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BUILDING BRIDGES

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# Building Bridges

Abstract book of the 23<sup>rd</sup> Annual Meeting of the European Association of Archaeologists 2017

**Building Bridges**

**Abstract book of the 23<sup>rd</sup> Annual Meeting of the European Association of Archaeologists 2017**

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## 17 PAINTING AMARA WEST: COLOUR TASKSCAPES IN ANCIENT SUDAN

**Author:** Ms Fulcher, Kate - UCL Institute of Archaeology; British Museum, Department of Scientific Research (Presenting author)

**Keywords:** paint, pigment, Egypt

**Presentation Preference:** Oral

The ancient Egyptians decorated their houses using bright colours, and archaeological evidence suggests this was not just the prerogative of the elite. My research takes as its starting point the material evidence for the production and use of paint at the ancient Egyptian/Nubian town of Amara West. Scientific analysis of the pigments and binders on palettes and walls has identified the raw materials used, which was used to inform an experiential study in which I recreated the paints from raw materials. During this process the range of materials and skills required to create paint, from gathering the raw materials to application on the wall, became apparent. To manufacture paint the minerals had to be collected from a known location, stone tools created from local materials, a paintbrush prepared using plant fibres, plant gum collected, and ceramic palettes obtained. Only then could the technological process begin. In addition, more than one colour was generally used, and some were difficult to obtain, so trading relationships had to be negotiated. It appears unlikely that there was a dedicated painting profession within the town, meaning that every household undertook their own painting tasks; these skills were widely shared within in the ancient town's population. Within each step of the painting process social norms and practices would come to bear, requiring certain actions or performances. The apparently simple act of painting a wall is revealed to be an involved and lengthy social process with many practitioners.

## 18 THE FINE GREY WARE PYXIS: EVIDENCE FOR A LOCALIZED CROSSOVER?

**Author:** Professor Miller Bonney, Emily - CSU Fullerton (Presenting author)

**Keywords:** pottery, crossover

**Presentation Preference:** Oral

Bronze Age Cretan pottery stands out for its generally painterly and plastic characteristics. From the Early Bronze Age through the Late Bronze Age Cretan finewares featured painted designs apparently often intended for display at competitive feasting events. Painted design and shape were integrated visual productions that could be enhanced by applied flowers and figurines whether human or other animals or by the inclusion of orderly ridges and protrusions that emphasized the structure of the vase. While incision appeared on some of final Neolithic pottery occasionally in combination with white filling the more subtle decoration presumably was less appropriate for pottery intended to make a visual statement. Thus the appearance of a class of globular vessels in a distinctive grey fabric decorated solely with complex incised designs at the transition from Early Bronze I to Early Bronze II is surprising. Fine Grey ware was produced only in south central Crete although the specific location(s) remains unknown. The ware is distinguished by its unique firing conditions. While fine grey ware plates and chalices were known in the Early Bronze age the globular pots usually called pyxides are new at the beginning of the EB II and mark a distinctive development with decoration that imitates works in metal, basketry and leather and differs from contemporary painted wares. This paper argues that these vessels although clearly outstanding works of pottery evidence craft crossover at a critical point in the EB with the appearance of the first substantial settlements in the area of production. The intersection of the craft crossover at a time of significant change suggests that one way to understand such borrowings is as a means by which social transformation occurred. That is that the pottery was one of the ways through which new social groups emerged.

## 19 METHODS OF THE RIMS SHAPING FROM DUBOVY LOH 5 NEOLITHIC SITE (SOUTH-EASTERN BELARUS): COMMON FEATURES AND SPECIAL ASPECTS

**Author:** Ms Tkachova, Maryia - Institute of History NAS of Belarus (Presenting author)

**Keywords:** pottery, Neolithic, Belarus

**Presentation Preference:** Poster

The archaeological settlement Dubovy Loh 5 is located on the right bank of the Ipcu river (the left tributary of the Soz river) near the old lake, in 3 km to south of the village Dubovy Loh. In 1979, 1981-1983 A. Kalechys excavated there an area of 612 square meters. As a result 1988 potsherds from more than 190 vessels of the Neolithic period were found.

