



25-26 NOVEMBER 2022

# EXCAVATING THE EXTRA-ORDINARY

CHALLENGES & MERITS OF WORKING WITH SMALL FINDS

WWW.EXCAVATING-THE-EXTRA-ORDINARY.UNI-MAINZ.









Organizers:

Dr. Monika Zöller-Engelhardt, JGU Mainz Dr. Andrea Kilian, FU Berlin Univ.-Prof. Dr. Alexander Pruß, JGU Mainz

Johannes Gutenberg University Mainz Institute of Ancient Studies – Egyptology and Near Eastern Archaeology Hegelstraße 59 55122 Mainz

> excavating2022@uni-mainz.de https://excavating-the-extra-ordinary.uni-mainz.de/

> > THE WORKSHOP IS GENEROUSLY FUNDED BY:

JGU Mainz, Internal University Research Funding, Research and Technology Transfer

JGU Mainz, Institute of Ancient Studies, Department of Egyptology and Department of Ancient Near Eastern Archaeology

Copyright Coverphoto: Fritz Barthel, @ The Asyut Project

## Excavating the Extra-Ordinary 2

Challenges and merits of working with small finds

Program	4
Abstracts	6
Cafeterias and restaurants	40
Мар	41

#### CONFERENCE WLAN

WLan: Uni Mainz

account name: excav01 password: dU7M9MoYrgZM or

account name: excav02 password: J8znSkr2LbsL

Friday 25/11/2022		
9:30 - 10:15	INTRODUCTION Andrea Kilian (Freie Universität Berlin) Alexander Pruß (Johannes Gutenberg University Mainz) Monika Zöller-Engelhardt (Johannes Gutenberg University Mainz)	
10:30 - 11:15	KEYNOTE <b>Aaron Schmitt</b> (Ruprecht-Karls-University Heidelberg) Uncovering the potential of early 20th century excavations in Mesopotamia: Ur and Ashur as case-studies	
11:15 - 12:15	Session I: <i>Multidisciplinary Methods</i> IMPULSE <b>Anna Hodgkinson</b> (Freie Universität Berlin) A Multidisciplinary Approach to Early and Modern Excavations Carried out at Site M50.14-16 at Amarna <b>Martin Odler</b> (Charles University, Prague) & <b>Jiří Kmošek</b> (Academy of Fine Arts Vienna   Academy of Sciences of the Czech Republic) Realities of Metalworking Life on the Middle Kingdom Elephantine Island	
12:15 - 14:00	LUNCH	
14:00 - 15:00	Session II: <i>Contextualizing Small Finds</i> <b>Tara Ingman</b> (Koç University, Istanbul) & <b>Hélène Maloigne</b> (University College London) & <b>K. A. Yener</b> (University College London) A Forgotten Kingdom of Small Finds – A Bronze Age Legacy Collection from Alalakh in UK Museums <b>Eva A. Calomino</b> (Instituto Multidisciplinario de Historia y Ciencias Humanas, Buenos Aires) From Special Findings to Domestic Dynamics. Contextual Study of the small finds of Tell el Ghaba (Egypt)	
15:00 - 15:30	COFFEE BREAK	
15:30 - 16:30	Session III: <i>Deductions from Microdebris</i> IMPULSE (Near Eastern Archaeology) Jana Richter (Westfälische Wilhems-University Muenster & Ludwig Maximilians- University, Munich) Finding Meaning in Microdebris: Challenges of working with very small finds at an Iron Age site in Iraqi Kurdistan	
16:30 - 17:00	COFFEE BREAK	
17:00 - 18:00	Session IV: <i>Best practices: Analyzing fragmented stone vessels</i> <b>Robert Kuhn</b> (Ägyptisches Museum und Papyrussammlung – Staatliche Museen zu Berlin – Preußischer Kulturbesitz) More than 20.700 fragments of stone The convolute of stone vessels from the tomb of king Dewen at Abydos <b>Nora Kuch</b> (State Museum of Egyptian Art, Munich) Puzzling Fragments: Deposits of Stone Vessel Fragments in Context of Early Dynastic Burial Practices	
	CONFERENCE DINNER	

