Predynastic Egyptian representations of animals: The journey from nature to art and beyond

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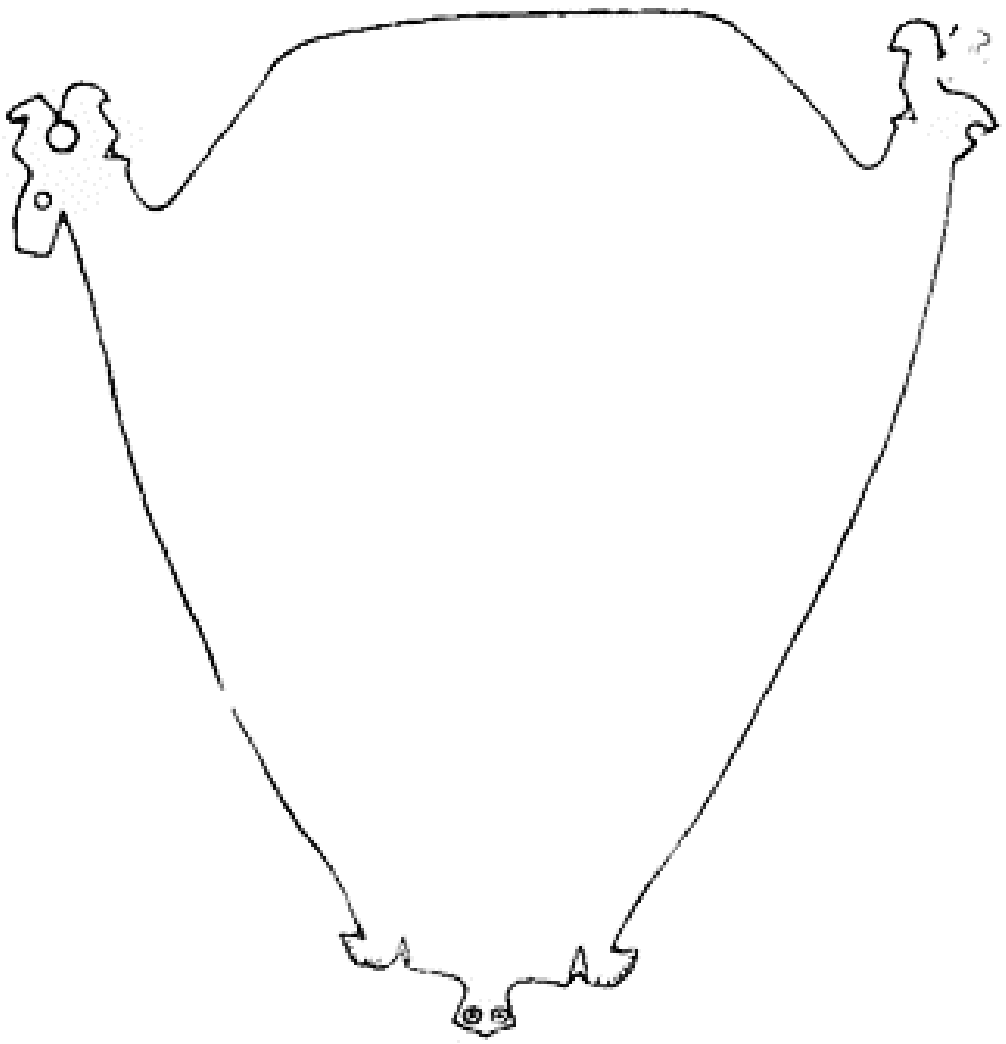
Abstract

This paper will argue that human-animal relationships in the Predynastic period of Egypt might be understood through the analysis of zoomorphic artefacts. Supplied with this paper is a database containing 617 three-dimensional zoomorphic objects excavated from Predynastic Egyptian sites. The analysis of the database, as well as critical discussions of forms leads to several conclusions. This paper details how artefacts may have related to the nature of cosmology and how animal-spirits represented aspects of place, identity and ancestors. Certain animals are appropriate for specific artefact types, such as fish being the most common animal depicted on palettes. The use of anthropological thought and ethnographic studies also aid in the interpretation of certain practices and beliefs related to animals and humans. The rise of elite powers seems to have affected how animals were used in artwork and iconography. Forms such as the 'bull's head' amulet appear more frequently towards the Early Dynastic period, but also the nature of late Predynastic ceremonial artefacts seems to have altered how humans related with animals in artwork. This paper shows how the elite appropriation of forms affected animal images in relation to official writing, but also how some aspects of hieroglyphic writing may have been anticipated on zoomorphic artefacts in the Predynastic period.

Predynastic Egyptian representations of animals: The journey from nature to art and beyond

By George Anthony Wing

Submitted to Durham University for the qualification of Masters by research in the department of Archaeology in 2015.



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Acknowledgements

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Frontispiece: The palette found in Naqada grave 271 (Petrie & Quibell 1896: pl.xlvii, fig.11).

How to use the supplied database

The supplied database was created using Microsoft Excel 2013, and it contains 618 entries divided by rows. The file is a '.xlsx' format, but a '.xls' version has also been supplied, which is more compatible with the 97-2003 versions of Microsoft Excel.

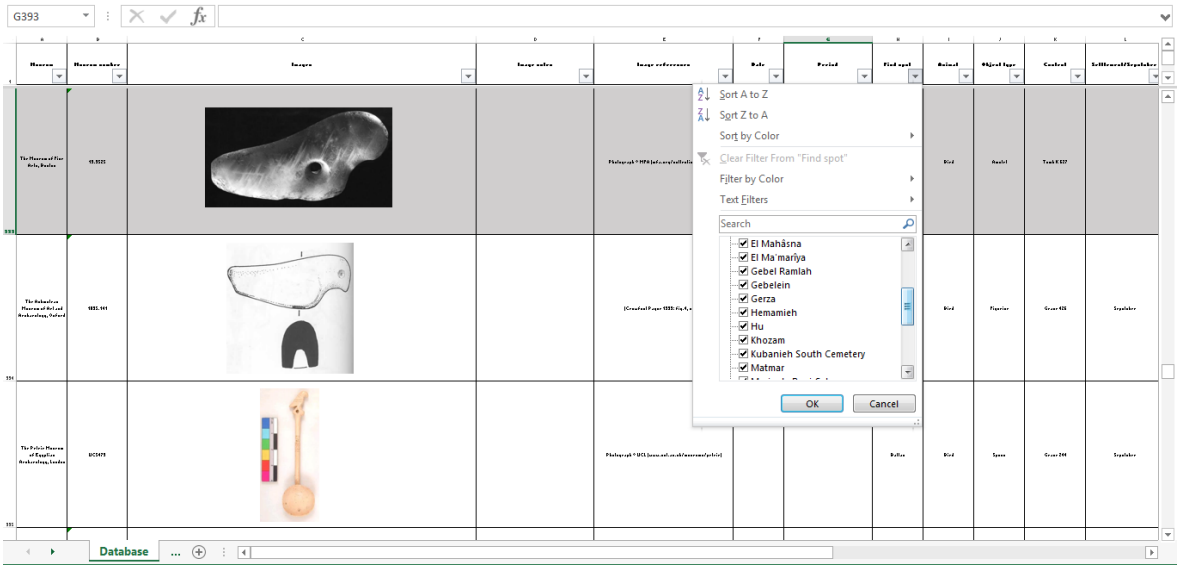


Figure 01. A print screen image showing the database in use on Microsoft Excel (Office 2013). The drop-down menu for the 'Find spot' can be seen, displaying some of the sites that the user is able to select.

The Excel spreadsheet contains multiple sheets, which are accessible at the bottom of the screen. The first sheet, named 'Database', contains all of the objects compiled for this study. The objects are organised by archaeological site. Each individual artefact has its own row, with relevant information about the artefact separated into columns. Each column heading along the top row has a clickable arrow which will bring up a drop-down menu (see **Figure 01**). Categories in the drop-down menu are automatically organised alphabetically, and there is also a search box to instantly find a specific category. The user may then select one, many, or all of the different entries for that category by clicking the relevant tick-boxes. For example,

by clicking the drop-down on the ‘Find Spot’ category, the user may tick ‘Matmar’ and ‘Badari’, which will then display only the artefacts found from these two sites. A combination of filters may also be applied by simply selecting more variables from other categories. For example, with only the artefacts from Matmar or Badari selected, it is then possible to view only the artefacts made of ivory from both of these sites by ticking the ‘ivory’ tick-box in the ‘Materials’ category. In order to view the entire database again, simply ensure the ‘(select all)’ tick-boxes are ticked on every column. The following four sheets contain ‘Pivot charts’ which might be similarly manipulated to view specific information. The complexity of these charts allows for the filtering of multiple fields while also offering a count of each relevant artefact. The pivot chart ‘Object_type, Find_spot, Animal’ might be used, for example, to give a count of specific types of objects from specific sites. These pivot charts can also be used to create relevant charts (which by default may also be filtered by categories). The final sheet is a bibliography relating to citations and image references mentioned within the database itself.

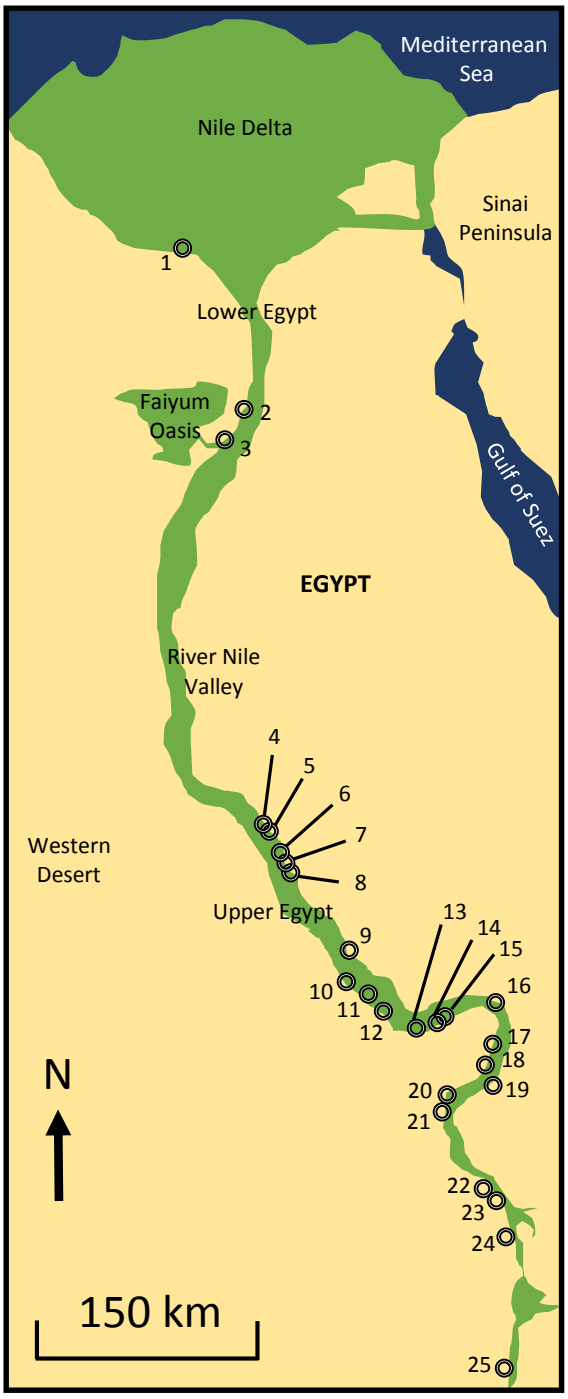


Figure 02. A map of Egypt showing the distribution of sites featured in the database (based on Google Earth imagery)

1. Merimde Beni-Salame	6. Badari	11. Abydos	16. Naga el-Hai	21. Gebelein
2. Gerza	7. Hemamieh	12. El Amrah	17. Ballas	22. El Ma'marîya
3. Abusir el-Melek	8. Qau	13. Hu	18. Naqada	23. Nekhen (Hierakonpolis)
4. Matmar	9. Mesa'eed	14. Abadiyah	19. Khozam	24. Abu Zaidan
5. Mostagedda	10. El Mahâsna	15. Semainah	20. Armant	25. Kubanieh South

0.1 Introduction

This paper aims to further the understanding human-animal relations in the Predynastic period of Egypt through the analysis of zoomorphic artwork. Although many discussions on Predynastic artwork exist (see below), there has not yet been a comprehensive analysis of zoomorphic forms. One of the main aims of this research is to streamline the dataset by taking focus away from objects without provenance. In order to fulfil this aim, it was necessary to create a database featuring a fairly exhaustive compilation of excavated materials with known provenance. As this paper will analyse specific artefact forms in depth through analysis of the database, the inclusion of unprovenanced objects could confuse results. The information from this database will be used throughout the paper to inform the discussion.

This paper will argue that the images of certain animals were reserved for specific artefacts, and that these selections were based upon how humans viewed those animals. In order to understand how Predynastic Egyptians used animal-images, this paper aims to chart the progression of certain artistic elements. The nature of this progression of ideas will be assessed. The first half of this paper will deal with earlier forms, arguing that there were cosmological connections between ancestors, place, death and animals (see Section 1: The journey from nature to art). The second half will argue that growing elite power in the Predynastic period affected a coalescence of animal-related beliefs, iconography and practices (see Section 2: The journey beyond art).

This paper also aims to not retrospectively apply later, Dynastic Egyptian beliefs onto the material culture of Predynastic Egypt. Wengrow labels the tendency for late prehistoric artwork across the Near East to be viewed in terms of Dynastic epigraphy and artwork as 'inappropriate' (Wengrow 2003: 140). This paper, instead, argues the importance of anthropological concepts (such as totemism and taboo), as well as discussions which highlight the socio-temporal contexts of artefacts. Due to time limitations it was decided that only 'three-dimensional' objects (that is any carved or moulded object) should be studied in detail and included in the database. Other relevant artistic media, such as petroglyphs and painted

vessels are not, however, excluded entirely, and are implemented where relevant. This paper aims to be as reflective as possible when offering interpretations in order to allow the reader to understand the potential flaws in certain theories, as well as to encourage them to examine what steps have been taken to get from the source material to a theory.

0.1.1 The theory and aims of the database

The supplied database forms the bulk of the present research and is used as the basis for discussion. It is important, therefore, to understand the formation of it. Bailey recognises a large amount of literature offering poor interpretations of prehistoric figurines, falling in either the naïve empiricism category, or the unreflective anecdotal one (Bailey 2005: 12-15, 24). He believes that empiricism is valuable to a certain degree, but criticises the lack of instruction given by researchers related to the use of their detailed measurements (*ibid*: 13-14). Bailey's argument could be ignored as not being in the spirit of archaeologically striving for the dissemination of the maximum amount of knowledge and understanding on a subject.

In order to be reflective on the included catalogue, justifying its level of empiricism, the theory behind it will be discussed. Each object is represented visually where possible which will facilitate the interpretation of form on the part of the author as well as the reader. Although Bailey sees line-drawings as often extraneous data when placed alongside a photograph (Bailey 2005: 13), their use is employed within the catalogue where various pieces of visual data are made clear as a result. Each object also features various administrative pieces of information where available, such as its museum number, in order to differentiate each object as well as to facilitate the reader's search for the object's current whereabouts if desired. Theoretically, archaeology as a whole aims to enthuse and inform others, so the inclusion of useful administrative information helps to fulfil the researcher's duty. The presentation of data such as 'context' and 'find spot' are also essential for an archaeological discussion. If not discussed within the paper, the reader may choose to view notes on the

specific grave or area in which an object was located. The compilation of this information brings present interpretations closer to the source material, helping to place the featured objects back into their places of final deposition. The strong focus on context also influenced the decision to exclude artefacts without good provenance from the catalogue. When analysing objects whose use is mostly unknown or not well understood, it is most useful to guarantee the object's authenticity as well as to know from which spatio-temporal cultural group it may have originated from.

0.2 Past research

0.2.1 Publications on Predynastic zoomorphic artwork

The people of the Predynastic have left behind a large corpus of artwork, mainly derived from burial evidence. Despite several publications dealing with Predynastic society (Tassie 2014; Teeter 2011; Wengrow 2006), and more specifically artwork (Patch 2011; Capart 1905), a unified corpus of Predynastic artwork has not been created. Petrie did manage to catalogue a vast sum of material, commenting on many artistic forms (Petrie 1920), as well as formulating a corpus of pottery and palette forms (Petrie 1921). These publications, however, featured many pieces which were not excavated, but merely bought, and therefore of unknown provenance. These early publications also preceded the discovery of the Badarian material culture (Brunton 1927, 1937 & 1948; Brunton & Caton Thompson 1928), not to mention the plethora of sites examined until today. Since Petrie there have been publications which highlight the material of specific museums, such as the artefacts from the Ashmolean Museum (Crowfoot Payne 1993), or the Metropolitan Museum of Art (Patch 2011). The combination of international materials, however, is still lacking. Specific phenomena have been compiled and assessed, such as rock art (Lankester 2012), or early writing (Regulski 2010). Singular material types have been assessed, such as palettes (Stevenson 2009a), as well as specific iconography, such as bovine artefacts (Hendrickx 2002). Although the combination of many different forms and object types might aid an overall understanding of Predynastic artwork, an argument may be made in favour of separate and targeted discussions. Each artefact type should be analysed in a unique way, as the limitations of a specific medium will also limit the types of analytical questions that may be asked of the piece (Hyman 1989: 104-105). For example, the variable presence of inlaid eyes might be explained by the ease of drilling and insertion of beads on the different material types. A siltstone palette would most likely have an inlaid egg-shell bead, whereas this process would be much more difficult on flint objects, so the omission of eyes on flints should be seen as a technical limitation, rather than a stylistic disparity between palettes and flints.

Several works have also discussed thematic continuities between different artefact types as well as across chronological periods. Hendrickx has produced articles (such as Hendrickx 2002

& 2011; Hendrickx & Eyckerman 2010 & 2012) tackling the interconnected themes of representational art found on objects such as pottery, tomb paintings, figurines, jewellery, decorated palettes etc. Certain ideas in these articles offer useful insights into Predynastic motifs. For example, the development of the royal 'smiting scene' can arguably be stylistically traced back prior to the time of Narmer (Hendrickx & Eyckerman 2012: 84, fig. 30). This particular development is certainly possible, but not yet fully understood. When it comes to art more related to the present paper, however, the evidence is even less clear. Hendrickx has focussed several times on the enigmatic bull and double-bird motifs (see chapters 1.5 & 2.6 below for my own approach to these forms) where many unprovenanced artefacts are highlighted (for example, Hendrickx & Eyckerman 2012: 37-38, figs. 10a, 10c & 12a-b; Hendrickx 2011: 80, fig. 8.5). Although it is understandable that the inclusion of as much information as possible might be desirable, regardless of provenance, certain artefacts do not have direct parallels among the excavated corpus which might skew conclusions. The use of unprovenanced examples is most frequent in Hendrickx 2002, where only one object is said to have come from a specific excavated location (Hendrickx 2002: 284, fig. 16.3), and the remaining 21 pictured artefacts in the article are unprovenanced. The illustrated objects are all from the Royal Museum of Art and History in Brussels, but it is not stated in the article that only these objects will be depicted. Apart from this criticism, Hendrickx's works have offered invaluable interpretations and have helped inform some of the discussion here.

On the internet, there also exist a few compilations of Predynastic artwork, such as those compiled by Francesco Raffaele (Website Reference 1). Raffaele's website, entitled 'Late Predynastic and Early Dynastic Egypt' features many essays and three databases; 'Corpus of Late Predynastic Decorated Palettes,' 'Corpus of First Dynasty Ivory and Wooden Year-Labels,' and 'Corpus of Early Dynastic Inscriptions on Stone Vessels.' The pages on this website feature many images and references to academic works, yet the databases feature many unprovenanced artefacts, and do not contain many entries. For example, the corpus of palettes focuses on types, rather than individual examples, so there is only one image representing the double bird palette with stem, or 'pelta' palette type. Similar essays and compilations of materials can be seen on the University College London's website, 'Digital Egypt', which has digitised many excavation maps and features many objects from the Petrie

Museum (Website Reference 2). Another website, 'The Global Egyptian Museum' clearly aimed to assimilate objects from many museums worldwide into one, searchable and free to access database (Website Reference 3). Although the database covers all periods of Egyptian history, it lacks many important entries. For example, when searching for objects of the 'Predynastic' or 'Prehistoric' periods from The Cairo Museum of Egyptian Antiquities, the database returns with zero results, while using the 'Advanced' search yields only six objects. Moscadelli (Website Reference 4) has published a database of Predynastic artwork online which features many unprovenanced examples, covers a wide range of materials from figurines to rock art, and yet only reaches a total of 438 entries. Perhaps one limitation on the compilation of such a vast dataset is the problem of categorisation. Through the creation of the present database, which only deals with zoomorphic objects, there are many examples where the interpretation of the basic form is unclear or debatable. Wengrow notes the difficulty in identifying species among Neolithic zoomorphic figurines, even to the point where it is uncertain whether the form was intended to be human, animal or a combination (Wengrow 2003: 147-149). The rigid labelling of forms is difficult, and perhaps not as useful as an example-based discussion of various forms. Despite this, cataloguing artwork from Predynastic Egypt would vastly improve discussions on frequencies of forms, as well as their temporal or geographical relations. From a modern perspective, carrying out research into various artefacts would also be expedited with the accurate cataloguing of modern day geographies of artefacts; many museums have failed to produce catalogues, or accessible registers.

0.2.2 Excavation of materials

Early excavators focused mainly on cemeteries where 'museum-quality' artefacts might be recovered, leaving settlements, such as those found by Brunton near Badari, poorly documented (Friedman 1994: 301). Although artefacts have been recovered from settlement areas at the turn of the Century, such as at Hierakonpolis (Quibell 1900) or Naqada's South Town and 'Nubt' (Petrie & Quibell 1896), without extensive levels of recording and

interpretation, it is hard to fully contextualise and understand the processes behind artefact creation and use. Evidence of life in the Predynastic period has been most richly found in the excavated records of funerary contexts. This does leave many settlement practices of the Egyptians unknown, but aspects of their ritual and social lives may be effectively unpicked through the trappings of the grave (Wengrow 2006: 69). It might be argued that a bias towards mortuary contexts for certain artefact types might reflect a genuine predilection for such objects to have been placed amongst the trappings of the dead.

Regardless of sites exhibiting sepulchral or settlement evidence, there is still a general lack of sites located in certain areas of Egypt. Despite several, more modern excavations of settlement contexts in Egypt, there must have existed many more large urban centres which are now inaccessible due to burial beneath modern cities and Nile alluvium (Wengrow 2011: 99). The relatively mobile and impermanent nature of settlement structures found at sites like Badari or Hammamiyah may be explained by the fact that more sedentary 'villages' existed closer to the Nile, where horticulture may have been employed more thoroughly (Wengrow 2006: 63). An example of this has been theorised for the settlement site of Halfiah Gibli, on the Qena bend of the Nile, where a much more permanent and extensive settlement may have existed closer to the Nile, which might have also served the graves of Abadiyah (Bard 2003: 128-129).

Not only is there a bias in terms of the small scale location of individual settlements, but there are also whole regions of Egypt which seem to display uneven levels of archaeological activity (see **Figure 02**). Site preservation is highly dependent on a number of natural factors, such as changes in the direction of the Nile channels, desertification, movement of sand dunes, erosion of soil and rock surface, deposition of Nile alluvium and earthquakes. Graves excavated from Upper Egypt outnumber those from Lower Egypt by roughly 15,000 to 600, highlighting a clear geographical bias of data (Stevenson 2009b: 1). The Central and West Delta are covered in thicker alluvium, affecting the location of sites, while Middle Egypt also remains underrepresented when compared with Upper Egypt (Tassie 2014: 428). The lack of zoomorphic objects from northern sites might also be explained by graves containing a lower

diversity of goods, as the Lower Egyptians may have displayed their status in non-material ways (Tassie 2014: 403).

Another area which is relatively lacking in excavated material is the area between the sites of the Nile Valley, and those of central Sudan. There is good evidence linking the material culture of Badarian sites, and the more southern sites of the Khartoum Neolithic (Wengrow 2006: 49-50), such as at Shaheinab (Arkell 1953) or Haj Yusif (Fernandez *et al.* 1989). It is the land between the Nile Valley and the Khartoum, however, which has been relatively under-examined, partially due to the actions of damming (Wengrow 2006: 50). Work has been undertaken, however, to survey and catalogue settlement and sepulchral sites along this area, such as at the Northern Dongola Reach between the third and fourth Cataracts of the Nile (Welsby 2001a & 2001b).

