

THE GRAMMAR OF ORNAMENTATION: A PREDYNASTIC DECORATIVE CONTINUUM

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Tags made of mudstone are predominantly found in ancient Egyptian Predynastic cemetery contexts. This study examines the symbolism and significance of mudstone tags that are crescent-shaped and/or feature the recurved horns of hartebeests. The use of syncretic imagery on these tags provides evidence for the fluidity of artistic perceptions in Predynastic Egypt. Evidence for use wear and the find locations of the tags in burials indicate that these artefacts were often placed in amulet bags and may have been predominantly associated with female individuals.

INTRODUCTION

This study examines Predynastic tags made of mudstone created by the Naqada culture of Upper Egypt (Stevenson 2009a: 1; Stevenson 2009c: 4). Two general categories of frequently misinterpreted tag decoration are investigated and re-evaluated: the “recurved horn” and the crescent type. The use of syncretic imagery on these tags illustrates the flexibility of artistic perceptions in Predynastic Egypt. Both types of tags are almost exclusively found in female burials. Thus, recurved horn and crescent-type mudstone tags were likely symbolic artefacts whose use was reserved for female individuals. The find locations of mudstone tags and ivory or bone tags and tusks are then compared to determine whether different types of tags and tusks may have been associated with distinct cultural practices that can be correlated to the sex of the grave occupant.

Amuletic tags are flat or cylindrical objects made of bone, ivory, stone, or pottery, frequently carved into shapes resembling animal teeth, or topped with animal or human heads (see Figures 1–2). These artefacts are found in graves and settlements from the Naqada culture dated to the Naqada I–II era, *c.* 3750–3325 BCE (Stevenson 2015: 151). Amuletic tags tend to exhibit a blunt rectangular end or attachment horizontally notched on both sides. Frequently, a hole is also drilled between the notches. In other cases, a horizontal groove may be carved into the blunt end (Nowak 2004: 896). Finally, some artefacts may exhibit both a groove and a drilled hole. All these features can be seen on tags (illustrated in Table 1), and will also be referred to here as a “hanger”. In accordance with this definition, crescent-shaped mudstone artefacts with central rectangular projections sporting notches and drilled holes were likely also tags (Brovarski 2005: 220).



Figure 1 Tag made of bone from Naqada grave 1606. Note the carved lines on the pointed end, resembling the lines carved on the tusk in Figure 3. After Petrie (1920: pl. XXXII.18).

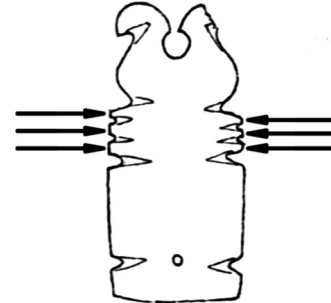


Figure 2 A horned mudstone tag with three sets of ear protrusions under the horns, as indicated by arrows. Found in Naqada grave 1646, now Petrie Museum UC4126. After Petrie (1920: pl. XLIV.103T).

Tags were frequently made of ivory or bone, but were also manufactured from other materials, including mudstone (Hendrickx & Eyckerman 2011: 536). This stone from the Wadi Hammamat was likely employed to fabricate most Egyptian palettes in the Predynastic (Stevenson 2006: 151). Mudstone tags share many decorative motifs with mudstone palettes, ivory or bone tags, hairpins, and combs (Brovarski 2005: 226; Wengrow 2014: 47–48). All of these objects were intended to be worn on the body (tags, hairpins, combs) or were likely used to grind pigment for the purpose of bodily adornment (palettes) (Wengrow 2006: 69–70). The use of all these artefacts in bodily ornamentation may explain why they exhibit similar decorative motifs.

The majority of mudstone tags can be classified in two categories: “recurved-horn” tags, and crescent-shaped tags. Previous analyses have offered differing explanations for the appearance of these artefacts. The following analysis re-evaluates recurved-horn and crescent-shaped mudstone tags to determine their possible symbolic significance. This study uncovers further evidence for the use of syncretic imagery in the Predynastic by examining the use of tags, the combination of tag motifs, and the depiction of tags on other media. Table 1 provides a summary of the motifs under study here, and their appearance on both tags and other objects.

EVIDENCE FOR CULTURAL PRACTICES

Recurved-horn and crescent-shaped mudstone tags are subcategories of a particular artefact type. Tags of different shapes made of other materials are also well known in the Naqada I–IIC archaeological record (Hendrickx & Eyckerman 2011: 518–519). Tags carved of bone or ivory also frequently seem to emulate another class of artefacts: carved hippopotamus tusks (see Hendrickx & Eyckerman 2011: fig. 1, Classes A.2, B.2, A.3, B.3). Many flat bone and ivory tags were carved with one blunt and one pointed end, likely in imitation of tusks (compare Figure 1 to Figure 3). Thus, given the frequent symbolic overlap between tags and tusks, both categories of artefact are analysed here.

Previous investigations into the meaning of these categories of artefacts have generally focused on the appearance and possible symbolism of tags and tusks (Hendrickx & Eyckerman 2011: 524–535). By contrast, the following analysis will focus on multiple underinvestigated vectors to further determine the possible meanings of tags and tusks:

- the sex of individuals buried with these artefacts,
- the quantity of tags and tusks buried with each individual,
- the deposition locations of tags and tusks in a grave, and
- the suspension devices used on tags and tusks, and the containers these objects were found in (where preserved).

In total, 104 graves with sexed remains were compiled for analysis. The limited quantity of examined finds precludes wide-ranging conclusions, but provides a basis for further research.

HISTORICAL CONTEXT

The popularity of tags as grave goods decreases after Naqada IIB (Hendrickx & Eyckerman 2011: 518). This trend may not be a coincidence. In Naqada IIA–B, Upper Egyptian Naqada cultures seem to have focused more on trade and cultural exchange with other groups living in the immediately surrounding areas (Stevenson 2016: 432). However, in Naqada IIC, the Naqada culture appears to have become more “globalized”, placing greater worth on the acquisition of rare goods and new technological concepts from further abroad in Syro-Mesopotamia and elsewhere (Watrin 2004: 61, 65, 67; Stevenson 2016: 438, 442). Both exotica and items associated with new concepts, such as large-scale beer brewing (Wengrow 2006: 94–96), were found in Naqada IIC–D graves at Gerzeh (Stevenson 2009b: 192–198, 292). From Naqada IIC onward, the graveside display of identity in Upper Egyptian cultures may not have employed familiar vectors of representation like tags and tusks. Instead, funerary display practices seem to have become fragmented and individualized. Further re-analyses of old excavations are required to substantiate this claim. However, the re-orientation of burial customs along more individualistic lines in Naqada IIC–D may help to explain why tags and tusks disappeared from the burial record during this period.



Figure 3 Tusk made of hippopotamus ivory, Brooklyn Museum 07.447.793a. Note the carved lines on the pointed end, resembling the lines carved on the tag in Figure 1. Cropped adaptation showing only left-hand tusk of original picture depicting two tusks, original retrieved from <brooklynmuseum.org/opencollection/objects/123356>. This image is under a CC BY 3.0 license <creativecommons.org/licenses/by/3.0/legalcode>.

RECURVED HORNS ON TAGS

By reviewing previous efforts to investigate the symbolism of tags and other objects with recurved horns, this analysis presents a new classification method for bodily ornamentation artefacts exhibiting this feature. Evidence for the use of syncretic imagery created by combining recurved horns with other motifs is also investigated. Artefacts ornamented with horns that exhibit a wide o-bend likely represent bovine horns or the horns of other ungulates (Brovarski 2005: 218). Unlike recurved horns, such decorative elements do not frequently appear to have been syncretically combined with other symbols. Consequently, artefacts with o-bend horns are not examined here.

Predynastic artefacts with recurved horns typically exhibit two horns that curve up from either side of an imagined centre point in a pronounced s-bend. These horns delimit a small round or flat space between them. Occasionally, a pair of triangular protrusions carved beneath the horns may represent animal ears (Baumgartel 1960: 86; Brovarski 2005: 224). Other artefacts have a multiplicity of “ears” stacked on top of each other, such as the three sets of “ears” shown in Figure 2. The multiplication of this element may be purely decorative (Brovarski 2005: 224), or it may indicate the object is depicting several animals, each behind the other.

Tags with recurved horns have been continuously reinterpreted by scholars with different perspectives and theoretical biases. Petrie’s original classification designated small tags with recurved horns as “bird headed amulets” (Petrie 1914a: 49). Later, Baumgartel theorized that these tags depicted “the horns and ears of the cow goddess”, while continuing to cite precedent by remarking that the recurved horns resembled birds (Baumgartel 1960: 86). The “cow goddess” was part of Baumgartel’s exploration of the theory that Predynastic Egyptians worshipped a “Great Goddess” associated with cow symbolism (Baumgartel 1960: 144). This scholarly emphasis on cow symbolism continues to be present in modern-day scholarship concerning Predynastic belief systems (Hassan & Smith 2002; Hassan 2002). Scholars proposing these theories seem to have overlooked evidence that unequivocal Predynastic bovid representations usually depict these animals with horns curved in a c-shape (Brovarski 2005: 218). This focus on cows also appears to have obscured the important symbolic associations existing between women, other animals, and objects. These associations will be explored below.

Previous interpretations of amuletic tags and other objects with recurved horns were combined by Hendrickx, who deemed all horned tags and palettes to be representations of bovids (Hassan 2002: 292). He hypothesized that objects bearing recurved horns were syncretic representations that combined cattle horns with bird heads (Hassan 2002: 292; Hendrickx & Eyckerman 2011: 528). Hendrickx also concluded tags with recurved horns could be interpreted as the upraised arms of female figures combined with the representation of birds’ heads (Hendrickx & Eyckerman 2012: 37). Finally, Brovarski (2005) also frequently interprets tags, palettes, and combs with recurved horns as double birds.

The general consensus that recurved horns on tags depict birds or bovids seems to have caused previous scholars to overlook another possible interpretation of this decorative feature. Careful comparison reveals a close match between recurved palette horns and those of the hartebeest, a mammal indigenous to North Africa, and well known to the ancient Egyptians (Linseele & van Neer 2009). This is illustrated in Figure 4, where an image of a tag has been superimposed on the photograph of a hartebeest.

From this graphic, several aspects of the tag design become clear: the sharp angle of the recurve on the tag horns closely matches those of an actual hartebeest. The notched areas

on each side under the horns on the tag appear to represent the ears of the animal. Different hartebeest-horned tags seem to vary between depicting only the horns of the beast or the horns and the ears. Some tags also have depressions resembling eyes, and thus portray the entire head of the hartebeest (see Figure 5). Although these artefacts clearly display key traits of the animal, “eyed” tags have frequently been misclassified. For instance, the mudstone tags from el-Amra depicted in Figure 5 were simply referred to as “double headed birds” despite the evident ocular depressions visible in the photograph (Randall-MacIver & Mace 1902: 47). Three ivory tags with inlaid eye depressions and hartebeest horns were described by Baumgartel as carvings of horned fertility deities with “eyes (or breasts)” (Baumgartel 1960: 64). This ran contrary to the verdict of the original excavators, who identified the artefacts as representing hartebeests (Brunton & Caton-Thompson 1928: 59).



Figure 4 Bone/ivory hartebeest-horned tag from el-Mahasna grave 229, superimposed on an image of an African hartebeest, specifically *Alcelaphus buselaphus major*. An extinct subspecies called *Alcelaphus buselaphus buselaphus* is known to have formerly existed in Egyptian territory (Linseele & van Neer 2009: 57). Tag silhouette modified drawing from Garstang & Sethe 1903: pl. IV.229. Greyscale adaptation of picture of hartebeest with the title “Alcelaphus buselaphus in the Pendjari Nationalpark Benin, West Africa” by Baliola, retrieved from <commons.wikimedia.org/wiki/File:Alcelaphus_buselaphus.png>. This image is under a CC BY-SA 3.0 license <creativecommons.org/licenses/by-sa/3.0/legalcode>.

