Performing the Practice Turn in Archaeology

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Are we still living in the era of postmodern archaeology?[1] The paradigmatic shift from processual to post-processual archaeology took place in the early 1980s—at least in the Anglophone archaeological community. In the eyes of many archaeologists, we have been working as postmodern scholars by appropriating postmodernity's pluralistic approaches for three decades. In my view, it is time for another paradigmatic shift in archaeology. I do not want to proclaim a post-postmodernity in the sense of a rejection of what postmodernity has been postulating, but an enforcement and extension of some already existing approaches on the basis of the rich insights that anthropology, sociology, science and technology studies, material culture studies, and workplace studies won in the last years. After elaborating on the conceptualization of such a revision of approach for archaeology, I shall illustrate the innovative potential of this approach with two archaeological case studies taken from the Eastern Mediterranean Late Bronze and Early Iron Age of the thirteenth and twelve centuries BCE.[2]

1. Human-thing-relationships in archaeology

So far, archaeologists have taken very different approaches to decipher the prehistoric functions and meanings of objects: In the 1960s, the New Archaeology understood objects as extrasomatic means of adaptation to the environment, following Lesley White's definition of culture. This functionalist approach resulted in a very narrow understanding of things: things were considered to be just means to an end in the struggle to survive.[3] In retrospect,

1 This contribution is part of my postdoctoral research on "Material Entanglement: The Appropriation of Foreign Pottery in the Eastern Mediterranean Late Bronze Age" within the Heidelberg Cluster of Excellence "Asia and Europe in a Global Context." I would like to thank Joseph Maran, Hans Peter Hahn, Cornelius Schubert, Carol Bell, and two reviewers for critical discussions and helpful comments.

2 For the potential of prehistoric ceramics beyond chronological approaches cf. Stockhammer 2009.

3 White 1959, 8. 12–16; Binford 1962, 218–219. For a critical analysis of processual archaeology cf. Eggert 1978a, esp. 9; Bernbeck 1997, esp. 37–38. An understanding of function similar to processual archaeology was already developed by Bronislaw Malinowski (1949), one of the key figures of British Social Anthropology. Following Malinowski (1949), culture's main function is to satisfy man's basic needs and thus secure his survival.

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processual archaeology understood practices with things either in a behavioural sense or as an intentional action aimed at survival. Therefore, processual archaeology arrived at explanations based on monocausal intentionality of human relationships with things, if any human action was considered to be intentional at all. In principle, it was assumed that every object had its own specific function and that this object was created by man with the intention of exactly fulfilling this function. Taking the interpretation of prehistoric ceramics as an example, current processual approaches within this functionalist tradition would focus on the practical use of vessels, e.g. for cooking, storage, or consumption of food.

Since the 1980s, post-processual archaeologists have convincingly argued for a dialectic relationship between humans and things.[4] In their view, things were not simple tools for survival, but should be understood as media of non-verbal communication and important carriers of meaning in the living world of humans. Practices with things were thus mostly understood as intentional action. Such "Symbols in Action"—the title of Ian Hodder's (1982a) paradigmatic book—could also take the shape of pottery vessels that communicated social identities of the producer and/or consumer beyond their daily use for cooking, storage, or consumption. On the basis of this approach, archaeologists began to search for a possible social meaning of styles in pottery decoration, especially by combining archaeological analysis with an ethnoarchaeological perspective.[5] One of the central issues was the question of whether the spatially distinct occurrence of a certain style could be taken as an indicator for a prehistoric community of traditions or even an ethnic group. Although post-processual archaeology has always emphasised the plurality of an object's functions, the understanding of objects by some strands of post-processual archaeology is still based on human intentionality from an epistemological perspective with humans shaping objects in order to communicate non-verbal messages. These particular strands of post-processual archaeology replace the monocausal intentionality of processual archaeology by polycausal intentionality.[6] In their view, humans do not create objects with a single function in mind, but do so with several possible functions in mind. Nevertheless, the basic notion of human intentionality in the creation of, and practices with things, has remained untouched.

4 Hodder 1982a; 1982b. In 1978, Manfred K. H. Eggert already pointed out to the dialectic relationship between humans and things (Eggert 1978b). However, in contrast to Ian Hodder's most influential works his text remained without major influence in archaeological epistemology.

5 e.g. Herbich 1987; Skibo et al. 1989; Conkey/Hastorf 1990; Herbich/Dietler 1991; Stark 1998.

6 I am entirely aware of the fact that this is not the place for an overview of the multitude of strands in post-processual archaeology (for such an overview cf. Johnson 1990; Thomas 2000; Hodder 2012). Many post-processual archaeologists have successfully integrated agency and practice theory into their approaches for a long time (e.g. Dietler 1998; Dobres/Robb 2000).

Meanwhile, more and more approaches try to improve on processual and post-processual archaeology.[7] Archaeology owes important thought-provoking impulses to French sociologists Pierre Bourdieu and Bruno Latour, namely Bourdieu's concept of habitus and Latour's actor-network theory (ANT). In contrast to the dominating mentalist approaches in anthropology and sociology in the 1970s, Bourdieu rightly acknowledged the importance of the material in human living environments. He thereby created possible approaches for archaeologists who have only completely taken up these possibilities over the last twenty years. Bourdieu's (1987) concept of habitus is based on the notion that, to a large extent, our practices with things are governed by unconscious internalisation of collective dispositions. Therefore, humans act in a way that is specific to their social background, often without being aware of this and without acknowledging the important influence of their material surroundings on them. These material surroundings shape the habitus, where things are integrated within social practices.

Bruno Latour created his ANT in opposition to the dominant patterns of thought in sociology (especially French post-structuralism), which was also of major importance for post-processual archaeology. In the sense of Bruno Latour (1986; 2005) and John Law (1986; 1992), ANT proclaims that the relationship between humans, technologies, and things can only be understood when agency is not restricted to humans, but also applied to non-human actors. Technologies and objects are not only shaped by humans, but also shape humans. In Latour's (2005, 71) understanding, objects act very actively: "After all, there is hardly any doubt that kettles 'boil' water, knives 'cut' meat, baskets 'hold' provisions, hammers 'hit' nails on the head, rails 'keep' kids from falling, locks 'close' rooms against uninvited visitors, soap 'takes' the dirt away, schedules 'list' class sessions, prize tags 'help' people calculating, and soon. Are those verbs not designating actions?" Thus, following Latour, "any thing that does modify a state of affairs by making a difference is an actor—or, if it has no figuration yet, an actant" (Latour 2005, 71). However, with his particular understanding of action Latour ignores the differentiation between intentional action and behaviour that has been so deeply rooted, especially in German sociology, since the work of Max Weber (1968, esp. 471–472). In my view, this may have been one of the reasons for the resistance of German sociology against the work of Latour. Nevertheless, I believe this undifferentiated understanding of action is the basic reason for Latour's strong reception in current archaeological theory. Whereas historians often perceive history as a sequence of intentional actions, prehistorians

7 Eggert (1993) had called for integration and overcoming both research paradigms already two decades ago, however without much success.

are unable to separate the material manifestation of past practices within the archaeological record into intentional action and behaviour. Latour's terminological imprecision perfectly meets the epistemological limitations of prehistoric archaeology. Consequently, Latour is of great importance to archaeology as he allows us to lower the role of intentionality in the context of practices with things from an epistemological perspective without denying the importance of intentionality. Strictly speaking, Latour's actions of the things—a kettle that boils water and a knife that cuts meat—have to be termed behaviours rather than actions. Max Weber (1968, 471) already spoke of the "behaviour of those things" and differentiated their competence very clearly from human action. In my view, things never act intentionally on their own.[8] They only do so in the eye of a beholder who feels driven by an object to act in a certain way. I would like to distinguish between agency and intentionality on a conceptual level (cf. Knappett 2005, 22–23). For archaeologists, the (non-) intentionality of past human practices remains unclear in most cases. For this reason, I will continue to speak of practices with things and of actions by things and I will term both humans and things as actors. However, I am totally aware of the epistemologically forced reduction of my terminological understanding.