Saturday 26/11/2022	
9:30 - 10:30	Session V: <i>Switching Functions and Methods</i> IMPULSE <b>Julia Budka</b> (Ludwig-Maximilians-Universität München) What makes a pottery sherd a small find? Processing re-used pottery from settlement contexts <b>Camille Abric</b> (Panthéon-Sorbonne University) A pottery study approach to small find analyses. The zoomorphic clay figurines from Tell Abraq (Umm Al-Quwain, UAE)
10:30 - 11:00	COFFEE BREAK
11:00 - 12:00	Session VI: <i>Best practices: Analyzing Figurines</i> <b>Tina Beck</b> (Freie Universität Berlin) What to Do with All These Fragments? Challenges and Possibilities of Reconstructing Fragmented Wooden Tomb Statues <b>Elisabeth Eltze</b> (University of Auckland) Worker, Warden, or Whatnot? Amannote-erike's shabti in consideration
12:00 - 13:30	LUNCH BUFFET
13:30 - 14:00	ENIGMATIC OBJECTS <b>Jean-Pierre Pätznick</b> (Sorbonne University) The royal engraved marbles of the First Dynasty
14:00 - 15:00	Session VII: <i>Cultures in Context</i> IMPULSE <b>Maclej Makowski</b> (Institute of Mediterranean and Oriental Cultures of the Polish Academy of Sciences, Warsaw) Quantitative approach to definition of the local traditions and trajectories in material culture of Near East: a case study of coroplastic arts from 3rd millennium BC Mesopotamia <b>Silvia Prell</b> (History of Architecture and Building Archaelogy/TU Vienna; visiting scientist ÖAI/ÖAW) Hard to Pin Down – Clothing Pins in the Near Eastern Bronze Age with Focus on Middle Bronze Age Tell el-Dab'a/Egypt
15:00 - 15:30	COFFEE BREAK
15:30 - 16:30	Session VIII: <i>Best practices: Analyzing small finds</i> Vanessa Boschloos (Ghent University) & Alexander Ilin-Tomich (Johannes Gutenberg University Mainz) Beyond the most obviously interesting: aims and methods in documenting and processing scarabs Camille Koerin (University of Strasbourg) The cylinder seals as a source of study on the interactions between Egypt and Mesopotamia in the 4th millennium BCE
16:30 - 16:45	FINAL DISCUSSION

Camille Abric (Paris 1 Panthéon-Sorbonne University)

## A pottery study approach to small find analyses: the zoomorphic clay figurines from Tell Abraq (Umm Al-Quwain, UAE)

Recent excavations at Tell Abraq (Umm Al-Quwain, UAE) yielded an unexpectedly rich corpus of zoomorphic clay figurines, ranging in date from the beginning of the Iron Age II period (c. 1100/1000 BC) to the Late Pre-Islamic Period (up to the 2nd-3rd century AD). With a few exceptions coming from stratified contexts, the majority was found in disturbed, superficial sand layers not linked with any occupational remains.

Nevertheless, all the fragments were studied and will be presented here. Some are of difficult interpretation due to excessive fragmentation, yet all the figurines but one could be identified as representing either horses or camels, despite the fact that more than half of them consists of isolated animal legs that could not be re-joined to the body.

At the basis of these results stands the application of methods traditionally used for pottery studies – such as fabrics characterization and technological analysis – that allowed the inclusion of the figurines into a chrono-typology that is not based solely on morpho-stylistic analysis.

The results show the perdurable fashion of the represented subjects, while highlighting the changing materials and techniques used to create these figurines over time, arguably mirroring the changing taste of the communities to which these products were destined. At the same time, they offer an insight into possible contact with, and influences from, the wider Arabian Peninsula and beyond – finally underlining the importance of this class of "small finds".



Tina Beck (Freie Universität Berlin)

#### What to Do with All These Fragments?

## Challenges and Possibilities of Reconstructing Fragmented

#### Wooden Tomb Statues

This paper is based on my ongoing PhD research on private wooden tomb statues from the First Intermediate Period until the Middle Kingdom from Middle Egypt (Akhmim—Beni Hasan). The study contains 323 objects, or to be more precise, 127 complete statues, 191 fragmented statues, and 5 statues whose state of preservation remains unknown. Clearly, some of the statues are of larger size - some even more than life size. But the focus of this paper is on the small pieces, the imperfect, the fragments. The stages of fragmentations of these 191 statues varies considerably. Some are missing their base, others are acephalous and for some only a single arm or foot is all that remains. In my paper I will first discuss the question when a wooden statue can be considered as fragmented. Is this mere evaluation of a statue only applicable to its material or substance? Or can a statue without an archaeological context also be considered as fragmented? From complete statues and in situ contexts one can see that a statue's appearance and its location within a tomb correlate. I will show the challenges and possibilities when studying fragmented wooden statues, especially those where only an arm or one foot is preserved. In this context I will introduce the structuralistic description method I applied for my research as a basis for an art historical analysis. These results are then put together with the available meta data of the fragment. With this approach I am able to reconstruct the appearance for some of the wooden statue fragments, and based on this reconstruction I am able to discuss their possible location within a burial. Thus, I elevate these fragmented pieces from a mere statistical number to a research object of great interest.



Vanessa Boschloos (Ghent University) Alexander Ilin-Tomich (Johannes Gutenberg-University)

#### Beyond the most obviously interesting:

#### aims and methods in documenting and processing scarabs

Albeit ubiquitous in ancient Egypt, scarabs usually come in small numbers in almost every single excavation. Given that scarab studies is a marginal, not to say esoteric, subfield of Egyptian and Western Asian archaeology, the primary documentation and processing of scarab finds is often performed without considering the full potential research value of these objects.