All of these examples highlight the major problems when understanding vast regional patterns of art, belief and culture. The table below describes the ways in which artefacts and sites make it in to the archaeological record, demonstrating also how theoretical features are not available for study.

	Survival of feature	Destruction of feature
Visible/ Accessible	Above ground features, such as mounds, *tell* sites, or excavated/surveyed sites both sub- and supraterranean. In this instance 'survival' is achieved through accurate and detailed recording of an archaeologically investigated site.	Scatters of pottery which have been brought to the surface, or artefacts which have been recovered through purchases or undocumented excavation. These artefacts have lost their original context, yet are available for examination.
Invisible/ Inaccessible	Theoretical Predynastic sites which may have existed, but are currently hidden beneath sand dunes or modern cities. Although these sites or features are not available to survey, they lie in a state of preservation.	Sites which may have existed along the banks of palaeochannels, destroyed through alluvial actions. Sites and features may also have lost their context through the destructive actions of the sites which superseded them.

Figure 03. A table showing the factors which should be considered when assessing the survival and visibility of Predynastic sites across Egypt.

The material evidence is also potentially restricted to non-wealthy graves which would not have been disturbed by looters as much as the more elite burials (Jones 2007: 979-980). Relying predominantly on mortuary remains does not entirely limit discussions on society, as the conception, organisation and maintenance of graves would have been an important living practice (Stevenson 2007: 77).

Section 1: The journey from nature to art

1.1 Chronological outline

In Prehistoric Egypt, people were not geographically or temporally uniform in terms of their relationship with animals. It was primarily in the Neolithic Period when different forms of animal exploitation were adopted. The ways in which Predynastic cultures adopted certain Neolithic practices, such as pastoralism, as well as a commitment to sedentary living would have affected how humans interacted with animals. The earliest evidence so far for the introduction of goats and domesticated cereals from the Sinai into Egypt dates to the 6th millennium BC, and can be found in the Faiyum and at Merimde Beni-Salame (Wendrich & Cappers 2005; von den Driesch & Boessneck 1985). In the savannah and deserts of Upper Egypt, the herding of domesticated sheep and goats can be seen around c.5,900 BC (Tassie 2014: 180). There is evidence for domestication developing further south, along the Middle Nile later, in the early 5th millennium BC (Salvatori & Usai 2008: 153-155). There was not a consistent adoption of farming and domestication across the Nile Valley, because farming economies existed alongside semi-nomadic hunting groups (Tassie 2014: 14). Applying the term 'Neolithic' to the whole of Egypt, therefore, is perhaps not accurate, where some societies who do not display signs of full agricultural technology might be termed 'subneolithic' (Hays 1976: 86). Although the Predynastic period generally only encompasses the Naqadan periods, the present database also includes earlier Merimden and Badarian artefacts, as they include the earliest zoomorphic portable art in Egypt. The spread of metal working and advancements in economy and society led to a 'Chalcolithic' phase of certain areas of Nubia and Egypt. The Upper Egyptian Chalcolilthic can be separated into the phases: Naqada IA-B, Naqada IC-IIB and Naqada IIC-D (Tassie 2014: 369). This was then followed by what is often termed the 'protodynastic period', which encapsulated the Naqada IIIA-B periods (Tassie 2014: 407). The unification of Egypt in c.3,111 – 3,045 BC (see Dee *et al.* 2013) ushered in the 'Early Dynastic' period, which incorporated the end of the Naqada traditions, and Naqada IIIC-V, up to Dynasty 3 of a unified Egypt (Hassan 2004: 782).

1.1.1 Cultural characteristics of the chronological phases

Merimden (Early: c.5,000-4,800 BC, Middle: c.4,775-4,600 BC, Classic: c.4,600-4,350 BC):

Sites in the Delta of the Merimden period, which is subdivided into Early, Middle and Classic Merimden (Eiwanger 1984, 1988 & 1992), feature a cultural admixture of Nilotic, Western Desert and Levantine populations (Tassie 2014: 212). These Neolithic sites exist on the desert borders of Lower Egypt, at Merimde Beni-Salame, el-Omari and the Faiyum (Midant-Reynes 2014: 3). People of the earliest Merimden phase kept domesticated sheep and cultivated wheat, barley and legumes, but they supplemented their diet with the hunting of various wild animals including hippopotamus and ostrich (von den Driesch & Boessneck 1985: 116). These domesticates had spread from Asia, via southern Sinai (Midant-Reynes 2014: 2). Later phases at Merimde Beni-Salame show an increasing focus on permanent settlement and urbanisation, where cattle and pig gain much more importance (Tassie 2014: 205-207).

Badarian (c.4,400 – 3,800 BC):

The Badarian period refers to a cultural unit local to the sites of Matmar, Mostagedda, Badari, Hemamieh and Qau. The adoption of domestic cattle, sheep and goat increases across many areas of the Nile in this period (Wengrow 2006: 26). Sites in southern Upper Egypt, beyond the southernmost Naqadan sites, seem to have more in common with the Badarian, rather than Naqadan culture (Tassie 2014: 370). These similarities include semi-nomadic pastoralism, with seasonal cultivation and hunting, without a focus on permanent settlements (Wengrow 2006: 27-29). This could either mean that the contemporaneous periods of Badarian and Naqada I were localised expressions of the same culture, or that Badarian material had bypassed Naqadan sites, being expressed only the north and south of the Qena bend. Badarian communities seem to have been less sedentary than those at Merimde Beni-Salame (Tassie 2014: 346). Owing to the lack of harpoons in archaeological contexts, the Badarian culture seems to have stemmed from an economically terrestrial

tradition, from the Western Desert, as opposed to the aquatic traditions of Central Sudan and the Nile Delta (Tassie 2014: 247).

Naqada IA-B (c.3,900 – 3,700 BC):

The Culture of Naqada I can be seen at sites such as Abadiyah, Abydos and el-Amrah, with traditions having originated from the Neolithic communities of Libo-Nubia (Tassie 2014: 369). The Naqada IA-B sites are in Upper Egypt, with local distinctions in Middle Egypt (Patch 2011: 212). Villages are mainly located along the desert floodplain, with ephemeral structures (Patch 2011: 212). Some Upper Egyptian villages attained political autonomy and were then aggregated into supra-village polities (Anđelković 2011: 28). The Naqada IA-B period overlaps with the Badarian culture, and these two cultures may have existed as local variations of each other.

Naqada IC-IIA-B (c.3,700 – 3,450 BC):

Despite the importance attached to burials because of their survival in the archaeological record, most items and ceramics made for the grave can also be found in settlement contexts (Graff 2008), such as the Rough Ware which began to be deposited in graves in the Naqada IC-IIA-B period (Patch 2011: 212). Society was complex, with a social hierarchy and craft specialisation dividing groups of people by wealth or status, and standardisation of artefacts begins to take place (Tassie 2014: 403, 406). The political entities at Abadiyah, Gebelein, Elkab, Edfu and Elephantine are subsumed, creating larger spheres of political influence for the elites of Abydos, Naqada and Hierakonpolis (Anđelković 2011: 28-29). Some of the earliest 'elite' burials, with high quantities of goods, as well as expensive or high 'value' products can be seen at a number of sites across Egypt, including Naqada, Abydos, Hierakonpolis, Armant and Gebelein (Tassie 2014: 388-389).

Naqada IIC-D2 (c.3,450 – 3,300 BC):

Naqadan culture spread and integrated with other cultures from the Delta southward to Nubia, with regional differences (Patch 2011: 212), as a result of acculturation, exchange and contact between Upper and Lower Egypt (Tassie 2014: 401-403). Independent advancements

in mud-brick architecture take place in the Delta, perhaps at Saïs, and in Upper Egypt at Hierakonpolis (Tassie 2014: 404). Upper Egypt formed sufficient political power to the point of a 'proto-state', with increased sedentarisation and larger populations (Anđelković 2011: 28-29). The practice of hunting animals was no longer economically viable, and became a cultic, recreational activity reserved for the elite classes (Van Neer, Linseele, & Friedman 2004: 120-122).

Naqada IIIA1-2 (c.3,300 – 3,200 BC):

Graves generally contain fewer items, which is especially true of non-elite graves in this period (Patch 2011: 212). Greater standardisation of items occured, such as with the spread of a new lithic assemblage across Lower Egypt (Tassie 2014: 404). This standardisation was likely fuelled by increased demands of the Nubian and Delta sites who were actively involved in the trade of prestige goods required by the Upper Egyptians (Tassie 2014: 405).

Naqada IIIB (c.3,200 – 3,100 BC):

Elite rulers, buried at Abydos, amassed great power, ultimately leading to political 'unification'. A specific type of elite artwork is now found on ceremonial palettes, mace heads, knife handles, as well as seals and labels, arguably related to early temples (Patch 2011: 212). Early kings established fortified sites at least as far as modern day Gaza City (the site of Tell es-Sakan), and spread influence across the southern Levant (Anđelković 2011: 30-31).

Early Dynastic (Dynasty 0/1: c.3,100 BC, Dynasty 2: c.2,900 – 2,649 BC):

International trade, war, and expeditions increased against foreign powers, while rulers gained more wealth, resulting in more extravagant burials (Patch 2011: 214-215). Egypt now consisted of a large political entity, or state, united under a single regal power (Anđelković 2011: 31). Human icons, images and statues seem to have had more importance, anticipating the cult of the pharaoh and anthropomorphic deities.

1.2 Themes from animal-human interactions

The first chapters of this paper will discuss the earliest use of zoomorphic objects and symbols in the context of generally earlier sites of newly sedentary, or semi-sedentary societies prior to Naqada III. Objects from later periods will also be discussed where relevant, but will feature more prominently in the second half of this paper. The use of animal symbols in the early period suggests an 'organic' development of these symbols which hints at their origin from earlier, desert cultures from around Egypt. Transforming ostrich egg-shells, as well as seashells, into beads for personal display is attested in the Early Timnian culture (c.6,000 – 4,500 BC) of the south Sinai (Rosen 2011: 73-74). Egg-shells and seashells are found in many burial contexts throughout the Predynastic period, showing the continued tradition of ornamentation of the living and the dead. The spread of these traditions highlights two key aspects of early zoomorphic artwork, personal display and the inheritance of ancestral beliefs.

1.2.1 Variety of artefact types

The variety in object types found in the present database shows how divergent were artistic creations. The ways in which an artefact was regarded might have been equally as diverse, therefore this thesis will discuss how objects were intended to be perceived, or used, and by whom (Morphy 1989: 6). Animal representations in the Predynastic period also occurred in a variety of material types. The database of excavated examples contains the following types: amulet, comb, figurine, hairpin, horn, palette, palette with stem, ring, spoon, vessel, and vessel lid. The distinction between 'palette' and 'palette with stem' made here, has not been made in past literature. 'Stem' refers to those palettes which feature central projections akin to amulets, often with notches or perforations. These types of palettes are often smaller than 'regular' palettes, are of the 'pelta' shape, and were perhaps more amuletic in use. There exist, however, small examples of palettes without stems which might also have been used as amulets. The distinction is made due to the potential use of the notched stem, giving the object a slightly different function and meaning from palettes which are often merely perforated with a single hole at the top. Stemmed examples also seem to have been limited

in the types of species depicted, featuring only avian, and possibly hedgehog examples (discussed below).

1.  **2.** 

Figure 04. Two examples from the database highlighting the distinction between 'palette' and 'palette with stem': **1.** The non-stemmed type of palette from Grave U90 at Hu, (Author's photograph, ©The University of Cambridge Museum of Archaeology and Anthropology; Cambridge No. Z 36231; L 24.3 cm); **2.** The 'palette with stem' from Grave 1865 at Naqada, of Naqada II date, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC4345; W 8.7 cm).

Amulets, combs, hairpins, rings and possibly some horns or stemmed palettes may have all been worn about the person. Certain other palettes and horns, along with spoons and vessels may have been used in the storage and application of cosmetics and toiletries. These types of objects are often found buried about the person of the deceased in an area where they may have been used in life, such as palettes near the hands or head of the deceased, or the survival of hair with hairpins still inserted. An example from Abadiyah grave B378 of a well preserved scalp and hair shows hairpins as well as a spoon inserted into the hair (Petrie 1901: 35 & pl.vi, B378). Animal iconography was, for the most part, deeply connected with the individual human, how they dressed, beautified and cleansed themselves, as well as how they were differentiated and characterised. The database shows how avian forms, which are sometimes distinctly ostrich-like, dominate Predynastic period combs and hairpins, with

certain quadrupeds (possibly ibex or gazelle) also appearing fairly frequently (see MAP 10). Animals such as fish, however, are not represented atop combs or hairpins, perhaps implying they were not suitable for hair-related objects. The differences between species represented on artefact types may have stemmed from a symbolic belief related to the animal. In this instance it could be argued that fish, being scaly, would have little need for a comb, whereas gazelles have hairy heads and ostriches have small fluffy hair-like feathers over their head and neck (Williams 2013: 30), in a similar way to the humans who would have used them. Animals represented on hair-items were possibly perceived as being intrinsically linked to hair, or at least more linked to hair than other animals. It is possible that Egyptian cultures perceived inherent differences between the roles of animals and used representational artwork to validate or explain these roles, as has been suggested for other prehistoric art forms (Bailey 2005: 18).

1.2.2 Audience and displaying

The nature of audience would have also influenced the style of decoration on display-related items. Avian and quadruped forms might arguably have had the most social and identity-related importance, due to their use in display. The mortuary contexts of these items could suggest that a specific afterlife audience was intended to 'see' or recognise the aspects of status or identity transferred onto the dead via amulets and hair-ornaments. It is possible that these items were reserved for use in the grave, but the nature of drilled holes and notches on certain amuletic artefacts implies a functional attachment to clothing or the body which is not readily seen in the grave. The symbolism depicted might have catered initially towards a living, 'everyday' audience and was then intended to be viewed by assemblers of the grave, or beings of the afterlife. In life, worn symbols may have either exuded statements about the wearer which were clearly understood by some, or potentially isolated onlookers from outside of the wearer's cultural group who did not have specialist knowledge of the symbol. There is a potential for huge variation in personal relation to a symbol, as well as the relationships between different symbols. Even if an individual were to reject a symbol, this

would still give it a form of salience and recognition (Kunin 2014). The only artefact type that is not directly related to rituals of appearance and display is the figurine, which includes three-dimensional clay objects, as well as flat, carved flints (figurines will be discussed below).

Whether or not an artefact's practical function is currently understood, it would have been regarded by other humans and interpreted in their own way. This is not to say that creating a piece of art 'for art's sake' is impractical, as it would have served a definite purpose. The viewer of a sculpted artefact may have had little to no knowledge of where the source materials originated, but they may have simply considered the form of the piece and taken pleasure from that alone. It is also possible that the onlooker formed a story of the creation of the piece, based upon what they could see or what they were told, and they may have related to the object while 'playing the vicarious maker' (Baker 2005: 119). The creator has a meaning or symbol in their mind and they will then make the assumption that the object they create is related in some way to that concept. If the form is rendered accurately enough, then the onlooker will interpret the creator's meaning in order to reach an understanding of the original symbolic meaning. This act of communication might also have more complicated steps, however. The onlooker might reach a more complete understanding of the message if they recognise that the creator intended for them to interpret the form in a specific way (Neale 2014). Every element of an artefact is presented to the perceiver, where they will then complete their end of the silent interlocution. It can be said that, compared to a painted piece, three-dimensional artwork has greater potential for the conspicuous retention of natural elements (Baker 2005: 121), either through the creator's facture and process, or the tactile nature of contact with an artefact that the consumer experiences. The element of touch can be seen as what gives artefacts an extra dimension of interpretative understanding. 'Magical thinking' can take place while an individual makes intimate contact with an object and all of its history and previous human contacts (Korsmeyer 2014).

1.2.3 Recording, objectification and association

When understanding the ways in which inhabitants of the Nile Valley converted their surroundings into emblematic and aesthetic creations, it is useful to examine why humans may have done this in general. Preceding the creation of zoomorphic artefacts may have been a period in which symbolic ideas behind the images were formed. It is here when people may have constructed mythic ideas, stories and creatures, as well as structures of classification for the natural world, possibly motivated by a desire to control chaos (Layton 1997: 83). The process of forming these myths may have been made possible only after animals were given communally accepted names, allowing for such a familiarity to develop that individuals may have occasionally dreamed of and theorised about them (Harrod 2000: xvii-xviii). Humans may have transferred ideas of humanity, 'souls', or magic onto inanimate objects, as well as the animals around them (Freud 1950/2004: 89-90). Prolonged and intergenerational exposure to animals, experienced by many different individuals or families, may have compounded, distorted and cemented mythologies (Smith 1919: 76-77). In Egyptian Prehistory there seems to have been a time of fluid and 'natural', development of informal ideas, followed by a period of formalisation and standardisation. The idea of naming animals and becoming more familiar with them would point to the Neolithic as potentially being the period where a profusion of ideas and story-myths to explain the world were born. The resulting periods of more complex and permanently settled societies may have been so transformative and revolutionary that many ideas from the past were compounded or lost. This is not to say, however, that mythologies and beliefs were not formulated in a sedentary society. It is, in fact, from these sedentary societies of the Chalcolithic Naqadan periods where most of the evidence for zoomorphic artwork derives. It is interesting that domesticated animals appear on artwork much less frequently when compared with wild animals. Despite the difficulties in identifying whether images of cattle represent wild or domesticated specimen, birds and fish dominate the corpus of three-dimensional artwork (see MAP 5). In general, zoomorphic objects seem to only feature animals native to the Nile Valley, while more exotic animals such as elephants and giraffe can be seen on examples of desert rock art (Lankester 2012: 95-108). It must be stated, however, that even if certain species are not apparent in the corpus of Predynastic artwork, it does not necessarily follow that these

animals were not the subject of mythological or cultural beliefs. Ethnographical examples show that, although many species may be venerated, feared or used as the focus of certain mythologies, these specific animals will not necessarily coincide with the animals found within the corpus of artwork, and may be artistically ignored for 'no obvious reason' (Mundkur 1994: 167). Therefore, even the most commonly held truths related to animals at the time may not be glimpsed at by us due to the misunderstood process of artistic omission.

1.2.4 The cosmology of duality and multiplicity

The duality and multiplicity seen on several Predynastic artefacts, such as 'double-birds' forms, might potentially hint at aspects of cosmological ordering. These forms may have been influenced by social, religious and ritual aspects of life. An interesting aspect of the modern Nuer people of Sudan (discussed below), is the way in which their cosmos is ordered into certain binary oppositions, and how this also relates to animal identities (Burton 1974: 522-526).

The world of the Nuer is viewed in terms of relationships between normality and anomaly; upper/lower, right/left, light/dark, purity/danger, where 'control of chaos' is expressed through maintaining the divide between these concepts (Burton 1974: 522, 526). In Dynastic Egypt, there can be seen a similar focus on contradictory, yet complimentary notions, fundamentally permeating daily life, artwork and religion (Silverman 1991: 64). Arguably, by the time of Narmer, royal artistic motifs were already focussing on perceived dualities in the world, including notions of the familiar and the 'other' (Wengrow 2006: 207). Controlling nature and chaotic forces is also a theme of some later Egyptian religious and cosmological concepts, which arguably had their roots in the Late Predynastic or Early Dynastic periods (Patch 2011: 140). In terms of zoomorphic multiplicity among the Nuer, human twins are said to be the same as totemic birds (Burton 1974: 524-525), meaning that they occupy the world of the lower as well as the world of the upper. Although the connection between birds and twins is viewed by the Nuer as a relationship to a supreme deity, it has been theorised that a

monotheistic culture is not necessary for such dyadic beliefs to exist (Lévi-Strauss 1962/1964: 82). Regardless of whether these notions have any roots in the belief system of the Predynastic Nilotes, the ideas expressed in Nuer religion, and the ways in which they may be studied (Burton 1974: 533-534), offer interesting approaches to zoomorphic multiplicity.

1.2.5 Cosmological placing in life and death

Societies in Predynastic Egypt may have connected themselves to other living people, dead ancestors, places, and animals as a means of understanding, or ordering the known and unknown world. Ideas of how humans, nature and place were interrelated may have become compounded over many generations of oral and non-preserved artefactual traditions.

Attitudes towards animals may have stemmed from a Neolithic savannah pastoralist lifestyle, or at least had grounding there but then was adapted for an agricultural Nile Valley society. It is possible, for example, that the imagery of the ibex found on Badarian artefacts derived from a cultural image used in a previous, desert based culture (Tassie 2014: 247). Certain inhabitants of the Nile Valley may have understood, through tradition and stories, that their pastoral ancestors had migrated from the Western Desert (Kobusiewicz *et al*. 2009: 152) and respected this through burying individuals with faces oriented to the west (Tassie 2014: 353). However, at Gebel Ramlah in the Western Desert, the ancestral home of the Upper Egyptians, there can be seen a burial tendency to face south (Kobusiewicz *et al*. 2009: 148), perhaps in respect of their sub-Saharan ancestors. There may, therefore, have been a respect for traditions which originated in a sub-Saharan hunter lifestyle, cultivated by Savannah pastoralists and adapted for sedentary Nilotic groups. The respect for the West in terms of ancestors, who are the deceased, may have expressed itself as an association with the space of the dead. Throughout the Dynastic periods of Egypt, the West was viewed as the location of the underworld and it was even favourable to have preparation of corpses take place on the western banks of the Nile (Taylor 2010: 83). This does not mean that there was a continuity of this practice between the Predynastic and Dynastic periods, but simply that

there may have been similar cosmological reasons for revering the West. Despite the limited data, in the Predynastic period there can be seen a number of cemetery sites situated along the West of the Nile (See MAP 1).

Some Eastern bank sites may be explained because of their formation in the Badarian period, such as Mostagedda, Matmar, Qau and Badari itself. In this scenario the Badarians may have established a preference for East bank cemeteries while the Final Neolithic Western Desert people were still migrating to the Nile Valley where the idea of the ancestral, dead West was yet to form. Why Badarian cemeteries would then later be used in the Naqadan period is perhaps in respect of the established local Eastern bank tradition. Sites identified by Welsby along the Northern Dongola Reach, between the third and fourth Cataracts of the modern Nile, also seem to show that there may have been a slight preference for eastern burials in the Neolithic period (Welsby 2001a & 2001b). The courses of palaeochannels, however, must also be taken into account, as there existed a multitude of interweaving streams, around which settlements and cemeteries may have clustered. The Early Merimden people, of c. 5,000 – 4,800 BC, mostly faced towards the local branch of the Nile in their graves (Tassie 2014: 202), arguably from where they might have envisaged their ancestors as having come, or to where they might be going themselves. Perhaps cultures would face the more immediate locus of ancestral history in their sepulchral organisation. A comprehensive survey of site placement, sepulchral organisation and palaeochannel courses would, however, give a much clearer understanding of Predynastic mortuary orientation, but is outside the remit of this thesis.

1.2.6 The mortuary realm: Burying animals and humans

In non-royal burial contexts there is one major discontinuity between the Predynastic and Dynastic periods; the burial of animals near or within human graves. From all known examples of animal interment in the Predynastic period, it seems that there is a clear preference for domesticated animals, especially dog, sheep, goat and cattle (Van Neer, Linseele & Friedman

2004: 106). Domestic goats and cattle were also the animals that were widely domesticated across the Nile Valley in the Badarian period (Wengrow 2006: 26). This may strengthen the view that the domestication of animals and the keeping of small herds created a cultural background in which veneration or respect for animals was possible. The burial of animals in non-elite contexts does not continue into Dynastic Egypt, and it is interesting to note that at the same time there can be seen an increase in farmers' herd sizes (Tassie 2014: 7). It might then follow that the Badarian culture, who were possibly committed to mobile pastoralism to the point where sedentism was not viable (Wengrow 2006: 26-29), should show the closest affiliation to their livestock. In terms of artefactual evidence, it is hard to find a clear emphasis on domestic animal veneration in the Badarian period, not least due to the lack of material evidence. The present database actually seems to show that hippopotami are the most well represented animal in Badarian contexts (see MAP 6). Perhaps their mobile nature facilitated many interactions with wild hippopotami, cementing them as an important and recognisable creature of their wide socio-cultural cosmos. Badarian sites were also geographically close to marshy areas like the Faiyum and the Delta, where hippopotamus where abundant and consumed by the Neolithic inhabitants (Ikram 1995: 22). Across Egypt in Naqada I there can be seen a preference for depicting animals of the Nile Valley on decorated artefacts, especially on painted vessels (Seidlmayer 2004: 14), possibly as a reaction to an increased social and economic importance placed upon them. Differing views on animals, potentially brought about by different economic relationships, may have existed not only temporally, but also geographically. A range of subsistence tactics were employed by different cultures across Egypt and Nubia (Tassie 2014: 243), and it is hard to put definite geographical borders on each cultural practice (Flores 2003: 2). Attempting to divide these cultures into small units might, in fact, be counter-productive, as it is the interlinking and fluidity of practices which is in itself a characteristic of Egypt.