The integration of ANT into archaeological epistemology further necessitates the detachment from a certain understanding of sociologically constructed entities like "elite" or "lower classes." Following ANT, those entities must not stand at the beginning of any analysis as an explanation for individual action but only at the end, as the final result of entangled actions of a multiplicity of individual actors. Latour argues against these terms without acknowledging that terms like "elite" or "lower class" can be used in very different epistemological ways. On the one hand, they can be understood as a descriptive category for a group of actors or actants—be they objects, humans or social practices—with similar features in the sense of a descriptive type. Latour does not consider the possibility of this taxonomic understanding. He criticises that the formerly constructed and abstract entities are immediately transformed into powerful agents in our explanatory models. From an archaeologist's perspective, it follows that actions are not triggered by types of objects but only by the objects themselves. However, the misunderstanding of classificatory entities as demonstrated by Latour must not lead to the rejection of terms which are aimed only at the denomination of a classificatory entity. Abstract entities are indispensable as designations for a class of things, humans, or practices with identical features, because every

8 One has to take into consideration that non-human actors also include animate beings and not merely objects. However, the question of intentionality of animals' actions shall not be further discussed here, since it is irrelevant for my approach.

denomination ultimately corresponds with the attribution to an abstract entity. The descriptive understanding of abstract entities (types, classes of society, patterns of practices etc.) enables us to cautiously use the terms dismissed by Latour. They may describe, but must not explain.

The acknowledgement of human and non-human actors in shared networks brings forth the particular meaning of ANT for archaeological analysis whose focus is most often dominated by the thingness and connected characterisation of the things and thus often neglects the role of humans as actors. Thus, also from an archaeological perspective, humans and things need to be seen as actors entangled within networks (Maran/Stockhammer 2012). Latour (2005, 43–62) only cautiously speaks about the motivation of the actor to act and calls it his "second source of uncertainty." Following Latour, these entangled actors and actants move each other to actions. Human action can be triggered by the perception of images of goods or by breaking cooking pots. Humans and things have the power to initiate action and, therefore, are actors.

Latour's understanding how actors and actants are motivated to act does not sufficiently explain why different actors are acting in a structurally similar way over and over again. Moreover, ANT is not able to adequately explain processes of social transformation. At this point, I consider Bourdieu's concept of habitus as particularly important in determining motivators of action and I propose to address this problem by combining Latour's ANT with Bourdieu's concept of the habitus. Although Latour polemicises against Bourdieu, he also admits: "This is why Bourdieu's notion of habitus, once it is freed from its social theory, remains such an excellent concept" (Latour 2005, 209 n. 280). The concept of habitus in the sense of internalised collective dispositions is able to explain why different actors act in a structurally similar way. Actors with a similar habitus are moved by similar motivators of action. These actors are entangled with structurally similar actors and actants. They are, for example, surrounded by similar material objects or participate in the exertion of similar social practices. In this line of thought, terms like "elite" or "sublatern" are to be understood as denominations for groups of individuals who are motivated to act similarly by their habitus. Therefore, every study needs to begin with a contextual analysis of individual social practices, whose regularities and structure may then be interpreted as the realisation of similar world views or identities (Maran/Stockhammer 2012).

A focus on consumer decisions is most promising in order to demonstrate the power of objects that force humans to act. Human choice to acquire or use a certain object, e.g. a ceramic vessel, is neither always following purely functional thoughts (in the sense of the processual archaeology), nor is it best

understood as a conscious communication with the surroundings in the sense of post-processual archaeology. Often, humans choose an object because they are driven by some undetermined feeling that it is the right thing, without being able to give a reason for their decision afterwards. Occasionally, they articulate the feeling that the object found them and that they did not find the object.

In addition to these insights from Latour and Bourdieu, the representatives of the material culture studies, especially Daniel Miller (2005; 2010) and Hans Peter Hahn (2005; 2009; 2010; 2011; 2012; Hahn/Soentgen 2010), show that archaeology's current understanding of objects cannot do justice to the potential of things. Reflecting this, Colin Renfrew (DeMarrais et al. 2004; Renfrew et al. 2008; Malafouris/Renfrew 2010a; 2010b) created his "material engagement theory" that puts its focus on the human dependence on things, especially the dependence of the human mind. Ian Hodder (2011a; 2011b) has also recently joined this line of argument and dissociated himself from his post-processual understanding of archaeology. He differentiates between dependence and dependency when conceptualising human-thing-entanglements. The dialectic understanding of the human-thing-relationship in post-processual archaeology often overlooked the power of the things and the mutual dependencies. Things disorient, things break, things need care in order to be preserved, etc. Consequently, Hahn speaks of the stubbornness of things. A vessel breaks into pieces, it annoys, it is mourned, it is mended, it is re-used in a different way. This is the way objects behave. Objects' behaviour triggers human action. In this way things are actors in the sense of the ANT. My approach incorporates these behavioural traits, albeit in a simplified way, within my understanding of the term "action." This agency of things can neither be sufficiently analysed with a functionalist nor a semiotic perspective. The breakage, mourning, and often accidental transformation of things cannot be adequately explained with human intentionality. At the same time, communication with things is considerably more complex than hitherto assumed. Processual archaeology did not consider the communicative ability of things. Post-processual archaeology saw things indeed as carriers of meaning, as semiophors. However, their message was always one that had been encoded by humans. Things spoke messages that their human creator had intended them to. Yet, workplace studies have demonstrated a highly complex means of communication between things and humans that takes place without either words or symbols (Gatewood 1985; Knoblauch/Heath 2006; Richardson 2009). Pete Richardson (2009) studied the action of workers in an Idaho saw mill. Using all of their senses, their coordinated action occurs almost totally without words as a result of the holistic perception of the wood. It is the seeing, feeling, and smelling of an object's materiality that guides our practice with the object. Things are mute but they are able to communicate sensually

with humans. This kind of communication is very easily understood when one takes the practice of cooking as an example. The cook communicates with the vessel, the food, and the heat through smell, temperature, taste, and observation. Not one word is exchanged. The cook is unaware that his/her practice of cooking can be understood as an act of communication with the material.

To sum up: The entanglement between humans and things is not sufficiently characterised by a dialectical relationship. In my view, it is time to extend the practice turn of culture and social anthropology to archaeology in order to supplement processual and post-processual approaches. Humans and things are connected by complex entanglements which are based on a mutual dependence. Humans use things with multiple intentions, but at the same time feel that things move or force them to act. Humans communicate through objects but also with objects in the context of social practices.

With this epistemological basis in mind, it is now necessary to develop an archaeological methodology that is appropriate to the specific characteristics of the archaeological record. First, it is crucial to be conscious of the complex human-thing-entanglement in order to save us from premature conclusions. Moreover, we must acknowledge that meaning and function of an object are not states but processes. For this reason, it is important to dismiss the normative idea of "a certain purpose" of an object and the connected notion of "misuse" in the case of a different usage. Meanings and functions are created over and over again in the context of social practices with the object. There is neither a right nor a wrong way of handling of objects, but only a multitude of different usages of one and the same object. This multiplicity of meanings and functions of a single object cannot be understood simply on the basis of the archaeological record. Archaeology can only yield momentary meanings and functions of an object. Due to these epistemological constraints, we must focus our analyses on social practices involving the object. Only if those practices were materialised in the object or its context are they accessible for archaeologists. Only those materialised practices allow for the understanding of some part of the past multiplicity of meanings and functions of an object.

If one wishes to operationalise these thoughts to the analysis of e.g. pottery of Aegean-type, a multiperspective approach becomes necessary:

1) Analysis of a vessel's form (including the *chaîne d'opératoire* of its production) and the functional advantages and disadvantages for its handling.
2) Analysis of the decoration that also regards its technique and syntax.