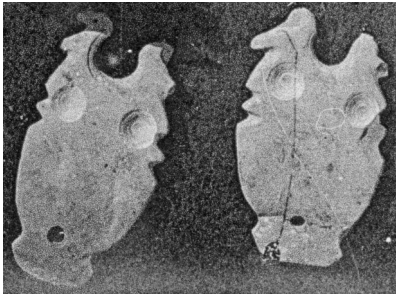


Figure 5 Two hartebeest head-shaped tags syncretized with bird heads. Note the eye hole drilled into the intact horn of the left-hand tag. Found in el-Amra grave a88, now Pitt-Rivers Museum 1901.29.25 and 1901.29.26. After Randall-MacIver & Mace (1902: pl. VII.2).

SYNCRETIC HARTEBEEST HORNS/BIRDS

Previous interpretations of hartebeest-horned objects mistakenly focused on the resemblance of these “horns” to birds. However, in some cases, tags and other artefacts may also have depicted syncretic forms that simultaneously represented hartebeests *and* birds. The clearest evidence for such depictions occurs when holes are drilled into the top of the recurved horns, likely to indicate eyes (Brunton 1948: 20). This type is exemplified by the mudstone hartebeest-bird tag with the intact horn or beak from el Amrah a88 (see Figure 5).

Some tags display a small protuberance between the recurved horns. As shown in the hartebeest/bird row of Table 1, this protuberance can be triangular, lozenge-shaped, two lozenges separated from each other by a v-shape and a pierced hole, or circular with a large pierced hole. This small protuberance could represent bird tails, joined together in an upright position (John Wyatt, pers. comm. 20 July 2011). These projections are also found between syncretic horns/birds on top of oval mudstone palettes (see Table 1). Brovarski (2005: 217) interprets this protuberance as an equivalent to the rectangular excrescence present on crescent-shaped mudstone tags with bird heads. However, as discussed above, the blunt rectangular attachment on crescent-shaped tags is likely equivalent to the rectangular ends of other tags (see Table 1).

Thus, it can no longer be stated that natively developed hybrid animal motifs were rare in the Predynastic (Fischer 1987). Bird and hartebeest motifs were freely integrated with each other in mudstone tags and palettes. This mode of depiction has been characterized as a “blending” approach to the creation of composite figures (Wengrow 2014: 47–49). Given the evidence discussed above, tags, palettes, combs, and pins with recurved horns should be referred to as hartebeest-horned, hartebeest-faced, or, if exhibiting hybrid traits, as hartebeest-birds.

CRESCENT-SHAPED TAGS AND PALETTES

Tags with a crescent shape are also frequently misidentified. The stylistic features of mudstone crescent-shaped tags are re-examined here in conjunction with palettes made of the same material and sharing a similar appearance. From these findings, new classifications will be proposed for some categories of mudstone tags. The range of variety exhibited by crescent-shaped tags and palettes was already acknowledged by Petrie in his early efforts to establish a chronology for the various forms he encountered (Petrie 1920: 37). A crescent-shaped palette shown in the “bird-headed boat” category of Table 1 exhibits a bird-headed prow, and a central ornamental “hanger” that may resemble the cabin of the boat (Ann Merriman, pers. comm. 23 July 2011). This bird-headed boat palette also displays traces of a hole or depression on the stern side of the boat. This has been identified as representing a quarter rudder oar cable hole. Thus,

palettes displaying this feature were likely depicting wooden boats (Merriman 2011: 11–12, 23–24; Merriman, pers. comm. 23 July 2011). Recent finds appear to confirm that the prow of boat-shaped palettes was frequently carved to resemble a bird. The broken half of a palette discovered in HK6 tomb 23 at Hierakonpolis likely represents the prow of a boat, topped with a carved bird's head (Figueiredo 2004: 11).

Tags depicting boats bear similar characteristics. This type of tag is illustrated by an example from Naqada tomb 171, and an unprovenanced example from the Petrie Museum (in Table 1), whose shape is similar to two examples from el-Mahasna burial H22 (Ayrton & Loat 1911: pl. XV.3). These tags exhibit a recurved stern with a quarter rudder oar cable hole, while the right side is ornamented with a curved bird's head (unfortunately broken in most examples).

The tags with single or double bird heads have previously been called “swimming birds” when they exhibit one head (Brovarski 2005: 220), or “anchor-birds” (Finkenstaedt 1979: 58; Brovarski 2005: 226) when they exhibit two heads. The shape of bird-headed tags is similar to the boat tags, and both types of tags can be decorated with white beads along their length (see Table 1). Thus, both boat-shaped and bird-headed tags can be placed in the same overarching category: crescent-shaped tags.

The double bird-headed motif was also frequently used on large palettes. This class of object features two bird heads often separated by a rectangle, either carved with lines or uncarved. Other variations of the double bird motif on large palettes feature the use of a grooved and holed separator similar to the pierced hanger of the bird-headed boat palettes (see Table 1). Palette carvers may have deliberately been establishing a visual relationship between both the rectangular hanger of double bird-headed crescent tags and the small blunt rectangular attachment of bird-headed boat palettes, while also incorporating new decorative elements.

An example from Matmar (see Figure 6) also shows evidence of the mixture of motifs. It represents a tag with the torso of a bird that bears the head of a hartebeest. Unfortunately, the broken head of this tag is incorrectly identified as a bird's head (Brovarski 2005: 226). Figure 6 corrects this oversight, basing the reconstruction of the snout on the intact hartebeest head on the large palette from Naqada tomb 271 (Brovarski 2005: 226).

The classification system elaborated in the study by Hendrickx and Eyckerman (2011: 498) for Predynastic Egyptian tags does not incorporate mudstone crescent-shaped tags. Given the above findings, Table 2 extends this tag classification system by categorizing crescent-shaped tags as follows:

- type B.11.a refers to boats, with or without birds' heads,
- type B.11.b refers to crescent-shaped tags with bird bodies and a single birds' head,
- type B.11.c refers to crescent-shaped tags with double bird heads, and
- type B.11.d refers to crescent-shaped tags with bird bodies and a single hartebeest head.

Syncretic object decorations that utilize double bird-headed tags as a motif also occur in Predynastic Egypt. As shown in Table 3, a representation of a double bird tag can be seen topping combs found in Naqada tombs 1480 and 1586. The central rectangular attachment of the double bird tag is clearly carved to feature a characteristic notch on the comb. The more extravagant Gebel el-Tarif comb features four pairs of stacked double bird tags, again clearly identifiable by the central rectangular attachment between the birds' heads.

Reproducing the silhouettes of artefacts as decorative figures is a technique also occasionally attested on Predynastic C-Ware, where depictions of bone/ivory combs were painted directly in white on the red surface of a bowl from Mesaid tomb M 763 (see Table 3), and another unprovenanced bowl of the same type (Wengrow 2006: 107–108). Thus, from the available evidence, combs seem to have been used as decorative motifs on pottery vessels, and they were also utilized as carriers of motifs adapted from mudstone tags.

By examining the use of syncretic imagery, this study has provided further evidence that the use of objects as decorative motifs is a feature of Predynastic art.

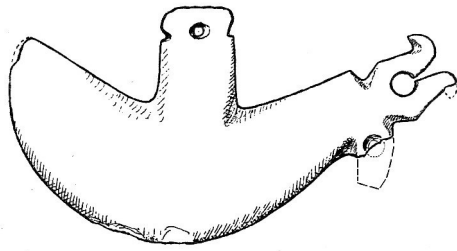


Figure 6 A crescent-shaped single hartebeest-headed mudstone tag found in Matmar grave 2720. After Brunton (1948: XV.37).

DISTRIBUTION TRENDS OF TAGS AND TUSKS

Hartebeest-horned and crescent-shaped mudstone tags are rarely found in cemeteries or settlements. A total of 49 provenanced Category B.8 or “recurved-horn” tags (Hendrickx & Eyckerman 2011), and 40 crescent-shaped tags (Hassan 2002: 312–313) have previously been compiled in publications.

To perform a detailed study on the find context of mudstone tags, the present study only considers artefacts from burials with sexed skeletal remains. Consequently, the corpus of mudstone palettes under consideration here consists of 22 “recurved-horn” tags, and 23 crescent-shaped tags. The rarity of these artefacts seems comparable to the relative scarcity of palettes made from the same material. Previous studies have shown that on average, only 15% of graves in any given cemetery were found to contain palettes (Stevenson 2009a: 4). Evidence for pre-depositional use wear on some tags (Hendrickx & Eyckerman 2011: 523–524, 529) also illustrates that these objects were likely used before being placed in tombs as a grave good. Similar evidence for wear can be found on palettes (Stevenson 2009d: 191).

Taking these factors into account, the small numbers of tags and palettes found in burials indicates that mudstone artefacts were restricted to particular classes of individuals. Individuals who owned palettes may have been invested with the power to perform certain rites within the community (Baduel 2005: 11–12). The following analysis shows that mudstone tag owners may have also been invested with special status. The distribution of other types of tags and tusks in sexed burials (e.g. hippopotamus ivory tags) is also examined, to investigate whether special status was attributed to the owners of non-mudstone tags and tusks. This increases the total number of burials examined in this paper to 104.

TAGS AND TUSKS: GEOGRAPHIC DISTRIBUTION

Previously, the study conducted by Hendrickx and Eyckerman (2011: 518–519) concluded that tags and tusks made of ivory, bone, stone, and pottery were generally restricted to Middle and Upper Egyptian find contexts, and are only infrequently found in Lower Egypt. In order to compare their findings to the evidence examined here, Naqada I–II cemetery sites with sexed burials found to contain mudstone tags and sites with non-sexed burials or recorded finds of mudstone tags in unspecified contexts were plotted on a map in Figure 7.

Present evidence seems to indicate that mudstone tags were used as funerary goods exclusively during the Naqada I–II period. Their distribution was generally restricted to Middle and Upper Egypt, aside from the site of Abusir El Meleq, a site whose cemetery shows evidence for cultural interaction with the Upper Egyptian sphere (Stevenson 2009b: 48). By contrast, larger mudstone grinding palettes were exported to Lower Egypt from Naqada I onward (Hartung 2013: 180). Thus, the cultural usage of mudstone tags was probably not exported to Lower Egypt in the same fashion as pigment-grinding palettes.



Figure 7 Map of Egyptian sites found to contain mudstone tags. Map created using data from the Natural Earth project at <www.naturalearthdata.com/>.

TAGS AND TUSKS: SEX-BASED DEPOSITIONAL TRENDS

Hartebeest-horned and crescent-shaped tags are the primary focus of this article. Consequently, the sexed graves found to contain these artefacts were first graphed separately in Figure 8. In total, 12 tombs with sexed burials were found to contain hartebeest-horned tags. Of these, 8 contained female burials, 3 contained burials of immature individuals, and 1 multiple burial of a female and an infant was also attested. Crescent-shaped tags were found in 13 graves. Of these, 11 contained female individuals, 1 contained an immature individual, and 1 contained a multiple burial of one female and two males. Thus, the available evidence shows that approximately two thirds of sexed burials with hartebeest-horned tags and sexed graves with crescent-shaped tags were predominantly (85%) found to contain female individuals, and none of either category of tombs were found to contain only male individuals.