Several remains identified as possible gazelles from the sites of Matmar and Badari were found within human graves. If the identification of the skeletal remains as gazelle is accurate, then the presence of young animals, as well as potentially different sized gazelle horns at Mostagedda, may hint at an attempt to domesticate gazelle (Flores 2003: 54-55). The animals would then have experienced a journey with the humans from wilderness to domestication.

The humans may have felt a sense of ownership, making the animal a form of grave good, or perhaps a feeling of parental care where the animal may have been more like a pet. Either way, the bond between human and gazelle would have been altered through the act of capturing and potentially breeding the animal. Artistic representations of the animal may then be seen as not necessarily depicting wild specimens.

The gazelle was most likely utilised in the economy of Naqadan Upper Egypt, where it was either hunted or was in the process of being domesticated (Flores 2003: 56). The continued practice of gazelle burial, between the Badarian and Naqadan periods at Matmar, may show the consistent exploitation of the gazelle in this area (Flores 2003: 54), but this must be viewed with caution due to older publications mistaking ovicaprine examples for gazelles (Van Neer, Linseele & Friedman 2004: 106). The persistent nature of using gazelle may have allowed for continuation in symbolic views on the animal. This idea assumes, however, that symbolic aspects of an animal relate to their real world behaviours and uses. There may have been many views on the gazelle based on cultural ideas that are impossible to reconstruct. In later Egyptian history, parts of a gazelle (the head and perhaps ribs) are seen on the barque of the mortuary deity Sokar, possibly showing a relationship between gazelle bodies and rejuvenation as early as the Early Dynastic period (Serrano 2002: 92-93). The gazelle in this case may have been viewed as an animal capable of transforming, protecting or carrying the deceased. Beliefs linking gazelle bodies to the deceased may have related somewhat to the Predynastic interment of gazelles with humans, or the wrapping of the deceased in animal hides (discussed below).

The presence of several gazelle horns in one pit at Mostagedda, Area 400A, could show the symbolic importance placed on such items. Fourteen pairs of horns were found within a single area, and they have been attributed to rams, goats, gazelles and a bull or cow (Flores 2003: 55). This menagerie of animal horns shows that, rather than each animal having an individualised importance, the symbolic value is derived from the assemblage. Either the horn itself had cultural weight, or it was necessary in one instance of cultic use or even for use in crafts.

The idea of having animals, and their products, as symbols of living spaces and home may be echoed within the grave. Items related to animals, as well as with the living world, may have accompanied people into the grave as an extension of the relationship between the individual, the family unit and the animal or animal product. The recovery of a pottery horn and leg from locality HK6 at Hierakonpolis suggests the existence of a cattle shaped bed or table (Figueiredo 2004: 12). The inclusion of this article into the grave, or possibly used nearby to serve the needs of the grave complex, shows how such an item may have symbolised, or facilitated a link between the world of the living and the dead. The table may have acted as a plinth upon which offerings may have been placed, or rituals may have taken place. Despite the functionality, the apparatus was constructed using zoomorphic symbolism, which was presumably seen by the artisan as an appropriate image to relate with death and the deceased.

The protection of the dead might have been an important factor when Ancient Egyptians decided what types of objects should be placed with the deceased. Perhaps a more correct term would be 'comfort' for the dead. If the cattle shaped fragments were part of a bed, the deceased may have lay upon it in the grave. Zoomorphic wooden beds are not well attested in settlement contexts, and it is possible that their presence within graves acted as a symbol of elite status (Ejsmond 2015). Having bodies covered in animal skins, which can be observed in the Neolithic at El Omari (Hayes 1964: 244-245), or sometimes resting their heads on animal skin pillows (Brunton & Caton-Thompson 1928: 19) may have been an extension of sleeping arrangements that occurred during life. The use of blankets and pillows intended for sleep may have arisen from the connections between sleep and death. It seems that the intention was to make the make the deceased as the protected and comfortable sleeper in the living world. Perhaps the ultimate extension of this can be seen in the lavish mortuary complexes of Abydos and Hierakonpolis. The layout of Tomb U-j at Abydos mimics that of a palace (Dreyer 2011: 129-131), while the elite cemetery HK6 at Hierakonpolis was filled with sacrificed captive animals (Friedman 2011b: 36-40); aspects of comfort, protection and earthly belongings are given to the deceased. Possibly emphasising the idea of death as a reflection of life, is the fact that Early Merimden burials were located within abandoned areas

of settlement (Tassie 2014: 202), where the remains of 'dead' structures would house the dead sleepers. Burial of the dead within houses is an observable phenomenon of a domestic 'package' found in sites across Neolithic South-West Asia (Wengrow 2006: 30). In the Late Merimden phases at Merimde Beni-Salame, c. 4,600 – 4,100 BC, there can be seen semi-subterranean structures containing hearths, with some examples featuring lintels constructed of hippopotamus tibia (Eiwanger 1982). The rough dimensions of these structures, and their elliptical nature (Tassie 2014: 208 & 215, fig. 57), may have given the overall impression of the shape and size of a hippopotamus when viewed from the surface. Residents of Merimde may have likened their homes to individual animals, and their village to a herd or 'pod'. There may have been superficial similarities to the bulky torso of the hippopotamus, but actual hippopotamus tibia were not present in all houses, leaving this interpretation as conjectural. Regardless of whether resting areas for the living represented animals, the resting area of the dead still may have reflected aspects of life. With a potential zoomorphic bed, there could be an animal theme to the entire resting ritual; whereby the sleeper, or the deceased, would lay upon, underneath and within the animal becoming its protected and possibly unborn offspring. It is possible that there was a symbolic, magical purpose to shrouding the dead with animal skins. The deceased, while imbued with animalistic power, may have been protected from cemetery predators and looters, or from dangerous forces in the afterlife. Animal fats might also have been used for the ritual interment of early mummies at sites such as Hierakonpolis, Abydos, Badari or Mostagedda (Jones 2007: 988), although the exact composition of some body treatments may have actually used fats from sea sponges (Jones *et al.* 2014).

Before the elite interment of animals at Hierakonpolis, the Badarian, Maadian and Nubian A-Group cultures were possibly the only Predynastic people who buried animals in their own, individual graves (Flores 2003: 23). Although the Tomb 16 complex at Hierakonpolis features the interment of many animals, it seems that special attention was paid to the elephant and wild bull, who were wrapped in large quantities of matting and linen in individual graves (Friedman 2011b: 38-39). In Predynastic Egypt, animals are also found buried within human graves. It is arguable that this goes beyond the level of reverence required for independent animal burials as it potentially stemmed from a belief in equality or interdependence between

humans and animals. It is also possible, however, that when animals were buried within a human grave, they were placed there as an item owned and used by the deceased (Van Neer, Linseele & Friedman 2004: 116) along with other such grave goods, while the separation of an animal into a different grave may show how animals were inherently unwelcome in certain humans' graves.

When viewing an interred animal as an object belonging to the human deceased, some disarticulated examples of animal remains may be viewed as having originated from cuts of meat. In this context, the unusual setting of the meal, a grave, might imply a ritualised communal activity, facilitating social interaction (Dietler 2011: 184-186). Families, friends or group members would have discussed meals and recipes, slaughtered animals, prepared the food and eaten it together. This means that people may have bonded over their relationship with each other, with crops and with animals. Perhaps people felt a stronger relationship with animals, rather than crops, due to the potentially reciprocal nature of affection or dependency. Food, and items of feasting might have played such an important role in life, that it was appropriate for them to accompany people in the grave. At Gerzeh, the meaty cuts of the cattle identified, the ribs and shoulder, perhaps show that these remains acted as offerings, or were the result of a feast (Stevenson 2009c: 103). At the Eastern Kom cemetery of Tell el-Farkha, bones were found next to the deceased as well as within vessels, perhaps implying their function as food offerings, while more fragmentary examples may have been connected to refuse from a funerary feast (Abłamowicz, Dębowska & Jucha 2004: 416-417). If a species were used for interment or eating at a grave, then it may have become symbolically connected to special feasts, the realm of the dead or communal activities in general. In the example of the Western Kom at Tell el-Farkha, the most frequently recovered remains belonged to pigs, which attested for 97.2% of all excavated bones (Abłamowicz, Dębowska & Jucha 2004: 416). Perhaps the fact that pig features extremely rarely in the corpus of Predynastic artwork shows that they had little significance outside of the functional act of consuming their meat.

The burying of animals might have taken on at least three different forms; burial of the whole animal (either within a human grave or isolated), the intentional deposition of parts of the animal (cuts of meat, hides, horns etc.), or the incidental refuse from a funerary feast. In any of these circumstances it seems that the animal, or parts of it, was significant to the mortuary ritual. Any zoomorphic figurative artwork present in the grave might further explain the relationship between animals and death. This connection with animals, however, may possibly have had no effect on artistic traditions. At Hierakonpolis there can be seen an increase in depictions of certain animals after they were no longer being buried (Van Neer, Linseele & Friedman 2004: 118-119), showing how mortuary traditions might not have coincided with artistic representations. The usefulness of this discussion, however, lies in the ways in which humans related to animals regardless of artistic consequences.

1.3 Function, materiality and memory: The use of zoomorphic palettes in life and death

At several Predynastic cemetery sites there can be found the stone 'cosmetic palette'. Although there exist many examples of these palettes (they are the most numerous object type in the present database), they only seem to appear in 15% or more Predynastic graves before their decline in Naqada IIIA2-B (Stevenson 2009a: 4). There are 224 palettes in the database, and 40 'palettes with stems'. The next most numerous artefact after the palette is the 'amulet' with 110 entries in the database. The frequency of amulets, however, might be explained by the broad understanding of this term, where beads and 'tags' are all included within this category. There exists a column in the database which tentatively separates 'amulets' into those which were likely related to necklaces, and those which contain the notches and shape of a 'tag'. Palettes, however, are a highly distinguishable artefact type, so their frequency in the database is telling of a relatively great consumption of this object type in the Predynastic period, or at least the zoomorphic versions of them. More specifically, given the nature of this database, palettes were the most popular medium for depicting animals, excluding the use of painted vessels which do not form part of this study.

1.3.1 Function of palettes

Palettes are often around 10-20cm across and many examples feature a zoomorphic design on them. Palettes were used in life, with the aid of a handheld stone, to grind down pigments such as malachite and galena into green and black powder. These ores, of copper and lead respectively, were possibly applied around the eyes for aesthetic, religious or medicinal reasons, for example, rubbing on the pigment may have helped to deter flies (Jórdeczka 2004: 457). The green pigment malachite was most commonly used upon palettes, while there are also occurrences of red ochre and hematite (iron ore) (Stevenson 2009a: 2). Pigments could have been applied on other areas of the body as body paint, to indicate particular areas for specific reasons or used in tattooing and scarification. As the cosmetic nature of the material

ground upon palettes is not explicit, the term 'cosmetic palette' may be somewhat of a misnomer. The term 'palette' itself perhaps even imbues the object with a type of use which is not always evident on certain examples.

When copper tools were more widely used, reducing the number of bone and stone tools (Seidelmayer 2004: 11), copper ore would have been a valuable commodity. This could mean that its use on palettes was restricted to wealthier individuals conspicuously consuming their economic excesses by wearing them, or that ores were imbued with social wealth because of their vital everyday use. These minerals are also important enough to be taken out of circulation and deposited within the grave. Palettes are often found in graves with pigments stained on them, or next to them. There is an example from grave a122 at El Amrah, of a basket being used to store malachite, resin and possibly hematite, placed in the grave alongside a fish-shaped palette (Randall-MacIver & Mace 1902: 18). Shells, as well as ivory horns have been found containing quantities of mineral material, presumably for use on a palette. One grave in Naqada featured a rather complete assemblage of the items needed for this purpose. The grave, number 343, contained a fish-shaped palette at the hands of the deceased, with a rubbing stone, a shell and quantities of malachite and powdered galena on top of it (Petrie & Quibell 1896: 26). More malachite was found near the palette, and the individual even had some black material and more galena 'clenched' in their right hand (Petrie & Quibell 1896: 26). There seems to have been some importance on the placing of these objects near the hands or head, the places where the dead might have wished to use them.

It is possible that palettes retrieved from funerary contexts were used as part of a mortuary ritual with special related actions reserved for the deceased. Most palettes found in grave contexts have been placed alongside grinding stones and are often either stained green or are found with lumps of green malachite (c.f. Randall-MacIver & Mace 1902: 46 & Petrie & Quibell 1896: 10), in contrast to those found with red ochre in settlement contexts (Baudel 2008). The living attendants who organised grave goods may have used the objects some time before interment as part of a funerary ritual; malachite may have been ground by the living to be applied to the deceased. Although not necessarily related to later practices of the Nile

Valley, evidence from Gebel Ramlah suggests that red ochre was used commonly in the cemetery, where a few examples of humans were completely covered in red pigment in the grave (Kobusiewicz *et al*. 2009: 150). The ochre may have been placed across the top of the body, but it is also possible that it was rubbed into the skin of the deceased. The deep red ochre would have revitalised the otherwise pale appearance of the deceased, restoring their visage as it was in life; ochre may then have been viewed as either a symbol of vitality or as an important mortuary tool, at least for the people of Gebel Ramlah. Perhaps covering the body in colour had a similar effect to the practice of wrapping the deceased in animal skin, possibly offering the deceased metaphysical protection or metamorphosis. There may have been some relation between this practice and the Neolithic plastered skulls found at several Neolithic sites across the Near East, which were treated with ochre, and possibly worked to empower the deceased (Lewis-Williams & Pearce 2005: 72-77). It is also possible that the practice may have had an equivalent amongst the living, whereby members of the community covered their body and hair in red ochre clay perhaps mixed with butter fat, as is traditional among the modern day Himba people of Namibia (Wärnlöf 2000: 176). The Himba, who are predominantly semi-nomadic pastoralists, paint their bodies often as a cosmetic ritual, as the red tinted skin is seen as beautiful (Crandall 2000: 36).

It is these potential practices which hint at the ways in which palettes became so culturally important. It is clear that palettes were related to people in life and in death, yet they were so frequently decorated with animals. The palette is linked to the creation of powders which possibly related to ideas of beauty, protection or transformation. Animal icons depicted upon palettes, therefore, may have similarly been valued as symbols of beauty or protection. It should then be understood the various ways in which palettes existed in the minds of the Predynastic Egyptians, with their source being an important factor. If the icons depicted on palettes might be viewed as related to the end product of grinding then, owing to the fact that many plain examples of palettes exist, perhaps the materiality of the palette itself was symbolically significant.

1.3.2 Materiality: Palettes and their cultural and stylistic relation to place

When understanding how palettes related to ancestor, place and animal, it is useful to discuss the uniform nature of material selection. It has been argued that the material of an object is intrinsically linked to social practices, a concept known as 'sociomateriality' (Yates 2014: 26-27). It could, therefore, be suggested that the sociomateriality of Predynastic palettes might be viewed through the sourcing and use of the stone from which they are made. Palettes found within Predynastic contexts are almost always found to be made of siltstone, but have also been found made of other materials, such as alabaster or porphyry (for example, Petrie, Wainwright & Mackay 1912: pl.vi, fig.8). At Gerza, in only two contexts, there were artefacts of black and white porphyry, and granite, associated with rubbing stones, but it is questionable whether these were truly palettes (Stevenson 2009c: 107). There is an observable consistency in terms of selecting siltstone for palette production, with very rare exceptions, whereas other products, such as vessels, were created out of a vast array of available stones (Stevenson 2011: 70). In the archaeological literature siltstone has been referred to by many different terms such as 'greywacke,' 'schist,' 'slate' or 'mudstone' (Stevenson 2009a: 1).

Locating sources of raw siltstone can help in the understanding of Predynastic craftwork. Although the evidence for quarrying is limited, as quarries are only known from the Late Predynastic period onwards (Harrell & Storemyr 2009), the quarries in the Eastern Desert, Wadi Hammamat, contain occurrences of siltstone (Klemm & Klemm 2008: 307). The stone varies between shades of dark green to grey, and worked palettes often appear to have one uniform colour with few veins or inclusions. The siltstone in the Wadi Hammamat, which can more properly be termed 'meta-siltstone' or 'epidote-chlorite-sercite siltstone' owing to its slight metamorphism (Klemm & Klemm 2008: 307-308), is found along a route decorated, especially towards the south, with Predynastic rock art (Lankester 2012: 8). Artisans, craftspeople, or traders, most likely originating from areas around Naqada or Badari, would have visited the Eastern Desert to collect materials, create rock art and potentially enact archaeologically invisible ritual activities. In terms of petroglyphs, Lankester identifies ibex, ostrich and antelope as the most frequently depicted animal between the Wadi Hammamat

and the Wadi Baramiya (Lankester 2012: 6). Objects from the current database certainly reflect the importance of ostrich, or birds in general, but do not feature antelope and ibex as prominently. Fish are prominent on sculpted pieces, especially on palettes (see MAP 11), but this does not seem to be the case with rock art. In terms of which animals are depicted, it seems there is little relation between rock art and personal art. Lankester determines that animals are present at 90% of sites in the Eastern Desert (Lankester 2012: 142), meaning that animals dominate the corpus of rock-art as well as personal art, while humans seem to be not so popular.

The main area of siltstone quarrying is located roughly 90 km east of the excavated sites of Naqada and Ballas, which may explain the vast amount of palettes recovered in graves at Naqada. Being the area closest to the exploitable raw material, sites around Naqada may have developed the different styles of palettes, in the same way that basalt vessel types may have been pioneered by craftspeople near raw basalt at Maadi (Stevenson 2011: 69). It is the Badarian culture, however, who seem to be the earliest to utilise siltstone for grinding pigments (Stevenson 2011: 70). Already in the Badarian period, stone working techniques were being perfected, especially in stone vessel construction, which required a laborious hollowing process (Stocks 2003: 139).

The fissility of the siltstone in this area causes thin segments to flake off when worked, forming palette-sized pieces (Klemm & Klemm 2008: 307). Craftspeople may have not chosen siltstone, therefore, for its aesthetic attributes, but perhaps because of the ease in which it could be turned into a handheld palette. Palettes may have been used in a relatively unworked form, as this would allow for the easiest and fastest way to grind pigment. It is difficult to assess how frequently unworked palettes may have been used as it is often hard to distinguish between a badly worn and a roughly worked example. It is also possible that because of the consistent use of siltstone from the Wadi Hammamat, coupled with the petroglyphic use of Eastern Desert stone, that the area and its products had inherent cultural, spiritual or political importance (Stevenson 2009a: 2).

The worked stone has a cold, smooth surface, which is pleasing to touch. Most palettes fit well into the hands, and even give a slight, almost metallic ring when gently rapped with the fingers. Materials ground upon the surfaces of palettes can leave behind their colour, as well as the hint of their smell. These physical sensations may have been pleasing for the Ancient Egyptians who used them. The stone may have initially been discovered through a long tradition of prospection and resource gathering along the Eastern Desert Wadi systems (Wengrow 2006: 27). This 'prospection', or location of sites, may have stemmed from the Neolithic herder groups, whose impermanent settlements afforded them high mobility (Wengrow 2006: 69-70). The Egyptians further used this land through quarrying and artistic works, making it a site belonging to them and their ancestors. The longevity of inscriptions, craft and ritual traditions might have aided the formation of 'cultural memories', where Predynastic notions of identity and ancestors may have been anchored to their 'inhabited space' (Assman 2011: 24). Palettes may have been imbued with mythological and cultural power as they were crafted from rocks which resided within the awe-inspiring, perhaps mythically embellished, landscape of the desert. The Wadi Hammamat itself, as well as the end products derived from there, might have benefited from increased social value, through reflexive grounding (Chapman 2000: 30-31).

Many examples of palettes feature ostrich egg shell inlays for eyes, which are almost identical in form and size to the ostrich egg shell beads found in the Final Neolithic burials at Gebel Ramlah (Kobusiewicz *et al*. 2009: 162, fig.16). There may have been a deliberate reuse of inherited beads or the continuation of the artistic practice, both showing a respect for ancestors and tradition. It is pertinent that a form of mobile art should be incorporated to this form, as there was clear importance placed on the decoration of the human body, displaying aesthetically and spiritually pleasing imagery in life and death (Wengrow 2006: 69-71).

1.3.3 Memory and artefact biographies

Palettes would have not only been imbued with the essence of place, but also with the essence of ancestors and history. Palettes may have been inherited across generations, experienced communally in temples (Raffaele 2009) and ultimately become heavily worn (Petrie & Quibell 1896: 43) or stained with pigment, and occasionally repaired (Jórdeczka 2004: 459), from many lives' use. Arguably, a cross-generational artefact may have conjured stories or theories of ancestry, human networks and identity in the minds of the users (Chapman 2000: 30). The initial meaning behind the symbols featured on the objects, therefore, may have become lost or altered during the object's lifespan. It could be argued that the relationship between artefact and ancestors is as reflexive as the artefact-landscape connection, where ancestors are seen as more valuable or connected because they had used an object. Perceived relationships may not have been so isolated and may have worked within a web or loop of interaction whereby the place is related to the object, which is related to the ancestor, who is also related to place. Perhaps it is the association between an object and personal or social history that led to the inscribing of events, whether mythical or factual (O'Connor 2011: 148), upon ceremonial cosmetic palettes.

The cultural importance of the object, which may have increased over successive generations of craftspeople working in the same area, might have caused the desire for ornamentation on palettes. The commodity would have gained economic and social value through the beautification of its design (Manniche 1999: 7). Artisans would have contemplated their designs while being influenced by the way in which their chosen medium would be perceived by others with knowledge of its origin. Palettes are in the form of plain rectangles or oblongs in the Badarian and Naqada I periods, with zoomorphic designs being added around Naqada II, followed by an extreme ornamental elaboration in elite centres in Naqada III while non-elite sites feature a reversion to simplistic rectangular styles (Stevenson 2009a). It is possible that this final division of style between elite and non-elite is due to the relocating of specialised craftspeople to elite centres focusing artistry there, while simultaneously depriving other settlements of skilled artisans (Stevenson 2011: 71). Thus the consolidation

of skills led to conformity and of practice, as well as the homogeneity and elaboration of decorative style and form.

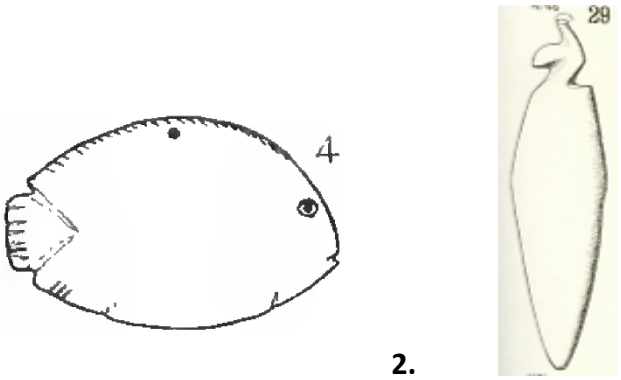
1.3.4 Form and dimensions

The form of a palette seems to have initially stemmed from a desire to smooth off the rough edges of the stone with very little extra work beyond that. As these simple designs persisted, the sizes and shapes of palettes used by the Badarians must have been functionally perfect. An adult could easily hold a palette and grind pigment upon them; no extra features were necessary for the use of the object. Thinner, or lighter examples might have been appropriate for younger or frail individuals. The grinding of pigments may have been a fairly strenuous activity which might not have been easily achieved while holding the palette with one hand, so it is possible that palettes were placed on the lap, knee or ground when in use. The initial elaboration of palette design around Naqada I-II may have followed a more widespread or ritualised usage of pigments, although it is hard to tell how many rough and unworked palettes were also recovered by early archaeologists from this period (Stevenson 2009a: 3). The palette would have been a medium that was foremost a useful cosmetic item and secondly an item of artistic or symbolic value, until extreme elaboration with the 'Protodynastic' examples including the Narmer Palette. It is by Naqada III that the importance of function and fashion reverse; these large, unwieldy ceremonial palettes convey complex political and religious messages through text and image, while an arbitrary area is left blank in the centre possibly used only aesthetically to identify their original use (Teeter 2011: 222). Earlier Predynastic examples, however, feature much more simplistic representations. As siltstone fractures into thin pieces, the way in which ornamentation could be added to a palette would have been limited. An artisan would have to turn their subject matter, whichever animals they were intending to depict, into a two-dimensional symbol that would have been understood by others. If the design is highly stylised, then it is likely to have been easily recognised by the artist's cultural peers (Hendrickx 2011: 76). Several processes would

have taken place, most likely subconsciously, whereby the artist would cherry-pick the most prominent and recognisable aspects of an animal for the symbolic representation of it.

