such exhibitions as well as consider how this approach fits within the greater mission of an encyclopedic museum.

BEATRICE ANDRÉ-SALVINI

### **Permanent and temporary exhibition in a so-called ‘Universal Museum’: The Louvre**

Musée du Louvre

In recent years the Louvre has expanded the perspectives of the “département des Antiquités orientales.” The Museum has installed new galleries for the collections of the Levant under the Roman Empire favoring a horizontal reading of one period, and it has developed new forms of national and international cooperation as the loan of masterpieces to the Louvre-Lens for a diachronic comparative historical presentation, or the Louvre Abu Dhabi whose aim is to be an illustration of a new model of museum. These large-scale projects require an adaptation or an evolution and a reorganization of the collections displayed in the permanent galleries as well as in the temporary exhibition spaces according to new lines of research and different approaches to reading history. Furthermore, these changes within a big museum conceived, at the origins, as “universal”, allow concentration on the specific work which is the heart of advanced museum research.

HOLLY PITTMAN AND RICHARD ZETTLER

### **New galleries at the Penn Museum: Challenges and Opportunities**

University Museum, University of Pennsylvania

The University of Pennsylvania Museum of Archaeology and Anthropology houses one of important collections of artifacts from the ancient Middle East outside of the region. It's especial importance resides in the fact that the collections consist with rare exception of materials distributed from regular excavations, removing questions of provenance, authenticity, and legality. During the next decade, these collections will be reinstalled in entirely reconceived galleries on the third floor of the Penn Museum. Ur and Nippur are the core of the Mesopotamia; Beth Shan is the core of the Levant; and Hasanlu, Hissar, and Chesm Ali/Rayy represent Iran. This presentation will describe the early stages of curatorial thinking about the display, seeking to identify both challenges and opportunities that these particular collections pose. Who are the audiences for these galleries? How can each be engaged? Where are the points of balance between regional/chronological sequence; cross-cultural threads; and highlighting the “works of art” that abound in the collection? How can digital technology enhance and extend the presentation? Some of the themes currently under discussion include the stories of retrieval; the culture history of “moments” best illuminated by the collections; cross cultural themes of interaction and trade, development of fundamental technologies; social organizations and political hierarchies; the story of writing within its cultural context and the results of and potential for programs of continuing research.

CLEMENS REICHEL

### **Conflicted Conscience—on Balancing Curatorial, Design, and Marketing Demands for a Blockbuster Exhibit**

Royal Ontario Museum, Toronto, Canada

Generally intended to provide a major revenue source for a museum, blockbuster exhibits need to attract large audiences. This requirement has a significant impact on their content and design. Curators often find themselves in a challenging position: while demands from design and marketing teams to make an exhibit accessible can undermine scholarly accuracy in favor of sensationalism, blockbusters also offer curators unprecedented opportunities to showcase their work and area of expertise to large audiences, especially when paired with

programming and outreach. These challenges and opportunities dominated the planning of “Mesopotamia,” a blockbuster exhibit held at Toronto’s Royal Ontario Museum (ROM) from June - December 2013. Having encountered limited topic recognition for “Mesopotamia” during initial market testing, the exhibit’s layout and feel was adapted to increase its appeal with numerous target audiences within Toronto’s multi-cultural society, while interactive features were installed to promote audience engagement especially among younger visitors. Looking at the exhibit’s content, design, programming and marketing strategies, this presentation will review the successes and shortcomings that “Mesopotamia” encountered, and provide suggestions on how a curatorial role could be defined in future ROM blockbuster exhibits.

PEDRO AZARA, ALBERT IMPERIAL, MARC MARIN, ERIC RUSIÑOL, AND JOAN BORRELL

### **Ancient "Art" in the White Cube?, or How Contemporary Art Creates Ancient "Art".**

Escola Tècnica Superior d'Arquitectura de Barcelona

A recent exhibition on Mesopotamia has shown, contrary to what was expected, that Near Eastern culture can interest a broad audience who is not familiar with art history and archaeology. It seems that the objects have two contradictory qualities: they seem to belong to a most ancient time, but, at the same time, they seem to look at us, to be near us, to be able to get into contact with us.

This apparent familiarity may be due to the fact that modern and contemporary art has got us used to certain shapes and expressions which seem “primitive”, and to the fact that, if we look at them as artworks, it is because we have made them: we look at our creations –as, in fact, the concept of art is rather recent, and objects before the XVIIIth century could not have follow our conception of what is a work of art-. So, in a sense, Mesopotamian “art” is as recent as the most up-to-date artworks, as it is been defined by us when looking and thinking at them as art. The fact that we show them in an exhibition is a proof that their function and meaning have changed. The paper will reflect thoughts about exhibitions of archaeological items, among them near eastern ones, due to the curatorial and design processes of *Before the Flood: Mesopotamia (35000-2100 BC)*, and *The Mediterranean: From Mythos to Reason (VI century BC- IV century AD)* exhibitions (2012-2015).

IRVING FINKEL

### **How to Make People Stop and Look**

British Museum

Museum curators in their enthusiasm are apt to miscalculate completely the effects of gallery displays on real, human people. This talk will discuss how to consider visitors, how to visualise their questions, how to provide what they want as well as what we think we want to impose on them. It will address the problem of *Museum Leg*, an affliction which comes upon the public five minutes after entering any museum or art gallery, which causes them to plod around with a glazed expression failing to take note of anything they encounter while thinking all the while of the shop, the toilets or the café.

LEILA BADRE

### **Museum exhibits and education: The AUB Museum as a Case Study**

Archaeological Museum, American University of Beirut, Lebanon

Before its renovation in 2006, the display style at the AUB Museum was that of its time (middle of last century), where the objects were left to speak for themselves, rather than engage the visitor in an educational process. Renovation was an opportunity to re-examine the collection in view of developing new and more meaningful ways of conveying its significance.