3) Analysis of traces of prehistoric use. Soot marks can give us an idea about its placement at the hearth. Chemical analysis of residues may supply us with important information about substances that the vessel contained.
4) Analysis of the context of a vessel, especially if one has the good fortune of finding it in its primary context. Within this context, it is necessary to study the find position in relation to architecture, installations, and other objects inside the relevant space.
5) Analysis of the spatial distribution of vessels of a certain form and/or kind of decoration and/or other related features as well as the occurrence of certain motifs on other media.
6) Analysis of pictorial and textual sources about the functions and meanings of contemporaneous vessels.
7) Analysis of ethnographic and ethnoarchaeological data and the application of a systematic comparative perspective in the understanding of Manfred K. H. Eggert (1993).

The agency of objects and the complexity of their interaction with humans will become most clearly visible once they move into a new environment because their potential will have to be explored in the context of the new environment. There are two areas where this can be observed: small children familiarising themselves with household objects and inserting them into new contexts, and foreign goods being appropriated in a region where they had to be translated into local social practices and world views, as is the case in this paper.

2. Appropriation of things from an archaeological perspective

Human-thing-entanglements become very obvious in the context of processes of appropriation. When humans encounter foreign or new objects and decide to integrate them into their living world, a multitude of conscious and unconscious human decisions are triggered that are considerably co-determined by the object.

Of crucial importance to the analysis of processes of appropriation are studies by Hans Peter Hahn. If an individual decides to appropriate a foreign or new object after the encounter, a complex process starts that is differentiated by Hahn into four different aspects. All four aspects are entangled and occur simultaneously (Hahn 2004a, 64–67; 2004b, 218–220; 2005, 102–104; 2007, 209–210): The first aspect, appropriation, refers to the transition of objects from wares to goods by becoming personal possessions. This may be connected with formal changes in the objects e.g. by decoration.

Second, objectivisation involves the attribution of an object to an existing category of one's own objects. This classification goes together with the attribution of a certain meaning to the object.

Incorporation as the third aspect refers to acquiring the competence to deal with the object in a "right" way.[9]

Finally, transformation means the attribution of new meanings to objects, which very much depends on the local context where an object is used. An object can also be used for the construction of traditions. "The object is adorned with meanings and contexts, it is transformed in order to be re-invented as part of the appropriating society" (Hahn 2005, 107).[10]

Some of Hahn's aspects refer to the perception of artefacts and, therefore, are hardly or not at all visible in the archaeological context. Whereas the integration of an object into existing social practices can be identified in an archaeological context, reinterpretation and traditionalisation are more difficult to detect and re-naming cannot be traced in preliterate cultures.[11]

I agree with Hahn (2004b, 220; cf. 2005, 106–107) that "the 'work of appropriation' is in this very sense never completely finished, and its results are called into question time and again" (Hahn 2004b, 220; cf. also Hahn 2005, 106–107). The term "appropriation" has the advantage in that it combines a focus on social practices with a hermeneutic approach (Hahn 2005, 101; 2007, 209; 2008, 197–199). Following Hahn (2008, 199), interpretation and action are no counterparts in this context, but mutually influence each other. Archaeology will not be able to reconstruct all of Hahn's aspects in an archaeological context. In my view, the importance of Hahn's thoughts lies in demonstrating the complexity of the process and leading us to take the materialisation of those aspects into consideration.

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9 Maran 2011a calls this aspect "translation" of the foreign or other. In his view, this translation is a prerequisite to convey the meaning of foreign practices, objects, and ideas to the receiving society. Following the differentiation between competence and performance in analogy to Noam Chomsky's syntax theory, which defines competence as a general linguistic ability and performance as individual language use (Chomsky 1972, 14–15), we can speak of the "imparting of competence." However, "translation" is just a possible part of the process of appropriation. The imparting of foreign practices and meanings or the interest of the individual to appropriate this knowledge does not have to be part of a process of appropriation.

10 „Das Objekt wird mit Bedeutungen und Kontexten versehen, es wird transformiert, um so als Bestandteil der sich etwas aneignenden Gesellschaft neu erfunden zu werden."

11 Regarding the potential of semiotic approaches in archaeology cf. Furholt/Stockhammer 2008.

The process, which I call "entanglement," can be conceptualised the following way (Stockhammer 2012a). The process starts with the "encounter" of at least two different entities that are etically defined and, therefore, "pure" from an epistemological perspective. We have to be aware of the etic character of these entities and of the fact that our analytical categorisations differ from past systems of classification (e. g. archaeological cultures versus past ethnic groups). These entities are mental templates only created for analytical purposes, therefore I do not mind if the two entities interacted before. Historically defined cultures like "Mycenaean" or "Cannaanite" should not be perceived as separate, real historic entities—especially in view of the close interconnection between Eastern Mediterranean cultures that already existed long before the Late Bronze Age. I focus on the interaction of certain aspects of culture, e.g. practices of cooking, drinking, and feasting. An example of the beginning of such a process of entanglement could be the transport of pottery from Greece to the Levant. The encounter with something new—irrespective where this encounter happens—generally forces the receiving unity to act and thus starts a process of appropriation.

At the instant of encounter, humans do not trigger a change in the object, but the object changes humans. Its mere material presence changes perceptions of social space and movements and forces humans to modify their social practices. Therefore, the state of relational entanglement is not a state of entanglement of the object, but a state of entanglement of social practices and meanings, as these are newly created, whereas the object remains unchanged or is, at most, only manipulated. The process of appropriation primarily struggles to create a structured handling of the new or foreign by modifying the object's context. The object does not change in its materiality, but the relationship to the object changes (Hahn 2004b, 226; 2005, 101). Thus, appropriation leads to a "relational entanglement" at first. As the process of appropriation never ends, relational entanglement is only a momentary state in the context of taxonomic liminal spaces in the sense of being in-between.[12] An example of this phase would be the integration of Mycenaean drinking vessels into Levantine feasting dishes with the dishes then consisting of local and foreign vessels used together in a performance within a social event. The Mycenaean vessel still remains unchanged in its materiality in this moment, although it became part of totally different practices and world views.

12 The importance of "liminal spaces" and "in-between" has already been pointed out by Bhabha 2007. Bhabha, however, understands these spaces and states as social realities in postcolonial societies. Thereby he ignores the fact that postcolonial society is also a product of scientific classification and no entity that exists in reality.

The process of entanglement does not have to end with the continuous emergence of new relational entanglements, but can also trigger an act of creation. Only then does a basic transformation of the material object in its materiality take place and "material entanglement" comes into existence. Within this entanglement, the formerly differentiated categories are blended together to shape something new that one might also possibly term a new category, if this makes sense from an epistemological perspective. This material entanglement clearly arose from the formerly separated categories, but its distinct origins cannot be distinguished any more.[13] The shape of a material entanglement is significantly determined by individual creativity and the agency of the actor. If one continues the already given example, the creation of pottery vessels which integrate Mycenaean and Canaanite features can be termed a material entanglement.

In my view, this methodological approach offers the best opportunity for analysing relational and material entanglements in the Eastern Mediterranean Late Bronze and Early Iron Age. In the analysis that follows, I will not rehearse all analytical steps mentioned above. I set out to gain insights into the course of selected processes of appropriation as well as identify the relevant factors guiding these processes. Moreover, I will analyse momentary entanglements with regard to their materialisation, their context and their historical meaning. Overall, I will illustrate the complexity of human-thing-entanglements and the manifold transformations of functions and meanings that result therefrom.

3. Case studies: appropriation of Aegean-type pottery in the Southern Levant

In order to show the potential of the methodological approach outlined above, I want to analyse selected processes of appropriation of Mycenaean pottery from the Southern Levant in the fourteenth to twelfth century BCE, i.e. the Late Bronze and Early Iron Age in Levantine terminology. I will take examples from the Southern Levant, which comprises modern state Israel (including the occupied territories) and Lebanon. Cyprus and the Northern Levant are only marginally considered in this paper (Fig. 1).

