

"Contextualization of Zoomorphic Figurines from the Neolithic of the Southern Levant"

Estelle Orrelle¹ and Liora Kolska Horwitz²

1. Hapardess Street 35, Kiryat Ono, Israel 5552584, Email: estelleorrelle@gmail.com
2. National Natural History Collections, The Hebrew University, Faculty of Life Science, Edmond Safra Campus, Jerusalem 91904, Israel. Email: lix1000@gmail.com

Abstract

Humphrey and Laidlaw (2003:3) claim that ritual significance in the Neolithic cultural contexts can be supported by historical analogies of practices related to a certain kind of ritual such as the significance of a choice of particular types of deposition location. The identification of such 'ritualized' elements of the record can allow speculations about the thought which lay behind such action (Bell 1992:16).

This study addresses the contexts of three-dimensional miniature clay zoomorphic figurines retrieved from Pre-Pottery Neolithic and Pottery Neolithic period sites in Israel, Syria and Jordan. A data base compiled of one class of figurine- horned quadrupeds, termed bull figurines, reveals formalized, repetitive contextual data for some 370 figurines.

The analysis of find spots of these zoomorphic figurines together with specifics about the form and shape of the figurines, such as their colour, reveals insights into rituals and beliefs, thereby documenting aspects of ritual performance. This is further interpreted with reference to Mesopotamian anti-witchcraft texts.

These data are then instrumental in identifying ritual practice and uncovering belief systems and cosmologies in the communities which produced them (Malone et al. 2007).

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Introduction

Aldenderfer (2012:23) noted that “for the archaeologist, religion ... is only perceived when it is expressed through some act that has material consequences”. In the Levantine archaeological record of the Neolithic period, spanning the period ca. 10,200 – 6200 uncal BP, ritual activity has been identified in a range of features and finds ranging from architecture, mortuary activities and material culture, especially the plastic arts (e.g. Bar-Yosef & Belfer-Cohen 1989; Kuijt 2004, 2008; Rollefson 2000, 2008; Twiss 2001). Zoomorphic clay figurines have featured prominently in this discourse. They have been variably perceived as: symbols of social, religious and psychological experience prior to their incorporation as domesticated food animals in the Neolithic economy (Cauvin 2000:25-33, 106-8), objects of magic or ritual use (Coqueugniot 2003; Freikman & Garfinkel 2009; Rollefson 2008; Schmandt-Besserat 1997, 2013), childrens' toys (Voigt 2002), items that played a role in economic activities such as animal exchange (Wengrow 2003), or simply representations of animals present in the economy (Twiss 2001:28).

Some ritual aspects of Neolithic life will be discussed here, with reference to miniature clay figurines of horned quadrupeds recovered from archaeological sites in the southern Levant. Two aspects will be addressed- their find contexts and their colour.