Because the Museum is a regional one including seven countries with objects mostly lacking their provenance, a double concept was introduced dividing the collection into two parallel groups: one focusing on the chronological evolution of the material and the other highlighting the various themes which are presented as comprehensive mini exhibitions. These exhibits had to follow a logical progression, with a firm transition that links the showcases in a smooth way, telling the story which in fact is made of several small stories!

Being a university museum gives the AUB Museum a special academic role, oriented to students and scholars. At the same time, it has to appeal to the entire community of the University environment. Several layers of texts accompany the exhibits: the large posters for the general themes, the small texts for specific groups and finally a succinct legend for each object. Several illustrations, placed in the background of the cases, help to relay the explanation in a more concrete and lively way.

The visitor, of any category, must leave the museum having been moved by at least one special object, moreover he must remember one or more stories that the display has tried to convey. Then, the Museum has reached its goal!

## 12. ELITE RESIDENCES IN THE HELLENISTIC AND ROMAN NEAR EAST (WEDNESDAY/THURSDAY, JUNE 11-12)

STEPHAN G. SCHMID – ZBIGNIEW T. FIEMA – PIOTR BIEWNKOWSKI – BERNHARD KOLB

Berlin; Berlin/Helsinki; Manchester; Basel

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A particular result of the symbiosis of old and new traditions is represented by elite residences (palaces, villae) in the Near East. Between the conquests of Alexander the Great and the Later Roman Period, the area under consideration witnessed the appearance of spectacular residences which feature both the old elements of Near Eastern architectural traditions as well as "new" elements, mostly deriving from such structures as the Argead palaces at Aigai and Pella in Macedonia, eventually remodelled in residences of the successors of Alexander the Great, the Ptolemies and the Seleucids in the first place. The specific arrangement and combination of these elements may be purely fashionable but may also point to some specific functional considerations.

This workshop addresses the question of elite residences in the Near East, concentrating on the few known structures in Judea and Transjordan, associated with Herod the Great and the Nabataean kings. Topics will include historical backgrounds, general plans of buildings, landscape designs, interior decoration, building traditions used, the elusive issue of the 'quality' of materials and construction, and best specific parallels from elsewhere in the Mediterranean. In order to widen the scope of discussion, selected complexes of funerary architecture will also be added in order to ascertain the relations between the architecture of the living and the architecture of the dead in the elite context.

## Programme

### SESSION 1

- Stephan G. Schmid – Zbigniew T. Fiema – Piotr Biewnkowski – Bernhard Kolb  
Power Landscape and Luxury Architecture - the IUBP and NEPP Residences in Petra
- Polytimi Agoridou  
New Insights into the Interior Decoration of a Bath Complex on Umm al-Biyara, Petra
- Marco Dehner  
What these Stones can Tell Us: a GIS-based Comparative Study of Architectural Members from the NEPP Area in Petra, Jordan

### SESSION 2

- Bernhard Kolb  
The Mansion of az-Zantur IV in Petra: Parallels and Differences with Presumed Residences of the Nabataean Kings
- Laura Weis  
From Absolute Necessity to Luxury Display: the Nabataeans and Hydrotechnology

### SESSION 3

- Thomas Kabs  
Same Status – Different status? The Relations of the Herodian and Nabataean Dynasties with Rome and Eventual Influences on the Building of their Residences
- Stefan Riedel  
The *basileia* at Alexandria in Egypt: the Mother of Prototypes?
- Stephan G. Schmid  
Intercultural Contacts in the Wider Mediterranean Area as Reflected in Nabataean Luxury Architecture

## Abstracts

STEPHAN G. SCHMID – ZBIGNIEW T. FIEMA – PIOTR BIEWNKOWSKI – BERNHARD KOLB

### **Power Landscape and Luxury Architecture - the IUBP and NEPP Residences in Petra**

Humboldt-University, Berlin – University of Helsinki – Manchester University – University of Basel:

stephan.g.schmid@culture.hu-berlin.de; zbigniew.fiema@helsinki.fi; piotr@piotrbienkowski.co.uk; bernhard.kolb@unibas.ch

Two recent projects in Petra, the ancient capital of Nabataeans in modern southern Jordan, are likely to considerably modify our picture and understanding of Nabataean luxury architecture. The present working hypotheses would propose to identify the first site, a prominent spot within the city center of Petra, with the *basileia*, the royal quarters of the Nabataean kingdom, as they are mentioned by Flavius Josephus, while the second site, situated on the most prominent mountain overlooking the city of Petra, would correspond to a luxurious temporary residence, most likely for the hot summer months. Interestingly, for both sites, parallels and prototypes from the wider Mediterranean area can be pointed out, both in details as well as for their general aspect. The residence on the mountain of Umm al-Biyara ("mother of cisterns") shows clear parallels with the Herodian palatial buildings on top of Masada and can be considered the Nabataeans' answer to the many hilltop residences of Herod the Great and his successors. The presumed palatial area in the city center is a potpourri of various Hellenistic and Roman architectural features in abundant combinations and it will be very interesting to point out the various influences and relations with well known architectural features from other luxury residences. Obviously, the owners of these residences put a lot of efforts and money into the construction of luxury architecture that not only served their needs, but was clearly used in order to shape the landscape and to impress the visitors, a clear statement that the former nomads had become the masters of the nature that surrounded them.