Figure 9 subsequently compares these findings to the burial distribution of other types of tags and tusks: 41 female burials, 25 male burials, 8 burials of immature individuals, and 16 burials of multiple individuals of different sexes and/or ages were found to contain non-mudstone tags or tusks. Mudstone horned and crescent-shaped tags were not evidenced in male graves, but tags/tusks made of other materials were found in male burials. There was also a higher incidence of non-mudstone tags/tusks in multiple burials compared to mudstone tags. Based on these results, it can be said that mudstone tags appear to have been predominantly deposited in the burials of female and immature individuals. By contrast, tags and tusks made of other materials were apparently deposited in graves of female, male, and immature individuals, as well as multiple burials.

More than one tag or tusk was generally found in an individual grave. The data from sexed burials examined here was employed to compare the depositional frequency of mudstone hartebeest-horned tags and crescent tags to those of other types of tags and tusks. Only tags or tusks exhibiting a similar appearance according to the classification established by Hendrickx and Eyckerman (2011), and found to be made of the same material, were classified as “sets” of tags/tusks. In some cases, more than one “set” of tags/tusks was found per burial (see Table 2). Unusual graves were classified in the following manner: In el-Amra b78, a hartebeest-horned tag made of ivory was counted as a set of one tag, while the two mudstone hartebeest-horned tags found in the same grave were counted as a set of two tags. In Matmar 2682, four tags of similar shape were found to be made of bone in three cases, but ivory in one case. Given the similar material and appearance of these artefacts, these tags were counted as a single “set” of four tags.

Figure 10 shows that hartebeest-horned and crescent-shaped tags from sexed burials were more frequently found in pairs. In contrast, non-hartebeest/crescent tags found in sexed tombs frequently occurred singly and as pairs, and also in larger multiples of three. Rarely, non-hartebeest/crescent tags were also deposited in multiples of four and six in sexed graves. A more generalized study conducted by Hendrickx and Eyckerman (2011: 498) on tags and tusks that excluded crescent-shaped tags and did not categorize the artefacts by material tends to corroborate these findings. Their study showed that few graves were found to contain more than three tags/tusks (Hendrickx & Eyckerman 2011: 520). Thus, from the evidence examined here, mudstone hartebeest-horned and crescent tags may have been buried according to a different practice than other types of tags and tusks.

The data compiled in Figure 11 shows that comparing the depositional locations of mudstone tags in graves with the exact find locations of other types of tags and tusks also reveals evidence for possible cultural practices. Predynastic skeletons, when found in intact burials, tend to lie

on one side in a contracted position (Stevenson 2009c: 3). Mudstone tags were frequently found in front of the arms and chest of the deceased, only rarely being located in other areas. By comparison, other types of tags and tusks tended to be discovered in front of the chest and hands, but also in the area around the head or the feet. Thus, placing mudstone hartebeest and crescent-shaped tags in front of the hands and chest of the deceased may have been a consistent burial practice related to this class of artefacts.

Petrie initially suggested that tag-like objects were “intended for manipulation in some ceremonies, in the hand” (Petrie & Quibell 1896: 18–19). He may also have been the first to remark that these objects frequently showed traces of leather wrapped around their suspension holes or notches. Alternatively, they were threaded on strings. This practice, as well as the occurrence of such objects inside containers, has also been noted by more recent studies (Hendrickx & Eyckerman 2011: 523). Evidence for leather suspension cords or containers was relatively frequent among the totality of the sexed burials examined here. As shown in Figure 12, there were 18 incidences in which leather was attached to the broad ends of tags/tusks, 1 incidence of tags being threaded together with string, 8 incidences of tags or tusks found on or inside some type of container (either a wooden box or a leather bag), 1 case of tags that were strung together and found inside a woven basket, and 5 cases of tags with leather still attached to them, which were found inside or on leather or woven bags.

Thus, the examination of available evidence has shown that crescent-shaped or hartebeest-horned mudstone tags were predominantly deposited in female graves, frequently as twinned “pairs” of artefacts. These were often placed in front of the chest and hands of the buried individual. A general tendency to place both mudstone and other types of tusks and tags threaded together and/or inside containers was also noted in cases where organic preservation of the burial permitted such evaluations. The graves found to contain mudstone hartebeest and crescent tags primarily contained human remains sexed as female. However, some juvenile graves were also found to contain these artefacts (see Figure 8). Thus, mudstone tags were probably not classified as signifiers of adulthood.

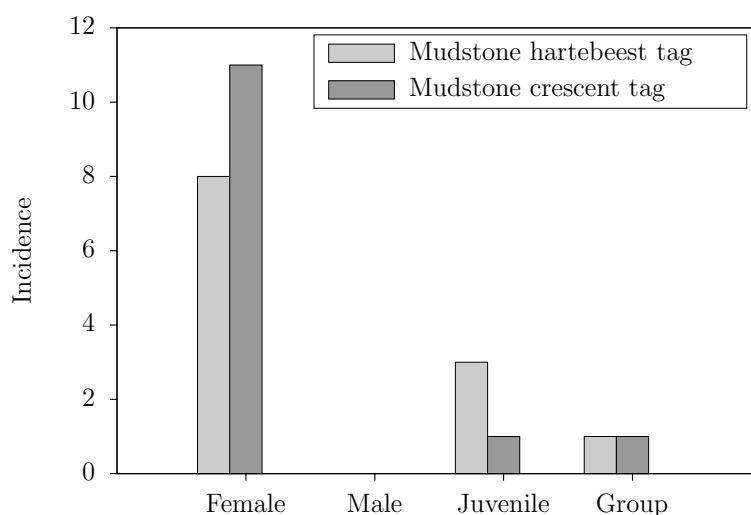


Figure 8 Distribution of sex of burials found to contain amuletic mudstone tags.

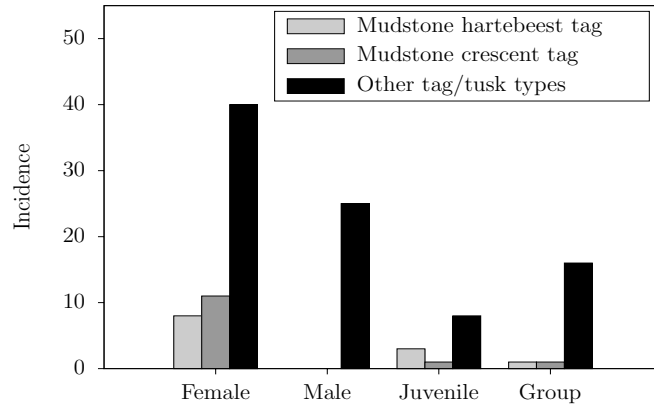


Figure 9 Distribution of sex of burials found to contain amuletic tags/tusks.

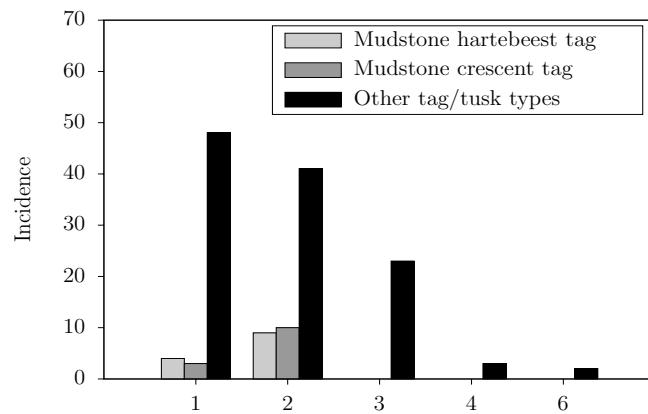


Figure 10 Incidence of all types of tags and tusks in groups in burials

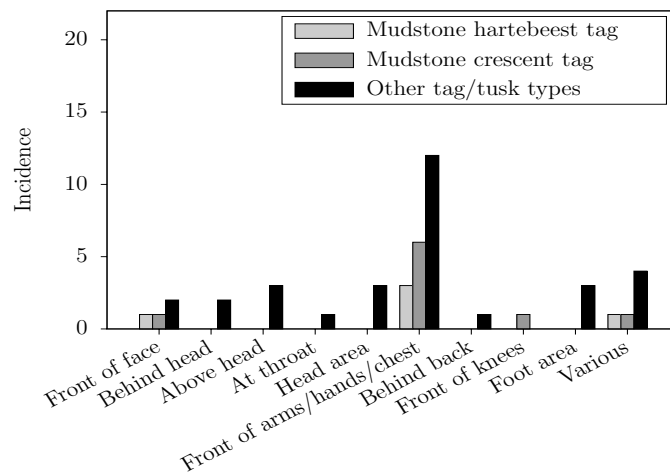


Figure 11 Deposition locations of tags/tusks attested in graves examined.

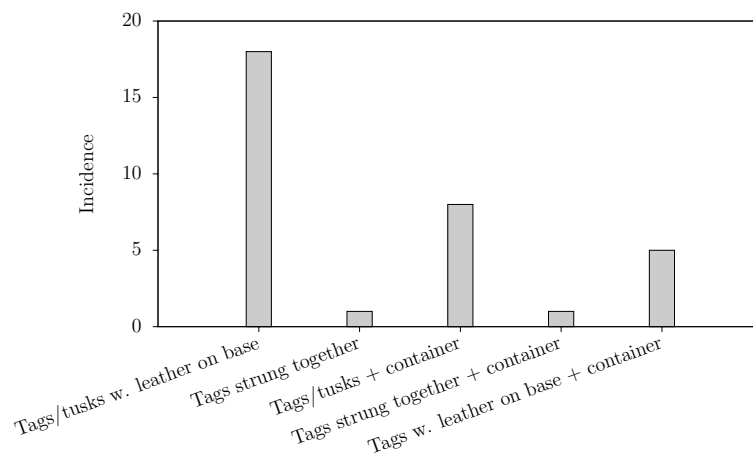


Figure 12 Attachments/containers for tags/tusks attested in graves examined.

TAGS AND TUSKS AS INHERITED OBJECTS

Grave Nag el-Deir 7634 may provide a further thread of evidence for the meaning of mudstone tags. The remains of two immature individuals in this grave were almost entirely decimated. However, the position of the intact leg and foot bone of both the identified six-year-old individual and the infant shows that a leather bag containing two tags was likely placed *in front of the body of the six-year-old* (Lythgoe & Dunham 1965: 417, no. 1, fig. 188a). Thus, it seems some children who were old enough to walk and talk independently were deemed worthy of receiving an amulet pouch, and this pouch may subsequently have been buried with them if they died in early childhood. Consequently, close personal association between the amulet bag and the owner of the bag can be posited. Of the two hartebeest-horned mudstone tags found inside the remains of the skin bag, one had partially broken horns. Since no remains of the broken horns were found, the tag was likely damaged at a much earlier date. Given this evidence, the juvenile individual in Nag el-Deir 7634 may have inherited the objects from another family member.

Additional evidence for the practice of giving young children tags or tusks can be seen in el-Badari 5719, found to contain a five-year-old child and an unconcealed ivory tusk-shaped tag (Brunton & Caton-Thompson 1928: 15, pl. VII, XXVII.6), and Deir el-Ballas Q132, a child grave found to contain both real bone/ivory tags and clay imitations (Petrie & Quibell 1896: pl. V.27, LXI.1). These finds lend further credence to the hypothesis that children over a certain age were permitted to be buried with this type of amulet. Given the small quantity of well-preserved burials of immature individuals, wide-ranging conclusions cannot be drawn at present about this practice. However, further investigations in more recently excavated cemeteries of the Predynastic, and re-examination of old excavated material, will likely reveal additional trends in the deposition of tags in tombs.

TAGS AND TUSKS AS CONCEALED AMULETS

In the previous sections, tags and tusks, in particular those made of mudstone and featuring hartebeest horns or crescent shapes, were demonstrated to have a restricted distribution among graves. The possible meanings underlying these distributions are now examined, not from the perspective of artefact symbolism but from the viewpoint of burial practices.