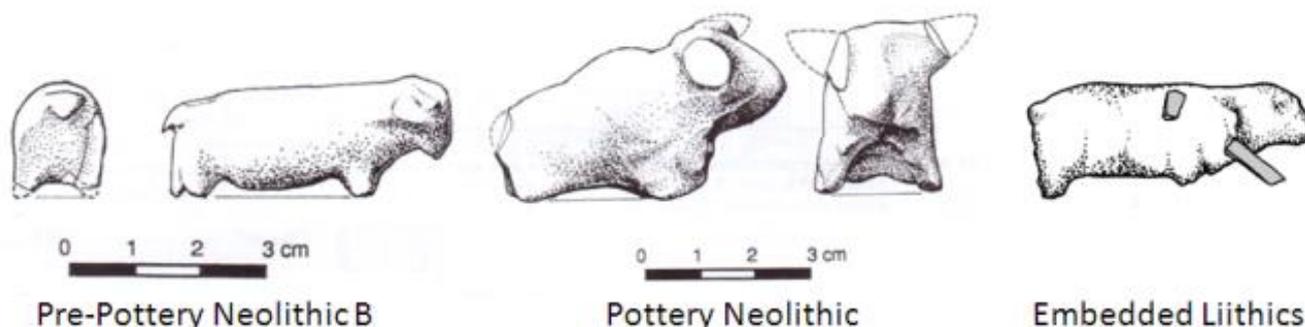
Background

Miniature zoomorphic clay figurines representing a range of animal species (e.g. goats, pigs, cattle, carnivores, birds, snakes), have been found in almost every Neolithic excavation in the Levant and Anatolia (e.g. Ayobi-Arrok 2013; Freikman & Garfinkel 2009; Garfinkel 1995; Helmer et al. 2004; Martin & Meskell 2012; Schmandt-Besserat 2013). The miniature zoomorphic figurines are hand-molded from raw clay, sun-dried or low-fired, and range in length from 3 to 15 cm in length. Predominant in the corpus of zoomorphic images are horned quadrupeds. Although their mode of representation is often schematic it is remarkably uniform and their execution reflects an intimate knowledge of the animal's anatomy. The makers also chose to emphasize selected features such as large, forward curving horns, a short powerful neck, massive shoulders and prominent withers, small tapering rear end, short parallel legs, as well as a short tail. Often they have an emphasized dorsal spine forming a crest along the back of the figurine (Fig. 1). These features have led to their identification as bulls, likely aurochs (e.g. Garfinkel 1995; Helmer et al. 2004; Martin & Meskell 2012; Rollefson 2000; Schmandt-Besserat 1997). We term them here ‘bull figurines’.

The Neolithic bull figurines are quite standardized in their material composition. Firstly, they are almost universally made of clay. Moreover, they are very homogeneous in stance - all are depicted standing, as well as in size, shape, surface treatment and configuration, though some of the figurines have incisions, perforations or contain embedded flint or obsidian (Fig. 1). Many are headless or limbless, perhaps due to intentional breakage, though accidental fracturing cannot be discounted. Despite the variation in such details, in terms of their basic qualities (material, form and size), there is not much difference between the modified and the unmodified, complete or partial, zoomorphic figurines.

Few examples of these bull figurines are known prior to the mid-Pre-Pottery Neolithic B (PPNB; dated to ca. 10,100–9,250 cal BP) in which period, and in the subsequent Late PPNB and PPNC, they become extremely common (e.g. Garfinkel 1995; Kuijt & Chesson 2004; Mahasneh & Gebel 1999; Rollefson 2008; Schmandt-Besserat 1997). They continue into the subsequent Pottery Neolithic period (PN; dated to ca. 8250-6500 cal BP) though by this time their numbers appear to decline as they are replaced by representations of domestic animals (Helmer et al. 2004; Rollefson 2008; Streit & Garfinkel 2015).

Figure 1: PPNB and PN bull figurines from Munhata (from Garfinkel 1995:121,123). Figurine with embedded lithics from PPNB ‘Ain Ghazal (redrawn after Schmandt-Besserat 1997: Fig 10).



This Study

For this study a corpus of some 370 fragments as well as whole, or nearly whole, bull figurines was compiled from sites in the southern Levant (southern Syria up to the Damascus Basin, Lebanon, Jordan and Israel), spanning the Pre-Pottery Neolithic (PPNB and PPNC) to PN periods. They derive from Levantine sites with large figurine assemblages and good contextual information: Aswad (Syria) and ‘Ain Ghazal (Jordan) – PPNB and PPNC; Munhata (Israel) – PPNB,PN; Sha’ar Hagolan and Nahal Zehora II (Israel) – PN (for this site, find locations for all imagery items were included). Where relevant, finds from other sites are also mentioned.

Writing about clay sculpture, Rawson (1971:8) notes it “contains’ both the reality of the materials and process, and the inner realities of man’s sense of identity in relation to his own world of meaning”. Thus, the clay, bull figurines may be perceived as embodiments of the Neolithic *weltanschauung* which produced them.

This investigation aims at analyzing bull figurine find contexts and figurine colour, features which may offer new insights into their purpose and performance.

Context

Researchers of figurines have emphasized the centrality of context in understanding their function (e.g. Humphrey & Laidlaw 2003; Renfrew 2007). The compiled data set of Neolithic bull figurines from sites in the southern Levant has provided information on their deposition contexts and though it has revealed some variation in selection of deposition locations, the dominant picture is of similar selection.