POLYTIMI AGORIDOU

### **New Insights into the Interior Decoration of a Bath Complex on Umm al-Biyara, Petra**

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In the excavation campaigns 2011, 2012 and 2013 of the International Umm al-Biyara Project (IUBP) under the direction of S. G. Schmid and P. Bienkowski, on the plateau of the Umm al-Biyara in Petra, various structures, dated between the 1st and 4th century AD have been excavated. These are likely to be a luxurious architectural complex, even possibly a royal residence with a heated bathing area. Amidst these structures, fragments of Roman sculptures of the 2nd century AD and ornament decorated stucco were found. The paper intends to examine the entire interior decoration, especially the sculptures, from stylistic, chronological and functional aspects. These statues are indeed so far unique for Petra, but they are certainly not unique in general, but rather a standardized type that was widespread on the "ancient art market". The comparative consideration of the sculptures found in Petra with the well-known pieces of the same type, allows us to make statements about dating and context. In several cases we have proof that these figures were placed in villas of the Roman nobility. In connection with other statue fragments found on Umm al-Biyara one can gain an idea of the rich sculptural decoration of these supposedly royal residences, but above all, the question arises of the models for both the architecture and the interior decoration. While some aspects quite clearly lead to Herod the Great and his palace architecture, others, especially the sculptural decoration, appear to go back directly to Roman role models. It thus seems to emerge again that despite the political tensions between the Nabataeans and Herod on one hand, and Rome on the other hand, cultural exchanges knew no bounds

MARCO DEHNER

**New insights into free-built architecture of Petra (Jordan)**

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For three years the North Eastern Petra Project (NEPP) has been exploring the northeast of the city center of Petra between the Wadi Mataha, the Wadi Musa and the western slope of al Khubta. After three seasons of intensively surveying several large ruined structures and a big amount of architectural fragments of different size and shape were recorded. Capitals, column drums, bases, decorated and undecorated elements of architrave and entablature as well as a large number of door jambs were secured. The architectural decoration shows a highly representative character. So far it is assumed that the area of the NEPP could be the Basileia of Petra. One question which should be discussed at the conference is whether or not the material supports the idea of a Basileia in the northeast of Petra. Was there an own nabataean architecture and system of decoration or were the Nabataeans only influenced by arabic or hellenistic and roman traditions in style? So far, intensive research of single architectural assemblies of free-standing buildings and houses as well as their stylistic and typological qualities is still to be done. Seeing to the fact that research in this field has just begun, first results are ready to be presented in this paper.

BERNHARD KOLB

**The Mansion of az-Zantur IV in Petra: Parallels and Differences with Presumed Residences of the Nabataean Kings**

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The excavations at the hill of az-Zantur, carried out by the University of Basel, revealed a substantial Nabataean mansion, prominently overlooking the southern outskirts of the city of Petra. Constructed around AD 20, this building offers a perfect case study of a Nabataean upper class housing. Designed by an experienced architect, it is a masterpiece of the elegant combination of a functional design, allowing the servants to discretely reach all relevant parts of the structure, and of a splendid *mise en scène* of abundant luxury in the outlet and interior decoration of the important rooms, where the owner received his guests. Hellenistic and Roman elements in design and decoration merge to something genuine new, the best comparisons for most of the elements as well as for the overall structure being found in neighbouring Judaea, although there remain some specific local particularities. The fully excavated residence of az-Zantur allows a detailed comparison with the presumed Nabataean royal residences on top of Umm al-Blyara and within the North-eastern city center, despite the fact that their archaeological exploration just begun.

LAURA WEIS

**From Absolute Necessity to Luxury Display: the Nabataeans and Hydrotechnology**

Humboldt-University at Berlin, Weis.Laura@web.de

The Nabataeans were a nomadic tribe which settled in northwestern Arabia. Their capital Petra is located in modern Jordan and was once one of the most important caravan cities in the East. This region is still extremely arid and dry. Thus, permanent settlement in this region necessitated extreme administrative as well as technical organization and skills. Particularly the supply of water was not only considered as a necessary means of survival, but also played a vital role in other areas such as ritual use or as a display of wealth and luxury in the urban environment.

To exemplify this, the latest results of the North Eastern Petra Project (NEPP) will be presented. The project has just finished its fourth campaign of survey within the city of Petra and has already discovered numerous fragments of architecture as well as structures suggesting representative buildings, maybe belonging to the royal quarters of the Nabataean kings, their *basileia*. This area seemingly played a vital role in the urban environment of Petra, which was supplied with water by several major water installations. The preserved cisterns, basins and cascades not only ensured basic survival but, equally important, were also an expression of luxury illustrating the highly developed hydrotechnological knowledge of the Nabataeans and thus offering further indications as to the function(s) of this prominent area within the city center.

THOMAS KABS

### **Same Status – Different Status? The Relations of the Herodian and Nabataean Dynasties with Rome and Eventual Influences on the Building of their Residences**

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Although the Hasmonaeans and the Nabataeans came into the sphere of influence of Rome at almost the same time after Pompey the Great's conquest of the East, the relationship with Rome emerged in a different way. Under the reign of Herod the Great, Judaea became a classic example of a Roman 'client state'. As tributes to Augustus, Herod had temples built, cities (re)named and (re)built and eponymous feasts celebrated. Within the Nabataean kingdom in contrast, although typical elements of a Roman client kingdom can be found, no special ambition to pay tribute to Augustus or his family is observed. Furthermore, the long lasting fights between Nabataeans and Judaeans were a danger for the inner peace of the region. The present paper will re-examine some well known historical elements in the light of new discoveries in order to reconsider the relation of the Nabataeans with their Herodian neighbours in Judaea, but also with Rome. From the historical background, likely to show a quite close connection between the Nabataeans and Rome long before the annexation of Nabataea in AD 106, additional reflexions as to cultural contacts shall be added, in the hope of being able to contribute to the analysis of the various elements that define Nabataean luxury architecture in its interesting position at the fringe of different cultural zones.

STEFAN RIEDEL

### **The *basileia* at Alexandria in Egypt: the Mother of Prototypes?**

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The anabasis of Alexander the Great and the following manifestation of the Hellenistic empires as political entities under the supremacy of a sole sovereign had fundamental influences on the political, social and therefore architectural development of the involved societies. The most striking expression of these changes in terms of building activities certainly were the residences of the kings which furthermore functioned as administrative and cultural centres of their times. These did not only comprise the actual habitation of the king and his family but – depending on the power and wealth of the ruler – included many other building-complexes of various types and for different purposes.

