Introduction: Expanding the 'Extra' in the 'Ordinary'

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1 Background and aims of "Excavating the Extra-Ordinary 2"

Every archaeological project uncovers small finds, be they tools, vessels, figurines, jewellery, or models. Time and again these finds are so common and 'ordinary' that their potential for deeper insight is grossly underestimated. Often these finds are fragmentary, found in disturbed contexts, or occur in such large quantities that their recovery and analysis is a Herculean effort. In many cases only a small selection of such finds is adequately presented in final publications. Museums and collections frequently contain small finds from early excavations or from the art market whose contexts are not (sufficiently) documented or whose provenance can no longer be determined. Nevertheless, all these finds can provide invaluable scientific knowledge if researchers dare to take them on. In 2019, the workshop "Excavating the Extra-Ordinary. Challenges and merits of working with small finds", initiated by Monika Zöller-Engelhardt and Andrea Kilian, provided a first platform for excavators, museum staff and personnel from universities and institutions on all career levels to exchange ideas about methods, *modi operandi* and best practices, with a focus on dealing with largely disturbed contexts, managing large quantities of finds, identifying specific items in mixed groups, and coping with inconclusive results. The conference proceedings of this first workshop with more than fifty participants from all over the world and fifteen presentations resulted in a conference volume[1] that was published in 2021. This first fruitful conference and publication showed that there is still a great demand for this kind of exchange, so a continuation of the "Excavating the Extra-Ordinary" workshop format seemed useful.

"Excavating the Extra-Ordinary 2" aimed to continue and broaden the discussion on challenges and merits of working with small finds. Again, we wanted to bring together scholars from all areas of object-centered work and material culture, be it fieldwork, museological expertise or university staff as well as independent researchers. Since archaeological work and the exchange on methodological questions benefit greatly from interdisciplinary exchange, it was a great gain to extend the team of organisers with Alexander Pruß, whose expertise in Near Eastern

1 Kilian/Zöller-Engelhardt 2021.

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Archaeology complements the research questions on small finds in archaeological work. Once again, our broad understanding of 'small finds',[2] generated a great response, resulting in a two-day workshop with over fifty participants and seventeen papers. The keynote lecture by Aaron Schmitt, University of Heidelberg, on the potential of analysing records and findings from early excavations at Ur and Ashur, as well as four impulse papers set the tone for the lively discussions during the event.

Still, the focus of ongoing discussions lay on methodological challenges and the comparison of strategies and methods for dealing with all kinds of (extra-)ordinary archaeological objects. Participants were motivated by the challenges of working with large quantities of finds, insufficient early publications, or dealing with objects without context. Some new perspectives that were discussed included, to name just a few, microdebris, multidisciplinary approaches, and the re-use of objects. The present publication captures many of these aspects and we are grateful for the opportunity to include them in this volume.

2 Definitions and points of discussion

Monika Zöller-Engelhardt

During the previous "Excavating the Extra-Ordinary" workshop and in the conference proceedings, we initiated the topic with a brief discussion on the definition of 'small finds'. Since the introductory remarks were far from exhaustive, the subject shall be introduced here from a slightly different perspective.

While preparing an accompanying seminar on small finds in the winter semester 2022/23, the author found this rather unsatisfying definition of 'small finds' on Wikipedia:

> "Small finds is an archaeological term for artifacts discovered on excavations which are **somewhat special compared with the common finds** for that type site or type phase on multi phasic sites. The special nature of the find is dictated by research agendas and the information the artifact can provide. Examples of the increased importance of small finds over other finds would be coins being often thought of as small finds whereas pottery sherds as just finds. The reason is coins can be much more specific when it comes to dating evidence. Small finds are usually treated differently in the recording system; often they are recorded on plan rather than being attributed to a single context like other generic finds."[3]

2 Cf. Zöller-Engelhardt/Kilian 2021: viii–xvi.

3 https://en.wikipedia.org/wiki/Small_finds (accessed 24.11.2022), emphasis by MZE. In the meantime (March 2024), the Wikipedia article has been updated four times, but the content has remained largely unchanged. Several requests for citations have been added.

In response to definitions like these, it seems risky to regard one group of finds as more special than others, since it can result in uneven priorities in the consideration and analysis of various groups of finds on a site or in a museum. Consequently, it can distort the interpretation and perception of the context, as demonstrated in some older publications.[4] It is not entirely accurate to claim that a coin systematically holds more scientific value than a pottery sherd, a terracotta figurine, or a wooden fragment. These objects, often referred to as 'common' or 'generic' finds, are far from 'ordinary'. In fact, investing time, resources, and energy into analysing these 'ordinary' finds can lead to quite extra-ordinary results.

However, defining the term '(small) find' still presents a definite challenge. While already early researchers as William Matthew Flinders Petrie separated "small objects"[5], archaeological introductions mostly define terms like 'artifact', which is, however, often in contrast to a broad definition of 'find' or 'small find'. A definition of '(small) find' should include objects, or maybe more accurately *things*,[6] that may not necessarily fall under, for example, Renfrew and Bahn's characterization of artifacts as "[a]ny portable object used, modified, or made by humans; e.g. stone tools, pottery, and metal weapons"[7]. A find is only considered a find through the process of finding it. The item exists as a material (or even non-material)[8] entity without human intervention, but only gains its status as a find through human-thing-interaction.[9]

Therefore, in accordance with the workshop title, 'small finds' are here understood in the broadest sense, including pottery, fragmentary objects, botanical remains, or micro-debris. The one requirement for the broad concept is that the object (or thing) must be discovered by humans in a specific (in this case, archaeological) context to be viewed and analysed as a 'find'. Thus, also stone vessels, (re-used) pottery sherds, or fragments of wooden statues as well as metal 'blobs' belong to this category.[10] The term 'small' is also unclear and subjective. While it may certainly apply to most pottery sherds, coins, terracotta figurines, or wooden funerary models, it could be used, for example, for fragments of larger entities such as pieces of architecture (but not an entire building), or elements from a chariot (but probably not the entire wagon).

4 Cf., for example, the unbalanced ratio of small finds and pottery depicted in publications by William Matthew Flinders Petrie, as exemplified by Henning Franzmeier (Franzmeier 2021).

5 Petrie 1927.

6 For a comprehensive discussion on the German terms "Ding", "Sache", "Gegenstand" see, for example, Hahn 2014: 18–21; on "Artefakte", "Fund(stück)e", "Gegenstände", and "Objekte", see Keßeler 2016: 343–345. On thing theory in general, Brown 2004; Brown 2015.

7 Renfrew/Bahn 2015: 338. Against the definitional value of the term "portable object" see Tsouparopoulou/Meier 2015: 52, who state "Mit der Frage nach einer notwendigen Materialität von Artefakten geht auch die Frage ihrer Transportabilität einher [...]. Zumeist bezieht sich der Begriff ‚Artefakt' auf spezifische, bewegliche und normalerweise mobile Dinge, wobei für uns nicht erkennbar ist, woher dieser Konsens rührt. Die Auffassung, Artefakte müssten mobil sein, so dass es sich dabei um eher kleine Dinge handelt, schließt jedenfalls eine Vielzahl anderer materieller Dinge, die gleichfalls menschlichen Eingriffen unterlagen, aus (v.a. Immobilien und insbesondere Architektur), obgleich diesen definitorisch ebenso Artefakt-Status zugesprochen werden könnte."

8 Cf. the discussion in Tsouparopoulou/Meier 2015: 51–52 with further references.

9 In the terms of Hodder 2012. For a perspective informed by Actor-Network-Theory cf. Fitzenreiter 2023.

10 See examples for these in this volume by Robert Kuhn, Julia Budka, Tina Beck, and Martin Odler/Jiří Kmošek.

Fig. 1: Ancient Egyptian adze (New York MMA 96.4.7); © The Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/547562 (accessed 12.03.2024)

In addition to the definitional questions, it is important to acknowledge that working with small finds presents unique challenges for researchers. The so-called common finds, such as pottery sherds, are abundant on excavation sites, but they are often fragmented, found in disturbed contexts, re-used, discarded, or lacking provenance. Here, it is particularly useful to discuss methodological approaches, theories, and best practices to fully utilise the great potential of these challenging finds.[11] Fortunately, in recent decades, archaeological research has again made significant progress in analysing, interpreting, and processing small finds. New approaches to material culture have been tested to overcome one-dimensional ways of thinking.