Tags and tusks are non-functional objects likely highly charged with symbolic significance. Thus, tags and tusks can clearly be designated as “amulets” on the basis of previous Predynastic scholarship (Hendrickx & Eyckerman 2011: 528–529). Additionally, the present paper has also demonstrated that Predynastic tags and tusks were generally placed close to the body in burials. In cases where the organic material was sufficiently preserved, the artefacts were found inside the remains of a concealing receptacle. Thus, the definition of Egyptian “amulets” as objects of a ritual or apotropaic purpose (Hendrickx & Eyckerman 2011: 528–529) should be expanded to add another criterion found in European archaeology. In this domain, amulets are specifically designated as objects that are frequently concealed in receptacles placed on the body (Thrane 1973: 268–269). Baines (2006: 14) has previously identified iconographic evidence for the use of amulet bags in the Old Kingdom. Consequently, the practice of using concealed amulets in Egypt appears to have continued after the Predynastic.

MATERIAL SIGNIFICANCE

Tags and tusks were often deliberately made from material that was difficult to obtain. Mudstone could only be mined in the cramped rock veins of the Wadi Hammamat (Bloxxam 2015: 794, 796), and hippopotamus ivory was obtained through the dangerous practice of the hunt (Droux 2015: 58).

In the case of mudstone, the single point of origin may have lent the material prestige. The greenish stone may also have been attributed with fertility symbolism (Stevenson 2006: 152). As the largest commonly encountered mammal in the Nile Valley, the hippopotamus was likely both highly respected and feared by Predynastic Egyptians (Droux 2015: 5, 49). Thus, it is generally posited that hippopotamus tusks carried apotropaic value for Predynastic Upper Egyptians (Hendrickx & Eyckerman 2012: 528–529; Droux 2015: 6).

HARTEBEESTS, BIRDS, BOATS, AND WOMEN: THE EVOLUTION OF A GEOGRAPHICALLY RESTRICTED SYMBOLIC COMPLEX

The analysis above has shown that imagery associated with hartebeests, birds, and boats may have been intrinsically linked with female individuals who were buried with tags bearing these motifs during Naqada IIA–C. This imagery is also found together on other media from the same period. In Naqada tomb 1480, the symbolism of birds and hartebeests was combined on an ostrich egg incised with two hartebeests (Payne 1993: Figure 85) that served as a substitute for the absent skull of the deceased individual, whose sex was unfortunately not recorded (Petrie & Quibell 1896: 28). Additionally, a piece of rock art in the Qena Bend region of the Nile in Upper Egypt shows a hartebeest with clearly delineated horns and ears riding in a crescent-shaped boat. The stylistic similarity of this hartebeest with the ones incised on the ostrich egg has been noted (Darnell 2009: 92). Thus, the association between hartebeests, birds, and crescent-shaped

boats was expressed in media other than mudstone. Both of these depictions were found in the area near the Wadi Hammamat, the source of mudstone used for tags depicting these motifs.

Tags and tusks cease to be used as grave goods after Naqada IIC (Hendrickx & Eyckerman 2011: 518). However, C-Ware pottery, the major artefact featuring figurative art of the Naqada IIC period, shows sparse evidence that boats and birds continued to be used as iconographic elements. Female figures also appear as decoration on these pots. Hartebeests do not seem to have made this transition, since they are not explicitly depicted on C-Ware. Crucially, all C-Ware pots found to depict boats, birds, or women were again found in the area surrounding the Wadi Hammamat. These are:

- one vessel featuring a bird (Naqada Tomb 1828 (Graff 2011: Cat. 045)),
- one vessel featuring a boat (Abydos (Graff 2011: Cat. 074)), and
- two vessels featuring women (Mahasna, Nag el-Alawna Tomb L.209; Mahasna Tomb H88 (Graff 2011: Cat. 098, 123)).

Subsequently, in Naqada IID, boats and birds begin to appear together on D-Ware pottery (Graff 2011: 15), often in conjunction with female figures (Graff 2011: 56). Thus, women make the transition from being buried with objects featuring this imagery to being depicted as motifs alongside birds and boats. Once again, the majority of pots depicting women also come from the immediate area surrounding the Wadi Hammamat, where the stone for tags and palettes was sourced (Lankester 2016: 13).

A single piece of D-ware from Abydos features a female figure with upraised arms standing directly below a hartebeest, indicating that the association between hartebeest and women was likely still actively known in Naqada IID (Droux 2015: Cat. no. 2.51). However, this is the only evidence of a hartebeest depiction on D-Ware found to date.

Later incidences of iconographic representation seem to focus on the animal as prey, which indicates a shift in the symbolic meaning of the hartebeest in Late Predynastic–Early Dynastic times. As delineated by Droux (2015), these incidences are:

- the wall painting of Tomb 100 at Hierakonpolis depicting a lassoed hartebeest (Droux 2015: Cat. 3.8),
- the Narmer macehead depicting three captive hartebeests inside an enclosure (Hierakonpolis Temple Main Deposit, Droux 2015: 213),
- a palette depicting a possible dead hartebeest carved in high relief (unprovenanced, Petrie Museum UC8846, Droux 2015: 213),
- the Two Dog palette depicting two hartebeests apparently hunted as prey (unprovenanced, Droux 2015: 212),
- the Hunter's palette depicting two hartebeests hunted as prey (unprovenanced, Droux 2015: 212–213), and
- the Carnaveron knife handle showing a hartebeest being attacked by a predatory animal (unprovenanced, Droux 2015: Cat. 4.31).

The only exception to this tendency to depict hartebeest as prey or captives is the palette found in Matmar Tomb 1005, dated to Naqada III (Droux 2015: 213). Significantly, this artefact

bears incised images of both a hartebeest and the emblem of Min, the patron deity of the Wadi Hammamat.

Thus, even as the hartebeest fell out of use as an iconographic element after Naqada IIC, its association with the region of the Wadi Hammamat, and by extension with the god Min, the patron deity of the wadi, remained culturally present until Naqada III. Its association with boats, birds, and women also continued until Naqada IID, based on artefactual evidence.

From the Old Kingdom onward, tomb scenes occasionally depict captive or hunted hartebeest (Droux 2015: 214). It is possible that the symbolic cluster of hartebeest-boats-birds-women was entirely neglected in favour of the symbolism of mastery over wild animals in ancient Egyptian culture during the Dynastic period. However, it is equally possible that this iconographic grouping was simply not represented in non-perishable media after Naqada IIC. Old Kingdom amulet bags, in particular those worn by women (Baines 2006: 13), may still have contained charms in perishable media that were associated with this symbolic cluster.

CONCLUSION

The evidence examined here has shown that mudstone tags previously listed as double bird-headed artefacts should be interpreted as hartebeest-horned tags, and the motif of the hartebeest and its horns was frequently combined with bird motifs. The unrestricted intermingling and reuse of hartebeest horns and birds' heads across media defy precise modern categorizations due to the fluidity of ancient artistic perceptions in Predynastic Egypt.

Mudstone tags shaped like hartebeests, crescent boats, and birds were found buried either in pairs or singly in front of the chest and arms of individuals. Frequently, these artefacts were carefully strung together and/or placed inside containers, and were found in cemeteries ranging from Middle to Upper Egypt. Thus, these objects may have formed part of regional cultural practices. The available evidence also seems to link these practices with the Wadi Hammamat. The predominance of female burials found to contain these artefacts may indicate that amulets related to the hartebeest-bird-boat symbolic complex were associated with female individuals. However, due to the low number of sexed burials found to contain mudstone tags that could be examined here, these results remain preliminary. Further excavations and re-examinations of old skeletal evidence are vital to determine whether the trends uncovered in this study were a widespread phenomenon in Predynastic Middle and Upper Egypt. The cultural importance of amulet bags as an intrinsic part of amuletic practices is also shown to have been neglected and should be taken into account in future studies.

It remains possible that even with changing cultural practices that led to the disappearance of tags, the amuletic significance of objects related to hartebeest, birds, and boats persisted in cultural realms that left few or no material traces. Future research will hopefully provide further evidence of the significance of this symbolic complex, of the Wadi Hammamat, and of amulet bags throughout ancient Egyptian history.

REFERENCES

- AYRTON, Edward R. & William L.S. LOAT 1911. *Pre-Dynastic Cemetery at El Mahasna*. (MEEF 31) London: Egypt Exploration Fund.
- BADUEL, Nathalie 2005. La collection des palettes prédynastiques égyptiennes du Muséum (Lyon). Étude des objets (traces de fabrication et d'utilisation) et présentation des palettes et du fard prédynastiques dans leur contexte historique, archéologique, social et funéraire. *Cahiers scientifiques du Muséum d'histoire naturelle de Lyon – Centre de conservation et d'étude des collections* 9: 5–63.
- BAINES, John 2006. Display of Magic in Old Kingdom Egypt. In: K. SZPAKOWSKA (ed.), *Through a Glass Darkly: Magic, Dreams and Prophecy in Ancient Egypt*: 1–32. Swansea: Classical Press of Wales.
- BAUMGARTEL, Elise J. 1960. *The Cultures of Prehistoric Egypt*, II. London: OUP.
- BAUMGARTEL, Elise J. 1970. *Petrie's Naqada Excavation: A Supplement*. London: Bernard Quaritch.
- BELLINGER, Dawn 1986. Slate Palettes from the Predynastic Cemetery at Naga ed-Der N7000. Undergraduate paper, Department of Near Eastern Studies, University of California at Berkeley.
- BLOXAM, Elizabeth 2015. 'A Place Full of Whispers': Socializing the Quarry Landscape of the Wadi Hammamat. *Cambridge Archaeological Journal* 25(4): 789–814.
- BRÉAND, Gaëlle & Nathalie BOZET 2009. *Aux origines de pharaon*. Treignes: Éditions du CEDARC.
- BROVARSKI, Edward 2005. Recurrent Themes in the Art of the Predynastic Period. In: K. DAUD, S. BEDIER & S. ABD EL-FATAH (eds), *Studies in Honor of Ali Radwan* (SASAE 34): 213–240. Cairo: Supreme Council of Antiquities of Egypt.
- BRUNTON, Guy 1937. *Mostagedda and the Tasian Culture*. London: Bernard Quaritch.
- BRUNTON, Guy 1948. *Matmar*. London: Bernard Quaritch.
- BRUNTON, Guy & Gertrude CATON-THOMSON 1928. *The Badarian Civilisation and Predynastic Remains near Badari*. (BSAE/ERA 46) London: Bernard Quaritch.
- DARNELL, John C. 2009. Iconographic Attraction, Iconographic Syntax, and Tableaux of Royal Ritual Power in the Pre- and Proto-Dynastic Rock Inscriptions of the Theban Western Desert. *Archéo-Nil* 19: 83–107.
- DREYER, Günter, Angela von den DRIESCH, Eva-Maria ENGEL, Rita HARTMANN, Ulrich HARTUNG, Thomas HIKADE, Vera MÜLLER & Joris PETERS 2000. Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof: 11/12. Vorbericht. *Mitteilungen des Deutschen Archäologischen Instituts. Abteilung Kairo* 56: 44–129.
- DREYER, Günter, Rita HARTMANN, Ulrich HARTUNG, Thomas HIKADE, Heidi KÖPP, Claudia LACHER, Vera MÜLLER, Andreas NERLICH & Albert ZINK 2003. Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof: 13/14/15. Vorbericht. *Mitteilungen des Deutschen Archäologischen Instituts. Abteilung Kairo* 59: 67–138.
- DROUX, Xavier 2015. Riverine and Desert Animals in Predynastic Upper Egypt: Material Culture and Faunal Remains. PhD thesis, University of Oxford.
- FAHMY, Ahmed G.-E.-D. 2005. Missing Plant Macro as Indicators of Plant Exploitation in Predynastic Egypt. *Vegetation History and Archaeobotany* 14: 287–294.
- FAWCETT, Cicely D. & Alice LEE 1902. A Second Study of the Variation and Correlation of the Human Skull, With Special Reference to the Naqada Crania. *Biometrika* 1: 408–467.
- FIGUEIREDO, Álvaro 2004. Locality HK6 at Hierakonpolis: Results of the 2000 field season. In: S. HENDRICKX & R.F. FRIEDMAN (eds), *Egypt at Its Origins: Studies in Memory of Barbara Adams: Proceedings of the International Conference "Origin of the State, Predynastic and Early Dynastic Egypt"*, Kraków, 28 August–1 September 2002: 1–23. Leuven: Peeters.
- FINKENSTAEDT, Elizabeth 1979. Egyptian Ivory Tusks and Tubes. *Zeitschrift für ägyptische Sprache und Altertumskunde* 106: 51–59.
- FISCHER, Henry G. 1987. The Ancient Egyptian Attitude Towards the Monstrous. In: A.E. FARKAS, P.O. HARPER & E.B. HARRISON (eds), *Monsters and Demons in the Ancient and Mediaeval Worlds: Papers Presented in Honor of Edith Porada*: 13–26. Mainz am Rhein: Philipp von Zabern.
- FRIEDMAN, Renée 2003. A Basket of Delights: The 2003 Excavations at HK43. *Nekhen News* 15: 17–19.
- FRIEDMAN, Renée 2014. *Discoveries in the Predynastic Cemetery at HK6 during the 2014 Season*. Hierakonpolis Expedition. Available online: <hierakonpolis-online.org/index.php/explore-the-predynastic-cemeteries/hk6-elite-cemetery/tomb-72>, accessed 11 May 2015.