In this regard, the paper considers one of the largest and probably most influential Hellenistic residences – the *basileia* of the Ptolemies in Egyptian Alexandria. It will focus on aspects of the general urbanistic layout of the royal quarter and try to identify its specific features. On this basis questions concerning the influence of the Ptolemaic residence on other Hellenistic residences and their interdependency will be addressed. This involves architectural features and the overall urbanistic layout as well as related ideas of the Hellenistic kingship and the dealing of the sovereigns with local societies lacking a Greco-Macedonian cultural background.

STEPHAN G. SCHMID

**Intercultural Contacts in the Wider Mediterranean Area as Reflected in Nabataean Luxury Architecture**

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The various buildings, structures, water installations etc. previously presented in this workshop clearly show that the most important architectural and technical features of the Nabataeans, at least as far as their capital Petra in southern Jordan is concerned, can not be studied and understood without the context of Greco-Roman architecture as on display in the wider Mediterranean area. In the present paper some of the most important parallels shall be presented and discussed. The special situation of Petra will be pointed out and discussed, clearly standing out, as far as the Mediterranean features are concerned, within contemporary Nabataean agglomerations. Further, the paper will ask what the relations were between the Nabataean architectural features and their Mediterranean siblings. Is one depending on the other, do they have common origins or do similar needs produce similar solutions without direct contacts? Especially the hypothesis of the North-eastern area of the city center of Petra as being identified with the *basileia* of the Nabataean kings needs a throughout investigation and argumentation, looking for comparable features within neighbouring cultures and searching for common points as well as for anomalies.

### 13. ETHNOARCHAEOLOGY AND EXPERIMENTAL STUDIES IN NEAR EASTERN ARCHAEOLOGY (THURSDAY/FRIDAY, JUNE 12-13)

RUTH SHAHACK-GROSS

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Ethnoarchaeological and experimental research are two types of actualistic studies that bridge an important gap between the present and the past. Such studies are often used by archaeologists as they focus on material remains and thus provide a means for interpretation of archaeological material remains related to cooking, subsistence practices, activity areas, production processes (e.g., of metals, of ceramics), and ideological and ritual aspects of human activities.

Traditionally, such actualistic studies (especially ethnoarchaeology) stem from and relate to the anthropological schools of archaeological thought. They are therefore related mostly to prehistoric archaeology and rely heavily on macroscopic observations and interviews. In recent decades however, actualistic studies are being conducted more and more by archaeologists working in historical periods, and hence address many questions related to practices evident in historic periods only, such as a variety of pyrotechnological practices (baking, metal and glass production), urbanization, and more. Such practices, processes and materials that are typical of historic periods are especially relevant to Near Eastern archaeology.

In addition to the above, it is noted that methodological changes characterize Near Eastern actualistic studies. A new approach focused on materials and their microscopic traits in ethnoarchaeological contexts and experimental studies is developing in the last decade. To date, there is almost no discourse between these apparent three different types of actualistic studies: experimental, macro-ethnoarchaeology, and micro-ethnoarchaeology.

The aim of the proposed workshop is therefore to bring together the different types of actualistic studies carried out in the Near East in order to promote discussion of methodological and interpretational aspects of these studies, on all levels of observation (from macroscopic to microscopic) and all time periods. In this workshop, methodological aspects will be highlighted by presentations and discussion of method, theory and research design of actualistic studies, while interpretational aspects will be highlighted by presentations of case studies.

## Programme

### SESSION 1

- Ruth Shahack-Gross  
Introduction: Method and Theory in Actualistic Studies
- Elisabetta Boaretto, Mintz, E., Shahack-Gross, R. & Gur-Arieh, S.  
High Resolution Radiocarbon Dating in Archaeological Research: the Lesson from a Modern Ethnographic Context
- Georgia Tsartsidou  
Phytolith Assemblages from two Ethnographic Contexts of Greece: Implications in the Interpretation of the Archaeological Record

### SESSION 2

- Maria Bofill  
What and How to Grind? An Ethnoarchaeological and Experimental Approach for the Study of Grinding Technologies in the Neolithic of the Near East
- Shira Gur-Arieh  
A Geo-Ethnoarchaeological and Experimental Study of Cooking Installations, their Taphonomy and Preservation

### SESSION 3

- Sarah Elliott, Robin Bendrey & Jade Whitlam  
Ethnoarchaeological Research on Modern Animal Husbandry in Iraqi Kurdistan. Linking the Macroscopic with the Microscopic: Integrating Animal, Plant and Environmental Data
- Hadia Faisal, Ramon Buxó and Miquel Molist Montaña  
Agricultural Methods in Southern Syria: an Ethnoarchaeological Study in the Sweida Region (2011-2012) and its Contributions to Understanding Agricultural Practices in the Neolithic Site of Tell Halula (Syria)
- David Friesem  
Ethnoarchaeology of Mud Structures Across the Near East: Taphonomy, Preservation and Site Formation Processes
  
- Ruth Shahack-Gross: Closing remarks

## Abstracts

RUTH SHAHACK-GROSS

### **Introduction: Method and Theory in Actualistic Studies**

Kimmel Center for Archaeological Science, Weizmann Institute of Science, Rehovot 76100, Israel; Ruth.Shahack@Weizmann.ac.il

Actualistic studies include ethnographic and experimental research. Ethnoarchaeology is the study of material remains that result from present day human practices. Thus it involves recording of material signatures of human activities in their social, economic and ideological contexts. Experimental archaeology refers to field as well as laboratory-based experiments primarily conducted with the aim of replicating the material fingerprints of ancient human activities, structures and crafts. Both fields of research focused traditionally on macroscopic traits of materials. The realization that the archaeological record also includes a microscopic aspect results in a growing tendency to integrate macro- and microscopic aspects related to materials linked to human behavior and activities. This presentation will introduce theoretical as well as methodological aspects in the development of actualistic studies in archaeology, via example case studies. It will also attempt to highlight strengths and weaknesses inherent in each field, and suggest how the two may be integrated in order to strengthen the archaeological implications derived from the results of such studies.