In several PPNB sites, figurines were found *on floors* or *fills under floors*. For example, in ‘Ain Ghazal about half (54) the bull figurines were found in fills (Schmandt-Besserat 2013:84-110), while in the PPNB site of Tell Aswad, over a third (63 out of 232, not counting horn fragments) were found in contexts related to floors. A unique find from ‘Ain Ghazal were two bull figurines that had been placed, side by side, in a shallow pit covered by a limestone slab. The pit had been dug through the floor of house – both figurines had embedded flints (Rollefson 1986). In Pottery Neolithic Sha’ar Hagolan, a horn fragment was found in fill under a mud plaster floor (Freikman 2010:268 Z28), while at PN Nahal Zehora II, about a third of the figurines were found on a variety of floor types (Gopher & Eyal 2012:Table 29.2).

A related and widespread find locality are deposits identified as *debris* or *refuse dumps*. Arntz (2013:47) noted the paradox, that despite the often cultic function ascribed to figurines, they are often found not in clear ‘ritual contexts’ but intermixed with refuse. These refuse contexts frequently also contain burnt material. For example, the figurines discovered at PPNB Kfar HaHoresh are commonly found in open areas (Biton 2010:49) together with bones, flint, ash and

other finds – described as "everyday waste". Most of the PN bull figurines from Sha'ar Hagolan (N=38) were deposited in fills and debris contexts, some with burnt material. Some 50% of the 97 imagery items from PN Nahal Zehora II were found in what the authors describe as trash, refuse or fills.

Another characteristic of bull figurines is their *occurrence in concentrations*. The zoomorphic figurines from the PPNB layers of Munhata are illustrated in a distribution map (Garfinkel 1995:16, Fig. 3) which shows a large concentration of items, constituting 25% of the assemblage, from one excavation square, M17. On a spatial distribution map of the Sha'ar Hagolan assemblage, concentrations of zoomorphic figurines were located in a courtyard (Freikman 2010: Fig.8.1). Notable, is a cache of 24 bull figurines from 'Ain Ghazal, found together with an incised lump of yellow clay (Schmandt-Besserat 1997:48).

Other find localities are what we may call *special contexts*. For example, in PPNB 'Ain Ghazal, figurines were found both together with a cache of human skulls and in a stone storage bin beneath three decorated cattle bones (Rollefson 1986:47). In PPNB Aswad, two bull figurine fragments were deposited in human graves and a quarter of the zoomorphic figurines were found in basins (*cuvettes*) i.e. intentionally constructed localities (Stordeur et al. 2006). In PN Sha'ar Hagolan a figurine had been placed inside a wall in the courtyard and may indicate a foundation deposit (Freikman 2010:264 Z6), while in the Yarmukian strata at PN Nahal Zehora II, a special find locality was inside a seepage well (Gopher & Eyal 2012:1184-5).

Depositional contexts with *combustion-related features*, i.e. associated with hearths or in deposits with burnt material such as ash and/or charcoal, are perhaps the most salient of all find localities. In our study, such features were most clearly documented at 'Ain Ghazal (Schmandt-Besserat 2013:84-106) where deposition in ash dumps, ash pits, ash layer and a lime-burning pit fill was reported for some 50% of bull figurines (49 figurines out of a total 99). The figurines were deposited too in contexts with remains of fire such as charcoal, ash and/or fire cracked rocks. This is illustrated by the sediment recorded in the context of the 'cache of bull figurines' which is described as "ashy trashy" fill layer; charcoal and fire-cracked rocks (Schmandt-Besserat 2013:88-95, Nos. 32-54 of catalogue). Other find contexts at 'Ain Ghazal are structured hearths where ash from successive fires appears to have accumulated and been retained *in situ*. Ash-rich find localities were recorded also in PPNB Aswad (Stordeur et al. 2006). In the description of MPPNB graves at Aswad, the depositional context of figurines and other symbolic artifacts are documented as lying on a pile of ash within some graves e.g. No. 500 (Stordeur 2006:48-49), while in another instance, a fragment of a figurine was found on a pile of burnt coprolites (Ayobi-Arrok 2013:No.AW1169, #588). At the same site, "ashy layers" in open areas or inside the basins in which figurines were deposited are noted (Ayobi-Arrok 2013:81). An especially large basin in a workshop area had over 419 objects, all geometric or unidentifiable fragments. The objects were found *in situ* on an exterior floor in grey-ashy layers or in layers of burnt, red soil (Ayobi-Arrok 2013:vol.1:229-30; vol. 2:43).