In addition to new scientific methods and technological possibilities, there are new conceptual frameworks such as agency,[12] affordance,[13] entanglement,[14] and the concepts of assemblages,[15] object biographies,[16] and other areas of the 'New Materialism'.

When using concepts of the New Materialism, one question that arises is the shift from asking what something *is* to what something *does*.[17] This approach allows for a broader understanding of objects beyond their 'primary function' – or presumed primary function – enabling the ascription of multiple functions and contexts to material culture. As Rune Nyord has pointed out, Egyptology tends to "decontextualize artworks to study them according to purely iconographic and stylistic criteria"[18]. The same can also be said for analysing small finds. When

11 The same can be said of unprovenanced finds in museums, cf. Stevenson 2019.
12 See, for example, Hodder 2012.
13 Knappet 2005; Fox et al. 2015: 63–70.
14 Hodder 2011; Hodder 2012.
15 Harris 2021: 10 (after Deleuze/Guattari 2004).
16 Kopytoff 1986; Harris 2021: 10. In Egyptology see, for example, Meskell 2004.
17 Cf. Harris 2021: 20.
18 Nyord 2020: 3.

Fig. 2: Reconstruction of a foundation deposit from the time of Hatshepsut and Thutmose III (New York MMA 25.3.39); © The Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/544457 (accessed 12.03.2024)

looking at an object (Fig. 1), we might spontaneously categorise it as a tool and attempt to determine its primary function and method of use, potentially in a workshop or construction crew, and maybe try to reconstruct how it ended up in its current find spot.

When considering the same object in context (Fig. 2), we would clearly associate a different function and different background for the deposit. In the context of a foundation deposit,[19] the item serves a different function that is connected to ritual or religious-magical practices. This does not necessarily render it dysfunctional for its assumed 'primary function', as may be the case for models used as representations in foundation deposits.[20] However, it allows for a much broader perspective on the intention behind its creation and its object biography.

This approach can be expanded further. Regarding the relations of objects against the background of new concepts offers even broader possibilities of analysis and interpretation. For

19 A foundation deposit is a "type of votive offering placed in or beneath the foundations of a building or in its vicinity at the time of its founding", Weinstein 1973: xix. In ancient Egypt, it typically contains miniature tools, vessels, and further model objects connected to the rites of the foundation ceremony.

20 Cf. the discussion of the functionality of funerary models in Zöller-Engelhardt 2022: 155–159, esp. fn. 25.

instance, relations between humans and things, but also – in the words of Ian Hodder[21] – between things and other things as well as things and non-human entities. In the ancient cultures, these entities could include gods and goddesses, spirits, souls, or the deceased.

In recent years, there has also been significant interest in the interdependencies between objects and groups of humans or entire societies. Even the notion that humans must interact with material culture as a prerequisite for learning about the past has been challenged.

In his 2021 book "Assembling Past Worlds", Oliver Harris discusses seven challenges facing modern archaeology in developing not only a post-processual, but a post-humanist approach:[22] He recommends that scholars adopt a post-anthropocentric perspective, embrace the vibrancy of matter, acknowledge the significance of relations, process, and history, while still hold on to things themselves in their own right. Additionally, the author states that it is important to acknowledge that things can be more-than-representational, that researchers should work at multiple scales, and be open to creating new (especially non-western) concepts.

Scholars of Ancient Studies, particularly in Egyptology, may most likely observe a connection to the concept of more-than-representational, which is inherent in many aspects of Ancient Egyptian funerary culture. In the Egyptian funerary culture, texts, depictions, and physical objects create a transcendental reality that is not simply a representation of the real world, or the idea of a physical place that exists elsewhere. Instead, they convey complete concepts such as transformational and liminal processes, which are expressed as specific manifestations in the material culture. For example, Nyord discusses a specific type of Ancient Egyptian image, referred to as *sšmw*.[23] This image can be realised as three-dimensional sculpture in the round, that means a statue, but unlike other types of images that may be representations of the tomb owner and be part of the ongoing funerary cult, *sšmw* figures were not intended to be interacted with,[24] on the contrary: they were meant to be kept hidden and secret, secluded from the funerary cult after the deceased was interred. The function(s) of these objects is not to represent a real-world reference and act as a proxy to receive offerings or recitations. Instead, they serve to materialize the processes of 'guiding' and 'leading' the deceased, as implied by Egyptian funerary texts. As such, a material object acts as the focal point of a complex more-than-representational concept.

Without discussing all the challenges posed by Harris, a brief exploration on the idea of adopting a post-anthropocentric perspective may advance the understanding of pre-modern societies. From an ontological point of view, it can be challenging for humans to avoid perceiving everything else as a collection of non-human entities that require our input, handling, or consideration to have an impact or effect (Fig. 3). It is worth reflecting on how the world, in this case particularly the world of material objects, has influenced the development of not

21 Hodder 2011; Hodder 2012.
22 Harris 2021: 21–40.
23 Nyord 2020: 12–16.
24 For human interaction with statues regard, for example, the ritual of Opening the Mouth, on this recently Quack 2022.

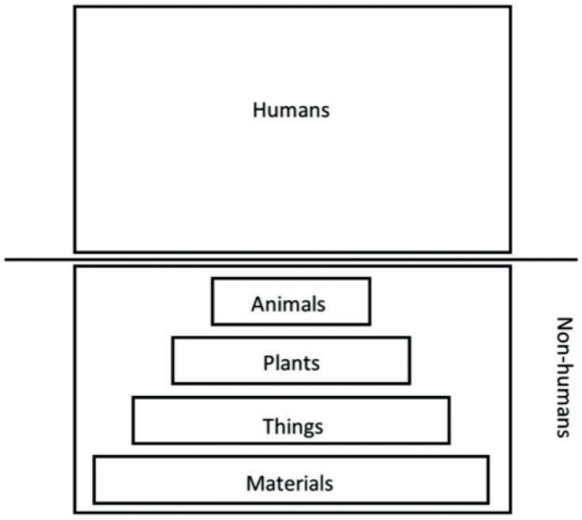

Fig. 3: Ontological elevation, after Harris 2021: 25, fig. 2.1.

only humans but also animals, plants, and objects in the past and present. A contemporary illustration is the smartphone, which has had a substantial influence on an entire generation since its invention two or three decades ago.

Ontological research has shifted the perception of this former dualism to considerate modes of being in a new way.[25] Harris provides the example of groups in Amazonia who conceptualize the world as highly animated.[26] They state that animals and people share a similar soul, which allows powerful humans to transform into animals. In the scientific modern western world view, this idea may be categorized as a 'local belief', which is an obstacle to a full understanding of this alternative conception of the world.[27] As Harris emphasizes, these observations are not solely about what people believe: motor functions of human hands can change in response to the tools they use; even the structure of the brain can be affected by learning new skills and interacting with physical objects or the surrounding world.[28]
Therefore, the analysis of small finds does not only open a window to understanding the past in terms of the manufacture, use, and disposal of things, but also prompts us to consider the nature of objects, what they actually are, which power or agency they emit and how these different perspectives can contribute to gain a more comprehensive understanding of the past. Or, as Amiria Henare, Martin Holbraad, and Sari Wastell observe:

25 Cf. Nyord 2020: 4.
26 Harris 2021: 23.
27 In this context it is worth noting that especially Ancient Egypt is well-known for its animal-headed gods and goddesses. This may suggest, as Nyord states, following Philippe Descola, "the presence of underlying connections and analogies between the different kinds of living beings." Nyord 2020: 5.
28 Harris 2021: 23.

> "So, if the first step to 'ontological breakthrough' is to realise that 'different worlds' are to be found in 'things', the second one is to accept that seeing them requires acts of conceptual creation – acts which cannot of course be reduced to mental operations (to do so would be merely to revert to the dualism of mental representation versus material reality). On this view, anthropological analysis has little to do with trying to determine how other people think about the world. It has to do with how *we* must think in order to conceive a world the way they do."[29]

This section of the introduction concludes with another definition of 'small finds', however, found in the Turkish variant of the Wikipedia article on the subject. It demonstrates a slightly better grasp of the concept and the organizers of "Excavating the Extra-Ordinary 2" especially wish to echo the final statement:

> "Small finds is the archaeological term **given to a large number and variety of small objects** such as pins, buckles, earrings, beads, pens, etc. made of various materials and used in daily life by historical peoples, as well as connecting parts used in furniture and architectural components. Depending on the use of the object, these materials are made of metal (gold, silver, bronze, iron, copper, lead, etc.), terracotta, bone, leather, stone (marble, alabaster, crystal, other precious and semi-precious stones), wood or glass. Since the processing of the materials used in small find groups varies, having information about the construction techniques of each material group is an important element in the periodic and typological studies of the materials. **By studying small finds in archaeological excavations and research, it is possible to obtain a lot of information about the social, religious, cultural and daily life of the civilization uncovered by excavations**."[30]

Case Study 1: Pottery

Andrea Kilian

As previously outlined, the question of the proper definition of 'small find' remains a matter of controversy. In particular, the status of the category of 'pottery' within this definition is a point of discussion.[31] We have determined that pottery should be included in this category due to the fact that many of the challenges associated with its treatment are similar to those encountered in the majority of other categories of 'small finds'.