ELISABETTA BOARETTO<sup>1</sup> – EUGENIA MINTZ<sup>1</sup> – RUTH SHAHACK-GROSS<sup>2</sup> – SHIRA GUR-ARIEH<sup>1,2,3</sup>

### **High resolution radiocarbon dating in archaeological research: the lesson from a modern ethnographic context**

1 Weizmann Institute-Max Planck Centre for Integrative Archaeology and Anthropology, D-REAMS Radiocarbon Laboratory, Weizmann Institute of Science, Israel, Elisabetta.boaretto@weizmann.ac.il; 2 Kimmel Centre for Archaeological Science, Weizmann Institute of Science, Israel; 3 The Land of Israel and Archaeology Studies, Bar-Ilan University, Israel

Chronologies in archaeological research are requiring higher and higher time resolution challenging the capability of radiocarbon dating. The most common samples used in radiocarbon dating are short-lived charred organic remains and bones. This method has at least two underlying assumptions: (1) the radiocarbon record of short-lived materials reflects the time of burial of the material and the age of a stratum; and (2), the state of preservation and the level of contamination of the samples permit accurate dating. To validate the first assumption, an ethnoarchaeological study was carried out in southeastern Uzbekistan. The radiocarbon contents of organic materials were studied from materials collected in a traditional agro-pastoral rural village. The sampling strategy included: interviewing the local people about periods of construction, renovations and changes in the use of buildings; sampling of organic materials of different origin; identification of short-lived organic materials before dating; and a small scale excavation of a sheep and goats house in order to test the age distribution along a stratigraphic profile. High resolution <sup>14</sup>C dating for the past 60 years can be determined using the radiocarbon bomb peak. Results show in some cases disagreement between the expected year and the <sup>14</sup>C value. These results provide a better understanding of depositional processes of short-lived samples, their context and impact the interpretation of the archaeological record.

GEORGIA TSARTSIDOU

### **Phytolith assemblages from two ethnographic contexts of Greece: Implications in the interpretation of the archaeological record**

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Phytoliths have often been used as a proxy for identifying activity areas and human action in the past. Many ethnoarchaeological studies have been conducted in order to test their potential. Kranionas and Sarakini are two Greek traditional villages that have served as an ethnographic environment for phytolith analysis. Their study showed that phytoliths are a strong tool with much potential in recognizing activity areas. However, they also revealed the weakness of following a single scientific approach when interpreting human activities printed in the sediments. In this talk examples of different cases-activity areas are shown in order to highlight the difficulty of identifying human activities especially when they follow idiosyncratic behaviors and innovations. A collapsed two-story smithhouse, a threshing floor covered with dung, animal enclosures that preserve lime floors and cereal barns with dung are presented. Their phytolith assemblages are analyzed and their problems are discussed. In addition, the possible mistakes in the interpretation of similar sediments in archaeological context are stressed. In some cases more than one scientific method were applied and this proved to be the best way to try to solve archaeological puzzles.

MARIA BOFILL

### **What and how to grind? An ethnoarchaeological and experimental approach for the study of grinding technologies in the Neolithic of the Near East**

Seminari d'Arqueologia Prehistòrica del Pròxim Orient, Departament de Prehistòria, Universidad Autònoma de Barcelona, Edifici de Recerca MRA, Lab.-104, Campus Bellaterra, Barcelona (Spain); mar.bof@gmail.com

Use-wear analysis of prehistoric stone tools is closely related to experimental programs that give the empirical base for proposing technological and functional interpretations of these toolkits. Such experimental works are usually supported by ethnoarchaeological data that brings the opportunity of looking into a broad range of functional possibilities. When considering grinding stone toolkits the various functions include grinding of cereals, legumes, condiments, meat, and minerals. Yet, some of these processed materials leave little or no material evidence on grinding stone tool surfaces, making it difficult to identify archaeological processed materials. The aim of this communication is to link the data obtained from the ethnographic references with the results of the experimental, use-wear and residue analysis of the Neolithic grinding stone assemblages considered in my research. My study deals with two Neolithic sites, tell Halula and tell Aswad (Syria), that have been crucial for delineating the first farming communities in the Northern and Central Levant. Which role played the grinding techniques in the socioeconomic context of the first plants domesticated in this area? A review of ethnographic parallels focused on traditional hand-grinding stone tools in Africa, Anatolia, Syria and Nepal provide a very rich source of knowledge about this technology.

SHIRA GUR-ARIEH<sup>1,2</sup> – ELISABETTA BOARETTO<sup>1,3</sup> – AREN M. MAEIR<sup>2</sup> & R. SHAHACK-GROSS<sup>1</sup>

### **A geo-ethnoarchaeological and experimental study of cooking installations, their taphonomy and preservation**

1 Kimmel Center for Archaeological Science, Weizmann Institute of Science, Israel, shiragura@gmail.com; 2 Department of Land of Israel Studies and Archaeology, Bar-Ilan University, Israel; 3 Max Planck Center for Integrative Archaeology, D-REAMS Radiocarbon Laboratory, Weizmann Institute of Science

Cooking installations are abundant in archaeological, pre-modern and modern settlements in the Near East. Archaeological cooking installations are mostly identified through analogy based on macroscopic traits similar those of ethnographic installations. The study presents: (a) direct evidence to the use of fire in or on archaeological installations, based on an experimental study related to Philistine pebble hearths and an ethnoarchaeological study of mud constructed ovens in rural Uzbekistan; (b) reconstruction of cooking temperatures; and (c) a newly developed method that allows determination of the proportions of wood and dung used as fuel. In addition, a laboratory-based experiment supplied an explanation for taphonomic processes that

alter micro-remain concentrations in fuel composed of wood and dung. The study integrated macro- and microscopic observations, using a variety of geoarchaeological methods that included FTIR spectroscopy, phytolith analysis, dung spherulite and wood ash pseudomorph quantification, and micromorphology. The insights gained from the ethnoarchaeological and experimental studies were applied to the study of archaeological hearths and ovens from Iron Age sites in Israel, allowing better interpretation of these ancient cooking installations.