The ways in which animals were depicted on palettes may have had some relation to contemporary examples of zoomorphic design, perhaps specifically those found at the Wadi Hammamat or the 'Qena bend'. As this area was the source of material, it could be that artisans in this area were solely responsible for the formation of these designs. However, the long use of palettes coupled with their unknown ritual value, makes putting them into a specific socio-temporal group difficult (Stevenson 2009a: 2). Evidence from sites around the Qena bend suggests that fish are the most popular animal to be depicted upon palettes (see MAP 11). The spread of fishing and goat herding in Upper Egypt from c.5,350 to 4,500 BC, possibly brought about by the movement of immigrant communities (Tassie 2014: 243), may have drastically altered local views about these animals, possibly leading to the abundant depictions of fish on palettes in Naqada. Interestingly there is a relative lack of fish shaped objects from sites in the Badari region (see CHART 1 & MAP 2). Although there are a smaller number of artefacts from this region compared with more southern sites, it is possible that this difference may reflect past symbolic beliefs. The fact that the Badarian culture derived from a terrestrial-adapted technology, and that harpoons are not represented at Badarian sites (Tassie 2014: 247) could show that aquatic species were not as symbolically important. Sites further south, however, may have been influenced by the culture of the aquatic-adapted communities of the Central Sudan.

The two-dimensional qualities of zoomorphic palettes are utilized fully through the consistent use of silhouettes. Much like with the animals that top combs and amulets, the relatively plain and schematic outlines can only cover a vague interpretation of the animal depicted (Forman & Quirke 1996: 12). The embellishment on certain palettes, such as Ashmolean Museum 1895.847 from Naqada grave 1740 (Petrie & Quibell 1896: pl.xlviii, fig.41), creates the impression that the palette has become the animal depicted, whereas others, such as an example from Matmar grave 2631 (Brunton 1948: pl.xv, fig.29), seem to feature the animal as an extra element above the plain palette.



1. **2.**

Figure 05. Examples of siltstone palettes showing the two different ways in which an animal may appear: **1.** A fish shaped palette from Naqada grave 1740 (Petrie & Quibell 1896: pl.xlviii, fig.41; Ashmolean No. 1895.847; H 9.9 cm); **2.** The bird-topped palette from Matmar grave 2631 (Brunton 1948: pl.xv, fig.29; Fitzwilliam No. E.16.1930; H 14.8 cm).

Each example of a palette appears to have been initially envisioned as being roughly oval or lozenge shaped, before being converted into a zoomorphic form. For example, if a mammal were to be depicted as if facing forwards, the shape would be much less of an oval unless the artist were to extend the body disproportionately, making it wider. The same could be said with fish; the individual animal is rotated to face the side in order to fit the general oval shape of a cosmetic palette. The angles chosen were also beneficial for the viewer to recognise the animal depicted; if a palette featured a ram as depicted from the underneath of the animal, an unusual viewpoint when encountering a specimen in real life, the viewer may not easily recognise the creature. In most cases, the choice has also been made to depict the animal as isolated and disconnected from the world without any land or natural elements surrounding them. When hunters viewed animals from a distance, they would have recognised the animal from their profile, and they were perhaps seen as inhabiting an 'empty' space of sand or sky, where the animal is the prime focus of the interaction. Many animals are depicted fully in profile view; with the diverse range of animals represented, simply the outline can be enough to successfully make the animal recognisable. Though the type of animal may be readily guessed, it is not always possible to know the exact species that was intended, due to the large variety of animals present at the time (Payne 1993: 260).

As only certain types of animals seem to have been appropriate for depiction upon a palette, perhaps there was a perceived connection between them. The only animals that appear on palettes with good provenance of the Naqada II type are: fish (with a doubled variant), birds (single and multiple), turtles (with hybridised variants), hippopotami, horned mammals (possibly rams, ibex or gazelle), cattle/ 'bull's heads', as well as a few unique forms, such as a possible crocodile or dog. The most common design on excavated palettes is fish, with double-birds and birds forming the next most numerous styles.

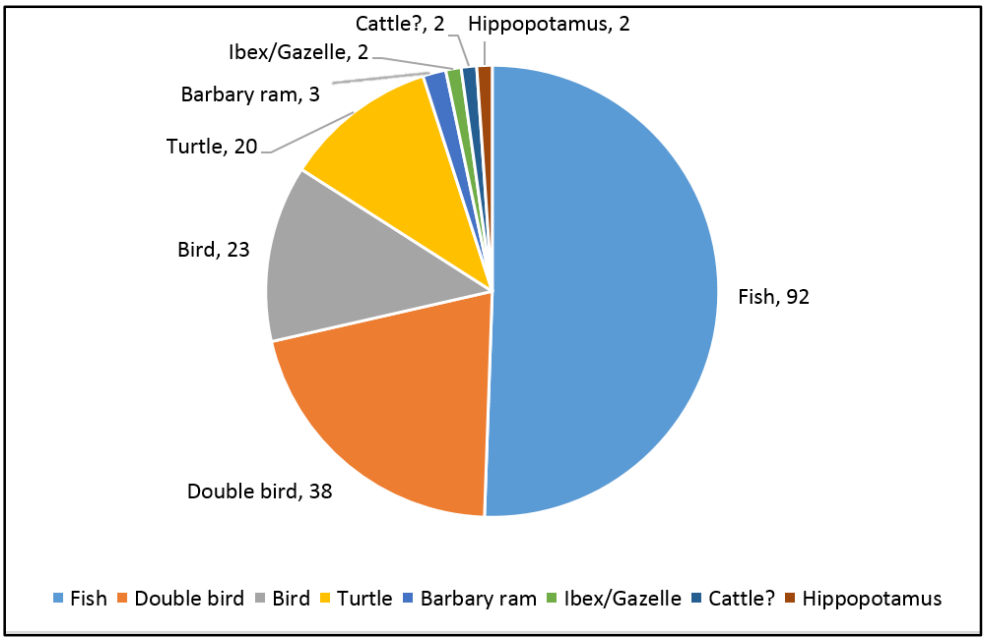


Figure 06. A pie chart to show the proportion of different animals depicted upon palettes across all prehistoric periods (Total N=182). The data is derived from the supplied database (some uncertain forms and outliers have been omitted, but may be seen in the database).

Each animal is deliberately depicted as if viewed from a certain angle; the orientation of the animal seems to adhere to a few criteria: it allows for the display of the largest surface area of the body possible, it creates a shape that is closest to an oval, and in most cases it will feature only the bare minimum of features needed for the viewer to recognise the creature intended. Below can be seen various types of zoomorphic palettes (**Figure 07**), where the main area of grinding takes place on the body-core of the animal depicted, which in the

following cases are; a Barbary sheep, a fish and a bird. The centre of the body may have symbolically been linked with life, due to the positioning of life-sustaining organs, or perhaps birth and rebirth, due to the perceived position of where an egg or a baby formed inside an animal. The large, undecorated, unperforated areas of these palettes were reserved, by the artist, for the grinding of pigment highlighting the intention that function would not be compromised for decoration.

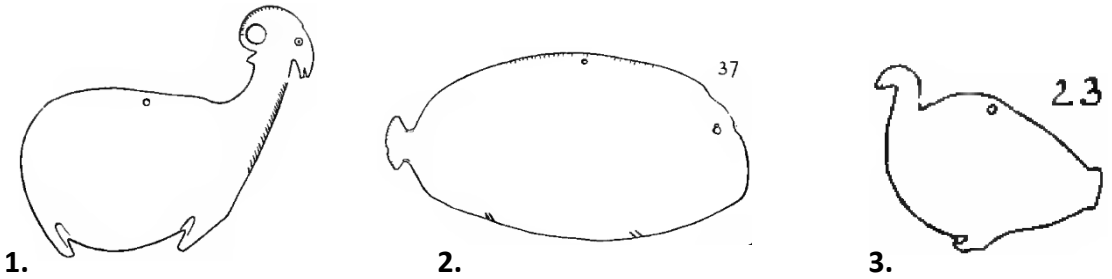


Figure 07. Naqada II period palettes, showing the diversity of animals which may be found: **1.** From Naqada grave 1562, of Naqada IIA date (Petrie & Quibell 1896: pl.xlvii, fig.1; Ashmolean No. 1895.855; W 18.3 cm); **2.** From Naqada grave T4, of Naqada IIB date (Petrie & Quibell 1896: pl.xlviii, fig.37; Ashmolean No. 1895.1203; W 22.3 cm); **3.** From Naqada grave 1217 (Petrie & Quibell 1896: pl.xlvii, fig.23; Ashmolean No. 1895.865; W 5.3 cm).

1.3.5 Zoomorphism and the cosmos: The River Nile, the sky-river

The zoomorphic embellishment of palettes was perhaps an important aspect of their use. Although many plain examples exist, it seems that only animals were appropriate when a plain palette was embellished with a design. This preconception of an appropriate or powerful form extends further than merely the zoomorphic shape, as it seems that only a few animals were ever used. The relationship between these specific animals and the nature or use of palettes might then be theorised.

There is a possible riverine connection between the different types of animals depicted upon palettes, as well as the use of palettes in general. Fish, turtles and hippopotami would have been seen often in water, while certain birds and mammals would have eaten near, or drank from the river. It is also possible, as birds feature so prominently, that the sky and the river were viewed as congruent or complementary geophysical zones, where birds 'swim' through the blue 'waters' of the overhead 'river'. On 'pelta' palettes, or 'palettes with stems', there can be seen forms which are usually interpreted as being boats (Patch 2011: 63). Boats were important to the Predynastic Egyptians as a useful vehicle of trade and travel, as well as ritual, as can be seen from their frequency and styles among petroglyphs (Lankester 2012: 210-214). Boats capable of carrying many passengers seem to have emerged by at least the 4th millennium BC, but it is believed that simple rafts for fishing might have existed as early as the 8th millennium BC (Ward 2006: 119-120).

Of the many 'boat' shaped, or 'pelta' examples of artefacts, there are a few variations. The majority feature a long 'stem' rising from the middle with notches and usually a perforation. The heads may be singular or doubled, and may face either inwards or outwards. Certain examples, however, do not feature the usual 'stem' shape in the centre, and instead have three upwards points. This seems to only occur on examples with inwards-facing 'heads'.

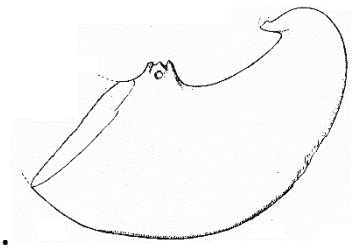
1.  **2.**  **3.** 

Figure 08. Three artefacts with a triple pointed and perforated motif in the centre: **1.** From Grave 1862 at Mostagedda (Brunton 1937: pl.xliii, fig.10); **2.** From Grave a120 at El Amrah, of Naqada I date, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC10789; W 17cm); **3.** From Grave B120 at Abadiyah, of Naqada IIB date, author's photograph (©The University of Cambridge Museum of Archaeology and Anthropology; Cambridge No. Z 17985; L 31.3 cm).

Alternatively, the 'boat' palettes have been viewed as having bird's heads (Figueiredo 2004: 14), but in all Predynastic avian depictions, the beak is apparent and was most likely one of the key defining features. Perhaps the three points protruding from the centre aided in the interpretation of the motif and helped to further distinguish it from the similar double-bird design. Despite the pointed feature on the example from Mostagedda, there is no incision representing an eye, so this may be seen as the tail, especially when compared with the two examples from El Mahâsna Grave H 22. These examples, however, do feature the longer 'stem'. It is possible that these few examples existed as an intermediary between the outward facing and inward facing designs. Also the inward facing example from Tomb 896 at Mesa'eed seems to only feature a very slight stem in the centre, seemingly only a rounded version of the three-pointed style. On all inward-facing examples the head is rounded. There is one exception, a palette from Naqada Grave 171, which has a more pointed, inward-facing head, but it has also been created with the longer, notched stem. If the boat interpretation is to be followed, then perhaps these different designs represented distinct types of boats, of which the Predynastic Egyptians would have been aware. It has also been suggested, however, that plain examples intended to represent boats were the origin of this motif, with zoomorphic variations occurring later (Tassie 2014: 378).

The zoomorphic aspect of these 'boat' forms suggest that they might be interpreted as an animal such as the hedgehog. Hedgehog artefacts are present in Naqadan contexts, such as the bead from Matmar Grave 5108 (Brunton 1948: pl.xv, fig.1), or the reported Naqada IIA 'small hedgehog-pot' of Naqada Grave 1586 (Petrie & Quibell 1896: 29). If the hedgehog connects to a riverine theme, it is not initially clear how Ancient Egyptians would have seen the animal in the river very often due to its nocturnal nature. It is possible, however, that people would have viewed the phenomenon of a hedgehog curling up defensively as it is placed into water upon which it may float (see **figure 09**). This phenomenon, among many other eccentricities, may have been observed in wild or tame hedgehogs as it is possible for them to roll around in shallow water, mud and even milk (Burton 1969: 94). Palettes such as the below example from Naqada grave 1842 can easily be seen as a hedgehog in defensive or

contracted position, especially with the perforation for the eye on the head, with the opposite end representing the tail. Examples with perforations on both protrusions, however, may simply depict a doubled hedgehog much in the same way as the double-bird examples (double-bird artefacts are discussed below). There is also potential for the ancient artisan or viewer to understand a zoomorphic palette as floating in a body of water, as they may have done for fish form palettes. The examples with central protrusions, could be seen as exhibiting the cabin of the boat. It is also possible, however, that this is an arbitrary shape used for suspension, much like hippopotamus amulets which feature similar extensions on their back (Crowfoot Payne 1993: fig.82, nos.1976-1978; Ashmolean nos. E.946, E.945 & 1895.139).

If these palettes were intended to be understood as boats then they would be the only non-zoomorphic Naqada II palettes excluding the plain geometric examples. It could be argued, however, that these forms are animal-boats, exhibiting the characteristics of both living creatures and constructed vessels. Interestingly there is an example of a palette without provenance (Petrie 1920: pl.xlv, fig.22) that features two small protrusions behind the 'head' akin to ears, but these may also be interpreted as oars or prow decoration. The confusion between a floating hedgehog and a boat may have been intended as the hedgehog may have become symbolic of physical boats, buoyancy and riverine movement. This connection can be further exemplified in the artwork from the Old Kingdom tomb of "Ka Khont Khut" which depicts a hedgehog-headed boat, one of many such examples (von Droste zu Hülshoff 1980: 95-117). It should not be assumed that there was a direct connection between Predynastic and Old Kingdom artistic traditions, but there may have been congruent thought processes leading to the association of hedgehogs with boats. Nilotic travellers, merchants and hunters may have envisaged themselves as being protected atop a metaphorical floating hedgehog. Many animals, however, can be seen as related to boats, especially when related to hunting-scene petroglyphs (Lankester 2012: 279).

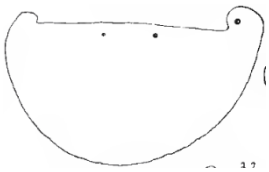
1.  **2.**  **3.** 

Figure 09. Images showing the potential connections between hedgehogs, palettes and boats: **1.** Ragweed the hedgehog curling up in anticipation of his bath (©Evan Countryman at: www.youtube.com); **2.** A Naqada IIA siltstone palette from Naqada grave 1842 (Petrie & Quibell 1896: pl.xlvii, fig.28; Ashmolean No. 1895.858; W 20.7 cm); **3.** A drawing of an Old Kingdom hedgehog boat (Holmes 1906: 11, fig.3).

Perhaps the connection with water animals and funerary practices extended from a belief that the afterlife was accessible through a riverine journey. When the route between the worlds of the living and the dead are aquatically connected, then riverine animals have power, and vessels have a supernatural use. Hassan argues that Prehistoric communities of the desert may have understood walking as the means of undertaking a journey into the afterlife, where the appearance of both boats and sandals on Nubian rock art existed as the confluence of desert and valley cosmological beliefs (Hassan 2004: 785-786). Filippou posits a similar, and perhaps complementary interpretation of the Minoan afterlife as being accessible via 'bull riding', where the deceased will use the celestial animal for transport (Filippou 2015). Links might even be made with the Apis bull of later Egyptian history, who would carry the deceased mummy on its back (Fillipou 2015: 215-216). The connection between boats and the afterlife can be seen in Egypt, through the phenomenon of Early Dynastic boat burials (Patch 2011: 63), while in later historic times there can be seen a great multiplicity in religious and spiritual beliefs related to the gods, the sky and boats (Mojsov 2005: 4, 17). The hedgehog/boat shaped palettes may then have been an early form of apotropaic effigies of this barge, such as other clay examples found in prehistoric graves (Mojsov 2005: 4). Although the use of these palettes as effigies of complex religious mythology is hard to prove, they may have at least served some form of cultural connection between death and boats.

Figures of boats are found in many settlement contexts throughout the Predynastic and Early Dynastic periods, highlighting their symbolic importance (Hendrickx & Eyckerman 2010: 132). It may then be possible that, instead of its inherent buoyancy, the hedgehog may have been selected for its perceived ability of revivification. The hedgehog's ability to hibernate and aestivate may have fascinated the Ancient Egyptians and inspired a view that the creature was able to live after death (Warwick 2014: 37). The use of the tilapia fish on artefacts has also been linked to ideas of the afterlife and rebirth in the Dynastic periods of Egypt due to the peculiar way in which this fish incubates its eggs in the mouth (Kozloff 2015: 299-300). The tilapia and the riverine world may have inspired belief in life-giving powers, just as how the softshell turtle may have resonated with ideas of renewal (Baudel 2008: 1066).

The use of animals related to the river might imply that palettes, and the materials ground upon them, had gained symbolic significance in relation to riverine or mortuary concepts. Undecorated palettes might have been understood as being able to create products of rejuvenation or renewal before they were elaborated with animal designs. It is possible that the consistent use of siltstone might also have related to concepts of the Nile, owing to the green/blue hue of the stone. A fish carving made from mica, from the Neolithic site of Gebel Ramlah, is a bright shade of blue (Kobusiewicz *et al.* 2009: 173, fig.37), where water may have been culturally more significant as the increasing aridity transformed savannah into desert (Kobusiewicz *et al*. 2009: 152). Certain, more modern, beliefs have been observed that relate to parts of the Nile as being medicinal, alleviating fevers, painful eyes and other ailments (Blackman 1927: 32-33). If a medicinal interpretation is understood in terms of materials ground upon palettes, then these medicines, rather than merely the animal depicted upon the palettes, might have conjured an association with the life-giving Nile. It is also possible that the potential use of water from the river in these mixtures would also have connected palettes with the river. The depiction of riverine animals on siltstone palettes may have enhanced the potency of the remedy being ground upon them. The river and its shells may have become associated with vitality, an idea which may have extended to encompass the fauna of the river (Smith 1919: 157-158). The spiritual importance of the Nile can also be

witnessed within the Sudanese Neur people, who venerate many different animals separately, but they all hold rivers in the same respect, as “the spirit of all the people” (Evans-Pritchard 1949: 234-235).

1.3.6 Conclusions

If the use of palettes was intrinsically linked to river, or more generally to ‘places’, then the animals carved upon them might have similarly been connected to these places. The common fish forms of palettes might further emphasise the palette’s inherent connection to riverine activities, yet there are still unknown factors. Compounding the issue is the further reinterpretation and reuse of these palettes as funerary tools. Attempting to link all aspects of palettes (place, use, animal, life and death), leads to the view that these items were highly charged with multiple layers of symbolic, cosmological and cultic ideas. How the direct relationship between human and animal might be picked apart from such complex items is explored below, using the more well-known connections between humans and cattle.

1.4 The importance of cattle and figurines

It has been discussed how zoomorphic forms might have represented notions of place, relationships and identity. It might be argued that in the case of palettes that the physical act of using a palette was the most important aspect of it. Their deposition within graves might have worked on the level of possession and clothing of the deceased, rather than individuals associating the animal on the palette with spiritual and cosmological beliefs. This line of thinking might not work so well, however, on objects with less well understood uses. The appearance of 'figurines' in several graves might imply that the object acted as more of a stand-alone icon. There wouldn't have been any cosmetic ritual use of the object taking precedence over the pure symbolic and powerful imagery of the artefact, whereby, the artist and user of the object might have connected more directly with the animal depicted. Cattle appear in the database as a frequent figurine type (see MAP 5 & 9), so the significance of cattle in Predynastic Egypt will be contextualised.

1.4.1 Cattle cultures

There have been many propositions that cattle occupied a special, arguably religious, role in the mythos and cosmology of many ancient cultures, related to the ways in which humans domesticated them (Wengrow 2006: 59-62). Across the Near East, there seems to have been great importance placed upon cattle in the Neolithic period, perhaps preceding and inspiring their eventual domestication (Russell 2012: 17-19). It must be noted, however, that archaeologists have afforded special importance to cattle when compared with other animals depicted in artwork of the Neolithic and Bronze Age (Wengrow 2001: 91, 94). The Egyptian material will, therefore, be contextually assessed, so as not to assume that cattle essentially 'exert an influence over human minds and actions' (*ibid*: 93).

There seems to have been strong importance placed on cattle at the Western site of Nabta Playa, where a great cattle tumulus, as well as a cattle interred in a clay lined chamber have been found (Hendrickx 2002: 275). The site of the tumuli dates from the late sixth to the early

5th millennium BC, however the precise dating of these monuments, including the megalithic solar calendar is difficult (Wengrow 2006: 57). Close to Nabta Playa, in the central Sudanese Nile Valley, along the Dongola Reach, at Kadruka and further South at el-Ghaba, there can be seen many examples of bucrania interred within human burials (Wengrow 2006: 57-59). Later than the Nabta Playa tumulus, and further North, in the Badarian Cemetery '5300-5400', there can be seen the interment of animals, including cattle, in their own graves, some with mat coverings (Brunton & Caton-Thompson 1928). Of the several animals interred, one of the cattle had the horns manipulated into a downwards direction, in a similar way to more modern pastoralist communities (Wengrow 2006: 56). Although horn modification might have practically aided in the movement of cattle, the process of altering the cattle might also have been seen as symbolically enhancing the cattle, due to its important social or cosmological position. The people of the Badarian culture may have respected their ancestral beliefs and practices related to animals, and might have even made pilgrimages to sites such as Nabta Playa (Tassie 2014: 246). Hendrickx argues that agriculture may have lessened these people's strong connection with cattle (Hendrickx 2002: 275-276), possibly removing them further from a tradition of cattle veneration. The mobility of the Badarian culture seems to imply their transitional status (Tassie 2014: 246), whereby the veneration of cattle might be understood, where agriculture is not fully formed.

1.4.2 The Nuer people of Sudan

When viewing zoomorphic objects as icons of veneration, in relation to group beliefs, the relative lack of Predynastic settlement evidence leaves some of these practices unknown. In order to unpick some of the archaeologically invisible practices of the Predynastic Egyptians, the case study of the Nilotic Nuer people has been chosen. Their geographical and economic similarity to the Predynastic Egyptians might offer some useful analogues of thought processes. Their beliefs have been documented and studied by Evans-Pritchard, who notes aspects of their laws, religion and cosmological order (Evans-Pritchard 1949).

The predominately pastoral Nuer people of Sudan have many different beliefs connected to the power of animals and how humans relate to them. If beliefs of the Sudanese Nuer people can help inform the ways in which Nilotic human-animal relations may have worked in Egypt, then it tells us that the admixture of ethnic groups can lead to complex beliefs, differing on an individual basis (Evans-Pritchard 1949). Groups among the Nuer can be formed of people from the same lineage, who may command special powers over the animals of their namesake, or who have to perform special rituals involving meat, milking or sacrifice of animals (Evans-Pritchard 1949: 228). Despite their pastoral commitment, and veneration of cattle, the Nuer also respect wild species, such as lion and ostrich, (Evans-Pritchard 1949: 239-240), showing either that there is little perceived differentiation between wild and domestic, or that these beliefs derived, through tradition, from their hunter ancestors.