Since the late 19th century, the interest in scarabs was mainly fuelled by the inscriptions on their undersides, as already expressed by W.M.F. Petrie who considered name scarabs as "the most obviously interesting class" of scarabs (Scarabs and Cylinders with Names, London 1917, 1). The 1970s and 80s saw the rise of comparative studies on decorative motifs. Other features were considered insofar as they could be used to position a scarab within a chronological framework, often thought of as a temporal succession of broad classes. Several classification systems, developed in line with this approach, cover only small segments of the scarab timeline. Such research interests could be served well by the then common line-art drawings of scarab undersides and occasionally of scarab backs and sides.

However, a careful examination of stylistic and morphological features, material and technology can reveal much more information on the production and use of scarabs than previous approaches allowed. New trends are emerging in scarab studies such as fine-grained stylistic analyses focusing on small groups of objects sharing sets of common traits (workshop studies), studies on stylistic imitations of particularly valued kinds of scarabs, and examinations of production processes and use-wear patterns. These new analyses often rely on minute details, previously omitted in descriptions and reproductions of scarabs, including shapes of clypeus and tail, perforation, incision techniques, various discolorations, striations, and other defects.

This turn to the materiality and fine details cannot be sustained without better documentation practices, both in the field and in the museum settings. The paper will discuss different aspects and steps in handling scarabs and substantiate these with case studies demonstrating the research opportunities provided by previously overlooked aspects.



Julia Budka (Ludwig-Maximilians-Universität München)

#### What makes a pottery sherd a small find?

#### Processing re-used pottery from settlement contexts

Re-cut pot sherds are in general common tools with multiple functions at domestic sites, attesting to material-saving recycling processes within Pharaonic culture. The best examples can be found at New Kingdom settlement sites like Qantir, Elephantine, Amarna and Sai Island (see Budka 2020, 193 with references). The most common function is that of scrapers, but re-shaping of ceramics is frequently attested to produce lids. Especially the lower parts of dishes and plates were sometimes re-cut to be used as lids or covers. Furthermore, numerous small tokens or pottery discs made of re-cut sherds are common at New Kingdom sites, but their precise function remains unclear.

Re-used pottery sherds offer many intriguing lines of research, first because of the recycling process and questions related to objects biographies. Second, the multiple function of tools created from re-cut sherds allows to investigate diverse sets of tasks and practises in settlement contexts. Third, lids and covers created from pottery sherds illustrate the blurred boundaries between categories of finds in the archaeological documentation, especially between ceramic small finds and pottery. Lids are also commonly part of ceramic typologies when produced as individual vessels. Can we determine if it made a difference to the ancient users whether a lid was made from a re-used sherd or as a new vessel?

The lecture will address some terminological and methodological issues arising from processing re-used pottery sherds as small finds as well as dating problems. The recording procedure established in the framework of the ERC AcrossBorders project for New Kingdom Sai will be outlined and discussed by means of case studies.

#### Reference

Budka, J. 2020. AcrossBorders 2: Living in New Kingdom Sai (with contributions by Johannes Auenmüller, Annette M. Hansen, Frits B.J. Heinrich, Veronica Hinterhuber, Ptolemaios Paxinos, Nadja Pöllath, Helmut Sattmann, Sara Schnedl and Martina Ullmann), Archaeology of Egypt, Sudan and the Levant 1, Vienna [open access, https://austriaca.at/9783700186922].



Eva Amanda Calomino (Multidisciplnar Institute of History and Human Sciences (IMHICIHU) – National Scientific and Technical Research Council (CONICET), University of Buenos Aires, Argentina)

#### From Special Findings to Domestic Dynamics.

#### Contextual Study of the Small Finds of Tell El Ghaba (Egypt)

In recent years it has been proposed a review and characterization of the small finds from Tell El-Ghaba archaeological site (North Sinai, Egypt), an urban settlement that was occupied between the beginning of the Third Intermediate Period and the early Saite period (10th-7th centuries BC). Tell el-Ghaba was an Egyptian frontier post, located on the eastern border of the Nile Delta. The site was connected to Egypt through the Pelusiac branch of the Nile and to southern Palestine through the coastal plain that stretches between the Suez Canal and the Gaza strip. The evidence suggests that, at least by the beginning of the 9th Century BC the site had already some degree of interaction with the trade network of the Eastern Mediterranean. In this frontier context both people and goods were in movement and interaction, therefore the predominance of small finds of local origin is striking. These objects were recovered in the systematic excavations carried out by the Argentine Archaeological Mission between 1995 and 2010. From a new analytical proposal, a selected sample of special findings was characterized, considering both published data and databases; these objects were classified in categories and subcategories without using function as the primary classification value. From this, the main characteristics of these objects were exposed and the first steps were taken to interpret the small finds from Tell el-Ghaba. In turn, this general characterization allowed, on the one hand, to deal with a large database; on the other hand, to achieve a global approach parallel to an individual approach, according to the characteristics of published catalogs. As a continuation of this line of study, this work addresses the functionalities that these objects would have had and in what types of activities they would have been involved from analyzing the materials in their contexts, linking the small finds with other remains found on the site and in the analyzed structures. Therefore, this work seeks describe, complement and create ways of interpreting the activities from the study of small finds in domestic spaces.