Colour

Like the depositional contexts noted above, irrespective of site or period, the bull figurines in our data set appear to have a similar repertoire of colours, though in some sites a particular colour predominates. These colours may be grouped into two categories: (1) variations of ochre colours - red, orange, yellow and brown; (2) variations of colours associated with burning (which are shades of black, white and grey, sometimes with black patches or adhering ash and charcoal. This might be the result of accidental or intentional firing. Beige might possibly belong to either group.

Of the 153 zoomorphic figurines described for PPNB 'Ain Ghazal (Schmandt-Besserat 2013:84-111), the vast majority (N=115) represent different ochre shades and only 32 were coloured black, grey, white and many showed signs of charring. At PPNB Aswad the number of figurines for which colour was recorded were 95 (Ayobi-Arrok 2013). Since the vast majority of these were described

as having more than one colour, a simple rule of thumb method measuring the appearance of orange or black/ grey resulted in the majority (N=74) belonging to the burnt group and 28 to the ochre group. The burnt group included at least one with clear signs of charring. Thus, in contrast to 'Ain Ghazal, for the PPNB at Aswad burnt colours appear more frequently than ochre colours. Similarly, of the 36 figurines from PPNB Munhata for which colour was recorded, two thirds were variations of light grey/ black; and 13 were ochre coloured. At Kfar HaHoresh, the figurines are described as 'red-orange, some smoothed' (Biton 2010:18).

As to the PN data, of 36 figurines from Sha'ar Hagolan, the majority (N=29) are grey and seven items are beige. In the PN (Wadi Rabah phase) at Nahal Zehora II (Gopher & Eyal 2012: 1186-7, Fig.29:7:1-3) all three zoomorphic figurines show signs of charring. Similarly, 17 out of the 22 figurines from PN (Yarmukian phase) Munhata were grey/black in colour. One of the grey-black items (Garfinkel 1995:110, Fig. 33:12) was incised and punctuated. The two zoomorphic figurines from the later PN (Wadi Rabah phase) at Munhata were coloured dark-grey to black (Garfinkel 1995:120 Fig. 38:1,2).

Specific colours may also have been meaningful. For example, in the ochre shades, red-orange is clearly the most common. This is illustrated by a unique item from PN (Yarmukian) Munhata which had red painted lines on its hindquarters (Garfinkel 1995:110, Fig.33:12, Pl.18.5). Shared colouration between figurines appears also to be of importance, as illustrated in the 'Ain Ghazal cache where 23 figurines were yellow and only one beige-white. Similarly, the bichrome group appears also to have special status as illustrated at Tel Aswad, where of the eight instances of figurines with incisions and perforations, all but one were found to be on bichrome coloured figurines (Ayobi-Arrok 2013:130-184).

Discussion

Humphrey and Laidlaw (2003:3) claim that ritual significance in the Neolithic cultural contexts can be supported by historical analogies of practices related to a certain kind of ritual such as the significance of a choice of particular types of deposition location. The identification of such 'ritualized' elements in the record can allow speculations about the thought which lay behind such actions (Bell 1992:16). To this end we follow the lead of Postgate (1994) and Schmandt-Besserat (1997; 2013) by turning to Mesopotamian texts to elucidate the patterning in context and colour we have observed in the Neolithic figurines. This offers insights into rituals and beliefs, thereby documenting aspects of ritual performance.