29 Henare/Holbraad/Wastell 2007: 15.

30 https://tr.wikipedia.org/wiki/Küçük_buluntu (accessed 24.11.2022) emphasis by MZE, translated to English using DeepL. The article has remained unchanged (March 2024).

31 As already mentioned in Zöller-Engelhardt/Kilian 2021: ix.

Fig. 4: Keg from Kharga, early Ptolemaic (according to Gill 2020), Metropolitan Museum of Art Acc. No. 25.10.20.266, © Rogers Fund, 1925

When dealing with pottery, the 'fuzzy boundaries' between different object categories become apparent from the very beginning. A particularly illustrative example can be found in Julia Budka's contribution in this volume on the re-use of pottery, which also addresses the question of how to categorize the finds. Is a re-used sherd an object in its own right, or does it still belong to the category of 'pottery' in the broadest sense? Who decides on this matter, and what are the consequences? A comparable issue arises with ostraca and inscribed vessels. It is not necessarily obvious from the beginning whether an inscribed sherd is an ostracon or if it details information related to the vessel resp. its content, as is the case with e.g. *tituli picti*.

While an ostracon provides additional information not related to the sherd or the vessel from which it originates, the *tituli picti*[32] supplement the information gained through the study of the pottery, as they provide information related to the vessel such as the name of a recipient, the products once contained in the vessel, or the place of provenance etc.[33] So, while the ostracon will be of interest to linguists and philologists, the *tituli picti* are quite standardized and not of similar high interest to them concerning grammar and topic. However, a ceramologist will be able to 'read' the inscribed sherd, be it an ostracon or *tituli picti*, and provide additional information such as a relative date of the sherd, the vessel type that it belonged to, information on the manufacturing processes, whether it is an import or an imitation of another vessel type, etc. – information that cannot be gained through the study of the text alone. As Budka points out, it is essential to combine the strengths of both viewpoints to gain a comprehensive understanding of the information that can be gleaned through the study of objects.

32 On *tituli picti* and the information they can convey, see e.g. Chaufray/Redon 2020: 168–169.
33 Chaufray/Redon 2020: 169.

When working with small finds, some of the basic questions to be answered concern material, time and usage. I will address some of these questions using the example of *kegs*[34], a distinctive vessel type from the oases of Kharga and Dakhla (Fig. 4), in order to illustrate the challenges that arise when addressing seemingly straightforward or ordinary questions such as:

- Design of the object in question
- Manufacture
- Fabric/Material used for designing the object
- Chronology (still one of the main questions pottery specialists are being asked about)
- Function
- Recycling

The *kegs* under discussion originate from Gebel Asyut al-gharbi, Asyut's western mountain. It is situated in Middle Egypt, right between Cairo and Luxor, and is located on the west bank of the river Nile, opposite the modern town of Asyut. The mountain has been utilized by humans from at least 3000 BCE until today and has served different functions over time, including as a necropolis, quarry, military area, and more.[35] Moreover, the site has been subjected to both authorized and illicit excavations, which have resulted in the area being in a severely compromised state. This is especially evident when dealing with pottery, because the discovery of complete vessels is the exception, and most times, even the sherds retrieved from the same context do not match, not even if they are from approximately the same time span. Sherds from various epochs of the ancient Egyptian history are scattered throughout the entire mountain area, which presents a significant challenge to the work of a ceramologist.

Gebel Asyut al-gharbi is one of the locations in the Nile Valley where pottery from the oases of Khargha and Dakhla was found in significant quantities.[36] The sherds originate from numerous vessels that have been identified as *kegs*. To date, over 1,200 sherds belonging to this vessel type have been discovered, collectively weighing approximately 75 kilograms. As is characteristic for the material retrieved from Gebel Asyut al-gharbi, none of the vessels was found complete and the majority of the sherds did not match.[37] The sherds are widely dispersed all over the mountain; however, more than 50% originate from the area in and around the so-

34 On this vessel form, see e.g. Hope 2000; Aston 2007: 441–442; Marchand 2007: 491–492.

35 Kahl 2007: 59 and Kahl 2012: 9–22. Since 2003, the Gebel Asyut al-gharbi has been examined by a joint Egyptian-German Team under direction of Jochem Kahl, Ursula Verhoeven, Mahmoud El-Khadragy, Mahmoud El-Hamrawi, Ahmed Alansary and Mohamed Abdelrahiem. The following results have been achieved within the German-Polish project "Ancient Asyut – centre of ancient trade" within the framework of the Beethoven Classic 3 founded by the German Research Foundation and the National Science Centre under the dircection of Jochem Kahl and Teodozja I. Rzeuska.

36 Rzeuska 2017: 647, stressing the high number of sherds found in Asyut in comparison to other locations in Egypt (ibid. 649).

37 With the exception of one keg that was discovered in 2023 from the tomb of Mesehti, clearly in secondary find position because in 2022 the shaft it was found scattered in and around was almost empty, whereas it was completely refilled when work started in 2023. It also differs noticeably in its clay composition and surface color, the latter being a bright orangey-pinkish color easily detectable among the sherds. A similar phenomenon is noted by Dixneuf 2011: 144 for the regions of Peluse and northern Sinai.

called Tomb of the Dogs, which also yielded ostraca, papyri, and pottery from the Ptolemaic and Roman periods,[38] as well as some burials, which are believed to date to this period,[39] in the adjacent area.

Design and manufacture

A *keg* is a barrel-shaped vessel with a long or short neck. In the initial stage of today's production, the vessels are manufactured in a manner analogous to that of a beaker, employing a turning device.[40] The completed vessel is then closed at both ends and turned sideways. A hole is subsequently created in the middle of the container, and a rim is added to this hole on the side.[41] This means that, in this case, the rilling marks on the body are *not* parallel to the vessel's mouth, a phenomenon that is also observed in ancient vessels. This is a rare feature among clay vessels that have been turned, and thus stands in stark contrast to the majority of other contemporaneous ancient Egyptian vessels. The surface of the *kegs* is smoothed over with the hands which creates a distinctive pattern that was so characteristic that it was also imitated on *keg*-shaped vessels made of Nile clay.[42]

Challenge 1: fabric

The fabric is quite distinctive because of its reddish color, but comparing the Asyuti material to those from the oases can sometimes be challenging[43] when it comes to publications, because of the resolution, printing quality, color or black and white photos etc. – a challenge inherent to all clay-produced objects. Nowadays, there are better possibilities to share color and high-resolution photos, but when it comes to earlier publications, this is sometimes quite a challenge. Another challenge is perception: although there are tools that help to describe pottery fabrics,[44] there will always be differences in the description from one scholar to another.

The importance of fabric cannot be overstated. It can provide clues to production sites, sources of raw materials, how and whether they were traded, whether only the finished product

38 On the Tomb of the Dogs see Kitagawa 2016. On ostraca and papyri from this tomb see Vittmann 2016. On pottery see Rzeuska 2012: 221–223.

39 Prell 2011: 195.

40 The exact manufacture process is under debate: while some suggest a three-stepped approach (two parts are joined to form the body and in a third step the rim is added), others vote for a two-staged process (the body is formed in one go by hand and then the rim is added in a second stage). For references concerning the production mode see Henein 1997: 125, who also describes the two-staged manufacturing process used by modern potters, Henein 1997: 120–125.

41 Hope/Eccleston 2000: 189 suggest that animal skins used as water containers could probably have inspired the creation of the special form of the kegs.