Elizabeth Eltze (University of Auckland, New Zealand)

#### Worker, Warden, or Whatnot?

#### Amannote-erike's shabti in consideration

Within ancient Egyptian burials, evidence of shabti figurines exists from at least the Fifth Dynasty (circa 2494-2345 B.C.E.). By the later stages of ancient Egyptian history, shabtis were a practically ubiquitous part of the burial of any individual who could afford them. This burial tradition eventually made its way south, to Egypt's neighbour and rival, Nubia. Traditionally. Egyptologists have considered shabtis to represent "worker" figures: figurines decorated with a spell that would magically bring them to life to enact duties on behalf of their owner in the afterlife. However, current research indicates that evidence in the Nubian burial context shows that shabtis may have been considered to embody a different function to their role in the ancient Egyptian context. Balanda in particular has made great strides in reassessing the role of the shabti in royal Napatan-period burials. The Napatan king Amannote-erike ruled Kush/Nubia for 25 years in the late fifth century B.C.E. (circa 431-405 B.C.E.). Textual evidence and physical evidence of his reign is rare. In this paper, one of the most significant items of Amannote-erike's scanty, extant burial assemblage – namely his only currently existing shabti – is presented and assessed in light of traditional Egyptological considerations, and in light of Balanda's arguments and of other recent research.



Anna K. Hodgkinson (Freie Universität Berlin)

## A Multidisciplinary Approach to Early and Modern Excavations Carried out at Site M50.14-16 at Amarna

Two seasons of excavation were carried out at site M50.14-16 in the Main City South at Amarna (Middle Egypt) on behalf of the Amarna Project in 2014 and 2017, and an area of c. 520 m<sup>2</sup> was uncovered. The site is located c. 80 m to the south of the house of Ranefer, and c. 35 m south-west of the Grid 12 excavation area.<sup>1</sup> It encompasses two domestic houses within a courtyard to their south, which brought forth large amounts of evidence of industrial activity. M50.14-16 had already been subject to excavations on behalf of the Egypt Exploration Society in 1922, directed by Charles Leonard Woolley, who recognised the site as a workshop, although he only published it cursorily.

Subsequently, the aim of the 2014 and 2017 excavations was to understand the function of, and the relationship between, the two houses and the archaeological evidence of industrial activity, which includes glass- and metal-working, faience production and the manufacture of stone beads, and to position the site within the industrial landscape of Amarna. This presentation therefore discusses some of the results from the new excavations, and the methods used to interpret the documentation of the early excavation carried out at the site in 1922 in the light of its intermittent decay.

Woolley's excavation diary concerning site M50.14-16 displays an initial interest in this "center of glaze-making industry". However, since the season was coming to an end and other tasks were considered more important, the work ended abruptly. Woolley furthermore quickly dismisses the site, as it delivered "very poor results". Subsequently, the single page dedicated to the site in the publication barely mentions the two houses (M50.15 and .16), while the courtyard is described only briefly.<sup>2</sup> Just over 20 objects and some ceramic vessels were noted on object cards and in the publication, catalogued simply by housing unit rather than archaeological context. The 1922 site plan is far from detailed and no photographs were taken.

One of the main features described by Woolley, is a "glaze kiln", and only debris thereof was identified on and below the surface in 2014. Numerous objects were left behind at the site and in adjacent spoil heaps by Woolley's team. By contrast, the modern excavations yielded more than 2,000 small finds, which illustrate domestic and industrial activities,

<sup>1</sup> Kemp, Barry J., and A. Stevens. Busy Lives at Amarna: Excavations in the Main City (Grid 12 and the House of Ranefer, N49.18), Volume I: The Excavations, Architecture and Environmental Remains, and Volume II: The Objects. Excavation Memoirs 90 and 91. London: The Egypt Exploration Society, 2010.