In this context, Mesopotamian anti-witchcraft rituals using figurines as described by Abusch and Schwemer (2010:22 ff.) are relevant. The figurines were manufactured of organic material, clay but also bitumen, wax, dough, wood etc.; in some rituals the source of the material was personified and deified e.g. when clay was taken from a clay pit, the deified river was called upon. Figurines were usually destroyed and there was a correspondence between their raw material and method of destruction i.e. clay figurines were "put in water, crushed and then buried but also burnt" (Abusch and Schwemer 2010:23). For burning there was a correlation between types of ovens used i.e. figurines of clay were destroyed in a potter's kiln. Although burning deforms the raw material i.e. clay, it does not necessarily destroy it. However, the transformation by fire suffices as a symbol for the annihilation of the evildoer. If exposed to fire, the burnt remains of the figurine had to be eliminated at the end of the ritual - dumped in a river or deposited in uninhabited areas. Abusch and Schwemer (2010) note that the final stage of destruction of the figurine often entailed its deformation, to humiliate and defile the evildoer. They state: "Burning and burying were the most common ways of destroying the figurines and ritually killing the sorcerers represented by them. Burning symbolizes their complete annihilation while burying banishes them to the netherworld" (Abusch and Schwemer 2010:23).

While we do not suggest a one to one correlation of function or belief system, there are many common elements between the Neolithic bull figurines and Mesopotamian ritual performance. We may term this a shared ritual *chaîne opératoire*, with the Neolithic rites perhaps representing an ancestral form.

1) *Clay & Fire*: In the Neolithic, the choice of clay as a medium was intentional. Clay may offer a symbolic correspondence with natural powers due its very nature - coming from the earth. It is also a material that may be transformed by baking and firing, changing both its colour and consistency. The PPNB marks the onset of experimentation with the earliest evidence for fired pottery (e.g. Ben-Michael 2016; Biton 2010) thus representing a new, and perhaps magical, technology.

Though little research has specifically focused on bull figurine pyro-technology, some are unbaked while others appear to have been fired at low temperature or placed in a combustion-related context as attested to by: the high numbers of figurines coloured dark-grey to black (burnt coloration), presence of adhering charcoal and ash in some instances, and ash-rich find contexts. Indeed, it has been suggested that the latter find localities may have been the primary contexts for the burning of figurines (e.g. Broman Morales 1990:10; Schmandt-Besserat 2013:64). Based on the data presented here, we therefore propose that the use of fire was an integral part of the ritual *chaîne opératoire* for the bull figurines.

2) *Buried*: In many primary find contexts - beneath, or on, floors, in or under walls, inside installations, pits and various architectural features or graves, the bull figurines were secreted away. Similarly, finds of figurines in middens and refuse deposits suggest, as noted by Coqueugniot (2003:39), a secondary context representing intentional abandonment, and not one of primary use. Researchers have viewed these contexts as indicating disposal due to expediency (e.g. Arntz 2013; Freikman 2010:263; Martin & Meskell 2012) or localities where ritual objects were retired when they lost their power (Rollefson 2008; Voigt 2002). In contrast, we suggest that the debris and middens represent intentionally selected localities for final deposition of figurines - perhaps a way of further humiliating adversaries by being buried with refuse.

3) *Modified*: Some of the bull figurines have embedded flints in them, incisions or painted lines on their bodies. They are also broken, perhaps intentionally. These features reflect intentional intervention, perhaps an act related to hunting magic or a manifestation of another type of relationship with the figurine.

Conclusion

It is apparent that the Neolithic bull figurines are highly standardized objects: in species representation, their size, form and features; most have undergone a similar repertoire of modifications, conspicuously those associated with fire (i.e. burnt colouration, adhering ash, charcoal); notably they are found in settings related to combustion features - probably their primary contexts; they also occur in a limited range of secondary contexts, that relate to their final burial and disposal. These attributes emphasize the repetitive nature of their manufacture and use, conforming to ritual acts as defined by Malone (2007:24): “the ritual action is usually formalized, repetitive and makes use of symbols in special places which potentially leave recognizable archaeological material remains”.

These diminutive clay animals, having served their purpose in ancient rituals, are put to work again by the archaeologist. Through the study of their contexts and morphology, we can hazard a guess as to the nature of the rites involved and belief systems behind them – best illustrated by ancient textual sources. Thus, these figurines continue to be active players in the world, illuminating for us the thought behind Neolithic ritual action.

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