42 Rzeuska 2017: 651.

43 Also emphasized by Rzeuska 2017: 649.

44 See e.g. Orton/Hughes 2013: 282, fig. A.4 showing the percentage inclusion estimation charts after Mathew, Woods and Oliver 1991, or the Munsell Soil Color Chart for describing color values.

or its contents were traded, technological developments, e.g. new recipes for pastes or innovations in kiln technology, and so on. It also provides important clues to the *chaîne opératoire* of an object, as Camille Abric, Maria Paola Pellegrino, and Michele Degli Esposti demonstrate in their contribution in this volume on clay figurines, where they expertly demonstrate how a pottery study approach can be applied to clay figurines.

This is true not only for clay and pottery, but also for metalworking, as Martin Odler and Jiří Kmošek show in their article on metalworking on Elephantine. Through meticulous study of even the smallest fragments they were able to demonstrate that not only were metal products used on Elephantine Island, but that the finds cover all stages of the production process of copper, which is all the more important since no corresponding installations have been discovered so far.

Challenge 2: chronology

The first *kegs* appear in the Late Period, starting around 600 BCE.[45] Their distinctive feature is the neck, which becomes shorter over time. Interestingly, this form is still in use today.[46] It is the most long-lived vessel form in Egypt, having been in use for more than 2000 years now. This poses quite a challenge for those who are not yet familiar with this type of vessel, because it is not easy to make a direct comparison between the fabric used in ancient times and those used in more recent times: it is difficult to get access to the modern vessels without very good knowledge of the (modern) local trading points, or to travel to the oases themselves or to contact one of the pottery specialists working there. And it is not always easy to transport modern vessels through Egypt, let alone abroad. This is an obstacle faced by all ceramologists in Egypt, regardless of the location they are working at or the time span they are concerned with, because it is not allowed to take samples and transport them through Egypt without special permits.

Challenge 3: functions and usage

Egyptologists used to (and sometimes still want to) asign a single function to each vessel type or object in general. In recent years, it has become clear that this does not work because vessels in particular are multi-functional tools used for storage, transport, or preparation of food, to name but a few. Sometimes special requirements are needed to fulfil special functions. For example, containers for liquids often use a special clay and/or surface treatment, such as polishing, to prevent liquids from evaporating too quickly. But sometimes that very feature, evaporation, is required because it cools the contents of the jar, so water is often stored in more porous vessels than, for example, wine. Such containers can still be found in rural villages in arid countries,

45 Aston 2007: 441.

46 Henein 1997: 125, stressing the fact that the oases are quite isolated compared to the Nile Valley and new technologies and ideas needed longer to reach them.

where they provide public drinking water available to all passersby. However, it is of the utmost importance not to transfer recent usage and project it back thousands of years onto the then used forms.[47] Modern *kegs* are used to prepare butter and to transport water, but, as far as is known, the ancient *kegs* were not used to make butter, but to transport water and produce from the oases.[48] However, no analyses of the vessel contents have been conducted so far to clarify this point. A similar problem is addressed by Robert Kuhn in his article on stone vessels and the thousands of fragments from the time of king Den (Dynasty 1, ca. 2930/2910 BCE)[49]. Kuhn points out that the contents of most of these vessels are unknown because not enough research has been conducted so far. In regard to the problem of function, Kuhn also addresses the challenges posed by different typologies and the insights that can be gained from a thorough examination of object and context, which allowed him to define stone vessels as luxury items and durable tableware for the afterlife, which were maybe also used in daily life. However, he also mentions that further evidence from settlement sites is needed to confirm the assumption.

Concerning function and usage, the modern *kegs* provide some important clues to consider when working with ancient material. The differences between the same type of vessels can be minimal in appearance, but important in meaning. In Henein's study, the differences in *kegs* seem to be quite marginal. They concern the capacity as well as the diameter of the mouth.[50] The form itself, thus, is the same, but the function is quite different and slightly but efficiently adapted to its use: The butter churn has a wider opening than the small water container – the former for easier removal of its contents,[51] the latter to prevent too much water from spilling over. So, there is a lot of information hidden in the pottery that can be discovered with infinite and often very painstaking care, because sometimes minor alterations can illustrate changes in the function of a vessel, its mode of transport, its commodity, or the like. These alterations, on the other hand, are the result of various factors, be it a changing environment that forces people to adapt, or new influences from abroad that trigger innovations, or the like.

Sometimes, this hidden information is only revealed when the object in question is broken. Certain manufacturing traces in pottery only become apparent if a vessel is fragmented or can be deduced from the breaking pattern of a vessel, e.g. along the coils from which it was constructed.[52] This is also true for other objects, as Tina Beck demonstrates in her contribution on wooden

47 Also stressed by e.g. Cedro/Żurawski 2019: 24.

48 For the modern use see Henein 1997: 161–166. For ancient use see e.g. Hope et al. 2000: 190 suggesting water and wine as contents or *ibid.*: 228 claiming that these vessels found along desert roads were most likely water containers; Dixneuf 2011: 145 suggesting water (transport as well as storage) and cultivated products for commerce like wine and olive oil; Rougeulle/Marchand 2011: 448–449 also suggesting wine and maybe olive oil based on the observation that the inside of some kegs are coated with resin. This was also observed with some of the Asyuti keg sherds whose interior sides are sometimes covered with a black shiny substance.

49 After Schneider 1996: 165.

50 Henein 1997: 161–166.

51 Henein 1997: 164–165.

52 Rice 2015: 138, fig. 8.5.

statues and the 'deities under cover' that are hidden in the joints or below the feet of the statues and only become visible when the statue is dismantled – and only if one looks very closely.

Another challenge is posed by the fact that two very different types can be used for exactly the same purpose.[53] In Henein's study,[54] the distinguishing features between the vessels in question are the volume (one type of vessel offers large and small volumes, the other a larger overall volume) and the mode of transportation (which in turn affects the appearance of the vessel). The choice between the vessel types depends on several factors:

- Capacity, which depends on who is transporting the filled vessel: people or donkeys/beasts of burden[55]
- The water source: *Kegs* require a wide stream to be filled, whereas with wells it is easier to use vessels that can stand on their own
- Means of transportation and the manner in which the vessels can be stacked, gripped or fastened to an animal or carriage

Challenge 4: recycling

Another important factor to be considered is recycling (or re-use). Quite a lot of the Oasis ware sherds have been re-carved to create a special shape (Fig. 5). So far, this peculiar shape is unique to the Oasis ware sherds deriving from *kegs*. This could be related to the particular hardness of the sherds which allows them to function in certain circumstances where strength of material is required, but unfortunately their function is completely unknown to the author. Some of these sherds, like the one depicted in Fig. 2, also show small drilling holes made after firing. These holes do not seem to be related to the vessel, so their existence is most likely related to the secondary use for which they were intended.

Sherds can serve multiple functions when re-used: they can be re-carved as lids, as funnels[56], or even be used in the construction of an oven[57]. The functions of these items are not necessarily obvious at first glance, as shown by the re-carved objects from Oasis ware vessels. This leads to the last and most challenging topic: context, or the lack thereof.

53 Another problem not addressed here is that of typology. The perception of vessels and the types they are classified into can vary considerably, see e. g. Rice 2015: 227–228 with fig. 13.2. One has to keep in mind that typology is a very useful tool when working with pottery or artefacts in general, albeit it is a completely artificial system normally not related to the *Sitz im Leben* a object had during its active use-life.

54 Henein 1997: esp. 164, 168.

55 Even today, different kinds of water vessels are used in the oases, see Henein 1997: 168, comparing the capacity of two different types of water containers and showing the mode of transportation of those vessels with greater capacity, suitable for transport via donkey. Concerning the same type but different capacities, Henein 1997: 164 states that the "petit format est destine aux fillettes."

56 Beckh 2013: 106. Thomas Beckh dedicates one chapter of his publication to the topic of recycling and re-use and discusses the reasons that could have let to re-using pottery in Roman-Byzantine times, ibid. 100–111.