Considering the vessel itself as the result of the potter's work, we can single out the stable traditions of making ceramics. In addition, the method of vessel constructing reflects the level of development of potter's production skills.

The study of the rims of 73 vessels made it possible to determine several methods of their constructing at the site. The most popular technique is the so-called "simple" design of the rim. The thickness of the edge of such rims is equal to the thickness of the walls of the entire pot. Such technological methods as deliberate thinning or thickening of the rim are rare. In some cases, the fibrous material was used to form the edge of the vessel for additional strengthening the rim. This method indicates a more developed technique for forming the edge of the pot, which is necessary when creating large wide-necked vessels. The use of this technique indicates a profound master's knowledge of clay properties and a high level of his practical skills. It remains an open question whether the deep ornamentation of the rim edge had a technological character or performed only a decorative function.

Thus, throughout the entire Neolithic, the shape of the upper part of the vessels from the Dubovy Loh 5 site remained unchanged. Only at later part of Neolithic there was a new tradition of designing the upper part of the vessel

## 20 STUDYING MULTIPLE TECHNOLOGIES: CASE STUDIES FROM THE NEOLITHIC OF SE EUROPE

**Author:** Dr. Vitezović, Selena - Institute of Archaeology, Belgrade (Presenting author)

**Co-Author:** Dr. Antonović, Dragana - Institute of Archaeology, Belgrade

**Keywords:** bone industry, lithics

**Presentation Preference:** Oral

Archaeological studies of technology and craft production are often limited to one type of raw material – lithic, ceramic, and so on. Even one group of raw materials, which clearly represents one technology, with shared manufacturing techniques and forms, is sometimes split into smaller groups (for example, mollusc shells are sometimes studied separately from other osseous raw materials, or obsidian is separated from other chipped stone tools). However, for comprehensive study of technology and craft production in prehistory it is necessary to study relations between different technologies – they may share same tools, activity areas, craftspersons; changes in one technology influence the changes in others, etc.

The introduction of the Neolithic way of life brought also new tools, new tasks and new technologies. In this paper, we will explore the relations in production between bone and stone artefacts in the Neolithic. Not only stone tools were used for production of bone objects and bone retouching tools were involved in stone production, but we may also note the connection in technological changes (e.g., increased use of abrasion in bone technology with the increased number of stone whetstones), examples of skeuomorphism



(similar or identical forms in different materials) and so on. Furthermore, we tried to examine the relations of tools made from bone and stone used for the same or related tasks: for woodworking, plant processing, etc.

## 21 NINEVEH'S FIRST POTTERS - A SCIENTIFIC STUDY OF HASSUNA POTTERY FROM MALLOWAN'S DEEP SOUNDING

**Author:** Dr Spataro, Michela - The British Museum (Presenting author)

**Co-Author:** Dr Fletcher, Alexandra - The British Museum

**Keywords:** technology, Neolithic, Iraq

**Presentation Preference:** Oral

The British Museum collection includes over 300 sherds of Hassuna pottery found at Nineveh, Mosul, Iraq, in the early 20<sup>th</sup> century, during fieldwork led by L. King and R. Campbell Thomson on behalf of the BM. These sherds are mainly from a stratified sequence in the 'Prehistoric Pit', dug by Max Mallowan in 1931-32. Mallowan (1933) was the first to recognise Hassuna pottery as a distinct phenomenon, which was soon recognised across northern Mesopotamia. Nishiaki and Le Mière (2005) have analysed Hassuna pottery from Tell Seker al-Aheimar. Using macroscopic methods, Petrova (2012) has studied Hassuna technology at Yarim Tepe I. These studies, and contemporaneous pottery at Tell Sabi Abyad (Nieuwenhuyse 2006), hint at a dramatic change in the chaîne opératoire at c. 6000 BC, when local variants were rapidly replaced by a common technical tradition. As technological similarities and differences should reflect the sources of pottery as a craft (chaîne opératoire transmitted between generations), scientific analyses of the Nineveh material will show whether this tradition is extended to the Tigris, or if superficially similar pottery was made following local traditions.