In terms of the discussion about cattle, it is interesting to note that, for the Nuer, cattle are the 'focus of social and religious life' (Serpell 1996: 189). The closeness felt by Nuer people toward their cattle also expresses itself as a social restriction on the slaughter of cattle, as well as sheep and goat, outside special ceremonies (Serpell 1996: 190). The few intriguing Predynastic Egyptian figurines seemingly representing slaughtered animals (discussed below) might then be understood in a new light. As society was less complex in the earlier pastoral periods of Egyptian prehistory, it is possible that humans felt a similar, Nuer-like closeness with their animals. The slaughter of animals may, therefore, have been a socially or religiously important act, worthy of commemorating through figurative artwork.

1.4.3 Cattle figurines

It is not only the bones of cattle, or animals in general, which accompanied humans within their graves. Many figurines of cattle have been found in Predynastic mortuary contexts which might be viewed as tools of veneration. 'Figurines', or 'figures', are terms used to classify artefacts that depict an object on a small scale. Three-dimensional figurines are often analysed completely separately from other types of artefacts. In some cases, authors will view

a figurine as part of large, regional complexes of socio-religious beliefs, rather than in terms of its more immediate relations. This is mostly true for anthropomorphic figurines from the Upper Palaeolithic or the Neolithic eras, from which zoomorphic figurines are usually excluded, or simply side notes in such broad discussions. Understanding that there are different methods of analysis for zoomorphic and anthropomorphic figurines may highlight an inherent bias in modern research aims. The subject matter of a figurine seems to influence how much intrigue it raises within the modern mind. There is an abundance of literature on anthropomorphic, especially female, figures (Bailey 2005: 12) where no such trend exists in zoomorphic artwork studies. This is not simply applicable to Egyptian studies, but of Near Eastern archaeology in general, as Wengrow states that 'no published survey exists of zoomorphic figurines in the Neolithic Near East' (Wengrow 2003: 142). For example, Ucko's (1968) compilation of Predynastic anthropomorphic figurines draws upon comparisons with Greek and Near Eastern figurines, where no comparable volume exists for zoomorphic figurines. It must also be noted that figurines depicting buildings or vegetables are also underrepresented in archaeological literature. This might be explained by the relative lack of these types of objects. In relation to zoomorphic objects, however, it is clear that there are many more excavated examples of zoomorphic artwork when compared with anthropomorphic objects, at least in Predynastic Egyptian contexts. It has been suggested that this focus on anthropomorphic figurines is due to the perceived relative unattractiveness of zoomorphic figurines (Freikman & Garfinkel 2009: 5). It may also be true that the anthropomorphic aspects of certain figures capture modern imaginations the most. Figures that are sexually ambiguous, morphologically ambiguous, or zoomorphic supposedly fail to attain the popularity of female figures, according to Assante (2006: 183), yet this is hard to measure accurately. Individuals, both past and present, will view figurines with variable intrigue. It is clear from their use, however, that they must have had some importance in society.

Perhaps it is the three-dimensionality of a figurine which causes, or is supposed to cause, a great sense of intrigue within the viewer. As the object may be viewed from all directions, there are many more aspects of it which may be scrutinised and appreciated compared with a two-dimensional piece. It might also be that the portability, and by extension the tactile

nature of a three-dimensional object is pleasing. It is not possible, however, to state with certainty whether Ancient Egyptians would have had similar notions of awe and intrigue in relation to specific artefact types. Many Predynastic artefacts, no matter how flat, arguably exhibit some form of three-dimensionality through the working on both sides of the object. Portability is also not exclusive to figurines, yet, figurines can paradoxically inhabit the role of the static and the portable. The main differentiation used in this study's database between a wearable bead or amulet, and the 'figurine' is the nature of use. Lesure defines a 'figure' as having 'no obvious functional attributes' (Lesure 2011: 73); a statement that is true of certain Predynastic figures. Objects with notches and holes for suspension, are termed 'amulets', creating a division based on function. It should not be assumed, however, that there existed any such division in the past, in terms of how each object was symbolically understood.

Lesure argues that objects such as individual figurines, which may have fulfilled a role at a domestic level only, may have potentially been phased out over a period of increased centralisation of power and specialisation of craft (Lesure 2000: 1). It must be argued, however, that it is hard to see individuality when analysing the use and deposition of three-dimensional artwork. Within graves there are many instances of artefacts being part of an assemblage, or having almost identical objects alongside. The three-dimensional objects with no apparent use in cosmetics or fashion are, in fact, the objects which are quite likely to be found with another similar object. For example, the grave B83 at Abadiya contained two similar, fragmented clay bird figurines as well as two clay fishes, a turtle, and other fragments (Crowfoot Payne 1993: fig.16, nos.63-66 & 68-69). This could either rule out the idea that 'individual' zoomorphic figurines were not used for worship, or that worship was practiced with several images.

Should the animal figures here be discussed in terms of their relation to broader social and religious views across the Near East, as female figures often are? This may in fact be useful as there may well be certain links between the representation of animals and the spread of the Neolithic across the ancient Near East. It may then follow that animal figures may be viewed as having certain qualities proposed of anthropomorphic figures, such as being representative

of powerful deities or ancestors of present individuals (Bailey 2005: 21). The connection between Neolithic cattle-beliefs, might stem from the idea that the deification of cattle resulted from the observed ability of cattle to support people and provide nourishment in various environments, from the desert to the valley (Hollis 2009: 3).

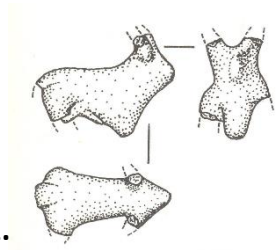
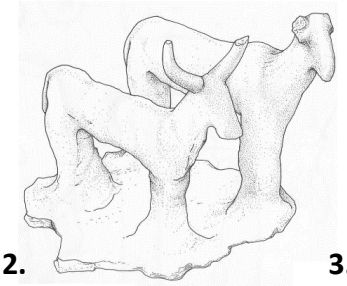
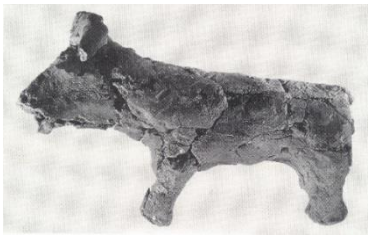
1.  **2.**  **3.** 

Figure 10. Clay cattle figurines: **1.** A figurine from MB80 SV 53 IV at Merimde Beni-Salame (Eiwanger 1992: Tafel 89, IV.953; L 2.3 cm); **2.** Figurines on a stand from El Amrah (Crowfoot Payne 1993: fig.14, no.56; Ashmolean No. E.3207; L 18.7 cm); **3.** An example from Grave U-235 at Abydos (Dreyer *et al*. 1998: tafel.4.c).

The catalogue of excavated material reveals that cattle are by far the most numerous species among the figurines, perhaps giving some credit to the idea that figurines were the ideal medium for expressing wide-reaching intercultural concepts and beliefs. There are 32 cattle figurines (with 6 examples that are harder to identify) in the catalogue, with the second and third most popular figurine types being hippopotamus and birds (see **Figure 11**).

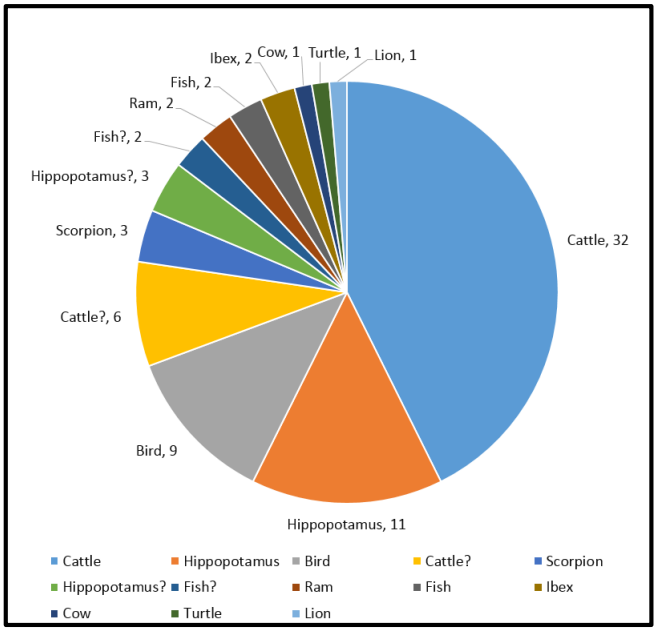


Figure 11. A pie chart to show the proportion of different animals depicted on figurines from all prehistoric periods (Total N=75). The data is derived from the supplied database (some uncertain forms and outliers have been omitted, but may be seen in the database).

It is interesting to note a cluster of these figurines at the sites of Abydos, El Amrah and El Mahâsna (see MAP 5 & 9). Not featured on these maps is the site of Merimde Beni-Salame which contains 17 figurines in the database, the majority of which appear to be bovine. However, the vast chronological and geographical difference between Merimde Beni-Salame and the rest of the sites discussed, makes direct comparisons difficult. Forming a plastic representation of cattle may have stemmed from a desire to emulate the power of a real carcass, or perhaps these models had a separate significance. Although these figurines do not prove any veneration of the animal, the deposition of these artefacts in grave contexts could arguably prove that some special significance was afforded to these icons. Figurines, often made of clay, were mostly crafted separately but there are notable examples of cattle grouped onto stands. At El Amrah, there are several graves which contained similar clay stands, each with four cattle; graves a56, a23, a72 and perhaps b132 (Randall-MacIver & Mace 1902: 16, 17 & 19), while another example only had two cattle on a stand (Crowfoot Payne 1993: fig.14, no.56). Grave b212 at El Amrah contained three loose cattle without a stand, which seem to portray a cow, bull and a calf (Randall-MacIver & Mace 1902: pl.ix, figs.6,

9 & 10). There was a clear importance placed on the assemblage of the animal across these graves at El Amrah. It was believed that the clay was not fully dry upon the interment of the object (Randall-MacIver & Mace 1902: 41), implying that they were not used during life. It is uncertain, however, whether similar objects existed which served a purpose during life, while individual examples were crafted for the grave.

Most of these cattle are seen standing upright and are made with very few details. Emphasis is placed variously on the horns, penis or udders. Although the material from Merimde Beni-Salame represents a much earlier culture when compared with El Amrah or Abydos, there can be seen a similar emphasis on the penis or udders on otherwise plain forms (Eiwanger 1992: Tafel 89, IV.954 & IV.953). Although not implying a direct continuation of tradition between Merimde and the south, it is clear that in most cases the differentiation of gender was important when depicting cattle. The small examples from Merimde seem to have some parallels with other figurines in the Near East, such as the clay figures from Sha'ar Hagolan (Freikman & Garfinkel 2009). Cattle figurines were relatively frequent at Merimde, where Eiwanger identified fourteen, but the precise identification of the species may have been uncertain in the many fragmented examples (Tassie 2014: 204). If the Sha'ar Hagolan examples are examined, it can be seen that a fragment of the body alone might not be sufficient to discern the species, due to the general similarity between the goat, sheep and cattle figurines (Freikman & Garfinkel 2009: 7-9, figs. 2-4). Merimde, along with other Lower Egyptian sites such as Saïs and el-Omari, seemed to share material similarities with a wider technological complex extending to the Levant (Tassie 2014: 199). Despite the potential for completed objects rather than simply the raw materials to have been imported from the Levant (Tassie 2014: 207), artistic or ceremonial objects deposited within graves would have had a special significance with the Lower Egyptians, and would not have been the product of a passive capitulation to an external culture.

Two figurines from Abydos Grave U-560 feature diminished appendages, and red paint on their underbelly, leading Hartung to see these as possibly representing cattle carcasses (Hartung 2011: 470 & 481, fig.9a). The spotted black and white pattern of the animal hide

present on these two figurines is also present on various beads from the same grave, yet their zoomorphic character is not explicitly evident. Several cattle figurines from El Mahâsna, of Naqada I-IIC date, also feature diminished heads and limbs, with four examples featuring two cut marks on the neck, interpreted as butchery marks (Anderson 2006: 223). Red paint has been found, also at Abydos, on a hippopotamus figurine with a cut mark on the back of its neck. As the other hippopotamus from the same grave, U-239, does not have this cut, or red paint, it has been assumed that the red paint represents blood from a cut which symbolically killed the object (Hartung 2010: 110-111). If carcasses were the intended depiction, then these figures may have worked as symbolic food offerings. The examples from El Mahâsna, however, are not from a sepulchral context, and are sufficiently worn as to indicate use within life (Anderson 2006: 224). This does not mean that they did not work as ceremonial offerings, but that their symbolic importance was not necessarily reserved for the grave. The food offering may have been of importance to feasts and social rituals in general. Feasts may have featured large amounts of animal meat, implying that the organisers owned enough domestic animals to over-indulge in one event, which could have been understood as a sign of prosperity (Russell 2012: 155). Examples of multiple cattle on one stand may, therefore, have represented the many individual animals who were to be killed for the feast.

'Carcass' forms, as well as gender and age differences, show that cattle existed in many different forms in the minds of the Predynastic Egyptians. No other animal exists in such a variety of forms in the present database, or even among examples without provenance. There are several examples of hippopotamus figurines and some more amuletic artefacts (see MAP 9), yet they seem to exhibit a fairly consistent depiction of the animal. The hard-to-interpret forms of some cattle figurines, however, might show that other ruminants might have been intended. It is only anthropomorphic figurines which exhibit more diversity, through different postures, clothing and gender (Ucko 1968). It appears that the use of cattle on clay figurines may have reflected a closeness to humans, seen through certain cultic and sepulchral activities. The fact that cattle were connected to such intimate aspects of life as portable artwork and the grave, arguably shows how the animal was significantly incorporated into the spiritual and social realms (Wengrow 2001: 98). In order to further understand how this

connection with cattle and other animals might have worked in Predynastic society, it is useful to examine anthropological examples.

1.5 The ambiguous ‘double-bird motif’

On several different forms of Predynastic artefacts there can be seen variations on a symmetrical motif, which has yet to be fully understood. Such forms have variably been termed ‘double-bird,’ ‘cow horns,’ ‘boat’ or possibly humans with raised arms (see Hendrickx 2002). The confusion surrounding this type of symbol derives from various factors, such as the irregularity of its depiction and the spatio-temporal differences in artefacts. Some forms of this motif are clearer than others, the addition of clear beaks and inlaid eyes allows for an avian interpretation for some. Bird forms, both singular and doubled, are the most common animal depicted upon Predynastic objects recovered during excavations. In fact, the bird remains frequently depicted in various mediums throughout Ancient Egyptian history, possibly reflecting the abundant nature of native and migrant species (Houlihan 1986: xxi). There are a total of 121 bird artefacts in the database, with double-bird artefacts falling only slightly short of this with 117. Fish are the next most commonly depicted animal, with 101 artefacts, but double-bird artefacts seem to be more evenly distributed across sites (see MAP 2 & 3) and are also more ubiquitous due to their appearance on a wider variety of object types when compared with fish.

1.5.1 From single to double

Singular birds, in stark contrast to double-birds, feature on a plethora of materials, and are rather ubiquitous in Predynastic art. It is possible, however, that the icon merely represented two birds standing in opposition to each other. Other animal forms, such as quadrupeds or fish, are more complete, with heads and appendages differentiated with incised lines. These forms do have reduced versions also, but the double-bird form consistently features no legs or defined wings. In order to fully understand the forms intended, it would be useful to recognise the species of bird intended. It is possible that individual artisans envisioned many different species, or perhaps generic, nonspecific bird shapes, able to conjure the idea of many divergent types of birds. Most pieces of avian artwork with good provenance feature a

thick, straight or downwards-curving beak that tapers to a point of medium or great length. The head is usually rounded, and on several examples it connects to a curved neck and a protruding breast. Certain items feature streamlined bodies and straight tails, conjuring images of ducks and geese. Others, however, feature more rounded backs akin to ostriches or vultures. Hendrickx has postulated that ostriches may have initially been the most powerful bird icon depicted upon these types of objects, losing favour to the falcon by Naqada III (Hendrickx 2002: 289-291).

In order to classify an object as representing a 'double-bird', it is useful to understand what such a form might have looked like in terms of known artistic styles. Several singular bird forms were selected and digitally mirrored to formulate various double forms. If the prehistoric artisan mentally rotated and combined two images of birds, then these are the shapes that they were likely to have envisaged. Of the types of artefacts examined in this study, three-dimensional portable artwork, there can be seen certain stylistic continuities in terms of zoomorphic representations.

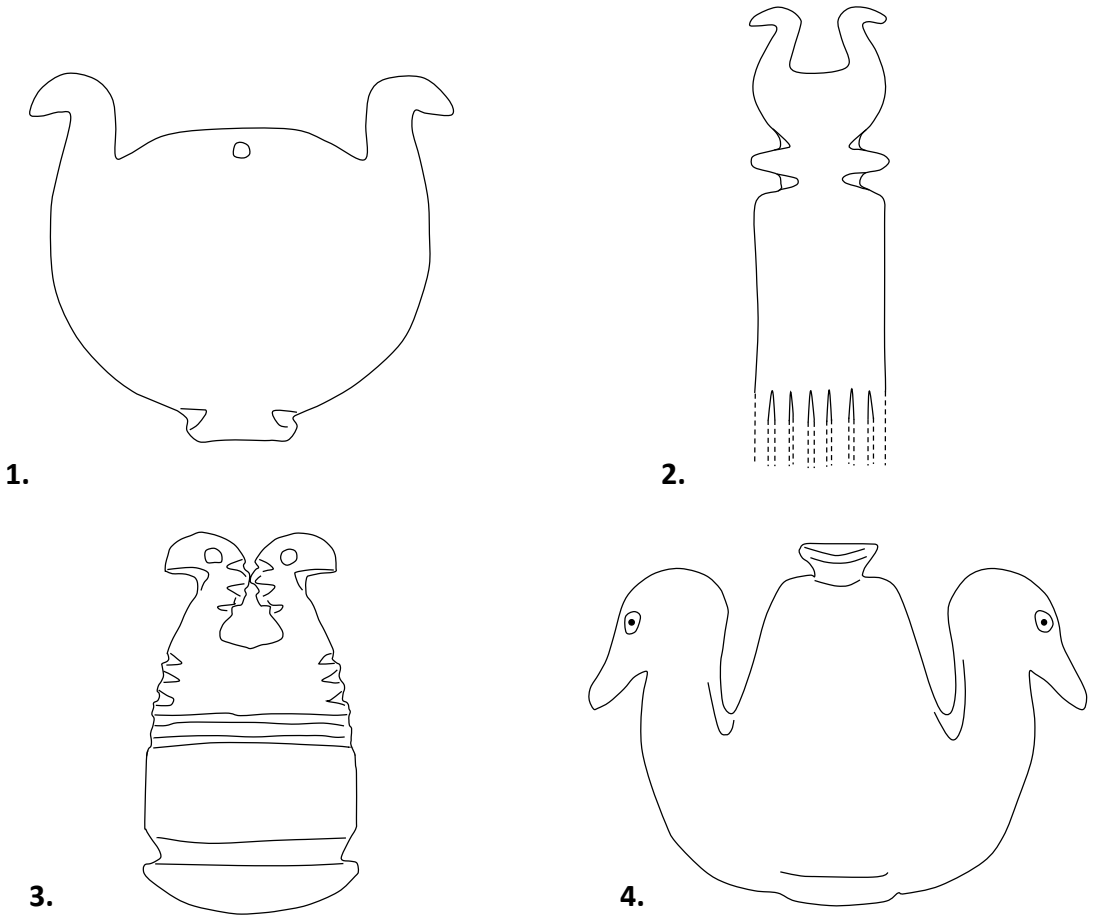


Figure 12. Four single bird objects digitally mirrored across the vertical axis in order to ascertain the style of double-bird forms: **1.** Based upon the palette from Grave 1217 at Naqada (after Petrie & Quibell 1896: pl.xlvii, fig.23; Ashmolean No. 1895.865); **2.** Based upon the comb from Grave R128B at Hu (afterPetrie 1901: pl.ix, fig.24); **3.** Based upon the amulet from Matmar Grave 3123 (after Brunton 1948: pl.xvi, fig.21; Cairo No. 57433A); **4.** Based upon the vessel from Grave 89 at Naqada (after Crowfoot Payne 1993: fig.58, no.1204; Ashmolean No. 1895.217).

The necks and heads of the birds can be seen in all the above examples, with the eyes sometimes represented by inlaid ostrich egg shells. The first example above demonstrates how the bird form may appear doubled through the repetition of the neck and head only, with the pointed beak being the most characteristic part of the bird. The second example, however, shows how the feet of the birds may protrude out on either side, just below the

necks and bodies of the animals. Artefacts similar to all four of these types can be found in the corpus of excavated material, suggesting that the double form is based directly on the repeating of a singular form. The amulet type with no feet below can be seen among several examples, along with the version with feet. Less common is the rounded palette form, but there are arguably three examples of this (Petrie & Quibell 1896: pl.xlvii, fig.3;, Brunton & Caton-Thompson 1928: pl.lii, fig.26; Brunton 1937: pl.xliii, fig.7). The final type, however, cannot be seen amongst examples of vessels. Yet, this general form seems to be represented amongst amuletic siltstone palettes with stems in the middle.

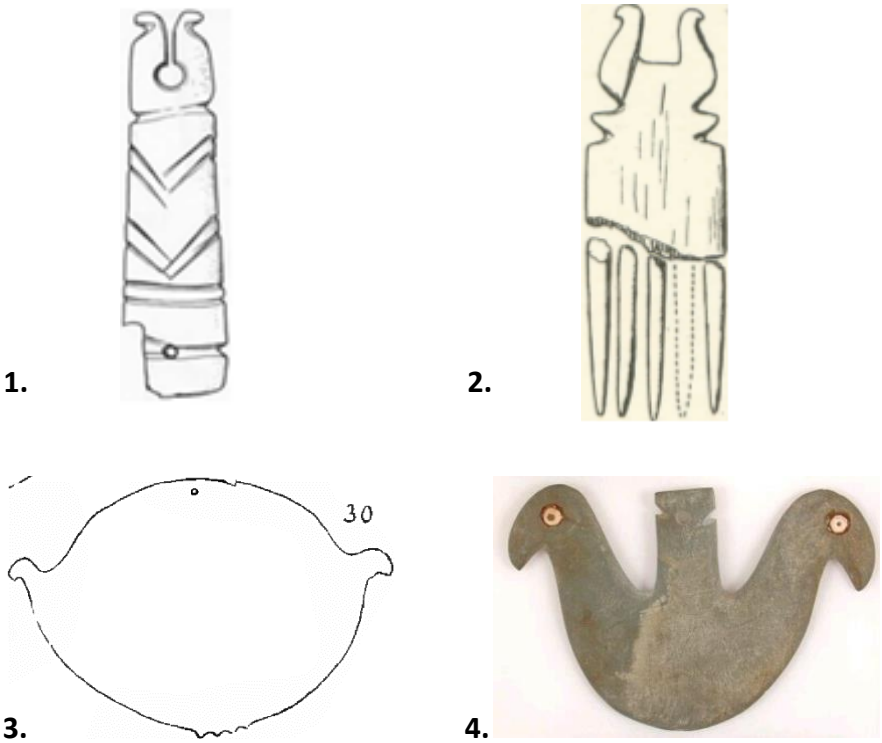


Figure 13. Excavated artefacts displaying forms similar to the theoretical forms created by digitally mirroring singular bird artefacts: **1.** Ivory amulet from Grave 149 at Naqada (Crowfoot Payne 1993: fig.82, no.1986; Ashmolean No. 1895.921; L 11.8 cm); **2.** Bone comb from Grave 2626 at Matmar (Brunton 1948: pl.xvi, fig.5); **3.** Siltstone palette from Grave T21 at Naqada (Petrie & Quibell 1896: pl.xlvii, fig.30; Ashmolean No. 1895.857; W 17.3 cm); **4.** Siltstone palette from Grave 1865 at Naqada, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC4345; W 8.7 cm).

Although vessels do not exhibit a double-bird form akin to the above types, perhaps the three-dimensional nature of the medium lends itself more naturally to examples such as the vessel from Naqada where two birds are connected along their lateral planes. This also hints at other ways in which birds may have been joined. Perhaps the meaning of this double vessel was distinct from the meaning of antithetically opposed bird heads. On almost every double-bird artefact, the two birds blend together seamlessly. There is a comb from Naqada grave 1503, however, which seems to have depicted the two birds on separate stalks. As one half is broken off, it is uncertain whether they would have joined in the middle or not.