- GARSTANG, John & Kurt SETHE 1903. *Mahāsna and Bêt Khallâf*. (ERA 7) London: Bernard Quaritch.
- GESSLER-LÖHR, Beatrix & Matthias SEIDEL 1976. *Staatliche Sammlung Ägyptischer Kunst München*. Munich: Lipp.
- GRAFF, Gwenola 2011. Les enjeux de l'iconographie des vases peints de Nagada II (Égypte, IVe millénaire): maintien de l'équilibre cosmique ou régénération de la vie? *Anthropozoologica* 46(1): 47–64.
- GRIMM, Alfred & Sylvia SCHOSKE 2000. *Am Beginn der Zeit: Ägypten in der Vor- und Frühzeit*. Munich: Staatliches Museum Ägyptischer Kunst.
- HARTUNG, Ulrich 2013. Some Remarks on the Chronological Position of the Predynastic Settlement at Maadi (Egypt) and Its Relations to the Southern Levant. *Paléorient* 39(1): 177–191.
- HASSAN, Fekri A. 2002. Bovines in Egyptian Predynastic and Early Dynastic Iconography. In: F.A. HASSAN (ed.), *Droughts, Food, and Culture: Ecological Change and Food Security in Africa's Later Prehistory*: 275–318. London: Kluwer Academic/Plenum Publishers.
- HASSAN, Fekri A. & Shelley J. SMITH 2002. Soul Birds and Heavenly Cows: Transforming Gender in Predynastic Egypt. In: S.M. NELSON & M. ROSEN-AYALON (eds), *In Pursuit of Gender: Worldwide Archaeological Approaches*: 43–65. NY: Altmira Press.
- HENDRICKX, Stan 1986. Predynastische objecten uit Naqada en Diospolis Parva (Boven-Egypte). *Bulletin des Musées Royaux d'Art et d'Histoire* 57: 31–44.
- HENDRICKX, Stan & Merel EYCKERMAN 2011. Tusks and Tags: Between the Hippopotamus and the Naqada Plant. In: R.F. FRIEDMAN & P.N. FISKE (eds), *Egypt at its Origins 3*: 497–570. Leuven: Peeters.
- HENDRICKX, Stan & Merel EYCKERMAN 2012. Visual Representation and State Development in Egypt. *Archéo-Nil* 22: 23–72.
- HOFFMAN, Michael A., Karin L. WILLOUGHBY & Elizabeth B. STANTON 1988. *The First Egyptians: An Exhibition Organized by the McKissick Museum and the Earth Sciences and Resources Institute of the University of South Carolina*. Columbia, SC: The McKissick Museum, University of South Carolina.
- KROEPER, Karla & Dietrich WILDUNG 2000. *Minshat Abu Omar: ein vor- und frühgeschichtlicher Friedhof im Nildelta, II*. Mainz am Rhein: Philipp von Zabern.
- LANKESTER, Francis David 2016. Predynastic Egyptian Rock Art as Evidence for Early Elites' Rite of Passage. *Afrique: Archéologie & Arts* 12: 81–92.
- LINSEELE, Veerle & Willem VAN NEER 2009. Exploitation of Desert and Other Wild Game in Ancient Egypt: The Archaeozoological Evidence from the Nile Valley. In: H. RIEMER, F. FÖRSTER & M. HERB (eds), *Desert Animals in the Eastern Sahara: Status, Economic Significance, and Cultural Reflection in Antiquity*: 47–78. Köln: Heinrich-Barth-Institut.
- LYTHGOE, Albert M. & Dows DUNHAM 1965. *The Predynastic Cemetery, N 7000: Naga-ed-Dêr*. Berkeley: UC Press.
- MERRIMAN, Ann Marie 2011. *Egyptian Watercraft Models from the Predynastic to Third Intermediate Periods*. (BAR-IS 2263) Oxford: Archaeopress.
- MÖLLER, Georg & Alexander SCHARFF 1926. *Die archäologischen Ergebnisse des vorgeschichtlichen Gräberfeldes von Abusir el-Meleq*. Leipzig: J.C. Hinrichs.
- MOND, Robert & Oliver H. MYERS 1937. *Cemeteries of Armant I*. (MEES 42) London: The Egypt Exploration Society.
- NOWAK, Edyta M. 2004. Egyptian Predynastic Ivories decorated with Anthropomorphic Motifs. In: S. HENDRICKX & R.F. FRIEDMAN (eds), *Egypt at Its Origins: Studies in Memory of Barbara Adams: Proceedings of the International Conference "Origin of the State, Predynastic and Early Dynastic Egypt", Kraków, 28 August–1 September 2002*: 891–904. Leuven: Peeters.
- PAYNE, Joan C. 1993. *Catalogue of the Predynastic Egyptian Collection in the Ashmolean Museum*. Oxford: OUP.
- PEET, Thomas E. 1914. *The Cemeteries of Abydos II*. (MEEF 34) London: Egypt Exploration Fund.
- Petrie Museum 1999. *The Petrie Museum Archives*. Petrie Museum of Egyptian Archaeology, CD-ROM.
- PETRIE MUSEUM 2014. *UCL Petrie Museum Online Catalogue Entry for UC9541*. Available online: <petriecat.museums.ucl.ac.uk/>, accessed 5 Feb. 2014.
- PETRIE MUSEUM 2015. *UCL Petrie Museum Online Catalogue Entry for UC9550*. Available online: <petriecat.museums.ucl.ac.uk/>, accessed 24 Mar. 2015.
- PETRIE MUSEUM 2016. *UCL Petrie Museum Online Catalogue Entry for UC73126*. Available online: <petriecat.museums.ucl.ac.uk/>, accessed 29 Apr. 2016.

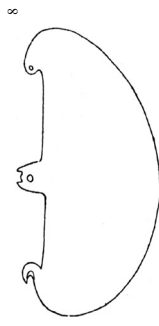
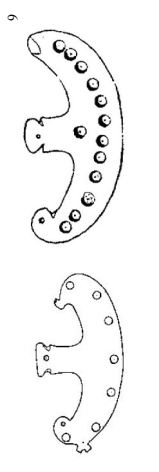
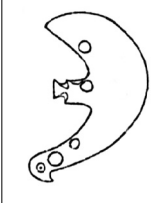
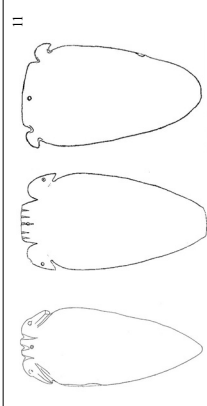
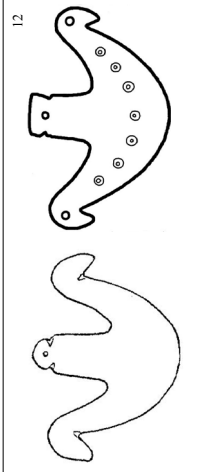
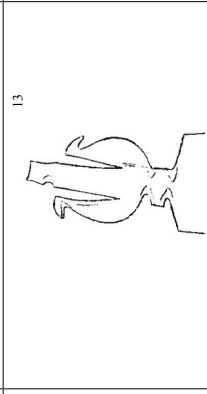
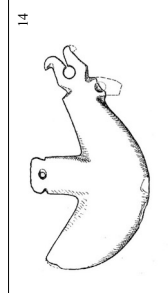
- PETRIE MUSEUM 2017. *UCL Petrie Museum Online Catalogue Entry for UC5364*. Available online: <petriecat.museums.ucl.ac.uk/>, accessed 15 June 2017.
- PETRIE MUSEUM 2018. *UCL Petrie Museum Online Catalogue Entry for UC5666*. Available online: <petriecat.museums.ucl.ac.uk/>, accessed 13 May 2018.
- PETRIE, William M.F. 1901. *Diospolis Parva: The Cemeteries of Abadiyeh and Hu*. (MEEF 20) London: Egypt Exploration Fund.
- PETRIE, William M.F. 1914a. *Amulets: Illustrated by the Egyptian Collection in University College, London*. London: Constable & Co.
- PETRIE, William M.F. 1914b. *Tarkhan II*. (BSAE/ERA 26) London: British School of Archaeology in Egypt.
- PETRIE, William M.F. 1920. *Prehistoric Egypt: Illustrated by over 1,000 Objects in University College, London*. (BSAE/ERA 31) London: British School of Archaeology in Egypt.
- PETRIE, William M.F. & James E. QUIBELL 1896. *Naqada and Ballas*. (ERA 1) London: Bernard Quaritch.
- PODZORSKI, Patricia V. 1993. The Correlation of Skeletal Remains and Burial Goods: An Example from Naga-ed-Dêr N 7000. In: W.V. DAVIES & R. WALKER (eds), *Biological Anthropology and the Study of Ancient Egypt*: 119–129. London: British Museum Press.
- QUIBELL, James E. 1905. *Catalogue général des antiquités égyptiennes du Musée du Caire: Archaic objects*; I. (CGC 11001–12000, 14001–14754) Le Caire: Imprimerie de l'Institut français d'archéologie orientale.
- RANDALL-MACIVER, David & Arthur C. MACE 1902. *El Amrah and Abydos, 1899–1901*. (MEEF 23) London: Egypt Exploration Fund.
- REISNER, George A. 1910. *The Archaeological Survey of Nubia: Report for 1907–1908: Vol. I: Archaeological report*. Cairo: Government Press.
- SCHARFF, Alexander 1929. *Die Altertümer der Vor- und Frühzeit Ägyptens*; II. Berlin: Karl Curtius.
- SEIPEL, Wilfried 1992. *Gott-Mensch-Pharao: Viertausend Jahre Menschenbild in der Skulptur des alten Ägypten*. Wien: Kunsthistorisches Museum.
- SPENCER, Alan J. 1993. *Early Egypt: The Rise of Civilisation in the Nile Valley*. London: British Museum Press.
- STEVENSON, Alice 2006. The Material Significance of Predynastic and Early Dynastic Palettes. In: R. MAIRS & A. STEVENSON (eds), *Current Research in Egyptology 2005: Proceedings of the Sixth Annual Symposium which Took Place at the University of Cambridge, January 2005*: 148–162. Oxford: Oxbow Books.
- STEVENSON, Alice 2009a. Palettes. In: W. WENDRICH (ed.), *UCLA Encyclopedia of Egyptology*: 1–9. Los Angeles: University of California at Los Angeles.
- STEVENSON, Alice 2009b. *The Predynastic Egyptian Cemetery of El-Gerzeh: Social Identities and Mortuary Practices*. Leuven: Peeters.
- STEVENSON, Alice 2009c. Predynastic Burials. In: W. WENDRICH (ed.), *UCLA Encyclopedia of Egyptology*: 1–10. Los Angeles: University of California at Los Angeles.
- STEVENSON, Alice 2009d. Social Relationships in Predynastic Burials. *Journal of Egyptian Archaeology* 95: 175–192.
- STEVENSON, Alice 2015. Telling Times: Time and Ritual in the Realization of the Early Egyptian State. *Cambridge Archaeological Journal* 25: 145–161.
- STEVENSON, Alice 2016. The Egyptian Predynastic and State Formation. *Journal of Archaeological Research* 24: 421–468.
- THRANE, H. 1973. Amulett: Definition. In: H. BECK, H. JANKUHN, H. KUHN, K. RANKE & R. WENSKUS (eds), *Reallexikon der Germanischen Altertumskunde*. 1: 268–269. Berlin: Walter de Gruyter.
- VINSON, Steve 2013. Boats (Use of). In: W. WENDRICH (ed.), *UCLA Encyclopedia of Egyptology*: 1–13. Los Angeles: University of California at Los Angeles.
- WATRIN, Luc 2004. From Intellectual Acquisitions to Political Change: Egypt-Mesopotamia Interaction in the Fourth Millennium BC. *De Kêmi à Birît Nâri* 2: 48–94.
- WENGROW, David 2006. *The Archaeology of Early Egypt: Social Transformations in North-East Africa, 10,000 to 2650 BC*. Cambridge, UK: CUP.
- WENGROW, David 2014. *The Origins of Monsters: Image and Cognition in the First Age of Mechanical Reproduction*. Princeton: PUP.