13 Following the terminology of Feldman 2006, 30. 62. 67. 202 n. 32, objects are "international" objects, when a "complete hybridisation" took place, because of which the object can no longer be attributed to particular local traditions.

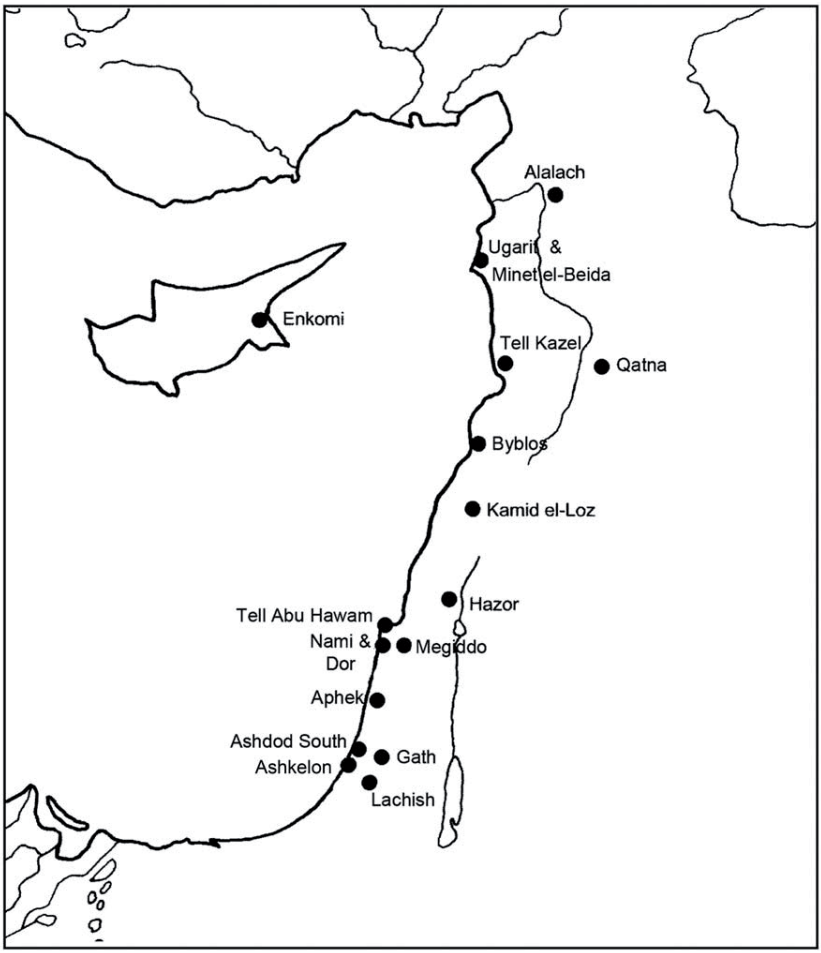

Fig. 1: The Levant in the late 2nd millennium BCE (after Fischer 2007, pl. 1).

During the fourteenth and thirteenth centuries BCE a large quantities of fine ware pottery, produced in workshops in the north-eastern Peloponnese on the Greek mainland, were brought to the Southern Levant. There, those vessels were continuously used in the twelfth century BCE and supplemented by pottery showing Aegean-type form or decoration but produced on Cyprus or in the Levant itself. As questions of origin and places of production will not be discussed further here, I will use the term "pottery of Aegean-type" instead of "Mycenaean pottery." In my definition,

Aegean-type pottery comprises all vessels produced in a Mycenaean or Minoan (Cretan) tradition of forming—irrespective where such vessels were actually produced. I will also not address the ongoing discussions about the mechanism of the distribution of goods in the Late Bronze and Early Iron Age Eastern Mediterranean, concentrating only on the appropriation of particular vessels and transformations of function and meaning that took place during this process.

In the discussion that follows, I will select just two of the multitude of Aegean-type vessel forms imported to the Levant, namely the amphoroid krater and a shallow, stemmed drinking bowl called a kylix by Aegean archaeologists. The function and meaning of both types of vessels are beyond any doubt in Late Bronze Age Mycenaean Greece where kraters were used to mix water and wine before this mixture was drunk from the kylikes that were grouped into equal pairs to be used by pairs of drinkers. Thus, a Mycenaean feasting ensemble comprised one krater together with several pairs of kylikes (Stockhammer 2008, 135. 169. 306. 314. 295–310. 320. 325). The appearance of both shapes at the Southern Levant has long been taken as an indicator for the take-over of Aegean drinking practices in this region. The identity of vessel shapes in Mycenaean Greece and at the Levant was considered as proof for the identity of practices and meanings connected with the particular shapes. Form, function, and meaning were virtually perceived as inseparable, transcultural constants.

In the course of my study of amphoroid kraters and kylikes, I was especially focussing on in situ finds as these allow for a comprehensive analysis of the context including other finds from the same context and the architectural setting. Moreover, I analysed the quantitative relationship between the two shapes in each of the settlements and the functions and meanings of vessels of Levantine type with a similar shape. Fortunately, for the latter ones in situ contexts, some textual and pictorial sources and residue analyses are available.

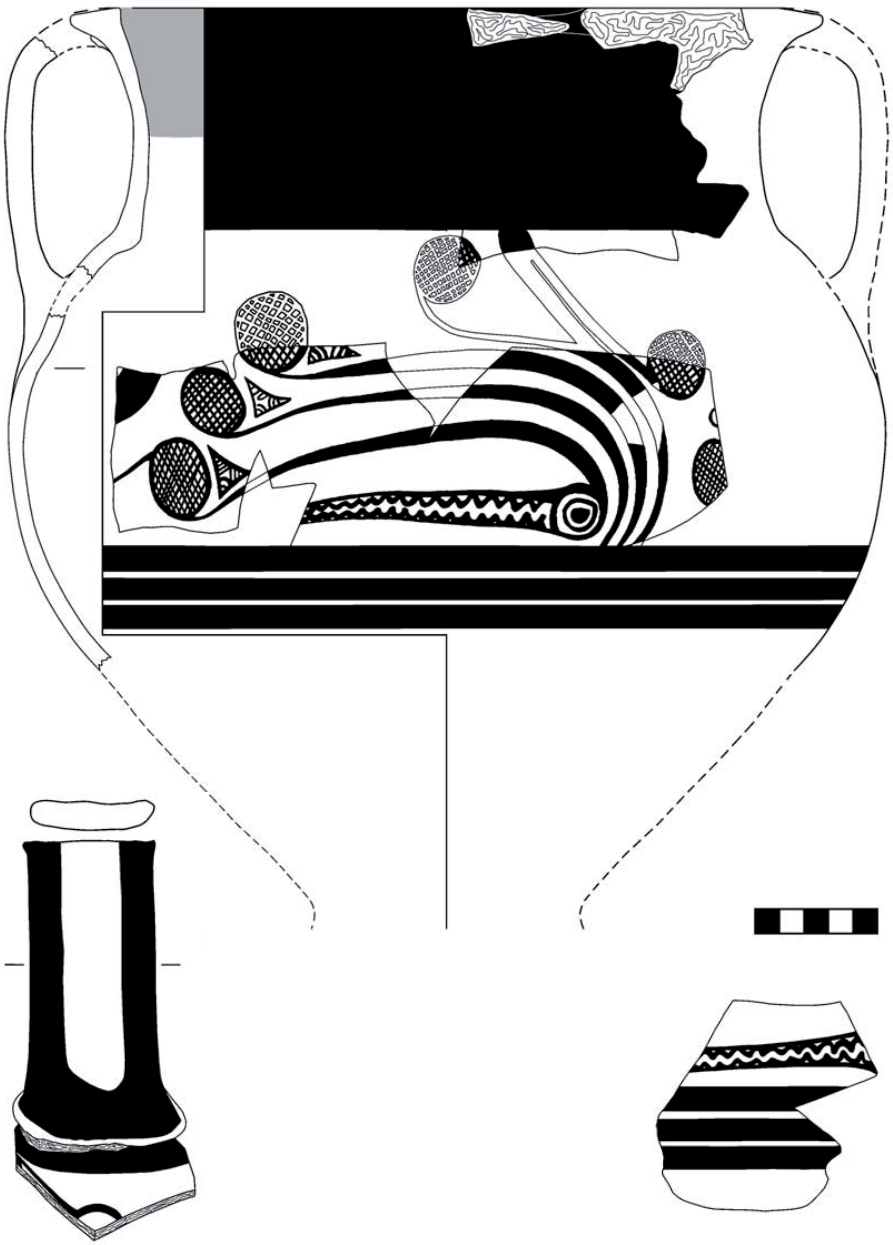

Fig. 2: Mycenaean amphoroid kraters from Megiddo, room 1817 (drawing P. W. Stockhammer).