57 Gates-Foster 2022: fig. 6.

Fig. 5: Re-used Oases Ware sherd, photo: A. Kilian, © The Asyut Project

The final challenge: context

Sherds can be classified in a lot of ways, wether as 'sherds/pottery', as 'partly complete' or 'partly reconstructed vessel', as an object in its own right, e.g. a scraper used for digging, or a re-carved sherd used as lid, or only part of a re-carved sherd used as lid, etc. But sometimes they may be the only remains that are left to us showing traces of ritual actions, as is discussed in Nora Kuch's article in this volume on stone vessels and the intentional breaking of these objects. Without the meticulous documentation of the context in which these sherds were found, it would not have been possible to detect all the 'hidden' information that Nora Kuch was able to obtain. This information cannot be gained from the object alone, because it does not leave any direct traces on the object itself other than that it is broken, which can have various reasons. So, the trait of ritual breaking is often not obvious when looking at a sherd, or an object in general, without any background information about its findspot and the assemblage it once belonged to and was associated with. However, even objects without this background can still provide valuable information. So, in the broadest sense, I agree with the invitation of Alexander Ilin-Tomich and Vanessa Boschloss: they emphasize the importance of documenting *all* sides of a scarab, not only the inscribed or decorated ones, because even features that are considered unimportant can provide significant information if studied closely. This is true for all objects – even small traces such as smoke clouds on the walls of a vessel can provide crucial insight into processes not obvious at first glance.[58] As this workshop and its proceedings have shown, even the smallest finds, the tiniest traces, and the most seemingly 'unspectacular' finds are worth the painstaking work that is necessary to extract the hidden information, because sometimes it is these tiny details that contain the most crucial information, if only one looks closely "beyond the most obviously interesting".

58 Baba 2011. For general merits of working with "knobbly bits", see Bader 2021.

Case Study 2: Spinning Whorls or Model Wheels? The Function of Disc-shaped Terracotta Objects from Bronze Age Syria and Mesopotamia

Alexander Pruß

The following remarks about a very specific category of small finds are intended to serve as another example of how a close look at the broader context might help to clarify the function of objects of disputed use and how important it is to publish full corpora of finds, including fragments.

Upper Mesopotamian and Syrian sites of the Early and Middle Bronze Age (ca. 3000–1550 BCE) have yielded significant amounts of small objects made of baked clay. Besides evident figurines in human[59] and animal[60] shape models of different shape – especially of vehicles[61] – are common, predominantly in the second half of the 3rd millennium.

In these sites, many circular terracotta objects with central piercing were found. Some are sherds of broken pottery vessels which were rounded and pierced (Fig. 6). This recycling usually produced not completely round objects, which were most probably used as weights for nets or looms, as spindle whorls or for other every-day purposes.[62] Plano-convex or biconvex discs which were pierced before firing (Fig. 7) are generally considered as spindle whorls.[63] Besides terracotta, these were also made of bone or stone. Discs with a thickened centre or a clearly separated cylinder around the piercing are traditionally interpreted as wheels belonging to the vehicle models (two-wheeled chariots and four-wheeled wagons).[64]

This traditional interpretation as wheels was challenged since the 1990s by several authors publishing finds from Early Bronze Age (EBA) Upper Mesopotamian sites.[65] The arguments for this re-interpretation were the following:

1. the discs were rarely found together with the vehicle models to which they purportedly belonged,
2. the chronology does not match – 'wheels' were found in levels predating the occurrence of vehicle models,
3. there are too many wheels compared to the number of model vehicles.

59 Sakal 2018 on 3rd millennium figurines with further references to earlier publications. For early 2nd millennium figurines, see Marchetti 2001 and Pruß 2010: 46–110.

60 Peyronel/Pruß 2018. See also the contribution of Abric/Pellegrino/Degli Esposti in this volume on more recent animal figurines.

61 Pruß 2018 with further references.

62 Britsch/Horejs 2014: 234; Rittig/Strommenger 2010: 90–91; Wissing 2009: 212–215.

63 Britsch/Horejs 2014: 229–231; Rittig/Strommenger 2010: 90–91; Wissing 2009: 213–218; Baccelli 2014: 3–5.

64 See for an overview on the different opinions concerning these objects: Helms 2010: 208–210.

65 Among others: Yener 1990: 401–402; Wattenmaker 1998: 142–149; Pfälzner 2001: 220–221; Hempelmann 2013: 250.

Fig. 6: Rounded pottery sherd with secondary central piercing, Tell Beydar, Field P, surface find (unpublished). Photo: Mission Tell Beydar

Fig. 7: Conical-shaped spindle whorl, terra-cotta, Tell Beydar, Field P, no. 42340-M-1, surface find (Pruß 2014: 124, fig. 14). Photo: Mission Tell Beydar

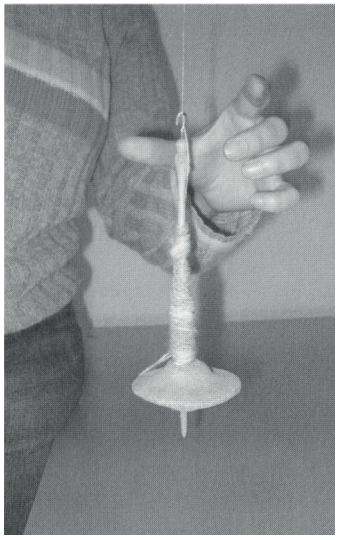

Fig. 8: Experimental use of a terra-cotta wheel as spindle whorl (Helms 2010: 215-216, fig. 4,2)

Fig. 9: Terra-cotta model wheel with incised constructive details, Tell Beydar, Field P, no. 42521-M-1, final EJZ 3b (ca. 2340 BCE; Pruß 2014: 123, fig. 13). Photo: Mission Tell Beydar

Combined with the fact that only few evident spindle whorls were found in most of the excavated sites, these authors concluded that the so-called wheels were actually spindle whorls or that at least they were made for different purposes, including the use as spinning whorl. Tobias Helms proved that actual 'wheels' found at the site of Tell Chuera can be used as spinning whorls (Fig. 8).[66]

However, a close look at the evidence shows that the finds under discussion can indeed be explained as wheels of chariot and wagon models, at least in their primary function. This

66 Helms 2010: 215–216, fig. 4. See, however, the very sceptical remarks of Strommenger 2010: 82–83.

Fig. 10: Fragment of a relief plaque with depiction of a chariot, limestone, Ur, Early Dynastic (ca. 2600 BCE; Hrouda 1991: 333)

interpretation is most obvious with a group of objects with crescent-shaped incisions on both sides (Fig. 9), which depict the actual structure of the tripartite disc-wheels in use in 3rd millennium Mesopotamia.[67] Such wheels are visible on several wagon images from the EBA, e.g. on the famous 'Standard of Ur'[68] or on relief plaques from Early Dynastic temples (Fig. 10).[69] The actual wheels were solid wooden objects made of three pieces. The central piece included the hub, while the outer, crescent-shaped pieces could be replaced by spare-parts when the wheel became worn by its use. The identification of these terracotta objects as model wheels has never been doubted. However, only a minority (at most sites clearly below 10%)[70] of the objects under discussion show these incisions.

Several of the undecorated discs show wear traces at one side of the hub. This corresponds with similar traces at the sides of the boxes of several wagon models (Fig. 11a–b).[71] These observations demonstrate that at least some of the model vehicles were indeed assembled with wheels and were regularly moved on these wheels. The lack of matching finds of model vehicles and wheels remains puzzling, but as the vast majority of finds were made in domestic contexts, this is not unexplainable by usual depositional habits. As these traces of wear (as well as the

67 On these wheels: Littauer/Crouwel 1979: 18–19.

68 Woolley 1934: 61–62, 266–267, pl. 92.

69 Hrouda 1991: 333 (from Ur).

70 Only sites from which the whole corpus of wheels is available can be used here: Tell Beydar: 8 out of 202 (4%; Pruß forthcoming); Tell el-ʿAbd: 4 out of 23 (17%; Pruß 2019: 65); Mozan C: 5 out of 115 (4%; Wissing 2009: 220–224, pl. 51–59); Halawa A: 2 out of 70 (3%; Neufang/Pruß 1994: 162). Tell Biʿa has 6 out of 35 published wheels (Strommenger 2010: 83). However, only a selection of surely/at least? several hundred wheels was published, with a clear bias on decorated examples.

71 Wissing 2009: 196; 218 on model vehicles and wheels from Tell Bderi and Tell Chuera.

Fig. 11a and b: Chariot model with wear traces of the wheel, terra-cotta, Tell Beydar, Field B, no. 54451-M-2, EJZ 3b (ca. 2370 BCE; Van der Stede/Devillers 2011: 28, fig. 59). Photo: Mission Tell Beydar

incised constructive details) occur only on objects with clearly visible hub, only such discs should be discussed as possible wheels.[72]

It is true that the earliest attested terracotta wheels were found in levels predating the first occurrence of vehicle models. Two rather small but formally evident wheels were found in an EJZ 0/1 (ca. 2900 BCE) context at the site of Tell Brak.[73] Other examples were found at contemporary levels at Tell Chuera.[74] Vehicle models are attested only starting from the EJZ 2 period (ca. 2750 BCE).[75] It has, however, to be kept in mind that early 3rd millennium levels are generally only rarely attested in Upper Mesopotamia and that the lack of vehicle models in these levels might be not more than chance.