SARAH ELLIOTT, ROBIN BENDREY & JADE WHITLAM

**Ethnoarchaeological research on modern animal husbandry in Iraqi Kurdistan. Linking the Macroscopic with the microscopic: integrating animal, plant and environmental data**

University of Reading, sarah.elliott@pgr.reading.ac.uk

Ethnoarchaeological research has increasingly played an important role in the understanding and interpretation of archaeological deposits. This paper will examine aspects of the modern rural village of Bestansur in the foothills of the Zagros Mountains, Iraqi Kurdistan. Our research aims to understand how families use and manage their livestock within the local landscape, to elucidate links between animal and plant resources and explore possible archaeologically identifiable traces of these practices. This work has been carried out in the framework of studying and understanding archaeological signatures left behind by the occupations and activities of this rural community, and relating them to early Neolithic practices and the emergence of farming communities. Dung is a major signature of occupation and activity, and is the primary focus of this paper. To date ethnographic and experimental animal dung studies are limited. However, reference collections and comparative data from different types of animal dung are increasing. Our research strategy involves the creation of comparative datasets, specifically focusing on investigating the chemical signatures and microscopic identification of dung deposits (through the presence of calcareous spherulites) and traces of animal diet, grazing/foddering patterns and how these are represented in the plant silica phytoliths extracted from the dung.

HADIA FAISAL<sup>1</sup> – RAMON BUXÓ<sup>2</sup> – MIQUEL MOLIST MONTAÑA<sup>3</sup>

**Agricultural methods in Southern Syria: an ethnoarchaeological study in the Sweida region (2011-2012) and its contributions to understanding agricultural practices in the Neolithic site of Tell Halula (Syria)**

1 SAPPO - Departamento de Prehistoria, Universidad Autònoma de Barcelona, hadiafaisal84@hotmail.com; 2 Museu D'arqueologia de Catalunya-Girona, rbuxo@gencat.cat; 3 SAPPO - Departamento de Prehistoria, Universidad Autònoma de Barcelona, Miquel.Molist@uab.cat

The analysis of agricultural practices of the Neolithic settlements is a very important line of research for the knowledge of the production activities of the first farmers. In order to advance the study of the farming populations of Tell Halula (Euphrates Valley, Syria) in the PPNB period, Hadia Faissal conducted a recent Ethnoarchaeological study of current agricultural activities in the Sweida region (Syria). The latter region was selected to carry out this ethnographic survey, because traditional agricultural methods are still being used, such as Roman ploughing as well as others. We analyze the complete agricultural sequence from the sowing to the food preparation. These agricultural techniques were documented during two trips to Syria in 2012. In this paper, we present the results of the study and the ethnoarchaeological analysis about the systems related to the current cultivation of cereals and legumes (wheat, chickpeas, lentils ...) in southern Syria, and inputs that are derived for the study of Neolithic samples. This ethnographic survey has allowed us to reach some theories about ancient agricultural practices in the PPNB period.

DAVID E. FRIESEM

**Ethnoarchaeology of Mud Structures Across the Near East: Taphonomy, Preservation and Site Formation Processes**

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Mud structures are common domestic architectural features since the Neolithic. Because mud-based building materials are less durable than stones or cement, they degrade and thus contribute to formation of many Near Eastern archaeological sites. Here I present an ethnoarchaeological study, conducted in modern abandoned mud structures in arid South Israel and temperate Northern Greece, in which I studied the taphonomy of earth floors, mud brick walls, thatch roofs and microscopic activity remains. Field observations and excavations were coupled with various sediment analyses conducted in the laboratory. It was found that roofs play a major role in preservation of remains deposited on activity floors, and that once roofs collapsed mud brick material degraded and accumulated on top of the roof remains. This process resulted in the formation of a microscopic complex that includes the floor- activity remains- roof- degraded mud brick material. Additionally, it was identified that mud brick degradation processes are initiated by low energy flows forming a macroscopic talus and in some cases even a mound at wall feet, which can be identified micromorphologically owing to distinctive patterns of slope deposited sediments. These results highlight the importance of combining several analytical methods to distinguish between various infill sediments, thus enabling better interpretation of archaeological mud structures.

## 14. IRRIGATION AND WATER WORKS IN THE ANCIENT NEAR EAST (WEDNESDAY/THURSDAY, JUNE 11-12)

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During the last few years the archaeology of irrigation and water supply has become a major topic in ancient Near Eastern studies. The lack of water as a result of insufficient precipitation made it essential for ancient historical empires to utilize hydraulic technologies to develop remarkable systems of water supply and irrigation management to deal with such aridity. Irrigation and water works played an important role in both rural and urban settlement in these ancient civilizations, particularly for the Achaemenid and Sassanid periods. Whereas some scholars have looked at urban water management, irrigation and water supply within the context of daily routines of life and their role in the settlement patterns, others see, for example, Achaemenid water systems providing evidence of interactions with the Classical Greece world.

The scope of this workshop will be upon the presentation of the most recent research on key aspects of irrigation and water distribution in the Near East especially for Achaemenid and Sassanid Persia. The workshop will bring together senior researchers working on the subject in order to assess the state of the field and identify new directions of research.