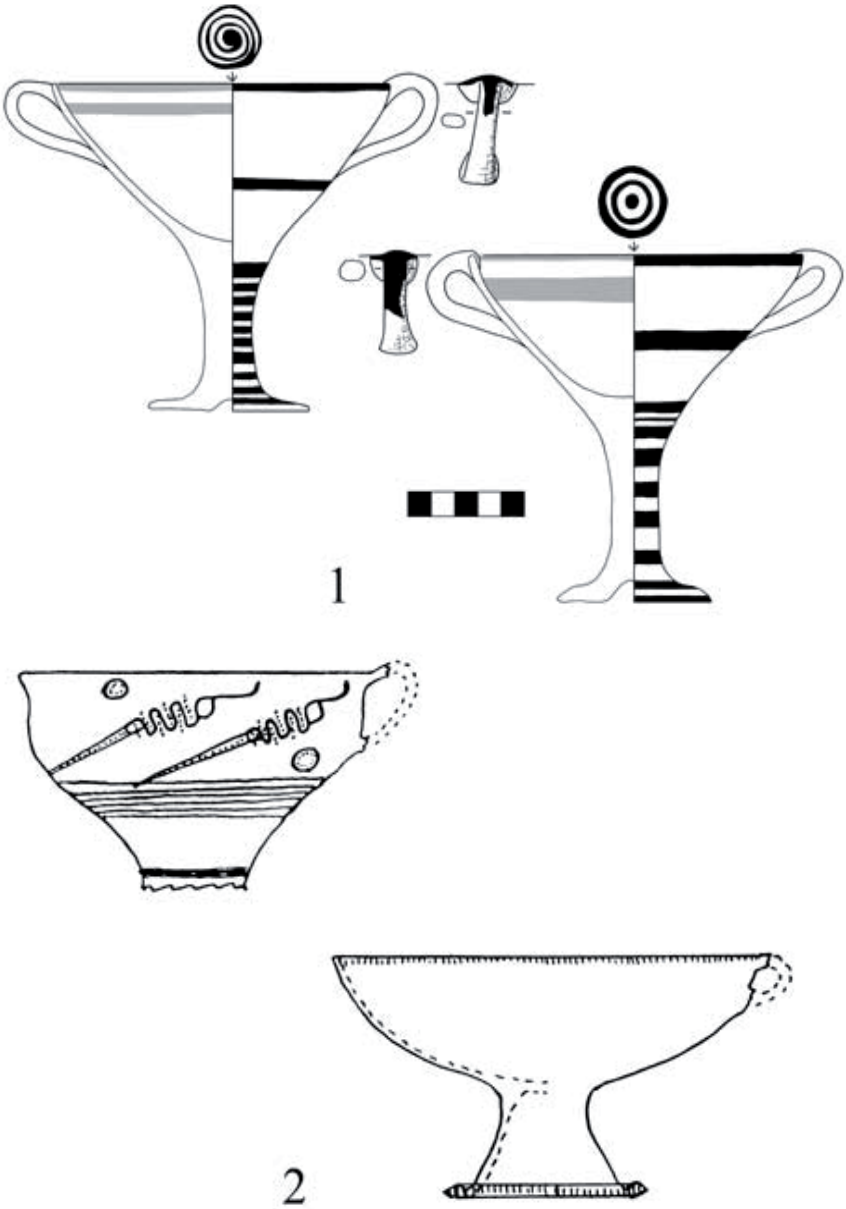

Fig. 3: Mycenaean kylikes from Tiryns (1) and Lachish (2) (1: Stockhammer 2008, No. 1194-1195; 2: after Tufnell 1940, pl. 46B, 213. 219).

3.1 Case study 1: amphoroid kraters at the Southern Levant

Despite their small number, the meaningful floor contexts with amphoroid kraters and quantitative analysis enable us to trace a Levantine—maybe particularly southern Levantine—appropriation of this vessel shape. The floor inventory of room 1817 in Megiddo is of special importance for my questions. There, at least one such krater was found in situ without any other feasting dishes, but with a Cypriot-type wall bracket of local production (Fig. 2, 2). A comparable find distribution is known from room thirty-six of the Temple of Rhytons in Ugarit, where the upper part of an amphoroid krater was found, which I assume was found in an in situ position. Further fragments of the vessel were dispersed over the south-eastern part of the building (Mallet 1987, 223. 239. 242 fig. 17, 79/5047; 243 fig. 18, 79/5047). In line with what was found in room 1817 in Megiddo, drinking vessels are also missing in room thirty-six in Ugarit,[14] whereas again Cypriot-type wall brackets were associated with the amphoroid krater (Mallet 1987, 239–240. 243 figs. 18, 79/5079. 79/5616. 80/5323). Indeed, only ten amphoroid kraters and only five Aegean-type drinking vessels were found in the settlement at Megiddo. In Tell es-Sâfī/Gath, I identified six amphoroid kraters and not a single Aegean-type drinking vessel from the excavations in 1996–2005 and 2010. From Aphek, nine kraters and seven other Aegean-type feasting vessels are known; from Hazor ten kraters and ten other feasting vessels of Aegean type; and from Lachish thirteen kraters, sixteen cups and a kylix (Hankey et al. 2004; Guzowska/Yasur-Landau 2009; Zuckerman, pers. comm.). I do not want to exclude that at the mentioned sites drinking vessels of Aegean type were never used with the respective kraters. However, the quantitative relation between the kraters and the drinking vessels differs so markedly from the one calculated for the Aegean—i.e. the combination of about ten drinking vessels with one krater—that Levantine practices of feasting with Aegean-type pottery doubtlessly differed from those in the Aegean. This might have also been valid for the Northern Levant, as five kraters but not a single drinking vessel of Aegean-type were found under the thirty-three examples of Aegean type found in the Temple of Rhytons in Ugarit (Mallet 1987; van Wijngaarden 2002, 60–62).

14 Only a single carinated bowl of local type with a rim diameter of 16.7 cm could have possibly been used as a drinking vessel (Mallet 1987, 240. 242 fig. 17, 80/5100).