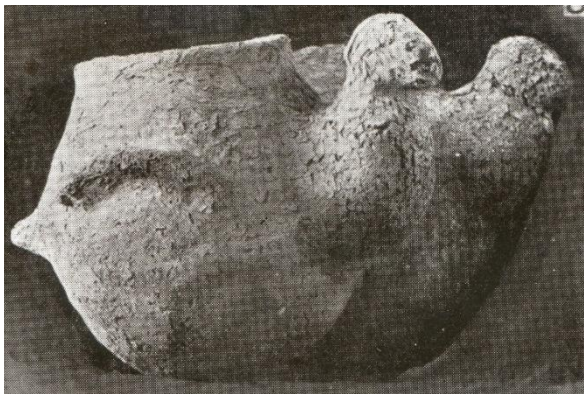
1.  **2.** 

Figure 14. Artefacts with uncommon connections between the two birds: **1.** Double-bird vessel from Grave 316 at Naqada (Knobel *et al*. 1911: pl. xxiii, fig. 31; Ashmolean No. 1895.629; L 19cm); **2.** The bone comb from Naqada Grave 1503, © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC4178; L 16.2 cm).

Whether the comb from Naqada featured a connection between the two birds or not, it would still feature multiple birds. The space between the two heads on double-bird artefacts seem to be rather changeable. The above examples highlight a few of the different variations; some have a flat space, some with a 'stem' protrusion and others have circular indentations. On larger palettes there can sometimes be seen many points or incised lines between the heads which perhaps represented some element of the two birds, such as feathers. It might then be assumed that the space between the heads could be filled with an important stylistic element.

The ‘stems’ on the double-bird amulets, although they may have functionally been used for suspension, might also have had an aesthetic purpose. If this element did, in fact, have an aesthetic purpose, then other artefacts may now be viewed in a different light.

Several doubled examples may be seen clearly as representing birds due to the positioning of inlaid eyes on the heads of the birds. There are also various objects that clearly depict the outline of a bird with no internal carved details, such as eyes, feathers or the line of the beak. It is clear then, that the presence of eyes was not essential for the recognition of the form as a bird. Therefore, examples of unclear form resembling bird heads should not be dismissed as having horns if they do not have inlaid eyes.

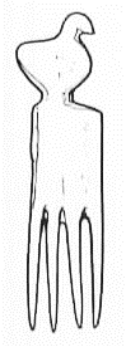
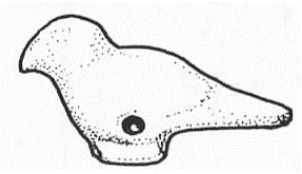
1.  **2.**  **3.** 

Figure 15. Avian artefacts without inlaid eyes: **1.** Ivory comb from Grave U160 at Hu of Naqada I date (Crowfoot Payne 1993: fig.78, no.1915; Ashmolean No. E.3957; L 6.6 cm); **2.** Siltstone palette from Grave 4615 at Badari, Photograph © The Manchester Museum, The University of Manchester (http://emu.man.ac.uk/mmcustom/EgyptQuery.php; Manchester No. 7267); **3.** Glazed sandstone or faience figurine from Grave 1774 at Naqada, of Naqada I date (Crowfoot Payne 1993: fig.4, no.14; Ashmolean No. 1895.142; L 3.3 cm).

The material of the object must also be considered when viewing differences and similarities between different artefact types. The artist would have understood that consumers of the art piece would perceive the connection between the physical object and the symbol behind it in different ways, owing to the different source material. There would presumably have been a

constraint on the ways in which the artist paired their ideas with the form of the object, without compromising the integral meaning of the symbol (Neale 2014). Regardless of the form, the icons of birds and double-birds were important enough to have been transposed on to several different artefact types, including combs, hairpins, amulets and palettes.

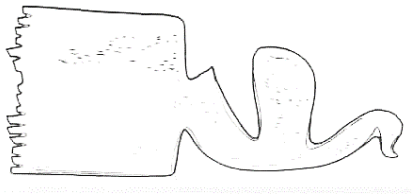
1.  **2.** 

Figure 16. Images showing the potential avian interpretation of the flint from Hierakonpolis: **1.** Flint object from the HK6 Cemetery, photograph ©Hierakonpolis Expedition (http://www.hierakonpolis-online.org/index.php/explore-the-predynastic-cemeteries/hk6-elite-cemetery/tomb-72), image rotated 180°; **2.** A comb from Naqada Grave 1411 (Crowfoot Payne 1993: fig.78, no.1910; Ashmolean No. 1895.934; L 10.7 cm), image rotated 90°.

A good example of the importance of perspective is demonstrated by a flint object from the HK6 Cemetery at Hierakonpolis. The flint artefact, when viewed with the projections pointing downwards, might be seen as the forward-facing head of an animal such as a Barbary ram. However, every other flint artefact from Hierkonpolis represents the totality of the animal in question, including the anthropomorphic flint which depicts the entire body. If this flint should follow this rule, then it perhaps depicts an entire animal, rather than merely the head. The artefact potentially depicts a mythical double-bird creature, in a similar style to the 'stemmed' palette examples, yet with diminished heads. The central stem even seems to be slightly notched at the tip much like the notches found on almost all 'stemmed' palettes. When viewed as a head, however, the notching on this 'stem' may be explained as the definition of the snout or muzzle of the animal. When looking at certain birds on top of combs who appear to be in flight, the curving of the body seems to mirror the 'stemmed palette' form. The wings, such as on the example from Naqada Grave 1411 could be seen as the central

stem on the double-bird artefacts. It is hard to say, however, whether these forms relate to the form seen on the flint from Hierakonpolis. Given the nature of zoomorphic objects being found with items of control at Hierakonpolis (Friedman 2011b: 42), this example may even represent a hooked weapon or tool. Due to the lack of parallels with excavated provenance, the uncertainty of this flint form is understandable (Friedman 2010: 70).

1.5.2 Perspectives and variations

Varieties might be explained by regional and temporal differences, but it is hard to view such patterns owing to the diversity of forms. The database suggests that in Naqada I the more oval shaped palettes had not yet developed, and examples with inlaid eyes might only have appeared in Naqada II. This could suggest that avian forms were added onto the 'double-bird' shape, which might have originally represented something else, such as horns. However, the variety of forms and material types that can be seen already in Naqada I (palette, palette with stem, comb, hairpin, amulet), might imply multiple origins of the motif. Although geographical differences are similarly difficult to interpret, it can be said that Naqada features several unique forms, especially among examples of combs. Certain palettes are similar to the 'pelta' or boat-form palettes, yet they do not have stems or well-defined heads. It is uncertain, therefore, whether these examples represent double-bird heads, but they do seem to have been clustered around the Badari region (Brunton & Caton-Thompson 1928: pl.lii, fig.27 & 28). Other double-bird artefacts, however, appear to be evenly spread, but the subtle differences between objects, even on the same artefact type, make it hard to delineate and recognise discrete forms.

In terms of understanding the ways in which people understood certain symbols, it is useful to know how it would have been viewed. For example, with amuletic artefacts it can be assumed that they may have hung downwards with the notched end attached to some form of belt around the waist or neck. Certain examples would hang seemingly upright, whereas, others would appear to us as upside down. It is not known whether the object was intended

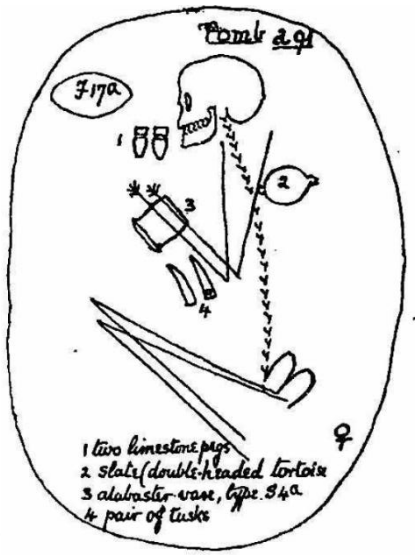
to have been viewed and understood by the user, the onlooker or a mixture of both. The fact that on different examples of objects there can be seen similar motifs with a stem at the 'top' and the 'bottom' perhaps shows how the orientation is not essential for understanding the symbolism. This assumes, however, that rotated icons had the same symbolic value. It is entirely plausible, however, that there was a plethora of iconographic emblems, such as 'upright single bird', 'upright double-bird', 'downwards single bird' and 'downwards double-bird. No matter which way the artefact hung, the wearer may have manipulated the object for special purposes, altering or inverting its orientation. The stem might have been useful for wrapping fingers around and moving the object around in different ways. This proposal unfortunately only serves to complicate the differentiation between various similar forms.

1.5.3 Interpretations of the double-bird form

Although it has been argued that Predynastic artwork may have, at least in part, used symmetry for aesthetic and pragmatic reasons (Davis 1989: 134), possibilities of how the double-bird symbol represented one or many natural or cosmologically significant motifs are discussed below. Understanding the form of the whole palette, not only the bird heads will aid in the interpretation of the motif. The blank space below the double-bird heads may possibly represent a number of things; the singular body of a hybrid form, two bird bodies connected, an egg, or perhaps an arbitrary shape. The relationship between the 'body' of the palette and the heads will be discussed.

If two birds were intended by the double-bird motif, then it is not certain how the two creatures were believed to be connected or why. Unlike other animals found upon palettes, there are no depictions of this motif in other media outside palettes, amulets, combs and hairpins. For example, it is hard to find any definite examples of double-birds among petroglyphs or painted vessels. Perhaps versions with two bird heads were viewed as a mythical animal with a singular body standing frontal with two opposing heads. The bird depicted may have conjured images of prophylactic power, or it may have resonated with

religio-cultural concepts, and doubling this iconography might have increased its potency. It is possible that two distinct individuals were envisaged as standing back to back or trussed together. The palette from Grave 345 at Ballas (Crowfoot Payne 1993: fig.76, no.1845) is a provenanced example showing how two distinct creatures, in this case two fish, can be connected on a singular palette. It is possible, then, that many other forms of doubled palettes were used but were not as popular, or have not yet been discovered. An unprovenanced palette depicts two turtle heads next to each other on a singular body (Metropolitan Museum of Art, 10.176.78), and hints at the possibility that various singular animal palette types may have had doubled versions. A turtle-shaped palette was excavated from El Amrah which reportedly had a 'head at each end' (Randall-MacIver & Mace 1902: 23), showing how other animals may have had antithetically opposed heads. The Metropolitan Museum curates another unprovenanced palette that features two birds joined by their tails rather than the usual double-bird form. This palette's distinct difference from the more usual double-bird form may indicate that it represents a separate idea. Future excavations may uncover analogous examples allowing for a better contextualisation of these examples.



1.

2.

Figure 17. Doubled palettes of uncommon character: **1.** Drawing of Grave a91 from El Amrah, showing the double turtle palette (labelled No.2 in this image), in position near the shoulder (Randall-MacIver & Mace 1902: pl.v, fig.3); **2.** A siltstone palette with no provenance, © The Metropolitan Museum of Art (Metropolitan No. 10.176.80; H 7.4 cm).

Arguably the process of creatively amalgamating parts of creatures within the mind of the artisan shows that extra concern and conceptual thinking had taken place before the artefact was even used. In terms of use and deposition, however, there seems to have been no special treatment afforded to double-bird artefacts in comparison with their singular counterparts. Several examples of double-bird palettes have signs of wear indicating that substances had been ground upon both sides. This could show how the animal image was understood to have power on both faces of the artefact. Palettes with singular animal motifs are also found with use wear on both surfaces. Using only one side consistently would lead to a large hollow forming, but as there are very few examples where this has happened, it is likely that this was actively avoided through changing sides, or acquiring new palettes. If there were no special actions or any different treatment afforded to double-bird palettes, when compared with singular zoomorphic palettes then it might be assumed that double-birds were viewed as equal to singular zoomorphs.

Recognising if, or how multiple forms were different from singular forms, requires the precise understanding of the entire doubled form. One complicated aspect of double-bird form palettes in particular, is the frequent lack of embellishment on the bulk of the palette. If the whole of the palette were to be viewed as representing an entire shape, rather than simply the motif at the top, then certain examples may be reassessed. Certain palettes depicting birds did not simply have the body of the bird inhabit the grinding area, but the palette had instead one or many bird heads above a plain oval shaped palette. Should these be understood using a different set of rules, whereby the viewer would understand that the animal ends somewhere towards the top and a plain palette existed below? Apart from the various avian examples, there exists another palette, excavated from Matmar, with a blank space below the animal. This palette seemingly represents a quadruped with a long tail. It could be interpreted as a baboon, or possibly a dog. The muzzle has notches which may indicate that its mouth is open, baring its teeth.

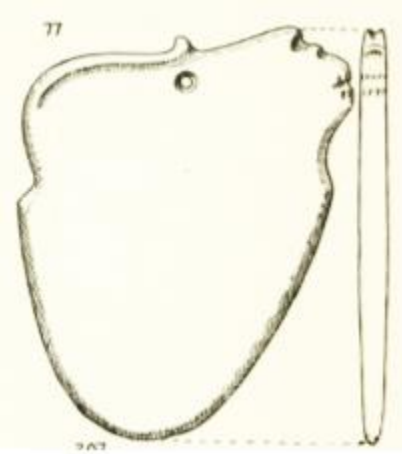


Figure 18. The zoomorphic palette from Grave 207 at Matmar (Brunton 1948: pl.xv, fig.34).

It is clear that Prehistoric Egyptians were comfortable with using undecorated palettes, without zoomorphic attributes, evidenced by the commonly used plain examples of the Badarian and Naqada III periods. In a period where almost every animal depicted encompasses the entire palette, however, it is not clear to what extent the idea of plain and decorated may have joined.

With double-bird examples, there can be seen three major elements; the two heads and the undecorated element below. The artist, as well as the owner of the object would have understood the relationships between these three elements on the palette. Hyman argues that the interpretation of spatial relationships between overlapping elements should be reserved only when it is clear that there was intended interaction between the two objects (Hyman 1989: 105-106). The partial occlusion resulting from overlapping, Hyman argues, may have been a technical decision or limitation rather than the deliberate formation of depth. In this scenario, however, there are no internal elements on the palette demarcating where the birds end, or if they overlap. This means that certain objects have implied partial occlusion, but it is impossible to tell whether this was intended or even understood at the time of creation. There may have been a multitude of elements within the unknown area of the palette, made manifest by the implications of the elements that were clearly depicted. A more

amuletic siltstone palette, being only 8.2 cm long, depicts a singular bird head with an extra extension below, possibly representing the feet of a standing bird (see **Figure 19**). It appears to depict a bird standing upright or standing with its wing outstretched. It offers an interesting comparison with other bird palettes, because the undecorated portion may represent a wing. If one were to witness a bird standing on a branch, then the shape would taper to a point at the bottom as the wings hang down, while the feet would not appear in the outline. This palette is unique, however, as most double-bird examples feature a plainer, egg-shaped form. Hinting at the potential interpretation of the main palette as being a body is an example without provenance from the Museu Nacional de Arqueologia, in Lisbon.

1.  **2.**  **3.** 

Figure 19. Images showing the relationship between avian palettes and birds: **1.** Siltstone palette from Grave 1529 at Naqada, Photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC4336; L 8.2 cm); **2.** An Egyptian Vulture standing on a branch, Photograph © Zuzana Randlova (http://www.dreamstime.com/nazzu_info); **3.** An unprovenanced double-bird palette (http://www.globalegyptianmuseum.org/detail.aspx?id=11640; Lisbon No. E 12; H 15.8 cm).

The example from Lisbon is of a highly unusual character, so must be examined with caution. It features twin heads at one end, with notches and incisions at the other. These might represent wings, feet, claws or feathers. If these are seen as the claws of the bird, then plainer palettes might be viewed as more schematic, reduced versions of this more well-defined example. It is just as likely, however, that this palette represents a hybrid, where the lower markings denote the appendages of a frog, turtle or Egyptian mongoose. Excavated examples do not feature any such feet, emphasising how unreliable and misleading unprovenanced examples can be.

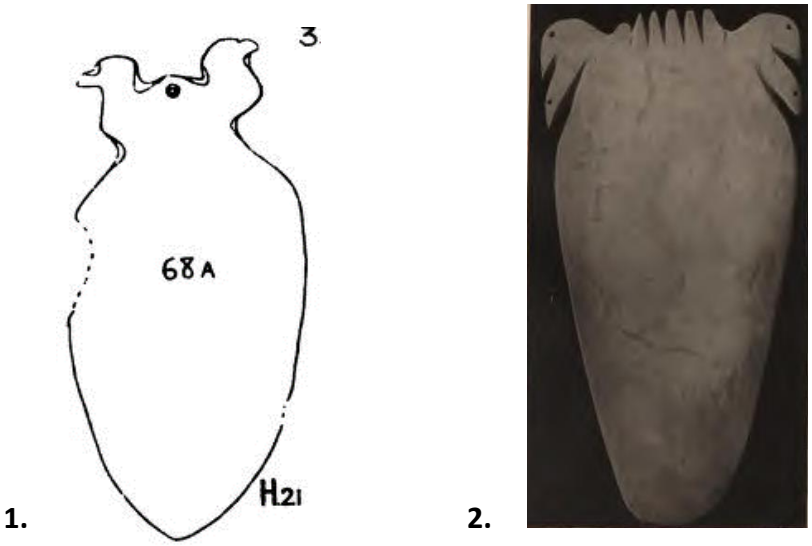
The space below the bird heads on other examples might represent something more closely connected to the bird. Palettes topped with bird motifs may, in fact, be depicting an adult bird incubating, with the large oval shaped palette beneath the bird representing the egg. It is possible that the birds atop palettes represented ostriches in particular, as their eggs have been found occasionally within Predynastic graves. Many examples of individually carved birds also clearly depict the long neck and characteristic shape of the ostrich. The communal nest system of the ostrich, coupled with ostrich hens and cocks constantly covering their eggs through alternating incubation at around 8 hours per session (Bertram 1992: 67-68; Williams 2013: 45-49), may have lead people to view ostriches as extremely attentive to their eggs. The motif may then represent one or more adult ostriches on top of an exaggerated egg, perhaps giving the palette, the material ground upon it, or the user, metaphysical parental protection. The relation between encasement within the egg and the tomb is seen in later periods of Egypt where the word of egg, '*swḏt'*, was a homonym for 'coffin' as well as 'shroud' (Faulkner 1988: 217). The application of pigment to the centre of the palette may intensify the egg imagery as the colour could have become the yolk of the egg. The user is then interacting with the core of the creature, the centre of the egg, much as they would with the centre of a fish or turtle-shaped palette.

Another interpretation of the bird motif may be the emergence of a hatchling bird from its egg. A bird above an oblong form may represent a hatchling, while the multiplying of this form into a 'double-bird' or 'two birds' motif may double the potency of this symbol. It is also

possible that it may represent the hatching of twin birds from the same shell. Such an occurrence is relatively rare, and may often lead to an early death of the hatchlings. The rarity of this occasion, however, is hard to calculate and even under modern conditions of ostrich farming there might not be a twin ostrich observed for 20 years or more (Brian Tomlin, personal communication, November 4th, 2014). It may be that the unusual and miraculous emergence and survival of two birds from the same egg is being commemorated on these palettes, perhaps a similar thought process to the Nuer beliefs concerning twin births (discussed below). One such palette, featuring central projections possibly representing feathers, was found alongside an ostrich egg in Grave b189 from El Amrah (Randall-MacIver & Mace 1902: 21), possibly emphasising the relationship with hatching or incubation. This palette in particular might actually represent four bird heads, perhaps painting a better picture of the whole nest, rather than the hatchlings of one egg. As most objects placed in Predynastic graves seem to have had some use in the living world, ostrich eggs may have been important tools in a cosmetic ritual.

Ostrich eggs are often found decorated, they have a long history of use as beads across the Faiyum and Western Desert, and were able to hold around a litre of fluid (Muir & Friedman 2011: 582-583). This capacity to hold liquid might have been exploited for storing materials to be used upon siltstone palettes. It is possible that the palette depicts the ingredients of the concoction ground, or ceremonially admixed upon its surface. The ostrich, when butchered, will release up to 10 kg of 'oil', a fatty liquid found between the skin and the flesh which has medicinal properties when applied to the skin (Williams 2013: 118). Regardless of whether the Predynastic Egyptians understood the way in which this oil could permeate the skin, if ostrich slaughter took place then there would have been a knowledge of this liquid which may have been used for its consistency alone. In this scenario, it may be that the palettes are dictating the use of ostrich oil and ostrich egg yolk in the formation of a cosmetic paste. Some form of oil would have been useful for mixing with malachite or red ochre, to create a consistent paste that might be applied to the face or body (Tassie 2014: 371). Other products might have been important, and certain palettes arguably depict erect feathers between the bird heads (see **Figure 20**). It has also been theorised that ostrich feathers might have been

seen in the Predynastic period as cosmological representations of air or breath, possibly anticipating the Dynastic feather of truth, related to the goddess 'Maat' (Hassan 2004: 789).



1. **2.**

Figure 20. Bird headed palettes, possibly representing multiple birds atop an egg: **1.** A palette from Semainah grave H21 (Petrie 1901: pl.xii, fig.33); **2.** A more elaborate palette, possibly depicting four bird heads from El Amrah grave b189, of Naqada IID1 date (Randall-MacIver & Mace 1902: pl.x, fig.9; Ashmolean No. E.3123; L 38.5 cm).

Supporting the idea that the bird motif may have included a symbolically blank area, as opposed to representing an egg, are examples with less egg-shaped areas below the bird. The following example from Mostagedda features either a horn motif or a double-bird motif. Unlike examples which merely depict the heads of the birds, the following has notches which arguably portray the feet of the birds (see **Figure 21**). These types of notches, due to their ambiguity, are also seen as the ears of a cattle, with the 'birds' as the horns above (Hendrickx 2002: 292-294). In this interpretation, the rhomboid palette below could be viewed as the face of the cattle, even though representing an entire palette as a face is unprecedented, the shape would still be uncharacteristically exaggerated when compared with the horns and ears. It seems more likely, when viewed against other examples, that these notches represent the feet of the birds above.

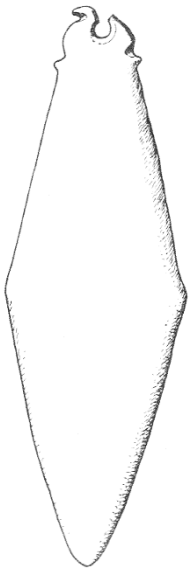


Figure 21. A Naqada I palette from Mostagedda grave 1825 (Brunton 1937: pl.xliii, fig.3; BM No. EA63066; H 77 cm).

This example is from Naqada I, so it may be viewed as an elaboration of zoomorphic style onto an existing plain form of palette, before animals were seen as inhabiting the whole of the object. If this was the case, then there may be seen certain transitions between the phases of palette development. It is possible that the idea of surmounting an otherwise functional object with an aesthetically pleasing motif may have developed from hair comb designs.

1. 

2. 

Figure 22. Combs showing how the element above the teeth may be decorated: **1.** A Badarian comb of hippopotamus ivory from Badari Grave 5130, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC9194; L 10 cm); **2.** A comb from Hu grave R128 demonstrating the positioning of the feet on a carving of a bird (Petrie 1901: pl.x, fig.2).

The notches below the bird on this comb from Hu show how this element may have been incorporated into a double-bird palette design (see **Figure 22**). The Badarian comb from Badari possibly depicts an early form of the double-bird motif, although it seems to only feature bird heads on an otherwise rounded form. Even if the intention in this example was not to depict this specific motif, combs were still created with the necessary functional aspect below and the fashionable area of display above. The idea of embellishing an object with toppings may have stemmed from the practice seen on ivory and bone combs, influencing representations on palettes. When artisans approached the task of elaborating their palettes with images that they found beautiful or culturally powerful, it is possible that they referred to pre-existing designs around them in the form of hair ornaments. Palettes may have been understood initially as having no symbolic value, then certain elements may have been understood as being additional to the form of the piece. It is hard to know which of these object types were decoratively embellished first, but as they are both connected to the rituals of display, it is possible that they developed in tandem.

The topping of palettes with birds might have stemmed from an understanding of the symbolic element as only encompassing one area of the palette. The common theme of representing an entire animal on the whole palette, such as with fish or turtles, perhaps developed in an unrelated way to double-bird palettes. The double-bird form, as a result, existed as one of the few exceptions to the artistic tradition of turning a palette into a single animal. The varieties in the form, such as the inconsistent appearance of 'feet' for the birds, add to the uncertainty in interpretation. Despite the unusual form of double-bird artefacts, it is clear that the symbolic repetition was of great importance.