Before comparing the numbers of attested vehicle models and wheels from different Upper Mesopotamian sites, one must keep in mind that fragmented wheels are easily identifiable, while fragments of model vehicles are sometimes hardly recognizable as such. This is particularly true for a variety of models of tilted wagons, which were made from re-shaped wheel-thrown goblets.[76] Some fragments can only be recognized by the non-radial curving of the rim or by the punched holes made for the fixing of the drought pole. Other fragments can also appear unspecific. In several publications, vehicle model fragments were thus not recognised as such.[77] It is thus advisable to use only published terracotta corpora of whole sites or excavation areas within sites for statistical purposes. If such corpora from later 3rd millennium Upper Mesopotamian contexts are investigated (Tab. 1), the alleged surplus of wheels compared to vehicle models is hardly existing. As most sites have yielded more wagon models (with two axles

72 See Oates 2001: 284, Wissing 2009: 211 or Strommenger 2010: 81 for the same conclusion.
73 Matthews 2003: fig. 5.78, 19–20.
74 Granda 2023: 128, tab. 5.
75 Pruß 2011: 248.
76 Bollweg 1999: 29–30, with further references.
77 E.g. Lebeau et al. 1987: pl. IX, 2 (a chariot model interpreted as animal figurine).

requiring four wheels) than chariot models (with one axle and two wheels), the expected ratio between wagons and wheels should be around or slightly above 1:3. This is nearly the case for Tell el-ʿAbd[78], while Mozan C[79] and Tell Beydar[80] have a ratio of around 1:4. The significant lower ratios at Halawa A[81] and Chuera[82] are probably the result of a selective registration process at the site. It is thus simply not true that there are far too many wheels compared to the low number of vehicle models.

Table 1: Relation between the numbers of vehicle models and wheels at Upper Mesopotamian sites

Site (date range)	Chariots (2 wheels)	Wagons (4 wheels)	Total (incl. undetermin.)	Wheels	Ratio (rounded)
Tell Chuera (2800–2200)	20	359	384	749	1:2.0
Tell Beydar (2500–2200)	16	30	51	202	1:4.0
Tell el-ʿAbd (2500–2000)	4	2	8	23	1:2.9
Tell Biʿa (2500–1760)	41	111	235	?(35+)	?
Tell Mozan C (2400–1800)	12	12	25	115	1:4.6
Tell Halawa A (2300–2000)	35	31	86	108	1:1.3

There is thus every reason to assume that the terracotta discs with clearly marked hub were indeed made as wheels of model vehicles (and of animal figurines on wheels[83], which are, however, not very frequent). They were, of course, recycled for secondary uses as tools[84] or weights, but this was not the primary reason for their manufacture.

After our introduction, the case studies serve as examples to amply illustrate the importance of working with small finds and illustrate the merits that can be gained from their meticulous study. This is also evident in the collected contributions in this volume.

78 Pruß 2019: 63–68.
79 Wissing 2009: 193–237.
80 Pruß forthcoming.
81 Neufang/Pruß 1994: 161.
82 Granda 2023: 123.
83 Peyronel/Pruß 2018: 92, type Z.13.
84 Helms 2010: 213–214; Strommenger 2010: 84–85.

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References

Aston 2007: Aston, D. A., Amphorae, Storage Jars and Kegs from Elephantine. A Brief Survey of Vessels from the Eighth-Seventh Centuries BC to the Seventh-Eighth Centuries AD, in: Cahiers de la Céramique Égyptienne 8.2, 2007, 419–445.

Baba 2011: Baba, M., Pottery Production at Hierakonpolis in the Naqada II Period: Towards a Reconstruction of the Firing Technique, in: Friedman, R. F./Fiske, P. N. (eds), Egypt at its Origins 3. Proceedings of the Third International Conference "Origin of the State. Predynastic and Early Dynastic Egypt", London, 27th July – 1st August 2008 (Orientalia Lovaniensia Analecta 205), Leuven – Paris – Walpole, MA 2011, 647–670.

Baccelli 2014: Baccelli, G., The Spinning and Weaving Material from Tell Beydar, in: Milano, L./Lebeau, M. (eds), Tell Beydar, Environmental and Technical Studies II (Subartu 33), Turnhout 2014, 3–15.

Bader 2021: Bader, B., From Knobbly Bits to Whole Vessels – Information Gleaned from Pottery from Large Disturbed Contexts, in: Kilian, A./Zöller-Engelhardt, M. (eds), Excavating the Extra-Ordinary: Challenges & Merits of Working with Small Finds. Proceedings of the International Egyptological Workshop at Johannes Gutenberg-University Mainz, 8–9 April 2019, Heidelberg: Propylaeum 2021, 1–24. DOI: https://doi.org/10.11588/propylaeum.676.c11283

Beckh 2013: Beckh, T., Zeitzeugen aus Ton. Die Gebrauchskeramik der Klosteranlage Deir el-Bachît in Theben-West (Oberägypten), Sonderschrift des Deutschen Archäologischen Instituts Abteilung Kairo 37, Berlin/Boston 2013.

Britsch/Horejs 2014: Britsch, Ch./Horejs, B., The Role of Textile Production and Fishing in the EBA Metallurgical Centre of Çukuriçi Höyük, in: Egypt and the Levant 24, 2014, 229–242.

Brown 2004: Brown, B., Things, Chicago 2004.

Brown 2015: Brown, B., Other Things, Chicago 2015.

Chaufray/Redon 2020: Chaufray, M.-P./Redon, B., Ostraca and *Tituli Picti* of Samut North and Bi'r Samut (Eastern Desert of Egypt): Some Reflections on Find Location, in: Caputo, C./Lougovaja, J. (eds), Using Ostraca in the Ancient World. New Discoveries and Methodologies (Materiale Textkulturen 32, Berlin/Munich/Boston 2020), 165–182. DOI: https://doi.org/10.1515/9783110712902-008

Cedro/Żurawski 2019: Cedro, A./Żurawski, B., Living with the Past in Modern Sudanese Village. Traditional Pottery Production in the Ad-Dabba Bend of the Nile, in: Études et Travaux 32, 2019, 23–52.

Deleuze/Guattari 2004: Deleuze, G./Guattari, F., A Thousand Plateaus. Capitalism and Schizophrenia, Minneapolis/London 2004 (1987).

Dixneuf 2011: Dixneuf, D., La diffusion des céramiques d'Assouan et des oasis du désert Occidental dans le nord du Sinaï. L'exemple de Péluse, in: Cahiers de la Céramique Égyptienne 9, 2011, 142–165.

Fox/Panagiotopoulos/Tsouparopoulou 2015: Fox, R./Panagiotopoulos, D./Tsouparopoulou, C., Affordanz, in: Meier, T./Ott, M. R./Sauer, R. (eds), Materiale Textkulturen. Konzepte – Materialien – Praktiken, Materiale Textkulturen 1, 2015, 63–70. DOI: https://doi.org/10.1515/9783110371291

Franzmeier 2021: Franzmeier, H., '... half a loaf is better than no bread': on the Fragmentary Nature of Early Archaeological Publications and their Utilisation in the 21st century, in: Kilian, A./Zöller-Engelhardt, M. (eds), Excavating the Extra-Ordinary: Challenges and Merits of Working with Small Finds. Proceedings of the International Egyptological Workshop at Johannes Gutenberg-University Mainz, 8–9 April 2019, Heidelberg 2021, 71–97. DOI: 10.11588/propylaeum.676.c11286

Fitzenreiter 2023: Fitzenreiter, M., Technology and Culture in Pharaonic Egypt: Actor-Network Theory and the Archaeology of Things and People, Cambridge Elements. Elements in Ancient Egypt in Context, Cambridge 2023.