APPENDIX: TABLES

Table 1. The stylistic continuum of hartebeest-horned and crescent-shaped palettes, tags, combs, and pins.

	Palette	Tag	Comb (only tops depicted)	Pin (only tops depicted)
Hartebeest				
Hartebeest/bird				

- 1 Petrie 1914b: pl. XXII.241; Brunton 1937: pl. XLIII.2.
- 2 Petrie 1901: pl. XII.42; Garstang & Sethe 1903: pl. IV.229.
- 3 Brunton 1948: pl. XVI.5; Petrie 1901: pl. X.3.
- 4 Petrie 1901: pl. X.10.
- 5 Brunton 1937: pl. XLIII.3.
- 6 Petrie 1920: pl. XLIV.103N; Petrie & Quibell 1896: pl. LXII.43; Brunton 1937: pl. XLIII.14; Randall-MacIver & Mace 1902: pl. VII.2.
- 7 Brunton & Caton-Thompson 1928: pl. LIII.31.

	Palette	Tag	Comb (only tops depicted)	Pin (only tops depicted)
Crescent-shaped bird-headed boat				
Crescent-shaped with bird head				
Crescent-shaped with 2 bird heads				
Crescent-shaped with hartebeest head				

8 Petrie 1920: pl. XLIV.32D.

9 Petrie 1920: pl. XLIV.31J; Petrie & Quibell 1896: pl. XLVII.29

10 Petrie 1901: pl. XII.37.

11 Petrie 1914b: pl. XXII.27d; Petrie & Quibell 1896: pl. XLIX.70; Petrie & Quibell 1896: pl. XLIX.74.

12 Petrie & Quibell 1896: pl. XLIX.66; Nag el-Deir double bird headed beaded mudstone tag, presently Hearst Museum 6-4746, drawn by Beuthe T. Image licensed under a CC BY SA 4.0 license <creativecommons.org/licenses/by-sa/4.0/legalcode>.

13 Petrie & Quibell 1896: pl. LXIII.58.

14 Brunton 1948: pl. XV.37, dotted lines in image modified by Beuthe T. to accurately depict hartebeest head.

Table 2 Table of sexed graves found to contain tags/tusks.¹⁵

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
Abadiya B102	3 M, 2 F, 1 C, 1 U	I	Petrie 1901: 33; Payne 1993: 241, no. 2001, fig. 83	B.3.a		
		I	Payne 1993: 241, no. 2003, fig. 83	B.3.a		
		I	Payne 1993: 241, no. 2002, fig. 83	B.3.a		
		I	Payne 1993: 242, no. 2013, fig. 84	B.3.b		Leather on base
		I	Payne 1993: 242, no. 2012, fig. 84	B.3.b		Leather on base
		B	Payne 1993: 242, no. 2015, fig. 84	B.3.b		
		B	Payne 1993: 242, no. 2014, fig. 84	B.3.b		Leather on base
		B	Payne 1993: 242, no. 2016, fig. 84	B.3.b		
		B	Payne 1993: 242, no. 2017, fig. 84	B.3.b		
		I	Payne 1993: 241, no. 2000, fig. 83	B.3.a		Leather on base
		I	Payne 1993: 241, no. 2005, fig. 83	A.3.a		
		I	Payne 1993: 241, no. 2004, fig. 83; Hendrickx & Eyckerman 2011: fig. 8	A.3.a		
		I	Payne 1993: 241, no. 2006, fig. 83; Hendrickx & Eyckerman 2011: fig. 9	A.3.b		Leather on base
		I	Payne 1993: 241, no. 2007, fig. 83	A.3.b		
		I	Payne 1993: 240, no. 1996, fig. 82	B.7.b		
		L	Payne 1993: 243, no. 2023, fig. 84	B.3.b		
		I	Payne 1993: 240, no. 1995, fig. 83; Hendrickx & Eyckerman 2011: fig. 20	B.7.a		
		I	Hendrickx & Eyckerman 2011: fig. 28: middle, right	B.7.a		
		I	Payne 1993: 240, no. 1994, fig. 83	B.7.a		

¹⁵ Total graves: 104. The second column contains information about the sex of the burial(s). F stands for female, M for male, C for child, I for infant; A stands for adult; U stands for sex undetermined. The column designated as M gives the material of the tusk/tag as designated by Hendrickx and Eyckerman (2011) in their table or in accordance with their specifications when the data was not derived from their table. Rows are coloured grey if the information in them pertains to a hartebeest-shaped or crescent-shaped mudstone palette. "Placement in burial" refers to the placement of tags or tusks in a grave relative to the interments. Labels used in the last two columns are defined in the captions of Figure 11 and Figure 12.

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
Abadiya B109	1 F	G	Petrie 1901: 33, VI, XI.2	B.10	Various	
		G	Petrie 1901: VI, XI.3	B.10		
		I	Petrie 1901: VI.4	B.3.b		Leather on base
		G	Petrie 1901: VI, XI.2	B.11.b		
		G	Petrie 1901: VI, XI.3	B.11.b		
Abusir el-Meleq 4d2	1 C	G	Möller & Scharff 1926: 51; 110–111 Taf. 32.315	B.11.b		
Abydos U-26	1 F	I	Peet 1914: 16, pl. IV.9	A.3.a		
		I	Peet 1914: pl. IV.9	A.3.a		
Abydos U-380	1 M	I	Dreyer et al. 2000, 55–56, 128	A.?	Front of arms/hands/chest	
Abydos U-415	2 M	I	Dreyer et al. 2003: 74–75, 129	A.?	Front of arms/hands/chest	
Abydos U-416	1 F	C	Dreyer et al. 2003: 75, 129	A.?		
		C	Dreyer et al. 2003: 75	A.?		
		C	Dreyer et al. 2003: 75	A.?		
Abydos U-510	1 M, ?	A	Dreyer et al. 2000: 129, Taf. 5b	B.5.a		
Abydos U-560	1 M, 1 F, 1 C, 1 I	I	Dreyer et al. 2000: 60, 130	A.?		
Abydos U-627	1 M	C	Dreyer et al. 2003: 78, 130	A.?		
Abydos φ 22	1 F	P	Payne 1993: 54, 236, no. 1952, fig. 77	C		
		P	Payne 1993, 235, no. 1951, fig. 77	C		
Armant 1461	1 C?	I	Mond & Myers 1937: 28, pl. XIII.4, 46	B.3.a		
		I	Mond & Myers 1937: pl. XIII.4, 46	B.3.a		
Armant 1482	1 M	B	Mond & Myers 1937: 28, pl. XLIV.5	B.3.a		
el-Badari 2064	1 C	I	Brunton & Caton-Thompson 1928: 44, pl. XXXI, LIII.44	A.?		
el-Badari 3731	1 F	I	Brunton & Caton-Thompson 1928: pl. XXXII, XXXIV.4, LIII.27	B.3.b		
		I	Brunton & Caton-Thompson 1928: pl. XXXIV.4, LIII.27	B.3.b		
		I	Brunton & Caton-Thompson 1928: pl. XXXIV.4, LIII.27	B.3.b		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
el-Badari 3759	1 M	I	Brunton & Caton-Thompson 1928: pl. XXXII, L.III.17	A.3.a		
		I	Brunton & Caton-Thompson 1928: pl. L.III.17	A.3.a		
		I	Brunton & Caton-Thompson 1928: pl. L.III.49	B.8		
		I	Brunton & Caton-Thompson 1928: pl. L.III.49	B.8		
		I	Brunton & Caton-Thompson 1928: pl. L.III.49; Petrie Museum 2014	B.8		Leather on base
el-Badari 3802	1 F, 1 C	I	Brunton & Caton-Thompson 1928: 51, pl. XXXII, XLXVIII.6 left	A.3.a		
		I	Brunton & Caton-Thompson 1928: 51, pl. XLXVIII.6 right; Petrie Museum 2015	A.3.a		Leather on base
el-Badari 3804	1 M	I	Brunton & Caton-Thompson 1928: 51, pl. XXXII, L.III.29	B.3.b		
el-Badari 3844	1 F	G	Brunton & Caton-Thompson 1928: 52, pl. XXXIII, XXXIV.4, L.II.20	B.11.b	Front of arms/hands/chest	
		G	Brunton & Caton-Thompson 1928: XXXIV.4, L.II.20	B.11.b		
el-Badari 3851	1 F	B	Brunton & Caton-Thompson 1928: pl. XXXIII, XXXIV.4, L.III.28	B.3.b	Front of face	
		B	Brunton & Caton-Thompson 1928: pl. XXXIV.4, L.III.28	B.3.b		
		B	Brunton & Caton-Thompson 1928: pl. XXXIV.4, L.III.28	B.3.b		
el-Badari 3904	1 M?	B	Brunton & Caton-Thompson 1928: pl. XXXIII, XXXIV.4, L.III.30	B.3.b		
		B	Brunton & Caton-Thompson 1928: pl. XXXIV.4, L.III.30	B.3.b		
el-Badari 5390	1 F?	I	Brunton & Caton-Thompson 1928: 11, pl. VI	A.1	Front of arms/hands/chest	
el-Badari 5719	1 C	I	Brunton & Caton-Thompson 1928: 15, pl. VII, XXVII.6; Hendrickx & Eyekerman: fig. 2	A.1	Front of arms/hands/chest	
Deir el-Ballas Q132	1 C	I	Petrie & Quibell 1896: pl. V.27, LXI.1; Hoffman, Willoughby & Stanton 1988: no. 62; Petrie Museum 1999	B.3.b	Behind head	