## Programme

### SESSION 1

- T.J. Wilkinson & Dan Lawrence  
Water Use at the Frontier: The Role of Water Systems in the Borderland of the Sasanian Empire
- Maurits Ertsen & Tijs De Schacht  
"Wealth is Water" Modeling Water Control in Achaemenid Iran
- Kourosh Mohammadkhani  
Management of Water in the Achaemenid city of Dahaneh-e Gholaman, Sistan-Iran

### SESSION 2

- Seyed Abazar Shobairi  
A Comparative Study of Urban Water Management in Achaemenid Persia and Classical Greece:  
Persepolis and Olynthos (6th - 4th c. BC)
- Louise Rayne  
Water and Territorial Empires
- Mehrnoush Soroush  
Mapping Long-term Irrigation Strategies on the Miān-āb Plain of Khuzistan

### SESSION 3

- Shahrokh Razmjou  
Revisiting Achaemenid Rock-cut Wells: Cistern or Ancient Riddle
- Antigoni Zournatzi  
Water works at the 'palace' of Vouni (Cyprus)
- Afshin Yazdani  
A Report on the Discovery and Excavation of the Four Achaemenid Water Wells at the Foot of  
Persepolis Terrace Platform Persepolis World Heritage Site

## Abstracts

T.J. WILKINSON & DAN LAWRENCE

### **Water Use at the Frontier: The Role of Water Systems in the Borderland of the Sasanian Empire**

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Conventionally, frontier zones and ancient frontier walls are seen as 'artefacts' consisting of the walls themselves, forts and associated military installations. However, research by a joint UK and Iranian Project has demonstrated that the Sasanian Gorgan Wall in NE Iran was functionally related to the development of a massive system of water supply. These not only supplied water for wall construction, water supply for the forts, irrigation and perhaps transport, they were probably also used for the purposes of defence. This paper will present the evidence for the use of hydraulic systems on the Gorgan Wall in NE Iran, and will place them in the wider context of the Sasanian frontier in Azerbaijan, Syria and Iraq. Because water systems have played a long role in ancient defence, we will contextualize our presentation within the broader topic of ancient Mesopotamian and Iranian water use, as well as the power relationships of the empires themselves.

MAURITS ERTSEN<sup>1</sup> & TIJS DE SCHACHT<sup>2</sup>

### **Wealth is Water" Modeling Water Control in Achaemenid Iran**

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In Iran, along the northern and eastern fringes of the Pasargadae plain (Fars), five dam remains from the Achaemenid period (550–330 BCE) present an important footprint of human impact and reshaping of the region. In the framework of the Joint Iranian-French Archaeological Project at Pasargadae, these dams were studied. In a wadi 22 km north of Pasargadae, Sad-iDidegan dam is an earth gravity dam with remains of a feeder canal and control infrastructure. To the northwest, Sad-iShahid Abad earth dam stored water from the perennial Rud-iPolvar River and had a similar canal and control structure. Close to SadiDidegan a large earthwork crossed the watershed divide between Didegan and Shahid Abad. Though constructing the system was left unfinished, the remains echo major investments of available labor. The contemporaneity of both dam sites is clear evidence of the regional and elaborately planned character of hydrological endeavors in the Pasargadae area. This contribution proposes a possible use of the two dam system using a modern control simulation model. Based on this possible use, the paper will set the dams of the Pasargadae plain in their wider hydrological context and link that to the hydraulic mission of the Achaemenid powers.

KOUROSH MOHAMMADKHANI

### **Management of Water in the Achaemenid city of Dahaneh-e Gholaman, Sistan-Iran**

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Dahaneh-i Gholaman is located eastward of Sistan-Baluchistan (Iran). The site was first recognized by Umberto Scerrato, who conducted surface surveys and undertaken excavations there between 1962 and 1965. The first excavations have shown that the site would have been occupied only in Achaemenid period. The climate of region of Sistan is arid. Sistan is only watered by perennial Helmand River and some seasonal rivers. There is one main ancient canal, south of the buildings in the north zone of the site. From the study of an aerial

photograph (1/2000, 1965 NCC of Iran) and satellite images (Landsat and Google earth), two new canals of water have been found in the north zone. One of these new canals joined the main ancient canal at its end, to the west of the site, and the second one in the middle of site in the south of the buildings. The direction of the main canal is west-east until its source of water (Sanaroud River). Sanaroud had been the second direction of Helmand River in the Achaemenid period. The length of the main ancient canal until Sanaroud was 30 km.

SEYED ABAZAR SHOBAIRI

**A Comparative Study of Urban Water Management in Achaemenid Persia and Classical Greece: Persepolis and Olynthos (6th - 4th c. BC)**

PhD. Candidate of Classical Archaeology, University of the Athens, Greece; (Former Researcher of Parse Pasargadae Research Foundation - Persepolis), and Fellowship of the Onassis Foundation, Athens; Email: Abazar.parse@gmail.com

Systems of water supply and management played an equally important role in the ancient urban settings of Persepolis, the Achaemenid capital founded by Darius I in Fars in southwestern Iran, and the contemporary Greek city of Olynthos, situated on the Chalcidice Peninsula in the north Aegean.

This paper focuses on the respective archaeological evidence for urban waterworks at these two sites, as typical examples of water management technology and its relationship to urban development in Greece and in Persia. It also considers, among others, similarities between these two contexts that could be due to interactions between the Greek and the Persian world, and not least, to the well attested participation of Ionians/Greeks in the construction of Achaemenid palatial cities.

LOUISE RAYNE

**Water and Territorial Empires**

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Many relict irrigation systems extend across the area of Northern Mesopotamia; this research uses remote sensing to identify them. In an area where fieldwork is currently difficult, satellite images offer a way to map traces of ancient hydrological features. CORONA images facilitated the recording of water systems which were dated through comparison with survey data. Collected between 1960-1972, with a pixel size of 2-5 m, these images provide a view of the landscape before recent intensification destroyed many archaeological remains. They were also used for Digital Elevation Model (DEM) creation; a 10 meters spatial resolution DEM was generated which was used to recognize the morphology of a significant canal. Recent high resolution imagery and data was also used, including IKONOS and SRTM. Confirmation of features as artificial channels rather than natural streams or ancient route-ways was enabled through the application of modern DEMs.