<sup>2</sup> Peet, Thomas E., and C. Leonard Woolley. The City of Akhenaten. Part I: Excavations of 1921 and 1922 at El-Amarna. Excavation Memoirs 38. London: The Egypt Exploration Society, 1923, p. 19.

large amounts of ceramic material, over 65 kg of vitrified furnace debris and c. 23 kg of worked agate.  $^{\scriptscriptstyle 3}$ 

Careful documentation and approaches from Archaeometry, Experimental Archaeology and Digital Humanities are now being carried out on the material by a team of archaeologists. While these focus on the newly excavated material, the 1922 archive and trenches (although poorly documented) are also incorporated into this project, on the one hand in order to understand the extent and impact of Woolley's excavations, and on the other to complete the record of the site. The methods used in this project can be applied to other early archaeological data, and they can help archaeologists gain a more complete picture of sites that have been excavated in the past.

<sup>3</sup> Hodgkinson, Anna K. 'Archaeological Excavations of a Bead Workshop in the Main City at Tell El-Amarna.' Journal of Glass Studies 57 (2015): 279–84; Hodgkinson, Anna K. 'Preliminary Report on the Work Undertaken in the Main City South at Tell El-Amarna: 7 October – 2 November 2017'. The Journal of Egyptian Archaeology 105:1 (2019): 3–15. DOI: 10.1177/0307513319874013.

Tara Ingman (Koç University, Istanbul) Hélène Maloigne (University College London) K. A. Yener (Emerita, University of Chicago)

#### A Forgotten Kingdom of Small Finds -

#### A Bronze Age Legacy Collection from Alalakh in UK Museums

Tell Atchana, Alalakh (Hatay, Turkey), is a pivotal site in the archaeology and history of the Ancient Near East. It has yielded a wide range of locally produced material, as well as imports from Egypt, Anatolia, Cyprus, Mycenaean sites, and Mesopotamia, and it holds a key position in the chronologies of the Eastern Mediterranean. First excavated by C. Leonard Woolley from 1936–39 and 1946–49, the wide range of materials and objects he found are central to the study of the Bronze Age and Early Iron Age.

Similar to many sites in the Middle East before the Second World War, Woolley's excavation profited from antiquities legislation imposed by the European Mandate powers. The site was in the territory of the French Mandate for Syria and the Lebanon until 1939, when the region voted to join the Republic of Turkey. Until then, Woolley was able to divide the finds between the local museum and various museums in Britain. In addition, many objects were left in his excavation house until the late 1990s, when they were transferred to the Hatay Archaeological Museum or the storage facility of the renewed excavation project. This sometimes indiscriminate dispersal of material, especially small finds such as beads, pendants, and clay figurines, has made it difficult to integrate these objects into the on-going re-calibration of the regional and local chronology by the renewed excavations at Tell Atchana.

This presentation will contextualise the importance and the potential of Woolley's legacy material in British museums, the Hatay Archaeological Museum and in the excavation storage. While highlighting the difficulties in accessing, cataloguing and publishing material with little stratigraphical context in ten different institutions in the UK and Turkey, we will focus on the potential of this material. This lies not only in improving our understanding of the Bronze Age, but also in the possibilities of international collaboration between museum curators and collections managers, archaeologists and historians of archaeology in coming to terms with archaeology's entanglements with 20th century colonialism and imperialism.



Camille Koerin (UMR 7044 Archimède – University of Strasbourg, France)

### The cylinder seals as a source of study on the interactions between Egypt and Mesopotamia in the 4th millennium BCE

The question of the interactions between Egypt and Mesopotamia in the 4th millennium BCE is a recurrent issue in the archaeological research of the Egyptian predynastic period since the 19th century. It is the result of the discovery of various oriental elements in the material culture (ceramics, cylinder seals and architecture) and iconography. They are evidence of close contacts between these two civilisations, but due to the lack of archaeological evidence, no one has ever been able to determine how these contacts took place. Recent discoveries both in Egypt, in the Nile Delta, and in the Levant, allow us to look again at the question and to bring new elements to fill the gaps that still exist.

A study of the geographical distribution of cylinder seals, Mesopotamian objects discovered in the Egyptian predynastic layers, would make it possible to define precisely the means by which the Uruk and Egyptian civilisations were able to come into contact in the 4th millennium, despite their great geographical distance. This research is based on an original corpus of cylinder seals discovered in different regions (Egypt, the Levant and Northern Mesopotamia) forming the Near East, during archaeological excavations. In-depth analysis of the objects in the corpus through petrographic (origin of materials), tracery (methods of manufacture) and iconographic studies would make it possible to determine the origin of the artefacts (local or foreign) as well as the route taken by them from Mesopotamia to Egypt through the entire Near East. It is on the basis of this study of the cylinder seals that it will then be possible to determine the points of contact between the different Near Eastern cultures of the 4th millennium BCE.