With a few variations in style, it is useful to examine individual objects as well as the whole assemblage. One unusual example features the bird connected to the rest of the palette at an angle (see **Figure 23**). Below the long neck is a hump that may either be interpreted as the characteristic back of an ostrich, or as the outstretched wings of a bird in flight. The undecorated portion might be seen here as the land or water from which the bird takes off. There is another interesting variation upon the form of a bird, seen on the pottery vessel from Mesa'eed, Tomb 781.

1. **2.** **3.**

Figure 23. Artefacts showing the different ways in which birds might be represented: **1.** The palette from Grave B117 at Abadiyah (Petrie 1901: pl.xi, fig.12); **2.** The pot from Mesa'eed Tomb 781, photograph © MFA (mfa.org/collections/object/; MFA No. 13.3933; W 14.5 cm); **3.** A palette from grave 15 or 451 from Gerza (Petrie, Wainwright & Mackay 1912: pl.xii, fig.9).

The vessel from Mesa'eed appears to depict a decapitated bird, a form which is seen on a similar vessel in the Cairo Musem, 'JE71468'. Being so schematic and plain, these pots could arguably represent a completely different form, such as a type of nut, gourd or fruit, but given their overall similarity to more complete avian vessels, it is clear to see how at least some might have envisaged this form as a headless bird. If a 'double-bird' was understood as a being a singular creature, then perhaps the 'headless bird' was a similar mythical being. This form might also have been understood as a highly reduced and schematised version of a regular bird, where only a rounded hint of a head and the slightest protrusion of a tail remain as distinguishing features. The double-bird form found on palettes is not represented clearly on vessels, yet there can be seen parallels between pottery and palettes in terms of the headless bird motif. Two palettes from Gerza, graves 15 and 451, are depicted with the same drawing of what appears to be a headless bird (see **Figure 23**). Whether this idea existed as a schematic or intentionally deformed representation of a bird, it was clearly a distinct motif which might have had a symbolic meaning different to the single or double headed birds.

1.5.4 The cosmology of human and animal twins

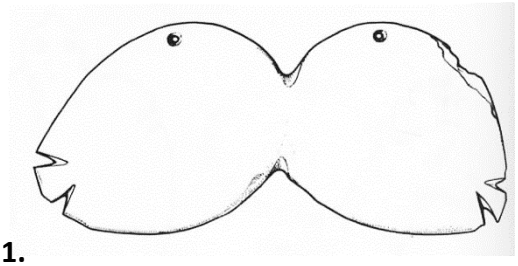
Perhaps the importance of the avian motif in Predynastic Egypt stemmed from the idea of their physical position above the world as relating to a cosmological position in the heavens. When the Nuer witness an event that challenges the prescribed, ordered cosmology, certain rituals are undertaken to restore order. For example, the birth of twins symbolically grounds a set of birds, who are of the 'upper' or the intermediary, and upon the death of the twins they are placed above ground or in trees returning them to the 'upper' (Burton 1974: 524-525). The actions perhaps associate birds, as being of the intermediary, with elements of the anomalous or unexplainable, and rings true in Predynastic cosmology. Regardless of whether a doubled bird had special significance, it should not be overlooked that the singular animal itself was also sometimes selected for some aesthetic or symbolic reason. An interesting series of fabric containers, presumably for water storage, can be found in the Agricultural Museum in Cairo. Simply described as "rural handicrafts" from Aswan, these Modern Era

artefacts depict two birds and a third with either an elaborately curved tail, or a set of antithetically opposed heads.

Figure 24. Three fabric containers with applied shells in the Agricultural Museum, Cairo. The central and right-hand objects depict birds, while the left-hand object is of a slightly different style (Author's photograph).

If designs such as these persist in North African rural areas, it is possible that there is a certain socio-cultural connection between birds and twinning. It is also possible that the symbol has outlived the symbolism through the replication of traditional designs without understanding their origin. In the case of the Nuer, the origin of their beliefs cannot be tracked back far enough to provide a connection with any Ancient Egyptian views on twins or birds. Although Milner (1969: 14) proposes an 'intuitive' connection between the bird and twins (the idea of identical wings in mutual support with the connecting, medial body) it should not be assumed that identifying the bird with twins is an essentialism for societies concerned with a binary cosmology. Several different animals may have sufficed in this respect; fish, that move with their bilaterally symmetrical fins akin to a bird's wings, can also be seen as doubled in Predynastic artwork (see **Figure 25**). The example from Ballas remains the only double fish with excavated provenance, although the Manchester Museum curates a similar example, except without drilled holes. The evidence for twinned fish, therefore, is limited. Interestingly it has been noted that fish, specifically salmon, has been related to twins among the Kwakiutl people of British Colombia (Lévi-Strauss 1962/1964: 81). In terms of how birds may not have been unique in respect to twins, the Nuer have many stories of twin births in relation to

several different animals and humans (Evans-Pritchard 1949: 242). Perhaps the act of twinning was as important as the species chosen, where any doubled form would act as a deterrent of anomalous forces. Twinning might also have acted as a signifier of generally dualistic elements of the cosmos, or any pair of things that were seen as important.



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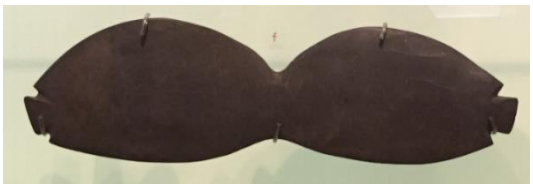


2.

Figure 25. Twin fish palettes: **1.** The palette from Ballas grave 345 (Crowfoot Payne 1993: fig.76, no.1845; Ashmolean No. 1895.845; W 14.6 cm); **2.** A similar example from the Manchester Museum, Accession No. 9500 (Author's own photograph).

Twinned animals may have symbolised the sudden miraculous, yet unnerving appearance of chaos into the ordered world. The chaotic nature in this respect might come simply from the unexpected nature of having two children at once. The focus on order and chaos observable within Pharaonic Egypt may have facilitated the continuation of these ideas. Death might have been viewed as a chaotic, or unexpected event that might require actions related to rebirth, restoring the equilibrium of life. In the Predynastic period, curative measures may have existed in the form of funerary rites; the ritualised use of cosmetic palettes for the deceased may have necessitated embellishment of a totemic or dual nature. Birds, and possibly fish, may have existed as intermediary, not between the upper and lower as with the Nuer, but between the living and the dead. These animals, and the artefacts associated with them, may have repaired the balance of life through certain ritual actions. The burial rites of the Nuer can involve the sacrifice of animals, while the ritual is altered in terms of how an animal is carved in two for the burial of an atypical individual (Burton 1974: 526). Perhaps burials in Predynastic Egypt functioned on a similar, but more fluid or complex level, whereby the degree to which an individual transgressed the natural order influenced the nature of burial.

This may then have led to a wide variety of burial types, with different animal bodies or animal objects appearing in graves in differing quantities to alleviate the effects of various transgressions. A nuanced necessity for different animal powers may have facilitated the use of hybridised icons in order to obtain a specific recipe of magic. The cleaving in two of an animal among the Nuer, might have had a more symbolic analogue in Predynastic Egypt, such as splitting a palette into two zoomorphs. Magical items in grave assemblages may have been used to restore order due to the nature of the uncommon individual, or perhaps apotropaically against ghouls who, according to several Nilotic tribes, sought to replace order with chaos through interference with the deceased (Howell & Lewis 1947: 157, 166). The living and the dead may have related to each other through animals, or other intermediary forms which might have cosmologically aligned with the binary opposition of life and death (Lewis-Williams & Pearce 2005: 150-152).

Special rites related to uncommon phenomenon may have been expressed through symbolic representation towards human twins in the same way that they were expressed towards deformity and dwarfism in Ancient Egypt (Dasen 2013: 45-46), the latter perhaps originating in the Early Dynastic period or earlier (van Haarlem 2009: 66; Ciałowicz 2011: 59-60). There is some evidence that sepulchral material culture in the Predynastic reflected the physical character of the individuals interred, such as distorted ceramics placed in the graves of physically deformed individuals, or miniature objects in the burials of children (Stevenson 2009c: 161). Deformity among the Nuer is often viewed in terms of a relationship between an animal; a deformed child at birth is said to have had an animal stamp its impression or likeness upon them (Evans-Pritchard 1949: 242-243). It is interesting to note how communal practices and cosmological beliefs might have expressed themselves in various ways. The pervasiveness of diametrically opposed forms might have existed as an artistic extension of a dual cosmology. The example of the Nuer shows how these types of beliefs could be expressed through group identity, as well as through the performing of certain ritual and sepulchral actions. It is not explicitly evident, however, that doubled artefacts specifically related to cosmological ideas.

It is hard to determine which interpretations of the double-bird form are more or less likely, especially when it is difficult to know whether a form actually depicts birds or not. The discussion, however, has shown how the duplication and layering of a form can be seen on many artefacts. The nature of this duality and hybridisation will be discussed in order to further grasp the origins, uses and understandings of these symbols.

1.6 Other duplications and hybridisation

The common themes of symmetry, multiplicity and hybridisation in the Predynastic corpus may show the inherent power of multi-zoomorphism and even a nascent worship of theriomorphic deities. One such deity; Aker, *ȝkr*, who was often depicted as two lions facing opposite directions in Dynastic Egypt, seems to have hieroglyphic origins in the Early Dynastic period, with potential artefactual evidence in the Predynastic period. The early hieroglyph of 'two connected fronts of lions', attested to the reign of Aha, may have been read as *ȝkr* (Regulski 2010: 116). The hieroglyphic symbol may also have related to the later idea of movement in *ḫns*, two directions, a word which was written with a similarly conjoined, yet bovine determinative (Faulkner 1988: 193). Much like the determinative for the Ancient Egyptian word *ḫns*, it could be extrapolated that other icons of doubled visage may have ideogrammatically expressed abstract notions. It is uncertain, however, to what extent these notions related to later deities of multiple forms.

There can also be seen an image of a doubled bull on the Hunter's palette. Although this object is unprovenanced, the animal is not featured alongside other hunted species, but it appears separate and apparently related to another symbolic pictogram. The symbol may have been used as part of the name for a cultic structure used as a corral for the animals being hunted on the palette (Patch 2011: 85). In this instance the symbol might have represented several animals tied or placed together, with the two bulls being a schematised short-hand-writing for 'many (or two) bulls'. It is also possible that this symbol may have had a metaphorical meaning in proto-hieroglyphic script, perhaps an early '*ḫns*', or it may have represented the name of a place or person. Interestingly, the centre of this mirrored hybrid

contains an image which is presumably the phallus and testes, yet it somewhat resembles a forward-facing bovid head.

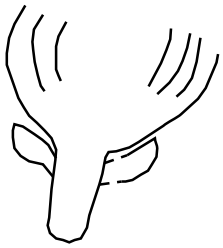
1.  **2.** 

Figure 26. A double-bull, possibly showing nested levels of symbolism: **1.** Detail from the 'hunters palette' from the British Museum (Patch 2011: 143, fig.38; BM No. EA20792; total W 66.5 cm); **2.** A tracing of the phallus area from the same image.

Perhaps the similarity to a bovid head layered the intended imagery. It might be possible that other, isolated depictions of the bovid head were to be understood as a simplified form of the doubled bull. The forward-facing head may have had a separate meaning, however, and might have added to the nested meaning of the 'glyph' on the Hunters palette. The meaning might have related to fertility, justifying the phallic shape. The bovine head is also similar in form to the flint object reportedly from the Naqada 'Royal Tomb', discussed by Hendrickx as having similarities to female forms (Hendrickx 2011 & 2002). Another example of 'nested' iconography is potentially visible on the baked clay cattle figurine from El Mahâsna, which appears to have another animal carved into its side (Ayrton & Loat 1911: 33 & pl.xxi, no. 5).

If Predynastic Egyptians already understood dual concepts, such as being able to move in two directions, or the idea that animals could exist in two states (wild and domestic), then the double-bull might have represented this idea. Perhaps the bull, or a doubled variant of it, was venerated as having the ability to traverse in unnatural and powerful ways. The duality of this bull might also have been understood as a more complex idea, rather than simply being able to physically move in more than one direction. For example, this idea of looking, moving and living in two directions might have related to some of the polar oppositions which would

become much more important in Dynastic Egypt; life and death, East and West, order and chaos, right and wrong. The double-bull also shows how species other than the bird can be found as being doubled. The symbolic meaning of a doubled image might have held much more power than the specific species depicted. Doubled motifs could show an early, complex belief in multiplicity and unnatural contradictions as being related to the divine. Objects may have been related in some way to the idea of being able to move in *ḫns*; the symbol may have been an icon of a deity which could move in two directions, or the object may have allowed the user to move in such a way metaphorically. The physically carved repetition and inversion of animals can be seen on many Predynastic objects, making it clearly an important motif, either magically or aesthetically. Another, related instance of duality and zoomorphism can be seen on a finger ring from Naqada Grave 1480. The ring may depict two lions which are connected at the feet, so that they are wrapped around the wearer's finger or toe in an embrace.

Figure 27. A bone ring, possibly depicting two lions, from Naqada grave 1480 of Naqada IIA date (Crowfoot Payne 1993: fig.74, no.1804; Ashmolean No. 1895.912; W 0.4 cm).

The two animals are connected in an unnatural way, with one as the reflection of the other. Perhaps the way in which these two would have moved together might have conjured another complex idea of supernatural dual mobility. Initially the ring appears to depict two heads facing inwards, with the tails on the opposite side, but perhaps in another case of layered meaning, the tails might be interpreted as two bird heads or horns. The double-bird motif which might have been understood from this ring, would have been a potent symbol owing to its frequent appearance in the Predynastic corpus of artwork. This symbol might

have also been related to the 'hero' motif, as seen on the Gebel el-Arak knife handle, where a man holds off two felines on either side as a symbol of strength.

1.6.1 A hybrid interpretation of the double-bird form

If double-bird heads might be seen as extra elements on a hybridised form, then this potentially offers a new interpretation of regular double-bird artefacts. The bird heads may be seen in a similar way to the two turtle hybrids, discussed below (Petrie & Quibell 1896: pl.xlvii, figs.11 & 12), which also feature antithetically facing heads at one end of the palette. Perhaps the bird examples, with their lack of turtle head and appendages, represent a variation upon this theme. The two bird heads may represent the appendages of another animal, such as the antenna of a beetle. In this case, examples without defined eyes for the bird heads may simply represent a non-hybridised scarab beetle, with its antenna and clypeus being the most recognisable parts of the creature. A possible example of this potentially non-bird headed motif can be seen within Grave B120 at Abadiyah (Petrie 1921: pl.lvi, fig.70).

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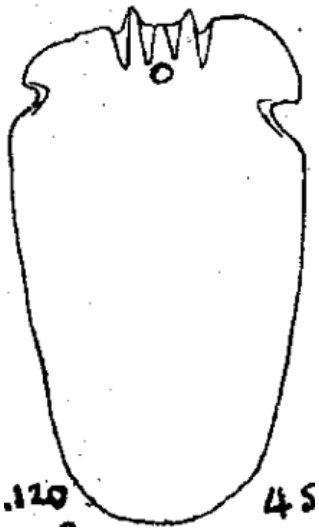
2. 

Figure 28. Palettes featuring protrusions between the two 'heads': **1.** A palette from Naqada grave T18 Photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC6037; H 20.4 cm); **2.** A palette from Grave B120 at Abadiyah (Petrie 1921: pl.lvi, fig.70; Ashmolean No. E.3124; L 26.4 cm).

Modern interpretations of such palettes focus on the visible bird heads, yet it is possible that the limbs of a different creature were being substituted, in the same way that cattle horns seem to have been substituted with bird heads (Hendrickx 2002: 289-292). If avian elements were an abstraction upon a different form, then this form has been masked by the substituting, or hybridisation of bird heads. This interpretation might help to explain the seemingly extraneous pointed or flat elements often present between the two heads. As it is unclear how Predynastic Egyptians divided their world, there may not have been any distinction made between 'insect' and 'animal', meaning that any creature with perceived special attributes may have been a potential candidate for decoration. There is some slight evidence for some form of use, or at least an interest in the dung beetle in the Predynastic period at Abadiyah and Hu. Within graves there have been found jars which contained several thousands of beetle specimens, two of which were found in the same cemetery as the more scarab-like palette above (Petrie 1901: 33-35). Beetles were certainly known by some, and placed in large quantities into these graves, perhaps a testament to their importance in the

mortuary routine. The ‘scarab’ palette, may even have been used to grind these scarabs to extract pigment, unguent or medicine. The beetles might then have been placed in graves as the product for the palettes, much in the same way that malachite and galena have been found in graves. Unfortunately, as the ‘body’ of this palette form is undecorated, it becomes impossible to pinpoint which, if any creature is intended, other than the more obvious avian heads.

1.7 Hybridisation and the nature of the cosmos

Huyge suggests that the combination of more than one animal into a hybrid may show that both animals had similar, or complementary symbolic beliefs attributed to them (Huyge 2004: 830). Through depicting unrealistic animals, artisans transcended from merely depicting the world around them; the unseen mythological beings that existed within stories were reified through their depiction. The potential existences of these hybrids in the world may also have been justified through their depiction alongside more common animals. There are 148 examples in the database which seem to include hybrid forms including double-bird forms. Only 2 of these objects, however, clearly feature more than one species of animal on the same object. These objects are the two palettes from Naqada, Grave 271 and 1738 which will be discussed below.

1.7.1 A palette from Naqada Grave 271: A case-study

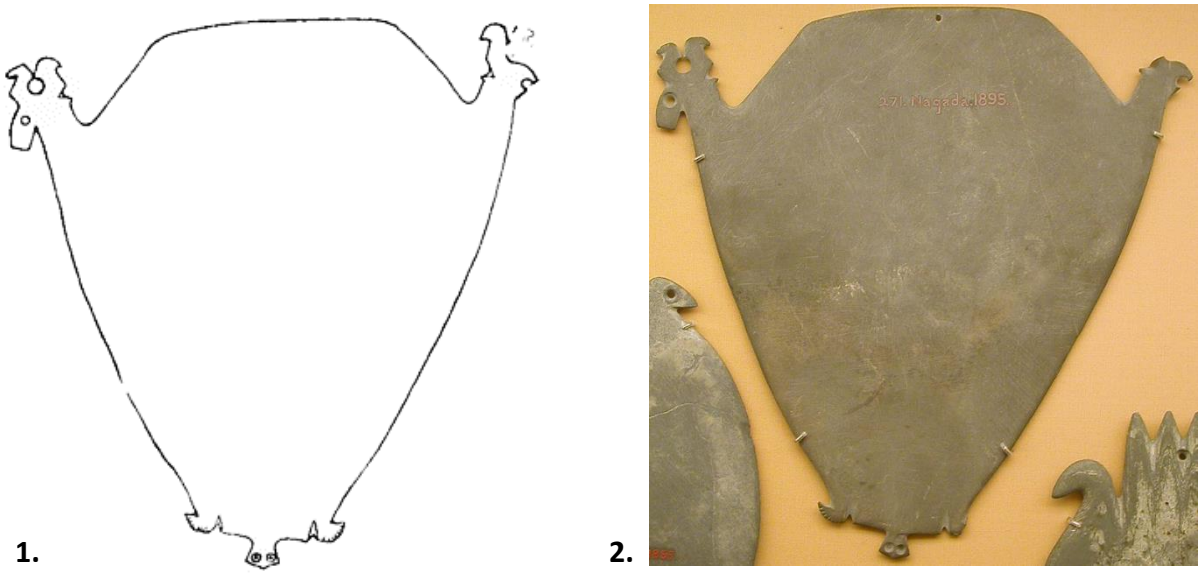


Figure 29. A drawing and a photograph of the hybrid palette from Naqada. The drawing shows elements which have since broken, while the photograph shows the drilled hole not present on the drawing: **1.** The palette found in Naqada grave 271, of Naqada IIB date (Petrie & Quibell 1896: pl.xlvii, fig.11; Ashmolean No. 1895.841; L 20.5 cm); **2.** A photograph of the same palette, (© Juan de la Torre & Teresa Soria at: www.egiptomania.com).

The palette from Grave 271 at Naqada, of Naqada IIB date, could be described as predominately testudinian, owing to its general shape and the presence of a small turtle head and feet at one end (see **Figure 29**). It does, however, feature two large mammalian heads, which are probably antelopes (Patch 2011: 60), but could also be seen as aurochs (Patch 2011: 222), gazelles or rams. Both heads, positioned at the opposite end of the turtle head, might have taken the place of the turtle's hind legs, creating a mythical, unrealistic animal. The turtle may have appeared anatomically complete with the head, two front legs, embellished hind legs and potentially a cord used for suspension simulating a tail on the opposite side to the head. The importance of this hybridised creature is unknown, but it is possible that the

depiction of the creature may represent a potent wild force of chaos (Hendrickx 2011: 80) that is overcome or controlled symbolically and ritually through the user's actions.

Creating, depicting and categorising the unknown or powerful beast may have been a means of appeasing it, and making it more 'domestic'. If the palette intends to represent not one hybrid, but several individual animals together, then this may have enhanced the value, beauty or the magical power of the object. The symmetry, duality and multiplicity of the animal figures are further enhanced when it is considered that the horns of the mammals potentially depict the 'double-bird' motif. Presuming that the damaged head was initially identical in form to the complete head, there are four birds present atop the heads of the mammals. This palette could then be viewed hierarchically, branching out like a tree; a single large turtle at one end, followed by two smaller animals, ending in four even smaller birds. The palette may be representing a schematised classification of life, separating and ordering the reptilian, mammalian and avian classes. It is possible that the classes are arranged according to their ecological and physical location; the turtle may be oriented at the bottom, representing its position in the water, above the turtle are the land mammals on earth, and atop them are the birds in the sky. Patch sees a similar but unprovenanced example as reflecting the perceived division between the Nile Valley and the desert environments (Patch 2011: 60). The different environs of the known world could be schematised and encapsulated within an animal indicative of that area. It has also been suggested of the Narmer palette that the registers are organised as representing the perceived vertical strata of the cosmos; heaven, earth and the underworld (O'Connor 2011: 152). Even if a palette did not have carved lines demarcating separate registers, the separate icons would have been unpicked and interpreted by the onlooker. The juxtaposition of ecologically different or contradictory animals can be seen amongst the artwork and myths of certain North American peoples, where the hybridised creature acts as a 'mediator' (Lévi-Strauss 1975/1982: 120-121). Rather than simply being related ecologically, each species may have had complementary or identical symbolic beliefs attributed to them (Huyge 2004: 830).

The use of the palette from Naqada grave 271 may have required specialist knowledge to ensure that the correct orientation was achieved. Perhaps suspending the object from a height allowed enough room for it to rotate when blown by the wind or spun around intentionally. In this instance the onlooker would be able to view and access both sides easily. Importance may have been placed on the correct orientation of the object at specific times or during certain activities. For example, one side may have been used exclusively for the grinding of galena, while the other was used for malachite, meaning the owner would know the difference between the sides. If it was used as an aid to 'story telling' for example, the owner could turn the palette to the relevant animal at different points in the story. If the palette were to be spun around, or flipped onto a suitable surface, the resulting orientation might have been used for divination. Compounding this issue is the fact that the motif of turtle, mammals and birds is then repeated on the opposite face, making them almost identical. This is evidenced by the fact that the gazelle or ram heads were perforated on both sides for eye inlays, as well as the fact that the palette was used on both faces (Crowfoot Payne 1993: 222). Although the palette was certainly used on both faces, it was found in the grave with malachite on one side (Petrie & Quibell 1896: 21). Perhaps this was simply the last side to have been used, or just a result of placing the two items together into the grave.

Clearly importance was placed on the object being visible from both sides, but not necessarily at the same time. Even some rough, undecorated examples of palettes, whether used on both sides or not, seemed to have been reworked so that both sides were flat and visually appealing (c.f. Vermeersch, Van Neer & Hendrickx 2004: 237, 239). As several examples of palettes feature inlaid eyes on both faces, it could be argued that artisans aimed for a representation that could work more on a three-dimensional basis. It is possible that, as the palette had potential to be used on both sides, the object is simply two-dimensional when viewed from either side. The turtle's head on the palette from grave 271, however, only features hollows for inlaid eyes on one side. It could be that one side represented the water, land and sky, while the other simply the land and the sky. This may have represented a progression to the next stage in a ritualised usage of the item, or it may have mimicked a mythical or historical view on the change in relationship of these animals or the aspects of earth that they represented. The hybridisation of this palette, however, was likely irrelevant

to the turtle only having eyes on one side. Other examples of non-hybridised turtle palettes also have eyes only on one surface, and many do not have any eyes inscribed. Certain examples with eyes on one surface also have toes incised on both sides, such as the palette from Badari (The University of Cambridge Museum of Archaeology and Anthropology, 1924.946 A). This shows that the side without eyes was not left completely blank, the eyes were the only omitted details. A palette similar to the hybrid turtle palette, contemporaneously of Naqada IIB date and also from Naqada, features a turtle with large hind legs with perforations, possibly representing fish heads (Crowfoot Payne 1993: 222). Following the idea of ecological divisions, perhaps the fish were seen as somehow above the turtle, but the reverse may also be true depending on the indented orientation of the piece. These appendages may also be interpreted as two more turtle heads, looking out to the left and the right, rather than the main head which looks downwards, or possibly forwards.