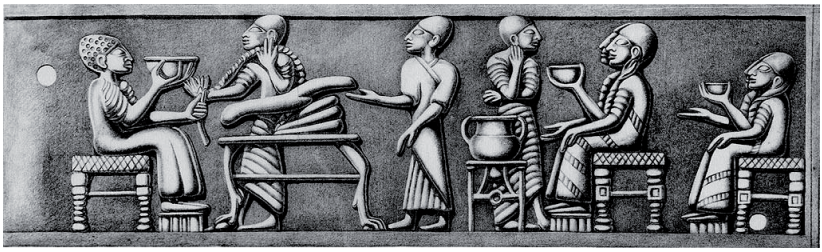

Fig. 4: Depiction of a drinking ruler on an ivory object from Megiddo (after Loud 1939, pl. 32, 160)

The few depictions of drinking practices of the Canaanite elite of the thirteenth and twelfth centuries BCE, especially the images of drinking male rulers on ivories found in the palace of Megiddo, clearly indicate the consumption of wine from metal bowls following the Egyptian rulers' iconography (Fig. 4). The use of shallow metal drinking bowls by the local elites is further evidenced by their frequent occurrence as grave goods in elite burials (Yasur-Landau 2005). At the Southern Levant, however, actors with high statuses stopped using Aegean-type pottery from the late fourteenth century BCE onwards (Stockhammer 2012b). Thus, the aforementioned images cannot be used for illustrating the practices with Aegean-type pottery. They only show us that actors with high status positions also used krater-like vessels and that those vessels were placed in stands. More illuminating for the practices with Aegean-type kraters are the depiction of a Canaanite mercenary on a stele from Tell el-Amarna from the fourteenth century BCE (Fig. 5; Spiegelberg/Erman 1898) and the great number of finds of strainer tips and also, sometimes, tube elbows for drinking straws,[15] e.g. from Tell el-Amarna and the shipwreck from Ulu Burun (Griffith 1926; Weisgerber 2005). The average people obviously drank beer with straws from huge vessels that were placed in the centre of a round of drinkers. In room thirty-six of the Temple of Rhytons in Ugarit, several individuals probably sat on the stone benches at the walls in order to drink from the krater placed inside a bronze stand. In most cases, kraters of Canaanite shape were most probably used for this kind of Canaanite feasting practice, as those vessels are so frequently encountered in Late Bronze Age contexts (Amiran 1970, 132–135 with pl. 41). The Canaanite-type kraters were often decorated with pictorial motifs (Choi 2008), but hardly any scenic depictions that are so common on Aegean-type amphoroid kraters (Vermeule/Karageorghis 1982).

15 Griffith 1926; Maeir/Garfinkel 1992; Simon 1992; Maeir 2007. There are a great number of images depicting drinking with straws in the Near Eastern and Egyptian art of the third and second millennium BCE, especially in the glyptic of the third millennium BCE (Selz 1983; Homan/Ebeling 2008; McGovern 2009, 97–100).

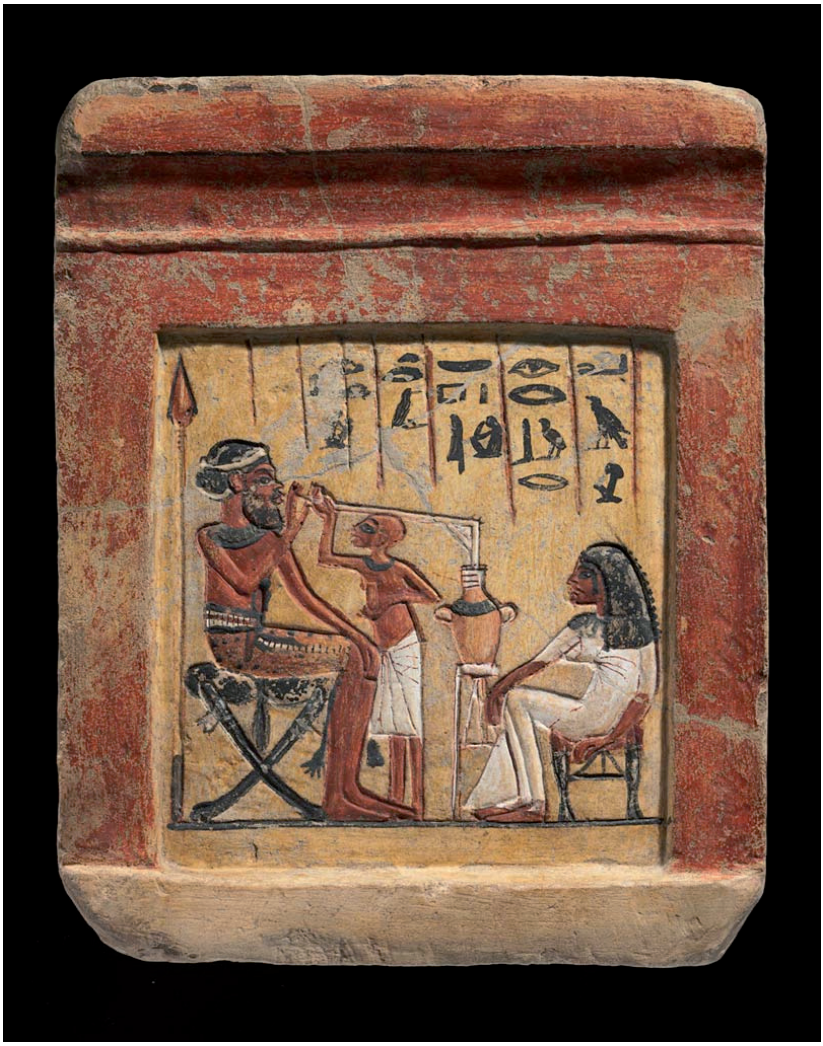

Fig. 5: Depiction of a Canaanite mercenary on a limestone stele from Tell el-Amarna (with kind permission of the Staatliche Museen Preußischer Kulturbesitz, © Sandra Steiß, Ägyptisches Museum und Papyrussammlung, Berlin).

The Bronze Age textual and pictorial sources of the Near East inform us that the consumption of beer was closely connected with the use of straws

from the third millennium BCE onwards.[16] However, whereas beer was consumed by the populace and persons of high status and, thus of very different statuses, the consumption of wine was restricted to the elite in the Southern Levant as well as in Egypt and Lower Mesopotamia. The Egyptian vineyards were all Pharaonic possessions. In Egypt, wine was only distributed to the general public in the context of the most important religious ceremonies (Marciniak 1995, 242; Poo 1995; McGovern 2009, 182; pl. 6).

Further evidence for the consumption of beer with straws is given by the use of strainers that should hold back residues in the beer, whereas the consumption of wine makes straining less necessary. Moreover, the Greek author Xenophon (Anabasis, IV, 5, 26) gives us an ethnohistorical description of the custom of drinking beer with straws by farmers in the Armenian mountains (Spiegelberg/Erman 1898, 128). Even today, drinking beer with straws from huge krater-like vessels is a common habit in East Africa and Vietnam (Fig. 6; Karp 1980; Homan 2004, 86; Dietler/Herbich 2006; Haaland 2007). Thus, Aegean-type kraters could easily be integrated into this Levantine practice of drinking.[17] Thus, there is considerable evidence that indicates a very particular use of Aegean-type kraters at the Southern Levant that differs markedly from what the Greek producers had originally envisaged to be their function. Even if the Aegean function as a mixing vessel was known, the beautifully painted, large open vessel could have been the centrepiece of beer consumption during a feasting event. Placed in the centre of the room, the pictorial decoration of the Aegean-type krater certainly would have attracted the glances and attention of the drinkers. The motifs of the decoration—be they chariot scenes, bulls, or fantastic beings—might have been topics of discussions and would ultimately have had exerted some influence on narration during feasting.[18]

16 Homan 2004, esp. 86; Homan/Ebeling 2008, 48. 56; McGovern 2009, 97–100. The earliest depiction of drinking beer with straw is found on a sealing from Tepe Gawra ca 3850 BCE (McGovern 2009, 98 fig. 13a).

17 The detection of beer with residue analysis is much more difficult than that of wine. Unfortunately, such analyses are completely missing for amphoroid kraters found at the Southern Levant. Moreover, no strainers or elbow tubes have been found inside Aegean-type kraters at the Levant so far. Ethnographic data from modern day Eastern Africa indicates that most drinking straws for beer are used without a strainer or elbow tube (Dietler/Herbich 2006). Unfortunately, nothing is preserved from such straws in an archaeological context. Another possibility for straining beer before drinking is the use of a strainer jug. Such vessels are frequently known from Levant and Egypt in the Late Bronze and Early Iron Age (Homan 2004, 92; Homan/Ebeling 2008, 55–56).