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		I	Petrie & Quibell 1896: pl. V.27; Hoffman, Willoughby & Stanton 1988: no. 62	B.3.b		
		I	Petrie & Quibell 1896: pl. V.27	B.3.b		
Deir el-Ballas Q217	I F	G	Petrie & Quibell 1896: pl. V.25; Fawcett & Lee 1902: Table V; Petrie Museum 1999	B.8	Front of face	Leather on base
		G	Petrie & Quibell 1896: pl. V.25; Petrie Museum 1999	B.8		
el-Amra a16	I F	G	Randall-Maclver & Mace 1902: 19	B.11.b		
		G	Randall-Maclver & Mace 1902: 19	B.11.b		
el-Amra a26	I C	L	Randall-Maclver & Mace 1902: 23; Petrie 1920: pl. XLIV.104G, XLVI.19	B.7.b	At throat	
		L	Randall-Maclver & Mace 1902: 23	B.7.b		
el-Amra a45	I F	I	Randall-Maclver & Mace 1902: 17	B.3.b		
		I	Randall-Maclver & Mace 1902: 17	B.3.b		
		I	Randall-Maclver & Mace 1902: 17	B.3.b		
el-Amra a55	I F	G	Randall-Maclver & Mace 1902: 17	B.8		
		G	Randall-Maclver & Mace 1902: 17	B.8		
el-Amra a59	I F	I	Randall-Maclver & Mace 1902: 17	B.3.b		
		I	Randall-Maclver & Mace 1902: 17	B.3.b		
		I	Randall-Maclver & Mace 1902: 17	B.3.b		
el-Amra a66	I M	L	Randall-Maclver & Mace 1902: 17	A.2.b		
		L	Randall-Maclver & Mace 1902: 17	A.2.b		
el-Amra a73	I F	I	Randall-Maclver & Mace 1902: 23	A.2.a		
		I	Randall-Maclver & Mace 1902: 23	A.2.a		
el-Amra a85	I F	P	Randall-Maclver & Mace 1902: 16; Payne 1993: 235, no. 1947, fig. 80	C		
el-Amra a86	I M, 2 C	L	Randall-Maclver & Mace 1902: 23	B.3.b	Head area	
el-Amra a88	I F	I	Randall-Maclver & Mace 1902: 16, 36, pl. VII.2c	A.2.a	Front of arms/hands/chest	
		I	Randall-Maclver & Mace 1902: pl. VII.2f	A.2.a		
		L	Randall-Maclver & Mace 1902: pl. VII.2h	A.2.b		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		L	Randall-Maclver & Mace 1902: pl. VII.2h	A.2.b		
		I	Randall-Maclver & Mace 1902: pl. VII.2e	B.3.a		
		I	Randall-Maclver & Mace 1902: pl. VII.2g	B.3.a		
		I	Randall-Maclver & Mace 1902: pl. VII.2d	B.3.b		
		I	Randall-Maclver & Mace 1902: pl. VII.2j	B.3.b		
		I	Randall-Maclver & Mace 1902: pl. VII.2k	B.3.b		
		I	Randall-Maclver & Mace 1902: pl. VII.2m	B.3.b		
		I	Randall-Maclver & Mace 1902: pl. VII.2n	B.3.b		
		G	Randall-Maclver & Mace 1902: pl. VII.2a	B.8		
		G	Randall-Maclver & Mace 1902: pl. VII.2b	B.8		
el-Amra a89	I F	L	Randall-Maclver & Mace 1902: 17	A.2.b		
		I	Randall-Maclver & Mace 1902: 17	B.3.b		
el-Amra a91	I F	I	Randall-Maclver & Mace 1902: 23, pl. V.3	A.2.a		
		I	Randall-Maclver & Mace 1902: 23, pl. V.3	A.2.a		
		L	Randall-Maclver & Mace 1902: 23, pl. V.3	A.2.b		
		L	Randall-Maclver & Mace 1902: 23, pl. V.3	A.2.b		
el-Amra a92	I F	L	Randall-Maclver & Mace 1902: 18	A.2.b		
		L	Randall-Maclver & Mace 1902: 18	A.2.b		
		L	Randall-Maclver & Mace 1902: 18	A.2.b		
		L	Randall-Maclver & Mace 1902: 18	B.2.b		
		I	Randall-Maclver & Mace 1902: 18	B.3.b		
		I	Randall-Maclver & Mace 1902: 18	B.3.b		
el-Amra b63	I F	G	Randall-Maclver & Mace 1902: 22	B.11.b		
el-Amra b68	I C	L	Randall-Maclver & Mace 1902: 18–19	A.2.b		
		L	Randall-Maclver & Mace 1902: 18	A.2.b		
		G	Randall-Maclver & Mace 1902: 18	B.8		
el-Amra b75	I F(?)	I	Randall-Maclver & Mace 1902: 24	B.3.b		
		I	Randall-Maclver & Mace 1902: 24	B.3.b		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		I	Randall-MacIver & Mace 1902: 24	B.3.b		
el-Amra b78	1 F	I	Randall-MacIver & Mace 1902: 19	B.3.b		
		I	Randall-MacIver & Mace 1902: 19	B.3.b		
		I	Randall-MacIver & Mace 1902: 19	B.3.b		
		G	Randall-MacIver & Mace 1902: 19	B.8		
		G	Randall-MacIver & Mace 1902: 19	B.8		
		I	Randall-MacIver & Mace 1902: 19	B.8		
el-Amra b199	1 F(?)	I	Randall-MacIver & Mace 1902: 22	A.2.a		
		I	Randall-MacIver & Mace 1902: 22	A.2.a		
el-Amra b220	1 F, 1 I	I	Randall-MacIver & Mace 1902: 18	B.3.b		Leather on base
		G	Randall-MacIver & Mace 1902: 18	B.8		
		G	Randall-MacIver & Mace 1902: 18	B.8		
Hammamiya 1787	1 C	I	Brunton & Caton-Thompson 1928: pl. XXXI, LIII, 19; Petrie Museum 2016	B.3.a		
		I	Brunton & Caton-Thompson 1928: LIII, 19	B.3.a		
Hierakonpolis HK6, Tomb 72	1 M	I	Friedman 2014	A.2.a		
		I	Friedman 2014	A.2.a		
		I	Friedman 2014	A.2.a		
Hierakonpolis HK43, B333	1 F	A	Friedman 2003: 17-18; Fahmy 2005; Hendrickx & Eyckerman 2011, fig. 18b	B.5.b	Front of arms/hands/chest	Tags strung together+container
		A	Friedman 2003: 17-18	B.5.b		
		A	Friedman 2003: 17-18	B.5.b		
Khor Bahan 17:56	1 M	I	Reisner 1910: 120, pl. 27.a, 66.15	A.3.a	Head area	
		I	Reisner 1910: 120, pl. 27.a	A.3.a		Leather on base
el-Mahasna H22	1 F	G	Ayrton & Loat 1911: 15, pl. XV.3	B.11.a	Front of face	
		G	Ayrton & Loat 1911: 15, pl. XV.3	B.11.a		
el-Mahasna H29	1 F, 1 U A	I	Ayrton & Loat 1911: 11-12, pl. XI.1	A.6	Behind head	
		I	Ayrton & Loat 1911: pl. XI.1	A.6		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		I	Ayrton & Loat 1911: pl. XI.1	A.6		
		I	Ayrton & Loat 1911: pl. XI.1	A.6		
el-Mahasna H41	1 F, 1 C, 1 U A	C	Ayrton & Loat 1911: 16, pl. XVI.1	C	Various	
		C	Ayrton & Loat 1911: pl. XVI.1	C		
		C	Ayrton & Loat 1911: pl. XVII.2	A.6		
		B	Ayrton & Loat 1911: pl. XVII.2	B.3.b		
		C	Ayrton & Loat 1911: pl. XVI.1	C		
el-Mahasna H42	1 M	P	Ayrton & Loat 1911: 13	C	Various	
el-Mahasna H61a	1 F	I	Ayrton & Loat 1911: pl. XV.2	A.1		
		I	Ayrton & Loat 1911: pl. XV.2	B.3.b	Front of arms/hands/chest	
el-Mahasna H85	1 C	I	Ayrton & Loat 1911: 19, pl. XIX.4	B.3.b		
Matmar 2622	1 M	B	Brunton 1948: 12, pl. VIII, XVI.29, XVII.40	B.3.b		
Matmar 2633	1 F (?)	I	Brunton 1948: pl. VIII, XVI.13, XVII.34	A.2.a		
		A	Brunton 1948: pl. XVI.32, XVII.59	B.2.b		
Matmar 2642	1 F, 1 M	A	Brunton 1948: 13, pl. VIII, XVI.34, XVII.55	B.2.b		
		A	Brunton 1948: pl. XVI.35, XVII.56	B.2.b		
Matmar 2644	1 F	G	Brunton 1948: pl. VIII, XV.36	B.1.1.b	Front of arms/hands/chest	
		G	Brunton 1948: XV.36	B.1.1.b		
Matmar 2646	1 F, 1 I	I	Brunton 1948: 13, VIII, XVI.12, XVII.54	B.8		
Matmar 2654	1 F	A	Brunton 1948: 13, VIII, XVI.33, XVII.58	B.2.b		
Matmar 2659	1 F, 1 M (?)	I	Brunton 1948: 13, VIII, XVI.27, XVII.48-53	B.3.b		
		I	Brunton 1948: XVI.27, XVII.48-53	B.3.b		
		I	Brunton 1948: pl. XVI.27, XVII.48-53; Gessler-Löhr & Seidel 1976: 15	B.3.b		
		B	Brunton 1948: XVI.28, XVII.48-53	B.3.b		
		B	Brunton 1948: XVI.28, XVII.48-53	B.3.b		
		B	Brunton 1948: XVI.28, XVII.48-53	B.3.b		
Matmar 2660	1 F	B	Brunton 1948: 13, VIII, XVI.24	B.3.b	Head area	Container
		B	Brunton 1948: XVI.24, XVII.47	B.3.b		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
Matmar 2663	1 M (?)	B	Brunton 1948: VIII, XVI.28, XVII.46	B.3.b		
Matmar 2681	1 M (?)	A	Brunton 1948: IX, XVI.31, XVII.57; Payne 1993: 243, no. 2028, fig. 84	A.2.b		
Matmar 2682	1 M	B	Brunton 1948: 14, IX, XVII.31; Payne 1993: 238, no. 1961, fig. 81; Hendrickx & Eyckerman 2011: fig. 17b	B.5.a		Container
		I	Brunton 1948: XVI.19; XVII.29; Seipel 1992: no. 3; Grimm & Schoske 2000, no. 35	B.5.a		
		I	Brunton 1948: XVII.30	B.5.a		
		I	Brunton 1948: XVII.32	B.5.a		
Matmar 2701	1 F (?)	I	Brunton 1948, IX, XVII.33	A.1		
		I	Brunton 1948: XVI.30; XVII.42	B.3.a		
Matmar 2720	1 F	B	Brunton 1948: IX, XVI.26; XVII.43	B.3.b	Front of arms/hands/chest	
		B	Brunton 1948: XVI.26, XVII.44	B.3.b		
		B	Brunton 1948: XVI.26, XVII.45; Spencer 1993: fig. 17	B.3.b		
		G	Brunton 1948: XV.37	B.11.d		
Matmar 3114	1 F (?)	I	Brunton 1948: 16, X, XVI.14, XVII.78	A.2.a		
		I	Brunton 1948: XVI.14	A.2.a		
		I	Brunton 1948: XVI.14	A.2.a		
Matmar 3123	1 F	I	Brunton 1948: 16, X, XVI.21, XVII.71	B.9		
		I	Brunton 1948: XVI.22, XVII.70	B.9		
		G	Brunton 1948: XV.35	B.11.c		
		G	Brunton 1948: XV.35	B.11.c		
Matmar 3133	1 F	G	Brunton 1948: X, XVI.10; Payne 1993: 240, no. 1988, fig. 82	B.8		
		G	Brunton 1948: XVI.11; Payne 1993: 240, no. 1989, fig. 82	B.8		
Matmar 5106	1 M (?)	I	Brunton 1948: X, XVI.25	B.3.b		
el-Mustagidda 428	1 F	I	Brunton 1937: 53, VII	A.1	Foot area	