Nora Kuch (State Museum of Egyptian Art, Munich)

## Puzzling Fragments: Deposits of Stone Vessel Fragments in Context of Early Dynastic Burial Practices

Within archaeological disciplines fragments are omnipresent and have been generally accepted as the result of taphonomic process and therefore as a "typical" state of preservation. Moreover, the fragmentary state of artefacts is remedied by the conventional procedure of reconstruction, and further investigations focus on these reconstructions regardless of the artefacts' factual state. However, the area Operation 4 of the Early Dynastic Cemetery in Helwan displayed several tombs with distinct accumulations of fragmented stone vessels that can only be explained as the result of deliberate fragmentation prior to their deposition. A contextualised examination of these fragments in well-preserved funerary contexts emphasise the depositions of the fragmented vessels as the result of a performative act associated with the closing of the tomb. Depending on the architecture of the tombs, the fragments accumulate in the entrance areas of subterranean chamber tombs or in the spacing between the coffin and the walls of simpler pit tombs. Further, the fragments found in these pit tombs reveal a tendency to be often located in front of the buried body suggesting a probable connection. This specific placement indicates a possible separation of grave goods based on their function, e.g., personal belongings, storage vessels, ritual artefacts, and characterises tombs as ritual spaces with a distinct structure. A comparable functional separation is found in the so-called offering lists of the Old Kingdom, which differentiate between inventory and ritual objects. Additionally, these lists can contain ritual instructions, including the ritual of breaking the red pots as earliest written evidence of a deliberate practice of fragmentation. So, this paper pleads for a more contextualized view on small finds. Although an individual study of small finds is essential to questions of material culture, it is only in their context that artefacts can be considered as part of actor-networks and allow inferences about human interaction.



Robert Kuhn (Ägyptisches Museum und Papyrussammlung Berlin)

#### More than 20.700 fragments of stone ...

## The convolute of stone vessels from the tomb of king Dewen at Abydos

Stone vessels can be found in large quantities in royal tombs and those of the highest elite during the 1st and 2nd Dynasty. An example of this is the convolute of more than 20.700 fragments of vessels found during the excavations of the German Archaeological Institute inside and around the tomb of King Dewen at Abydos. Due to the problematic history of the site, the assignment of these fragments to this very tomb is sophisticated. In case of the Dewen-tomb, traces of secondary burning of the objects may help in this matter. The second firing process led to a discoloration of the fragments and even to mineralogical alterations. Therefore it is sometimes difficult to determine the geological mineral or stone with precisely. This is of course a problem since the assignment is the basis for important economic questions connected to transportation, trade networks etc. Even though many resources of stones in Egypt are known, yet almost no resources of the Pre- and Early Dynastic mining can be ascertained.

When working with the fragments themselves the biggest problem concerning the assignment of the vessels is that the majority of the convolute represents non-diagnostic fragments. Furthermore, the designation of the diagnostic material is problematic as well due to their fragmentation (small) and production (hand-made). Therefore, it was decided to work with a slightly smaller and rougher corpus of forms. In the past 100 years many different typological studies have been performed – starting with W. M. Flinders Petrie. However, working with these typologies is very difficult, as they usually lack a clear definition of the forms, e. g. especially for the open forms such as platters, plates, bowls and cups. To avoid this problem, the typology for pottery based on the vessel-index introduced by Holthoer is to be preferred.

In addition to typological aspects, the technical questions of the manufacturing process play an important role. Since only very few workshops and store rooms have been archaeologically discovered, most of the information can be obtained by studying the material of the early Dynastic stone vessel itself.



Maciej Makowski (Institute of Mediterranean and Oriental Cultures of the Polish Academy of Sciences [IMOC PAS])

## Quantitative approach to definition of the local traditions

and trajectories in material culture of Near East:

a case study of coroplastic arts from 3rd millennium BC

#### Mesopotamia

What is referred to as small finds give invaluable insight into an ancient material culture. Those which have survived in huge quantities could provide an opportunity to trace some general, repetitive, and long-lasting patterns, both for a site and a region, but also on a cross-regional level. However, the traditional typological approaches towards systemising such objects do not always yield satisfactory result in this respect, especially when dealing with material from a large area or the chronological scope of the research is extensive. In conventional methods, large numbers of objects representing a given category of finds remain beyond the framework of broad comparative analysis and are therefore invisible. As a result, in studies aimed at defining local traditions and trajectories in material culture, a shift towards a quantitative approach can be suggested. The coroplastic arts of 3rd millennium BC Mesopotamia will be discussed as a case study, namely two of the most abundantly attested categories of terracottas: anthropomorphic and zoomorphic figurines. The analysis aims at determining the structure and general characteristics of the collections of figurines from particular sites by observing two main factors: the proportions between the anthropomorphic and zoomorphic figurines and between the different kinds of animals among the zoomorphic figurines. The research is based on material from thirty sites distributed throughout Mesopotamia. The results obtained for particular sites will be comparatively analysed on a regional and supra-regional level to trace possible chronological and geographical patterns in the structure and characteristics of terracotta collections.