Gates-Foster 2022: Gates-Foster, J., Third century BCE Supply Networks and Ptolemaic Transport Amphoras from 'Abbad and Bi'r Samut in Egypt's Eastern Desert, in: Durand, C./Marchand, J./Redon, B./Schneider, P. (eds), Networked Spaces. The Spatiality of Networks in the Red Sea and Western Indian Ocean, Lyon 2022, 347–364. https://books.openedition.org/momeditions/16436#text

Gill 2020: Gill, J. C. R., New Insights into an Old Collection: Ptolemaic Pottery from Hibis (Kharga Oasis), in: Metropolitan Museum Journal 55, 2020, 118–124. https://www.metmuseum.org/met-publications/gill-metropolitan-museum-journal-v-55-2020

Granda 2023: Granda, Z., „Wagenmodelle und Wagenräder", in: Meyer, J.-W. /Tamm, A. (eds), Tell Chuēra: Objekte aus Ton und Stein, Vorderasiatische Forschungen der Max Freiherr von Oppenheim-Stiftung 2, X, Wiesbaden 2023, 123–167.

Hahn 2014: Hahn, H. P., Materielle Kultur. Eine Einführung, Berlin ^{2}2014.

Harris 2021: Harris, O. J. T., Assembling Past Worlds. Materials, Bodies and Architecture in Neolithic Britain, London/New York 2021.

Helms 2010: Helms, T., Wagenradmodelle oder Spinnwirtel? Überlegungen zum Gebrauchswert der Keramikscheiben mit zentraler, durchbohrter Verdickung aus Tell Chuēra, in: Becker, J./Hempelmann, R./Rehm, E. (eds), Kulturlandschaft Syrien. Zentrum und Peripherie. Festschrift für Jan-Waalke Meyer, Alter Orient und Altes Testament 371, Münster 2010, 207–226.

Hempelmann 2013: Hempelmann, R., Tell Chuēra, Kharab Sayyar und die Urbanisierung der westlichen Ǧazīra, Vorderasiatische Forschungen der Max Freiherr von Oppenheim-Stiftung 2, IV, Wiesbaden 2013.

Henare/Holbraad/Wastell 2007: Henare, A./Holbraad, M./Wastell, S., Introduction. Thinking through Things, in: Henare, A./Holbraad, M./Wastell, S. (eds), Thinking through Things. Theorising Artefacts Ethnographically, London/New York 2007, 1–31.

Henein 1997: Henein, N. H., Poterie et potiers d'Al-Qasr, oasis de Dakhla, Bibliothèque d'étude 116, Le Caire 1997.

Hodder 2011: Hodder, I., Human-thing Entanglement. Towards an Integrated Archaeological Perspective, The Journal of the Royal Anthropological Institute 17/1, 2011, 154–177.

Hodder 2012: Hodder, I., Entangled. An Archaeology of the Relationships between Humans and Things, Malden 2012.

Hope 2000: Hope, C. A., with appendices by Mark A. J. Eccleston, Olaf Kaper, Sylvie Marchand and Deborah Darnell, Kegs and Flasks from the Dakhleh Oasis, in: Cahiers de la Céramique Égyptienne 6, 2000, 189–234.

Hrouda 1991: Hrouda, B., Der Alte Orient. Geschichte und Kultur des alten Vorderasien, Gütersloh 1991.

Kahl 2007: Kahl, J., Ancient Asyut. The First Synthesis after 300 Years of Research, The Asyut Project 1, Wiesbaden 2007.

Kahl 2012: Kahl, J., Asyut and the Asyut Project, in: Kahl, J./El-Khadragy, M./Verhoeven, U./Kilian, A., Seven Seasons at Asyut. First Results of the Egyptian-German Cooperation in Archaeological Fieldwork. Proceedings of an International Conference at the University of Sohag, 10th–11th of October, 2009, The Asyut Project 2, Wiesbaden 2012, 1–29.

Keßeler 2016: Keßeler, A., Affordanz, oder was Dinge können!, in: Hofmann, K. P./Schreiber, S./Meier, T./Mölders, S. (eds), Massendinghaltung in der Archäologie. Der Material Turn und die Ur- und Frühgeschichte, Leiden 2016, 343–365. https://www.sidestone.com/books/massendinghaltung-in-der-archaeologie [accessed 01.03.2024]

Kilian/Zöller-Engelhardt 2021: Kilian, A./Zöller-Engelhardt, M. (eds), Excavating the Extra-Ordinary: Challenges and Merits of Working with Small Finds. Proceedings of the International Egyptological Workshop at Johannes Gutenberg-University Mainz, 8–9 April 2019, Heidelberg 2021. DOI: 10.11588/propylaeum.676.

Kitagawa 2016: Kitagawa, Ch., with contributions by Jochem Kahl and Günter Vittmann, The Tomb of the Dogs at Asyut. Faunal Remains and Other Selected Objects (The Asyut Project 9), Wiesbaden 2016.

Knappet 2005: Knappet, C., Thinking through Material Culture. An Interdisciplinary Perspective, Archaeology, Culture, and Society, Philadelphia 2005.

Kopytoff 1986: Kopytoff, I., The Cultural Biography of Things. Commoditization as Process, in: Appadurai, A. (ed.), The Social Life of Things. Commodities in Cultural Perspective, Cambridge 1986, 64–91.

Lebeau 1987: Lebeau, M., avec la collaboration de Françoise Fauconnier, Anne Leyniers, Dominique Martin et Malou Schneider, Rapport préliminaire sur la troisième campagne de fouilles à Tell Melebiya (Moyen Khabour – automne 1986), Akkadica 51, 1987, 1–74.

Littauer/Crouwel 1979: Littauer, M. A./Crouwel, J., Wheeled Vehicles and Ridden Animals in the Ancient Near East, Handbuch der Orientalistik VII, I, 2 B 1, Leiden/Köln 1979.

Marchand 2007: Marchand, S., Les conteneurs de transport et de stockage de l'oasis de Kharga. De la Basse Époque (XXVIIe–XXXe dynasties) à l'époque ptolémaïque, in: Cahiers de la Céramique Égyptienne 8.2, 2007, 489–502.

Marchetti 2001: Marchetti, N., La coroplastica Eblaita e Siriana nel Bronzo Medio. Campagne 1964–1980, Materiali e Studi Archeologici di Ebla V, Rome 2001.

Matthews 2003: Matthews, R. J., Exploring an Upper Mesopotamian Regional Centre, 1994–1996, Excavations at Tell Brak 4, Cambridge/London 2003.

Meskell 2004: Meskell, L., Object Worlds in Ancient Egypt. Material Biographies Past and Present, Oxford 2004.

Nyord 2020: Nyord, R., Seeing Perfection: Ancient Egyptian Images Beyond Representation, Cambridge Elements. Elements in Ancient Egypt in Context, Cambridge 2020. DOI: 10.1017/9781108881494.

Oates 2001: Oates, J., Equid Figurines and Chariot Models, in: Oates, D./Oates, J./McDonald, H. (eds), Nagar in the Third Millennium, Excavations at Tell Brak 2, Cambridge/London 2001, 279–293.

Orton/Hughes 2013: Orton, C./Hughes, M., Pottery in Archaeology, Cambridge Manuals in Archaeology, Second Edition, New York 2013.

Petrie 1927: Petrie, W. M. F., Small objects from Naqadeh, in: Ancient Egypt 1927, 1927, 14–15.

Peyronel/Pruß 2018: Peyronel, L./Pruß, A., Animal Figurines, in: Lebeau, M. (ed.), Artefacts, ARCANE Interregional Volumes II, Turnhout 2018, 85–105.

Pfälzner 2001: Pfälzner, P., Haus und Haushalt. Wohnformen des dritten Jahrtausends vor Christus in Nordmesopotamien (Damaszener Forschungen 9), Mainz 2001.

Prell 2011: Prell, S., Tomb of the Dogs area, in: Kahl, J./El-Khadragy, M./Verhoeven, U./Abdelrahiem, M./Ahmed, H. F./Kitagawa, Ch./Malur, J./Prell, S./Rzeuska, T., The Asyut Project: Eighth Season of Fieldwork (2010), in: Studien zur Altägyptischen Kultur 40, 2011, 194–197.

Pruß 2010: Pruß, A., Die Amuq-Terrakotten. Untersuchungen zu den Terrakotta-Figuren des 2. und 1. Jahrtausends v.Chr. aus den Grabungen des Oriental Institute Chicago in der Amuq-Ebene (Subartu 26), Turnhout 2010.

Pruß 2011: Pruß, A., Figurines and Model Vehicles, in: Lebeau, M. (ed.), Jezirah (ARCANE I), Turnhout 2011, 239–254.

Pruß 2014: Pruß, A., The 2010 Excavations in Field P, in: Lebeau, M./Suleiman, A. (eds.), Tell Beydar, The 2010 Season of Excavations and Architectural Restoration – A Preliminary Report, Subartu 34, Turnhout 2014, 119–148.