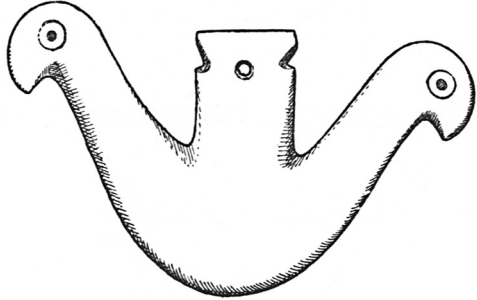
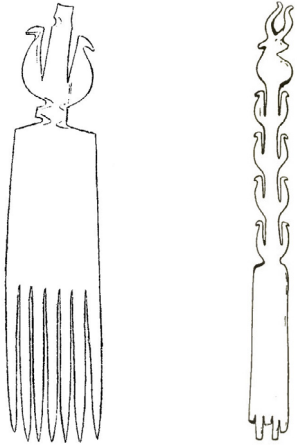


Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
el-Mustagidda 1632	1 F	B	Brunton 1937: XXIX, XLII.36	B.3.b	Various	
el-Mustagidda 1805	1 M (?)	I	Brunton 1937: XXX, XLII.26	A.2.a		
el-Mustagidda 1825	1 F (?)	I	Brunton 1937: XXX, XLII.34	A.2.a		
el-Mustagidda 1833	1 M (?)	I	Brunton 1937: 88, XXX	A.2.a	Foot area	
el-Mustagidda 1857	1 F, 1 C	L	Brunton 1937: 72, XXX, XLII.25	A.2.b	Front of arms/hands/chest	Leather on base+container
		L	Brunton 1937: XLII.25	A.2.b		Leather on base+container
		L	Brunton 1937: Plate XLII.25	A.2.b		Container
el-Mustagidda 11741	1 C	G	Brunton 1937: XXXI, XLIII.14	B.7-8		
		G	Brunton 1937, 86	B.7-8		
Minshat Abu Omar 882	1 F	B	Kroeper & Wildung 2000: 120–121, no. 6, pl. 36.6	B.7.b		
		B	Kroeper & Wildung 2000: 121, no. 7, pl. 36.6	B.7.b		
Nag el-Deir 7008	1 F, 2 M (?)	C	Lythgoe & Dunham 1965: 4–5, no. 11, fig. 1.s	B.10	Front of arms/hands/chest	
		C	Lythgoe & Dunham 1965: 5, no. 11	B.10		
		G	Lythgoe & Dunham 1965: 5, no. 3, fig. 1.o; Bellinger 1986: 3	B.11.c		
		G	Lythgoe & Dunham 1965: 5, no. 4, fig. 1.o; Bellinger 1986: 3	B.11.c		
Nag el-Deir 7014	1 M	I	Lythgoe & Dunham 1965: 7, no. 3, 9, fig. 3f	A.3.a	Front of arms/hands/chest	
		I	Lythgoe & Dunham 1965: 7, no. 3, fig. 3f	A.3.a		
Nag el-Deir 7072	1 F	I	Lythgoe & Dunham 1965: 41	A.2.a	Front of arms/hands/chest	
		I	Lythgoe & Dunham 1965: 41	A.2.a		
Nag el-Deir 7083	1 M	A	Lythgoe & Dunham 1965: 46, no. 2, fig. 18d	A.2.b	Front of arms/hands/chest	Leather on base+container
		A	Lythgoe & Dunham 1965: 46, no. 2, fig. 18d	A.2.b		Container
		A	Lythgoe & Dunham 1965: 46, no. 2, fig. 18d	A.2.b		Container
Nag el-Deir 7087	1 F	A	Lythgoe & Dunham 1965: 47 no. 1, 50, fig. 19i	B.2.b		
		A	Lythgoe & Dunham 1965: 47 no. 1, fig. 19j	B.2.b		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
Nag el-Deir 7130	1 F (?), 2 C, 1 M C, 1 A	I	Lythgoe & Dunham 1965: 78 no. viii, fig. 32b	B.3.b	Foot area	Leather on base
Nag el-Deir 7136	1 F, 2 M	I	Lythgoe & Dunham 1965: 81, no. i, fig. 33b	A.2.a		
Nag el-Deir 7150	1 F	I	Lythgoe & Dunham 1965: 87, no. 6, fig. 35f	A.2.a	Front of arms/hands/chest	Leather on base
		I	Lythgoe & Dunham 1965: 87, no. 6, fig. 35f	A.2.a		Leather on base
		I	Lythgoe & Dunham 1965: 87, no. 6, fig. 35f	A.2.a		Leather on base
Nag el-Deir 7235	4 F, 1 A	NA	Lythgoe & Dunham 1965: 132, 135; Podzorski 1993: 129	A-B.?		
Nag el-Deir 7293	1 F	I	Lythgoe & Dunham 1965: 170, no. 2, 172, fig. 74c	B.3.b	Front of arms/hands/chest	Leather on base+container
		I	Lythgoe & Dunham 1965: 170, no. 2, fig. 74c	B.3.b		Container
Nag el-Deir 7469	1 F	A	Lythgoe & Dunham 1965: 293, no. 4, fig. 132e	B.2.b	Behind back	Container
		A	Lythgoe & Dunham 1965: 293, no. 4, fig. 132e	B.2.b		
Nag el-Deir 7509	1 F	G	Lythgoe & Dunham 1965: 323, no. 2, fig. 143k; Bellinger 1986: 8	B.11.c		
		G	Lythgoe & Dunham 1965: 323, no. 2, fig. 143k; Bellinger 1986: 8	B.11.c		
Nag el-Deir 7634	2 I	G	Lythgoe & Dunham 1965: 417, no. 1, fig. 188b	B.8	Various	Leather on base+container
		G	Lythgoe & Dunham 1965: 417, no. 1, fig. 188b	B.8		Container
Naqada 884	1 F	G	Fawcett & Lee 1902: Table I; Baumgartel 1970: XXXII	B.8		
Naqada 1329	1 F	I	Fawcett & Lee 1902: Table II; Payne 1993: 237, no. 1958, fig. 81	B.5.a		
		A	Payne 1993: 237, no. 1959, fig. 81	B.5.a		
Naqada 1419	1 F	I	Petrie & Quibell 1896: 28, LXII.34; Fawcett & Lee 1902: Table II	A.6		
		I	Hendrickx 1986: 38, fig. 3; Bréand & Bozet 2009: no. 84; Hendrickx & Eyckerman 2011: fig. 10	B.3.a		
		I	Petrie & Quibell 1896: LXII.45; Petrie 1920, XXXIII.27	B.3.a		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		I	Petrie & Quibell 1896: LXII.19; Hendrickx 1986: 38, fig. 4; Hendrickx & Eyckerman 2011: fig. 11a	B.3.b	Front of arms/hands/chest	
		I	Baumgartel 1970: XLII; Petrie Museum 2017	A.3.a		Leather on base
		I	Baumgartel 1970: XLII	A.3.a		
		G	Petrie & Quibell 1896: 28, XLIX.66; Payne 1993: 239, no. 1983, fig. 82	B.11.c	Front of arms/hands/chest	Leather on base
		G	Petrie & Quibell 1896: 28, XLIX.64	B.11.c		
Naqada 1488	1 F	I	Fawcett & Lee 1902: Table II; Petrie 1920: 33; Baumgartel 1970: XLVI	A.2.a	Various	
Naqada 1587	4 M	L	Fawcett & Lee 1902: Table III; Scharff 1929: 183–184, no. 364	C	Above head	Leather on base
		L	Scharff 1929: 183–184, no. 364	C		Leather on base
		I	Petrie 1920: XXXIII.9	A.2.a		
Naqada 1675	1 M (?)	G	Fawcett & Lee 1902: Table III; Payne 1993: 240, no. 1992, fig. 82	B.8	Front of arms/hands/chest	
Naqada 1677	1 M (?)	I	Fawcett & Lee 1902: Table III; Baumgartel 1970: LIV	A.2.a		
		I	Baumgartel 1970: LIV	A.2.a		
Naqada 1682	1 M	L	Fawcett & Lee 1902: Table III; Payne 1993: 243, no. 2026, fig. 84; Hendrickx & Eyckerman 2011: fig. 26a	C		
		L	Payne 1993: 243, no. 2027, fig. 84; Hendrickx & Eyckerman 2011: fig. 26b	C		
Naqada 1781	1 M (?)	A	Fawcett & Lee 1902: Table III; Petrie Museum 1999	A.2.b	Above head	
		A	Petrie & Quibell 1896: LXI.1	A.2.b		
		I	Petrie & Quibell 1896: LXI.1	B.3.b		
		I	Petrie & Quibell 1896: LXI.1; Petrie 1920: XXXIII.41	B.3.b		
		G	Petrie 1920: XLV.34; Baumgartel 1970: LVII	B.9		
		G	Petrie 1920: XLV.35; Baumgartel 1970: LVII	B.9		

Site+tomb #	Sex of burials	M	Bibliography	Type	Burial placement	Attachment/container
		G	Petrie & Quibell 1896: LXIV,90; Petrie 1920: XLV,36; Baumgartel 1970: LVII; Petrie Museum 2018	B.9		
Naqada 1860	1 F (?)	A	Fawcett & Lee 1902: Table IV; Baumgartel 1970: LX; Petrie Museum 1999	A.2.b	Front of face	
		A	Baumgartel 1970: LX	A.2.b		
Naqada T4	1 F, 2 F (?), 2 M	G	Petrie & Quibell 1896: LIX,2; Fawcett & Lee 1902: Table VII	B.5.a	Above head	String
		G	Petrie & Quibell 1896: LIX,2	B.5.a		String
		G	Petrie & Quibell 1896: LIX,2	B.5.a		String
		I	Payne 1993: 238, no. 1965, fig. 81; Hendrickx & Eyckerman 2011: fig. 19b	A.6		
		I	Payne 1993: 238, no. 1966, fig. 81	A.6		
Qaw el-Kebir 136	1 F	G	Brunton & Caton-Thompson 1928: 49, XXX, LII,23	B.11.c	Front of knees	
		G	Brunton & Caton-Thompson 1928: LII,23	B.11.c		

Table 3 Reuse of motifs on different media.¹⁶

Object	Object as decorative motif
	
	

16 Top left from Brunton 1948: pl. XV.23. Top right from Petrie & Quibell (1896: pl. LXIII.58) and Quibell (1905: pl. 57). Bottom left from Brunton (1937: pl. XLII.46). Bottom right, greyscale cropped adaptation of picture of C-Ware bowl in the Boston Museum of Fine Arts, accession number 13.3935, by Marcus Cyron, retrieved from commons.wikimedia.org/wiki/File:Testupload_Boston_Museum_of_Fine_Arts_Egyptology_032.JPG. This image is under a CC Attribution 3.0 Unported license creativecommons.org/licenses/by/3.0/legalcode.