Martin Odler (Czech Institute of Egyptology, Faculty of Arts, Charles University, Prague) Jiří Kmošek (Institute of Science and Technology in Art, Academy of Fine Arts Vienna; Nuclear Physics Institute, Academy of Sciences of the Czech Republic, Řež)

#### Realities of Metalworking Life on the Middle Kingdom

#### **Elephantine Island**

Egyptian archaeology is often attuned to the size of things: if something is big, it must be important. That superficial observation is also valid for copper metallurgy, thus the most relevant findings must come from the large uncovered metalworking installations, such as the Old Kingdom Seh Nasb, Middle Kingdom Ayn Soukhna, and New Kingdom Qantir/Pi-Ramesse. We would like to argue in this paper that regarding the metalworking remains, size is not that important. Extraordinarily small finds can contribute to the wider debate as much as, or even more, as big installations. Because the most important and precious products of such installations are, nevertheless, gone.

The several excavation seasons of the Realities of Life project, led by Johanna Sigl (German Archaeological Institute, Cairo department), focused on a small part of the Middle Kingdom settlement on the Elephantine Island. The main deposits are datable from the Eleventh to Thirteenth Dynasty, and meticulous excavations allow us to focus on the minute details of the day-to-day past reality. Among the uncovered finds were several hundreds of rather small green copper "blobs", apparently coming from the metalworking. The production must have happened elsewhere in the settlement, as no metallurgical installations were identified in the trenches. The true nature of the corpus was uncovered with the use of portable XRF machine Niton XL3. Almost 500 unique spectra were produced, and material from all stages of the metal production was identified, from the ores, through the prills and slags, i.e. metallurgical waste, to the finished artefacts. The specific alloys represented are predominantly arsenical coppers, and there are also early tin bronzes. All measured samples were also weighed and described, and in combination with the archaeological contexts, a diachronic and synchronic synthesis can be produced.

The processing of the data continues, we would like to present the available preliminary results in this paper. The main take-out message that we would like to convey: very small finds that appear insignificant on the first sight can also provide important pieces of evidence, in our case on the metalworking processes in a Middle Kingdom thriving settlement.



Jean-Pierre Pätznick (Chercheur et Membre Scientifique Associé, UMR 8167 CNRS Orient & Méditerranée, Laboratoire "Mondes pharaoniques", Centre de Recherches Egyptologiques de la Sorbonne - CRES, Sorbonne Université, Paris IV)

#### The royal engraved marbles of the First Dynasty

Attention is particularly drawn to a group of artifacts that is absolutely unique. These are small stone marbles 1.4 cm to 1.5 cm in diameter. All of which have been engraved with the Horusnames of most of the rulers of the First Dynasty, which further reinforces its interest and uniqueness, but of course also raises many questions. As we know nothing about the find of such engraved stones marbles in the royal necropolis in Abydos and in Saqqâra or elsewhere in Egypt, what may have been the function of these royal stone beads? Were they part of the functary ritual of the sovereigns of the First Dynasty? Unless these royal marbles are to be understood in a completely different, much more prosaic way.



Silvia Prell (History of Architecture and Building Archaelogy/TU Vienna; visiting scientist ÖAI/ÖAW)

### Hard to Pin Down – Clothing Pins in the Near Eastern Bronze Age with Focus on Middle Bronze Age Tell el-Dab'a/Egypt

So-called 'toggle pins' are a common find, not only in the Middle, but already in the Early Bronze Age. When found in tombs, they can accompany males and females and the common opinion is that they held together a burial shroud, or specifically the garment of the deceased. The first metal toggle pins appear in the Chalcolithic Period, mainly in south-eastern Anatolia. They became common in Syro-Mesopotamia from the middle of the Early Bronze Age onwards. Most of the earliest examples are unperforated, but a few perforated specimens are attested already from the end of the 4th millennium BCE. Clothing pins were introduced into the southern Levant at the end of the Early Bronze Age, but perforated pins are few in number, getting common only at the beginning of the Middle Bronze Age and are then widely diffused in the region until the end of the period. Plain pins and pins with cylindrical heads and ribbed decoration are the most common types at Tell el-Dabla and the rest of the Eastern Delta, where pins do not show as much variety as those from the southern Levant. In all, forms are guite comparable and spread across a wide area, which is not astonishing as the shape is designed for a specific practical use. Nonetheless, distinct forms, decorations or materials might point to a common cultural background of the owners, especially as clothing pins are an entirely non-Egyptian type of object.



Jana Richter (Westfälische Wilhelms-Universität Muenster, Ludwig-Maximilians-University Munich)

## Finding Meaning in Microdebris: Challenges of working with very small finds at an Iron Age site in Iraqi Kurdistan

The study of microdebris distributions, also called Heavy Fraction or Heavy Residue analysis, is drawing increasing attention as part of the methodical portfolios of modern excavation projects in the Middle East. At sizes between 1mm and 2cm, little fragments of ceramics, faunal or other materials are hoped to have escaped cycles of cleaning or other formation processes of curation or secondary refuse. Due to their most instant deposition they could thus offer insights into locations of past activities - or at least more probably so than larger (small) finds.