18 For the range of motifs on amphoroid kraters cf. Vermeule/Karageorghis 1982; Güntner 2000.

Following my own methodological approach, an intricate process of appropriation can be determined, which results in a relational entanglement: all four aspects of appropriation as defined by Hahn are clearly recognisable in this case. Of particular interest is the objectivisation: the vessel was not classified as a mixing vessel in the Aegean system, but as a drinking vessel in the local taxonomy. This went along with the attribution of a different meaning, which resulted in the incorporation into local practices.

The complex relationship between humans and things in the sense of the practice turn can already be recognised in the context of the process of appropriation and the connected transformation of meanings and functions. At the same time, ANT enables us to understand the kraters as active participants of a feast. They influenced not only the practice of drinking (e.g. the handling and placing of the straws), but certainly also the narration during the feast due to their imaginative decoration.

Fig. 6: A party drinking beer through straws among the Fipa of Tanzania (photograph: Bilham Kimati, after Haaland 2007, 166, fig. 1; reproduced here with the friendly permission of Randi Håland).

3.2 Case study 2: Kylikes at the Southern Levant

I now turn to the appropriation of the kylix as a second example for the transformative power of transcultural entanglement. Thus far, this shape has

never been found with kraters of Aegean production in the same context in the Southern Levant. Already Assaf Yasur-Landau (2005, 172. 174; 2008, 356) has pointed out to the observation that stemmed drinking vessels of Aegean type were difficult to integrate into the southern Levantine feasting practices as depicted on the ivories from Megiddo (Fig. 4) and Tell el-Far'ah (south). However, he did not propose an explanation for the presence of Aegean-type chalices and kylikes in the Southern Levant?

In order to understand possible social practices with these Aegean-type vessels in the Southern Levant, it is first of all necessary to analyse the use of stemmed bowls of the Canaanite type. Residue analyses on stemmed ceramic or bronze bowls of the Canaanite type as well as pictorial images enable us to identify these vessels' function beyond any doubt:[19] these stemmed bowls were used for burning incense at certain events. The depiction of the conquest of Ashkelon by the troops of Pharaoh Merenptah on a stone relief in Karnak shows a priest standing over the roofs of the city holding a stemmed bowl from which smoke is rising towards the sky (Fig. 7). The form of the depicted vessel suggests a metal vessel. There is no doubt that this practice has to be interpreted as an urgent prayer, accompanied by offering incense to the gods in order to win favour in battle. Wall paintings in the tomb of Kenamun in Thebes, which illustrate the arrival of Canaanite ships in Egypt, show the captains of two ships, each of them holding a stemmed, bowl-shaped incense burner with their hands towards the sky (Fig. 8). The vessel's stem was an important prerequisite for holding the vessel during the burning of the incense, as the vessel's bowl heated up very quickly. As the carrying and raising of bowl-shaped incense burners seems to have been a crucial part of the offering practices at the Southern Levant, a stem was an absolute necessity for an incense burner. As the stem is the only feature that connects all the different types of Canaanite bowl-shaped incense burners, this part of the vessel was probably decisive for the individual perception and classification of a vessel as an incense burner.

19 Amiran 1970, 302–306; Yoselevich 2006, 27; Pulak 2008, 353; Namdar et al. 2010. A minority of researchers interpreted the Levantine chalices as drinking vessels or lamps (e.g. Grutz 2007). With their latest scientific analyses especially, Dvora Namdar and her team have ruled out this hypothesis as a general explanation.

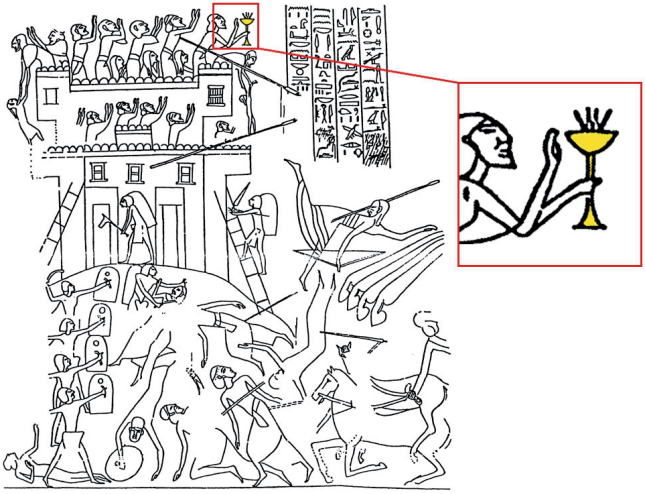

*Fig. 7: Conquest of Ashkelon under Pharaoh Merenptah, stone relief, Karnak (after Stager 1985, *57 fig. 2).*

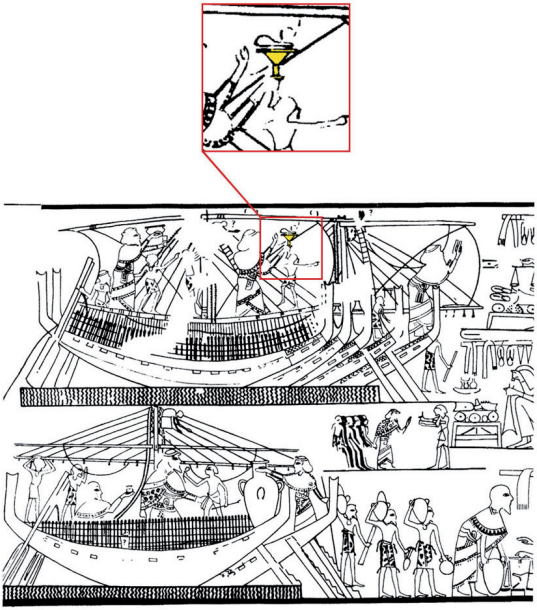

Fig. 8: Arrival of Canaanite ships in Egypt, wall painting, tomb of Kenamun, Thebes (after Davies/Faulkner 1947, pl. 8).

Scientific analyses of residues in four stemmed ceramic bowls from the harbour site of Tell Nami and another forty two found during the excavations of the Late Bronze Age Stratum V of the harbour site of Tell Abu Hawam in 2001 indicate that these vessels were also used for burning incense (Yoselevich 2006). The analyses of Late Bronze Age stemmed bowls from Tell Mevorakh, Shiloh, and Tell Sera' gave corresponding results. Such vessels were also found in many Early Iron Age sanctuaries (e.g. in Tell Qasile, Megiddo, Tell Rekhov, Lachish, Tell Michal, Ein Hazeva, Tell Quiri, and Tell 'Amal), which demonstrates a continuous use of this shape in ritual context beyond the Late Bronze Age. The connection between stemmed bowls as incense burners and shipping is still traceable in the first millennium BCE. A comparable ceramic incense burner was found in an eighth century BCE ship that sunk in the Mediterranean Sea near Ashkelon (Ballard et al. 2002, 160 fig. 9, 2; 163). Therefore, stemmed bowls played an important role for mariners, as well as priests, in the context of ritual incense burning on ships and in temples of the Late Bronze and Early Iron Age at the Southern Levant (Yoselevich 2006, 27; Pulak 2008, 354).