The results of the analyses by thin-section petrography and SEM-EDX of 60 sherds from the lowest layers of Mallowan's Prehistoric Pit will be discussed, focusing on 4 key steps (raw material procurement, clay preparation, construction and firing) in the production of prehistoric pottery. Linked to the shapes and styles of vessels sampled, the results will define the pottery chaîne opératoire over a significant period. Focus will be on how the creation of objects requires special skills/knowledge, what these say about social relationships between makers and owners, and how the treatment/decoration of different materials enables new ways of thinking and social relationships.

## 22 THE ELKS OF ŠVENTOJI: TAKING ANOTHER CLOSER LOOK

**Author:** PhD student Slah, Gvidas - Vilnius Academy of Arts

**Co-Author:** Iršenas, Marius - Vilnius Academy of Arts, Institute of Art Research; Prof. Dr. Butrimas, Adomas - Vilnius Academy of Arts, Institute of Art Research; PhD student Rimkus, Tomas - Klaipeda University (Presenting author)

**Keywords:** Elk, Baltic area

**Presentation Preference:** Oral

The staffs featuring heads of elks are a characteristic Stone Age artefact coming from the Baltic Region. The skilfully carved staffs uncovered in the Stone Age settlements of Šventoji have received a comprehensive coverage and discussion in archaeological literature, nevertheless, the investigation continues. In 2016, a microscope of 960-times enlarging capacity was used to the use-wear analysis of the elk-head staffs from the Stone Age Šventoji settlement; one of the staffs was dated using the radiocarbon method. The report discusses the results of these investigations and the new discoveries that extend the knowledge about the crafting technology of these artefacts and provide new information for further considerations regarding the purpose and function of these staffs.

## 23 FIGURATIVE SHELL, STONE, AND BONE WORK IN THE PRE-COLONIAL CARIBBEAN: PERSPECTIVES ON CROSS-MATERIAL TECHNOLOGY

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**Keywords:** Technology, Microwear, Cross-craft,

**Presentation Preference:** Oral

Indigenous Caribbean figurative objects of shell, stone, and bone are rich in imagery, and research has traditionally focussed on interpreting iconographic depictions and representations. Their symbolism is linked to socio-political developments, in which powerful individuals commissioned craftsmen and demonstrated ritual capacities by engaging the carved symbolisms on these materials. Aspects of use and exchange have come under investigation only recently, however, and little is known about manufacturing strategies in this context. These materials have dissimilar physical and structural properties, each of which enabling different production strategies and prevent the enactment of others. This paper seeks to understand how engagement with the variety of materials aligns in the manufacturing process, and how Caribbean figurative objects interrelate on technological terms. Microwear traces on materials from various late pre-colonial sites (AD 1200-1500) have been analysed using Optical Microscopy leading to a reconstruction of the operational sequences. Differences exist in overcoming morphological constraints during early reduction, and in the use of certain tools adapted to the specific working of shell, stone, and bone materials. Nevertheless, their manufacturing processes are based upon conceptual steps shared across media.

## 24 THE ROLE OF ARCHAOMETALLOGRAPHY IN INTERPRETATION OF ANCIENT BLACKSMITH'S ARTEFACTS

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**Presentation Preference:** Oral

Method of archaeological metallography is the main one on studying of the problems of ancient metallurgy and metalworking. The interpretation of metal structure lies on the basis of archeometallographic method. Our research group working in the Institute of Archaeology of the Russian Academy of Sciences carries out the systematic investigation of ancient iron artifacts. As a result the unique bank of metallographic data including more than 13000 analyzes was created.

Generalization of the analytical data allowed the authors to reconstruct the history of the development of ironworking in Eastern Europe. It was established that becoming of ironworking took place long chronological period of the late 8<sup>th</sup> c. BC – 8<sup>th</sup> c. AD. The different kinds of steel, carburization and heat treatment were learned at this time. Cardinal changes in the East European smithing craft occur at the turn of the 1<sup>st</sup> and 2<sup>nd</sup> millennia AD. They are associated with the formation of urban craft, connecting to craft differentiation. The basis of smithing craft became various options of welding technologies at this time.

Special importance is the problems related to the mechanisms of tradition formation and their interaction with innovations. To consider the raised problem we turn to the spectacular materials obtained from the medieval sites of Ancient Rus'. As we have established on the archaeometallographic data the Russian ironworking based on interaction two

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