This combined dataset was used to construct a detailed map of relict irrigation; a peak in the Early Islamic period is apparent, developing from Hellenistic and Late Antique canals. These water management systems were constantly modified, abandoned and reused. Given an uncertain climate, past irrigators were forced to adopt this flexible and dynamic approach.

MEHRNOUSH SOROUGH

**Mapping Long-term Irrigation Strategies on the Miān-āb Plain of Khuzistan**

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In Near Studies, Sasanian period is known for unprecedented achievements in water management strategies and technology which enables agricultural expansion and intensification. The Plain of Miān-āb, on the northeastern part of Khuzistan, is home to a sophisticated irrigation system, including an extensive canal network and several

relict hydraulic features. Archaeologists and historians have suggested that this hydraulic system was in most part developed in the Sasanian period and fell into despair after the Muslim Conquest of Khuzistan. Despite recent scholarly interests in the irrigation history of Miān-āb, little is known about the process of development of these “Sasanian” water works, that is, their relationship with the preceding and succeeding investments. Without this understanding, our image of the Miān-āb Plain could be overshadowed by what is known about the better studied irrigated landscapes of the Near East. The present paper reports on a work-in-progress that aims at distancing from generalization about the water management history of Miān-āb through a holistic mapping of the relict canal features and hydraulic structures. Previously collected archaeological data and old satellite and aerial imagery are used for this study. Some tentative results from the study of the ancient irrigated network vis-à-vis settlement patterns will also be presented.

SHAHROKH RAZMJOU

### **Revisiting Achaemenid Rock-cut Wells: Cistern or Ancient Riddle**

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The area around Persepolis contains a number of massive wells, cut into the rocks. The best known well is located at Persepolis, between the palaces and the royal tombs. It has been identified as cistern by archaeologists and early visitors to the site. According to the explanations, they are made in order to collect water after raining and to avoid damage to the buildings below the mountain on Persepolis platform. The rest of the wells, almost completely buried, are located between Persepolis and Naqsh-e Rostam royal cemetery. These wells are also identified as cisterns in the same way. However, another Achaemenid rock-cut well, located near Shiraz, can produce more questions about the nature and function of these wells. The location and design of the wells show that they are different types with still unknown aspects. This makes it a necessity to restudy these wells and their function.

ANTIGONI ZOURNATZI

### **Water works at the ‘palace’ of Vouni (Cyprus)**

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Excavated by the Swedish Cyprus Expedition in the late 1920’s, the monumental complex at the hilltop of Vouni, on the northern coast of Cyprus, remains to date one of the most conspicuous physical settings of political authority in Cyprus during the Persian period. The builders of the complex evidently selected the site on account, primarily, of its exceptional strategic importance and easy defensibility. The absence of a spring locally was compensated for by means of an elaborate system of collection and management of rain water—a system that, according to the excavators, underwent modifications in the successive periods of occupation of this complex from the opening of the fifth to the early decades of the fourth century BC.

The present paper reviews the available evidence for the water supply and drainage of this complex with reference, not least, to analogous contemporary and earlier practices within and outside the island.

AFSHIN YAZDANI

### **A Report on the Discovery and Excavation of the Four Achaemenid Water Wells at the Foot of Persepolis Terrace Platform Persepolis World Heritage Site**

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While removing earth for constructing a toilet service at the western margin of the Persepolis parking lot and at a distance of about 500 m. to the west of the great stairway of the terrace platform four ancient water wells were

discovered. The wells were cut in the ground in the method nowadays used to cut wells by hand and had about originally 5 m. deep. Based on the stratigraphical studies three main phases were determined, the first one started since the cut and by the time the wells were used to provide drink water, an intermediate short phase of abandonment which in the case of water well no. 1 comprises of intentional blockage and destruction of the well by falling big stones, bricks and debris into the well, and the last phase which includes a weak resettlement of the site which is seen at the well no. 1 by using it as a big garbage pit. Fortunately due to the character of the wells i.e. semi filled by water, whatever had fallen into them remained in a perfect intact shape which resulted to discover the largest amount of ever discovered pottery vessels of Achaemenid period.

## Acknowledgment

The Basel Organisation Committee of the 9. ICAANE wishes to express their thanks to all the people and institutions that made this event possible.

Our thanks for their generous contributions go to

The **Isaac Dreyfus-Bernheim Stiftung**.

The **Max-Geldner-Stiftung, Basel**.

The **Freiwillige Akademische Gesellschaft**.

The **Swiss National Science Foundation (SNSF)**.

as well as to

The **Government of Basel-Stadt** and the **Government of Basel-Landschaft**.

The **Rectorate of the University of Basel**.

The **Faculty of Theology of the University of Basel** (especially Sabine Müller-Schneider).

The **Fonds für Förderung der Studien auf dem Gebiet der ägyptologischen, orientalischen und klassischen Altertumskunde**.

and to the **Anonymous Donor**.

For their invaluable support we wish to thank

**Basel Tourismus** (especially Alain Burger and Samuel Schibler), **Catering Services Migros**,

and **Druckerei Hanemann, Weil am Rhein**.

the **Antikenmuseum Basel und Sammlung Ludwig** (especially its Director Andrea Bignasca, as well as Ilona Hellstern and Gordana Uzur).

A special thank goes to all the (voluntary) **helpers, students**, the **event-management-team of the Kollegienhaus**, and the **URZ Basel**, who supported this event with time and commitment.



Supported by

Max Geldner Stiftung, Basel

Isaac Dreyfus-Bernheim Stiftung



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