Pruß 2018: Pruß, A., Model Vehicles, in: Lebeau, M. (ed.), Artefacts, ARCANE Interregional Volumes II, Turnhout 2018, 172–191.

Pruß 2019: Pruß, A., Animal Figurines, Model Vehicles, Rattles and Architectural Models, in: U. Finkbeiner (ed.), Small Objects and Environmental Studies, Final Reports of the Syrian-German Excavations at Tell el-'Abd, III; marru 5/2, Münster 2019, 49–72.

Pruß, forthcoming: Pruß, A., Figurines, Model Vehicles, and other Clay Objects from Tell Beydar, forthcoming.

Quack 2022: Quack, J. F., Establishing Communication Channels. Remarks on the Transmission of the Ritual of Opening the Mouth as (not only) a Funerary Text, in: Weiss, L./Staring, N./Twiston Davies, H. (eds), Perspectives on Lived Religion II. The Making of a Cultural Geography, Papers on Archaeology of the Leiden Museum of Antiquities 22,Leiden 2022, 71–80.

Renfrew/Bahn 2015: Renfrew, C./Bahn, P., Archaeology Essentials. Theories/Methods/Practice, London 32015.

Rice 2015: Rice, P. M., Pottery Analysis. A Sourcebook, Second Edition, Chicago/London 2015.

Rittig/Strommenger 2010: Rittig, D./Strommenger, E., Diverse Objekte aus gebranntem oder ungebranntem Ton und Asphalt, in: Strommenger, E./Miglus, P. A., Altorientalische Kleinfunde, Ausgrabungen in Tall Biʿa/Tuttul V; Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 126, Wiesbaden 2010, 90–102.

Rougeulle/Marchand 2011: Rougeulle, A./Marchand, S., Des siga sur la côte du Ḥaḍramawt (Yémen), témoins d'une attaque navale? in: Cahiers de la Céramique Égyptienne 9, 2011, 437–460.

Rzeuska 2012: Rzeuska, T., The Pottery, Asyut 2011, in: Kahl, J./El-Khadragy, M./Verhoeven, U./Abdelrahiem, M./van Elsbergen, M./Fahid, H./Kilian, A./Kitagawa, Ch./Rzeuska, T./Zöller-Engelhardt, M., The Asyut Project: Ninth Season of Fieldwork (2011), in: Studien zur Altägyptischen Kultur 41, 2012, 209–233.

Rzeuska 2017: Rzeuska, T. I., Chronological Overview of Pottery from Asyut. A Contribution to the History of Gebel Asyut al-gharbi, The Asyut Project 7, Wiesbaden 2017.

Sakal 2018: Sakal, F., Anthropomorphic Terracotta Figurines, in: Lebeau, M. (ed.), Artefacts, ARCANE Interregional Volumes II, Turnhout 2018, 221–243.

Schneider 1996: Schneider, Th., Lexikon der Pharaonen, München 1996.

Stevenson 2019: Stevenson, A., Scattered Finds: Archaeology, Egyptology and Museums, London 2019.

Strommenger 2010: Strommenger, E., Wagenmodelle, in: Strommenger, E./Miglus, P. A., Altorientalische Kleinfunde, Ausgrabungen in Tall Biʿa/Tuttul V; Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 126, Wiesbaden 2010, 65–85.

Tsouparopoulou/Meier 2015: Tsouparopoulou, C./Meier, T., Artefakt, in: Meier, T./Ott, M. R./Sauer, R. (eds), Materiale Textkulturen. Konzepte – Materialien – Praktiken, Materiale Textkulturen 1, Berlin/München/Boston 2015, 47–62. DOI: 10.1515/9783110371291.47.

Van der Stede/Devillers 2011: Van der Stede, V./Devillers, A., Le chantier B: résultats des campagnes 2004–2008, in: Lebeau, M./Suleiman, A. (eds.), Tell Beydar, The 2004/2–2009 Seasons of Excavations, The 2004/2–2006 Seasons of Architectural Restoration – A Preliminary Report, Subartu 29, Turnhout 2011, 15–76.

Vittmann 2016: Vittmann, G., Demotische Ostraka aus dem „Hundegrab“ in Assiut: Ein Vorbericht, in: Kitagawa, Ch., with contributions by Jochem Kahl and Günter Vittmann, The Tomb of the Dogs at Asyut. Faunal Remains and Other Selected Objects, The Asyut Project 9, Wiesbaden 2016, 149–163.

Wattenmaker 1998: Wattenmaker, P., Household and State in Upper Mesopotamia. Specialized Economy and the Social Uses of Goods in an Early Complex Society, Washington D.C. 1998.

Weinstein 1973: Weinstein, J. M., Foundation Deposits in Ancient Egypt, PhD thesis, University of Pennsylvania 1973.

Wissing 2009: Wissing, A., Die Tonobjekte, in: Bianchi, A./Wissing, A., Die Kleinfunde, Ausgrabungen 1998–2001 in der zentralen Oberstadt von Tall Mozan/Urkeš, Studien zur Urbanisierung Nordmesopotamiens A, 2, Wiesbaden 2009, 13–427.

Woolley 1934: Woolley, Ch. L., The Royal Cemetery, Ur Excavations II, London 1934.

Yener 1990: Yener, K. A., The Small Finds, in: Algaze, G. (ed.), Town and Country in Southeastern Anatolia, Volume 2. The Stratigraphic sequence at Kurban Höyük, Oriental Institute Publications 110, Chicago 1990, 397–419.

Zöller-Engelhardt 2022: Zöller-Engelhardt, M., Correlations of Wooden Model Equipment and Wall Decorations in Asyut, in: Kahl, J./Kilian, A. (eds), Asyut – The Capital that Never Was, The Asyut Project 18, Wiesbaden 2022, 155–198.

Zöller-Engelhardt/Kilian 2021: Zöller-Engelhardt, M./Kilian, A., Introduction: Finding the ‘Extra’ in the ‘Ordinary’, in: Kilian, A./Zöller-Engelhardt, M. (eds), Excavating the Extra-Ordinary: Challenges and Merits of Working with Small Finds. Proceedings of the International Egyptological Workshop at Johannes Gutenberg-University Mainz, 8–9 April 2019, Heidelberg 2021, vii–xxi. DOI: 10.11588/propylaeum.676.c11282.

Papers presented at the interdisciplinary workshop "Excavating the Extra-Ordinary. Challenges & Merits of Working with Small Finds 2", Johannes Gutenberg University Mainz, 25–26 November 2022

Camille Abric, Maria Paola Pellegrino & Michele Degli Esposti
A Pottery Study Approach to Small Find Analyses. The Zoomorphic Clay Figurines from Tell Abraq (Umm Al-Quwain, UAE)

Tina Beck
What to Do with All These Fragments? Challenges and Possibilities of Reconstructing Fragmented Wooden Tomb Statues

Vanessa Boschloos & Alexander Ilin-Tomich
Beyond the Most Obviously Interesting: Aims and Methods in Documenting and Processing Scarabs

Julia Budka
What Makes a Pottery Sherd a Small Find? Processing re-used Pottery from Settlement Contexts

Eva A. Calomino
From Special Findings to Domestic Dynamics. Contextual Study of the Small Finds of Tell el Ghaba (Egypt)

Elisabeth Eltze
Worker, Warden, or Whatnot? Amannote-erike's Shabti in Consideration

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

Tara Ingman, Hélène Maloigne & K. A. Yener
A Forgotten Kingdom of Small Finds – A Bronze Age Legacy Collection from Alalakh in UK Museums

Camille Koerin
The cylinder Seals as a Source of Study on the Interactions Between Egypt and Mesopotamia in the 4th Millennium BCE

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

Robert Kuhn
More than 20.700 Fragments of Stone ... The Convolute of Stone Vessels from the Tomb of King Dewen at Abydos

Maciej Makowski
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

Martin Odler & Jiří Kmošek
Realities of Metalworking Life on the Middle Kingdom Elephantine Island

Jean-Pierre Pätznick
The Royal Engraved Marbles of the First Dynasty

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

Jana Richter
Finding Meaning in Microdebris: Challenges of Working with very small Finds at an Iron Age Site in Iraqi Kurdistan

Keynote Lecture: Aaron Schmitt
Uncovering the Potential of Early 20th Century Excavations in Mesopotamia: Ur and Ashur as Case-studies