With this perspective in mind, the München/Münster-based Peshdar Plain Project has adopted a systematic sampling strategy right from its onset in 2015: by 2021, more than 1.200 flotation samples have been collected from different contexts in the Iron Age Dinka Settlement Complex (DSC) in Iraqi Kurdistan, reflecting the contents of all recognizable suprafloor deposits as well as other locus types for comparison. With such abundant microdebris material, questions both of knowledge and of methodology can be adressed: were there common spatial principles structuring life and work within the settlement? And do any of these show exclusively in the microarchaeological record – or, put differently, under which conditions does 'looking closer' onto the smallest finds indeed reveal qualitatively new information?

Challenges in this endeavour are posed by the large quantities of fragments (reaching tens of thousands of pieces), workflow design (sampling protocols on excavation; biases in sorting decisions; mutual integration with pottery, small finds and other experts' analyses), site-specific characteristics (e.g. friable local pottery fabrics as opposed to hard flint debris, decreasing comparability with previous studies), as well as the need for developing innovative formats of documentation and publication.

Drawing on my PhD study of the Heavy Fraction material from the DSC, this paper aims to summarise such concerns and present reflections on microdebris as a source of information on daily life patterns in an ancient settlement, regarding both its limitations and its possibly unique insights.



Aaron Schmitt (Universität Heidelberg)

## Uncovering the potential of early 20th century excavations in Mesopotamia: Ur and Ashur as case-studies

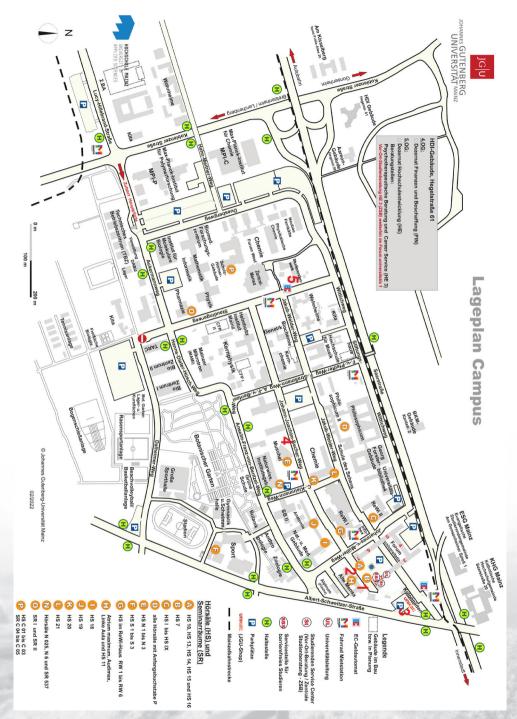
The sites of ancient Ashur (in northern Mesopotamia) and ancient Ur (in southern Mesopotamia) were excavated in the beginning of the 20th century and in the 20s and 30s respectively. At both sites archaeologists worked for several years and uncovering large areas of the ancient settlements. From the 3rd until the 1st millennium BC, both Ashur and Ur were important cities that functioned as capitals and major cult centers for most of its occupation. So in principle, the excavation results should have offered a plethora of important information on various aspects of ancient Mesopotamian cultures. In my research, I focused on investigating the cultural memory of ancient Mesopotamian societies. Ur and Ashur seemed to be two ideal sites for an investigation of this field of study. What remained to be clarified, however, was in how far the results of the early excavations would provide reliable data which would be adequate as a basis for the application of rigorous methods. In my presentation, I will give an overview of the documentation methods and the publication strategy of both excavations. I will lay out how I approached the problem of early excavations are still a potent source which can inform 21st century research.



#### Cafeterias and restaurants on the university campus

- 1 Baron mediterranean and lokal dishes mo-fri, 10–3:00 and sa 12:00–03:00 Johann-Joachim-Becherweg 3
- 2 QKaff Kulturcafé international and German snacks mo-fri 9:30-open end, hot food 11:30–14:00 Johann-Joachim-Becher-Weg 5
- 4 unikat Werners Backstube und JGU Uni-Shop sandwiches, snacks, coffee mo-fr 8:00-18:00, sa 8:00–15:00 Kolonaden, Eingangsbereich Forum Jakob-Welder-Weg 1
- 4 Diwan oriental food: falafel, moussaka etc., pizza and pasta mo-fri 11:30–18:00 Johann-Joachim-Becher-Weg 23a
- 5 Bali Bistro Burger, Pokebowls, indonesian and asian food and more mo-fri 11:30–22:00, sat-sun 13:00-21:00 Dalheimerweg 2

40



Notes