Latest scientific analyses on Iron Age II vessels of the late ninth or early eighth century BCE from Tell Yavneh give us an idea of the substances that were burnt in the stemmed bowls of the Canaanite type. The vessels were found in a pit with several thousand objects including other ceramic cult paraphernalia such as stands (Kletter et al. 2010). Seventeen stemmed bowls were analysed for organic residues with the help of gas chromatography. In one group of bowls, molecular traces of dihydromethyl jasmonate, isopropyl lauricate, myristate, and myristic acid were found that point to a mixture of floral oils from several plants including probably jasmine (*Jasminun Gradiflora*) or nutmeg (*Myristica fragrans*) (Namdar et al. 2010, 169). However, nutmeg has not been considered to be present in the Levantine Late Bronze and Iron Age so far. According to Dvora Namdar et al. (2010, 169) these essences "cause hallucination, involving light-headedness, blurred vision and distortion in time, color and space… give a sense of euphoria, detachment from reality and a loose feeling of the limbs due to the myristicine and safrole components." Therefore, the stemmed bowls were used to vaporise plant oils with an hallucinogenic effect that definitely enabled a very particular perception of the performed rituals when consumed in combination.

The shallow stemmed bowls FS (Furumark shape after Furumark 1941) 310 from Levantine sites have to be seen as Aegean imitations of Levantine incense burners. This suggests a similar use of this Aegean-type vessel at the Levant. However, no residue analyses have been carried out on these vessels so far. Thus, their usage can only be deduced with a certain probability on

the basis of indications. Moreover, the presence or absence of soot marks is not sufficient for us to identify a certain vessel as an incense burner. It is very probable that sand was used inside the bowl and the incense then placed on the sand, as is common in incense burning practices nowadays. The use of sand would thus prevent the bowl from getting blackened or burnt. It is further noteworthy that, so far, vessels of this type have only been found in large harbour centres of the Levant (Ugarit and its harbour, Minet el-Beida, and Tell Abu Hawam).[20] If we look at the finds of the Canaanite-type incense burners and the pictorial evidence, we may assume that these vessels were used frequently at those places. The obvious similarity of the shapes and the corresponding concentration at harbour sites—as far as the small number of finds will allow any conclusion—makes the use of shallow stemmed bowls FS 310 as incense burners highly probable.

From the perspective of Aegean archaeology, the function of kylikes as drinking vessels has never been questioned, even for the finds from the Levant, because the identity of the shape has always been given more importance than the difference of the contexts when it came to the reconstruction of prehistoric usage. As there are still no scientific analyses of residues in Aegean-type kylikes found at the Southern Levant, their functional interpretation can only be based on a contextual analysis. Aegean-type kylikes are considerably rarer than other Aegean-type shapes. Albert Leonard registers forty-five Aegean-type kylikes from the Levant, two thirds of which were found at a small number of sites, namely the huge harbour centres on the coast, especially Tell Abu Hawam, Minet el-Beida, and Ugarit, and the Late Bronze Age temples of Kāmid el-Lōz and Lachish in the hinterland (Fig. 3, 2; Leonard 1994, 106–107). Since the work of Leonard, the publication of further kylikes from Ugarit, Tell Kazel, and Kāmid el-Lōz has underlined their particular frequency of occurrence in harbour sites and temples.[21] In accordance with the shallow stemmed bowls FS 310, the distribution of kylikes corresponds significantly with places where ceramic or bronze stemmed bowls of the Canaanite type were very commonly used as incense burners. Tell Abu Hawam alone yielded more than fifty stemmed bowls which were obviously used on the ships for incense sacrifice and then discarded into the harbour after their breakage (Yoselevich 2006, 27). Whereas no stemmed bowls, but only stands without corresponding bowls were found in the temple of Kāmid el-Lōz (Penner 2006,

20 Leonard 1994, 127. Albert Leonard registers seven vessels of FS 310 from the Levant—three from Ugarit, one from tomb V in Minet el-Beida, and three from Tell Abu Hawam. A further specimen from Ugarit was published by Hirschfeld 2000, 157 No. 474; 241 fig. 31, 474. For stemmed bowls FS 310 on Cyprus cf. Karageorghis 1965, 208–213.

21 Monchambert 2004, 275; Badre 2006, 74; Jung 2006, 70–76; Penner 2006, 90 fig. 47; 92. 94.

281), numerous stemmed bowls of Canaanite type are known from the Fosse Temple in Lachish (Tufnell et al. 1940, pl. 46A−B). All this evidence indicates that Canaanite-type stemmed bowls and Aegean-type stemmed bowls FS 310 and kylikes were used in the context of the same social practices—i.e. as incense burners—at the Levant and especially at the Southern Levant.

The use of Aegean-type kylikes for the burning of pungent incense was definitely far from the imagination of an Aegean potter with regards to the function of those vessels. The similarity of their shape to Canaanite incense burners was probably crucial for the decision of Canaanite mariners and temple personnel, who decided to appropriate kylikes of Aegean type, and to integrate them into their incense burning practices. It is possible that the original function as drinking vessels was known to these actors. However, this possible knowledge obviously did not play a major role in the process of appropriation. In my opinion, it is highly probable that the identification of the kylikes as incense burners already took place in the context of the objectivisation of the objects. Thus, it would be misleading to speak of reinterpretation, because this requires the knowledge of the Aegean function as a drinking vessel as a prerequisite. This implies that kylikes were possibly never perceived as drinking vessels when first encountered, but were immediately viewed as incense burners. Maybe a possible usage as a drinking vessel was never considered at all or only secondarily. Following my own terminology, this process of appropriation resulted only in a relational entanglement, but not in a material entanglement, as the kylikes remained unchanged in their materiality. Why in some cases consumers decided to acquire Aegean-type stemmed bowls instead of Canaanite-type ones has to remain open. Aesthetic reasons or affection for the exotic may have been of relevance. It is conceivable that Aegean-type kylikes were sometimes also used as drinking vessels at the Southern Levant or that one and the same vessel was first used for drinking and afterwards for incense burning. The function and meaning of a certain vessel could have easily been determined in new and very different ways. However, the majority of Aegean-type kylikes were very probably used as incense burners and not as drinking bowls.

Similar to my first case study, the usage of kylikes in the Southern Levant demonstrates the transformative potential of processes of appropriation. If they were used as drinking vessels from time to time, they forced a new practice of holding the drinking vessel and, therefore, triggered a transformation of feasting practices. Their use for burning incense enabled the actor to hold the hot vessel not only with its stem but also with the handles, whereas stemmed bowls of Canaanite type are rarely equipped with handles.

Conclusions

My specific aim in this article was to advise caution before quickly attributing a uniform meaning or function to a specific vessel shape. Taking the practice turn seriously in our analyses means acknowledging the value of things as subjects that act or initiate action. Things shape our social practices and, thus, ultimately also our word views that are generated when acting with things. Things are neither stable nor static, even if this is supposed by their thingness at first sight. They change their shape, their functions, and their meanings in their biographies of usage. Such processes of transformation become particularly obvious, when humans appropriate foreign or new objects and integrate them into their social practices. At first, things remain unchanged, but they change humans, their practices, their life worlds, and ultimately their world views, as those are always views on the world (Maran 2012, 63). Things have the power to transform, to break, rot, or be manipulated. Things have biographies and itineraries similar to humans and we can only understand small parts of their worlds if we take a close look at the small traces of life materialised in and on the things and at the context of finding, at the same time. In my view, the transformative potential of appropriated things has largely been underestimated so far, not least because it is so hard to detect with our archaeological sources. However, it is imperative to break the dominating view in archaeology that a particular thing is associated with a particular function and a particular meaning. This is especially true for objects—in my case certain types of vessels—that were distributed over wide regions and that are traditionally attributed with a supra-regionally identical function and meaning by archaeologists. Focusing on the social practices and their contexts opens our eyes to the amazing creativity of humans in their handling of things: Chamber pots are recognised as cooking pots, horse gear as women's adornment, and necklaces as part of sword hangers .[22] Only the readiness to give up uniform patterns of interpretation opens the mind for the multiplicity of transformations of things and also, ultimately, of humans. A supra-regional uniformity of form, function, and meaning may have existed. However, its diagnosis must not stand at the beginning, but only at the end of comprehensive, contextual analyses.

22 Metzner-Nebelsick/Nebelsick 1999; Dabal 2008; Maran 2011b; Koch Forthcoming.

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