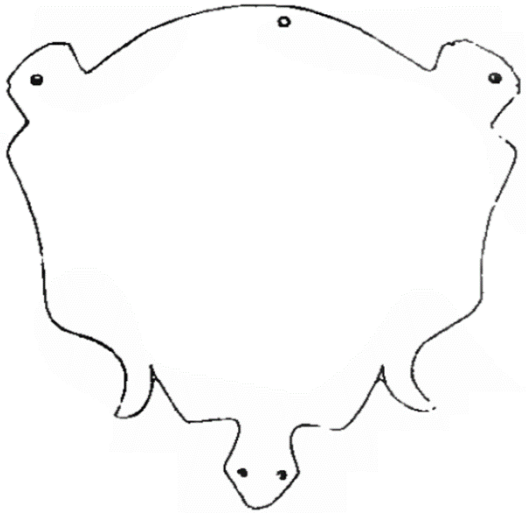
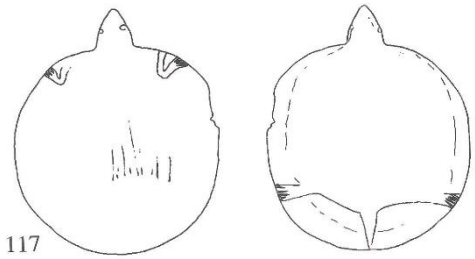


Figure 30. The turtle palette from Naqada grave 1738 of Naqada IIB date (Petrie & Quibell 1896: pl.xlvii, fig.12; Ashmolean No. 1895.843; W 17.7 cm).

Despite the different form of the turtle's head and legs, the two palettes are very similar in what they may have symbolised. The palette from grave 1738 also has perforated eyes on these symmetrical heads on both faces of the object. The turtle head, as with the previous example, features eyes on only one side, and the piece as a whole was used on both faces

(Crowfoot Payne 1993: 222). However, the idea of the three geo-ecological spaces of water, earth and sky are slightly different on this example. There are only three animals depicted in total, which could show a different idea behind this object, or could give weight to the view that the gazelle or rams on the analogous palette, from grave 271, are merely horned without birds on their heads. The palette from grave 1738 may represent a different journey, or relationship, centred mainly in the aquatic world, perhaps offering an adjacent, but not opposing symbolism to the palette from grave 271.

In either example, it seems as though the turtle may have been the single vessel, intended to be viewed in isolation, atop of which are carried animals of multiplicity and duality. It is also possible that the turtle may have been viewed in a different three-dimensional plane to the double animals, in as much as the turtle has two eyes present on one face, facing upwards, while the other animals have their two eyes on either side of the object as they are depicted in profile. This would have given the animals in profile two sides of their face, while the turtles would have a top and bottom. There must have been importance placed on the completion of the form of each animal. All of the heads were 'complete', in as much as they all have the correct number of eyes. Perhaps it would have been unnatural or improper to have the piece identical on both surfaces, which would have given the turtle a total of four eyes. The artisan must have viewed both faces of the object as forming part of a continuous whole. The owner may have differentiated between the shell and the underbelly of the turtle while using the palette. An example of a palette from Grave 19 at Gerza shows how the nature of the underside and the topside of an animal may be clearly depicted.



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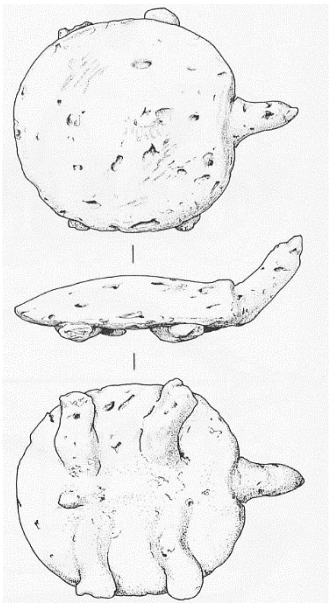

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Figure 31. Turtle-shaped objects demonstrating the ways in which the underside and shell may be depicted: **1.** A turtle palette from Grave 19 at Gerza (Stevenson 2009b: App.F, Cat. 117); **2.** A grey figurine from Grave B83 at Abadiyah, of Naqada IIB date (Crowfoot Payne 1993: fig.15, no.68; Ashmolean Nos. E.1068 & 1063; L 15.3 cm).

The palette from Gerza shows the potential for stone palettes to depict animals in a more three-dimensional way. In this respect, it can be seen as being related to the clay figurine from Abadiyah (see **Figure 31**). On these examples the shell of the animal is present and impacts upon the depiction of the appendages. The palette from Gerza shows the lower appendages and the tail as being underneath the shell of the turtle, but unlike the figurine from Abadiyah, the upper appendages are resting above the shell. The nature of arms extending outwards and being visible from above perhaps reflects the arms of softshell turtles which might often be seen in front of the shell while crawling. These arms, however, bend forwards at a steep angle, unlike the more realistic depiction on the figurine from Abadiyah. The unnatural, forward angle of these appendages might even afford a more anthropomorphic interpretation. The palette from Gerza may represent another testudinian hybrid form. This palette, much like the hybrid examples from Naqada, shows a differentiation between the overhead and underside of the animal, as well as some disconnect between the upper and lower half. If the hybrid palettes from Naqada were

viewed in the same way as this example from Gerza, then the user would have envisaged the existence of a shell and an underbelly of the form.

1.7.2 Objects as hybrids: A bead from Mostagedda Grave 1208

One example of a Badarian bead from Mostagedda Grave 1208, made of chrysoprase (a green variety of the mineral chalcedony), might also hint at an early use of hybridisation. The form of this bead can be seen as representing a hippopotamus, although it has some rather strange features. The bead has a nodule on its back, and seems to only have two feet, despite the animal being represented from head to tail. The protrusion on its back has been viewed by Horn (2014) as an attempt by the artisan to emulate hippopotamus form vessels, such as the ivory example from Mostagedda Grave 3522. The added notch at the top may have represented a stopper, and the idea that green malachite was stored or processed within this type of vessel may have been conveyed symbolically through the choice of green chrysoprase (Horn 2014: 60).

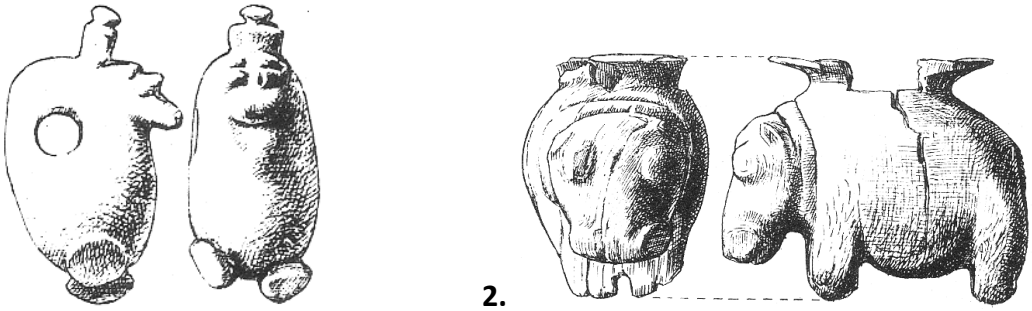


Figure 32. A hippopotamus bead which might represent another object, such as a hippopotamus form vessel: **1.** The chrysoprase hippopotamus bead from Mostagedda Grave 1208, from the Badarian period (Brunton 1937: pl.xxxix, fig.21A2; BM No. EA62167; L 3.09 cm); **2.** The ivory vessel from Mostagedda Grave 3522, also of Badarian date (Brunton 1937: pl.xxiv, fig.33; BM No. EA63057; L 7.5 cm).

It is possible that all four legs of this creature are, in fact, suggested by the use of the central perforation. Much like the beads from Badari Grave 5740 (Brunton & Caton-Thompson 1928: pl.xxiv, fig.15) or Matmar Grave 5108 (Brunton 1948: pl.xv, fig.1), the front and hind legs may have been partitioned by the use of the hole. The two stumps seem rather oddly shaped to represent its feet, and the whole body would be seen as extremely tall. Furthermore, the tail on the back of the object terminates high up, by the suspension hole (Horn 2014: 48, fig.2). The bottom of this bead might then have represented something upon which the hippopotamus was standing. As the object has already been viewed as representing an amuletic version of another artefact, the lower section, below the suspension hole, might also be viewed as a second object. The 'double-bird' comb, also of the Badarian period, from Grave 5130 at Badari, features two notches on top of a rounded form. Arguably, this form might relate to the lower half of the bead from Grave 1208. Viewing this object as a hybrid of various animals or objects would imply the artisan had similar intentions to those who created the hybrid palettes of Naqada IIB date.

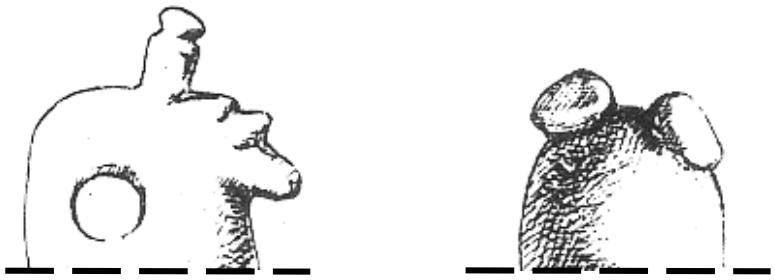


Figure 33. A theoretical division between elements of the bead from Mostagedda Grave 1208 (after Brunton 1937: pl.xxxix, fig.21A2).

This bead might then have represented two antithetically facing bird heads, or a palette with the double-bird motif, as well as a hippopotamus, or hippopotamus-form vessel, perhaps encapsulating the two major components of the malachite processing ritual; the palette and the vessel. One fault in this interpretation, however, is the lack of double-bird palettes from Badarian contexts. The bead perhaps was only intended to be viewed from the front or from the back, making any more feet superfluous, and perhaps difficult to render in the material. Regardless of the potential avian interpretation, this bead at least shows the way in which zoomorphs may have been augmented to represent non-natural forms. The amuletic nature of this bead might also help understand how such unnatural forms became synonymous with prophylactic magic, or cultural identifiers.

1.7.3 Discussion

Viewing these palettes as complete animals, might show how the form may have been viewed as an entire mythical creature. If these depictions were intending to portray hybrid animals that were believed to have existed, there remains the questions as to where one might have encountered the animal in the wild. The beast may have transgressed geophysical boundaries to exist in several ecological zones, using terrestrial, aerial and aquatic methods of

transportation. The use of hybridisation or symmetry in mythology, or by analogy, may have given humans the power to metamorphose, as well as travel into supernatural and extra-terrestrial worlds (Baldick 2000: 37). This power might have been used as a form of personal magic. The use of multiple animals on palettes might have facilitated the transfer of protective or enhancing powers onto the cosmetic products of the palette. The application of these cosmetics onto a human form might then have allowed the wearer to assume the qualities or even the visage of the various animals depicted on the palette. The nature of the hybrid animal can be seen on items of personal adornment, as well as stone palettes.

1.8 Multiplicity through assemblage

Zoomorphic objects, as well as more plain forms, can be seen in excavated contexts as being related to multiplicity, duality and assemblage within the grave. There are several instances of identical or similar objects found within the same context, such as three similar bird amulets found within Naqada grave 1781 (Petrie Nos. UC5664, UC5665 & UC5666); two or three double-bird palettes with stems and possibly two ivory bird amulets from Matmar Grave 3123 (Brunton 1948: 16); two single bird palettes with stems from Grave 2644 (Brunton 1948: 13); three unusual amulets from Badari Grave 3759 (Brunton & Caton-Thompson 1928: pl.liii, fig.49); as well as others (see the database for more). One notable example is Grave B101 at Abadiyah, which contained a hippopotamus siltstone palette, two hippopotamus limestone amulets, and three clay hippopotamus figurines (Petrie 1901: 33). Here, there could have been importance placed on the specific numbering of these groups, whereby it was symbolically pertinent to have one palette, two amulets and three figurines (see **Figure 34**). The disturbed nature of this burial (Petrie 1901: 33), however, means it is possible that there were more of these objects originally, but were robbed or removed in antiquity. Perhaps, in this example, the owner wished to have as many artefacts related to the hippopotamus as possible, regardless of the specific number, because of a strong personal, spiritual or cultural affiliation with the animal.

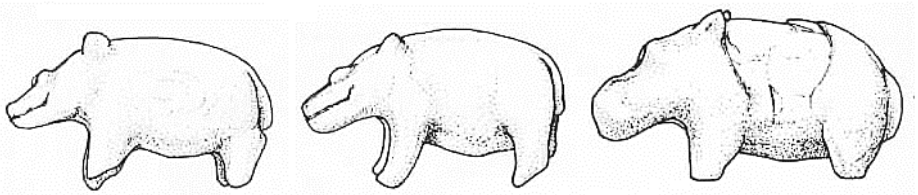


Figure 34. The three hippopotamus figurines made from clay with haematite coatings, excavated from the Naqada IIA Grave B101 at Abadiyah: **1.** (Crowfoot Payne 1993: fig.14, no.53; Ashmolean No. E.948; L 5.3 cm); **2.** (Crowfoot Payne 1993: fig.14, no.54; Ashmolean No. E.949; L 5.1 cm); **3.** (Crowfoot Payne 1993: fig.14, no.55; Ashmolean No. E.947; L 4.2 cm).

Assemblages of amuletic artefacts are also sometimes found within pots, such as the five pendants from pot 3284 and eight pendants from pot 3165 (Brunton & Caton-Thompson 1928: 59), or basketry, such as the undisturbed grave from HK43 at Hierakonpolis (Friedman 2003: 18-19). In these instances it can be seen that the multiplication of objects resonated with some aspect of sepulchral organisation, or a cosmological/post-mortem belief. Objects may have been the possession of, and perhaps symbolically representative of, different members of the deceased's family or culture group (Wengrow 2006: 70). The fact that these items are grouped in a grave could show the preservation of the group, or the reunification of the constituent fragments at the time of deposition. There can be seen other examples of objects which might show that the individual artefact was itself internally divided post-creation of the object.

In the Badarian period, there can be seen two examples from Mostagedda, one of clay from Grave 494 (Brunton 1937: pl. xxiv, fig. 31) and one of limestone from Grave 1872 (Brunton 1937: pl. xlii, fig. 33), of female figurines broken into several pieces within the grave. Although the limestone example had been cut by a later Roman burial (Brunton 1937: 89), the clay figurine was found in an undisturbed grave (Ucko 1968: 83). The pieces of this figurine were scattered at the time of burial, with three parts near the head and knees, and one part behind the head (Brunton 1937: 36). If there existed a real practice of fragmenting a human figurine for interment, then the same may have occurred on zoomorphic artefacts. Although found in a disturbed burial, the hippopotamus vessel from Mostagedda (Brunton 1937: 42), for example, might have similarly been split intentionally for deposition. In these cases, the objectification of the human and animal body might have resulted in the division of an object into separate, yet connected pieces.

Although this practice might not necessarily have been restricted to the Badarian period, there is one more interesting figurine from Cemetery 3700 at Badari (Petrie No. UC9795a; H 6 cm). This rough clay figurine was created in two parts and then refitted with straw pegs, but the poor quality of the material makes it hard to interpret the form as anthropomorphic or

zoomorphic (Brunton & Caton-Thompson 1928: 61). The artisan responsible for this object may have created it with the intention of breaking it, as has been argued of other Neolithic/Chalcolithic figurines which were also sometimes internally joined with pegs (Chapman 2000: 70-79). The fact that the material of the Badarian figurine was 'poor quality', however, might possibly suggest that it had broken apart at some point, and the pegs may have simply been an easy means to rebuild the item.

The process of interring these identical or complementary items could imply a socio-economic importance placed on accumulation, or perhaps the existence of social practices related to the sharing and dividing of assemblages. Humans involved in this process might arguably have been socially 'enchained' to each other through the divided or reunited artefact (Chapman 2000: 27-29). Aspects of identity might be questioned, if certain humans might have associated themselves or others as figurines of humans or animals. The figure may have acted as a form of clan identifier, which would have united those humans affiliated with it.

The division of a figure, forming multiple sections might have mirrored Prehistoric practices related to the alteration and modification of human remains in the grave. Mortuary manipulation seems to have become a ritualised and normative action in the Predynastic period (Tamorri 2012). At the Final Neolithic site of Gebel Ramlah there can be seen several instances of mortuary manipulation which might be interpreted as the reunification of fragments. Four individuals at Gebel Ramlah had teeth reinserted into their skulls; two females had teeth rearranged within their jaws, one male was found with a tooth in his nasal cavity, while the fourth had eighteen of his own teeth placed within his right eye (Kobusiewicz *et al*. 2009: 151). Importance here is placed on the fragmented human body and how it may be reunified or modified in different ways. Perhaps the human body was objectified by the Ancient Egyptians at a certain point of decay, or simply whenever it was necessary for ritualised manipulation. In this instance, the living may have been merely 'fixing' the body so that all the pieces were reunified within the grave.

The idea that Neolithic communities in general may have impressed their social interactions upon everyday artefacts opens up the potential for this research in Egypt. It could be argued, however, that fragmentation should be best used on sites that are competently and completely excavated for a maximum understanding of the phenomenon in that local area. Unfortunately, as most Predynastic sites were excavated in a time when relatively uninteresting material would not be discussed in depth or even preserved, it becomes hard to apply fragmentation theory at such a minute level.

1.8.1 The human body as a vessel of cosmology

The fact that some Predynastic objects were separated internally into various forms shows how people would have understood a single form as having separate, connected elements. Coupled with the idea that certain palettes may have represented ideas of hierarchy and cosmos (discussed above), it is possible that the Egyptians viewed their own bodies, or at least artefacts associated with them, as similarly ordered. In Predynastic Egypt, possibly related to the mobility of people, the human body became a tool of outward display in life and in death (Wengrow 2006: 69-71). In order to unpick how a cosmological order may have been transferred onto the body, the most prevalent zoomorphic forms have been arranged by artefact type, and the relevant space on the body (see **Figure 35**). Owing to the visual nature of outwards display, the most common material for each artefact type has been provided.

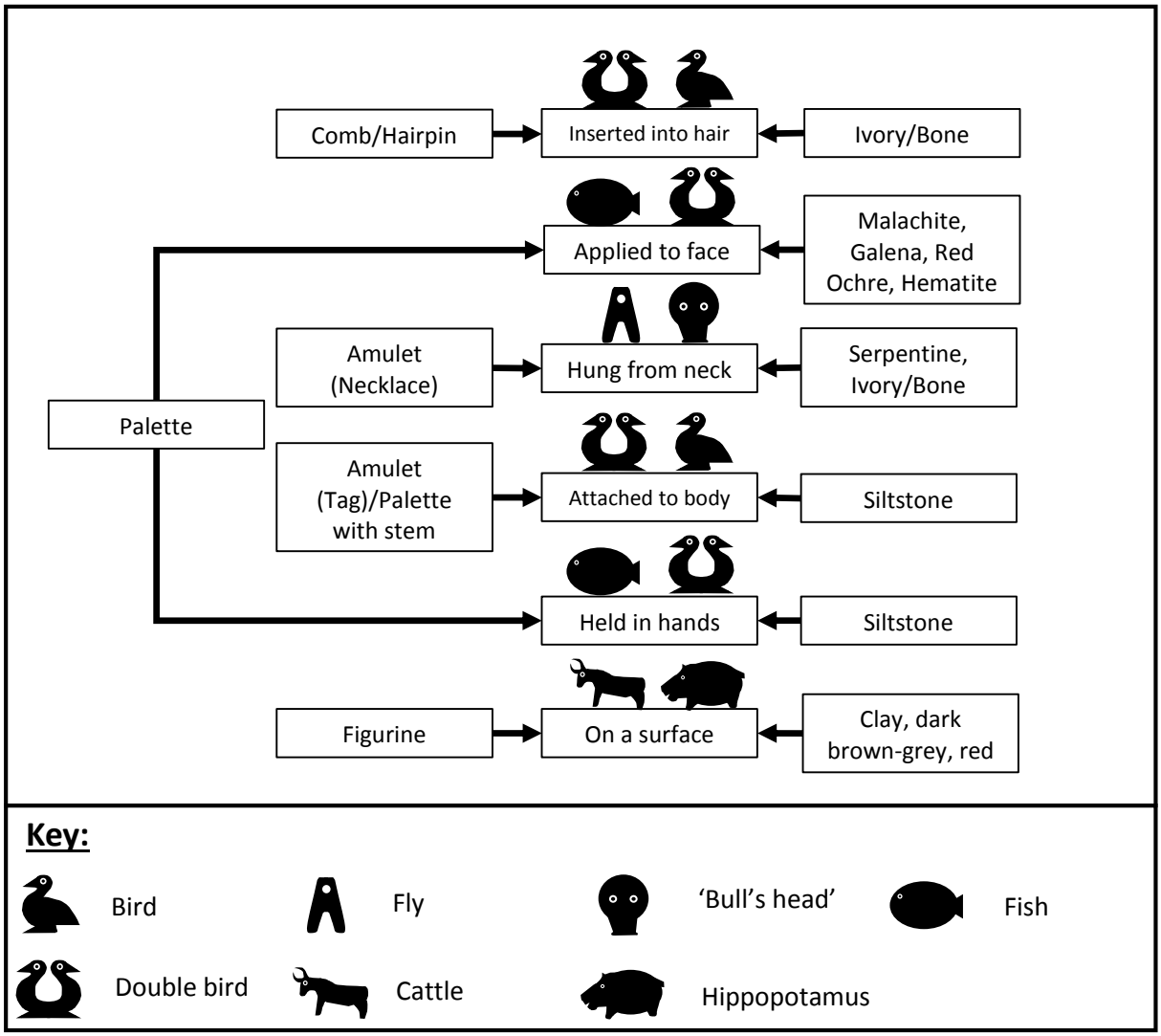


Figure 35. A graph illustrating the most common animals depicted on specific artefact types (the two most frequent for each), as well as how these artefacts might relate to the human body. The labels on the left describe the object type, note how 'Amulet' has been subdivided into 'Necklace' and 'Tag' in order to distinguish known use (amulets on a necklace) from unknown use ('tag' amulets may have attached anywhere on the body). The materials have also been included on the right. It must also be noted that materials ground upon palettes can be applied to the whole body, not only the face, but the appearance of palettes close to the head in many graves shows how facial products might have been the most symbolically significant.

The preference for certain animals to appear on specific artefact types would have reflected on the human body in terms of outwards display. The above graph shows how objects such as palettes and figurines do not inhabit a specific location in relation to the human body, at least as far as we can tell. The positioning of objects on the graph shows a potential spatial differentiation of forms, where figurines inhabit areas below a human body (placed flat on the ground during use), while hairpins and combs exist as the highest object (as they extend above the hair of the human head). Ideas of the cosmological 'upper' and 'lower' of the Nuer people might hint at why birds are underrepresented in figurine form, as they are of the upper. Also the appearance of doubled birds at the hands or on the body might coincide with notions of twins as intermediaries between the upper and the lower (discussed above). A theoretical dividing line may be drawn on the above figure, horizontally across from 'palette', where everything above is of the 'upper' and everything below of the 'lower', with piscine or avian palettes as the intermediator. Such a dividing line may have been perceived as existing along the human body's transverse plane, separating it into the 'upper' (head and torso), and 'lower' (pelvis and legs).

The human body, erect in life and crouched in death, may have been viewed as separated into cosmological strata or binary oppositions, where specific animal forms, materials or colours represented elements of the cosmos related to self. Although the animal forms do not conform completely to this model, it is interesting to note how at least some animals and materials may have been inherently connected to areas of the body. The use of ivory and bone predominantly in the hair and around the neck is interesting, as it might contrast with the more prolific use of siltstone elsewhere on the body (possibly the waist). This might hint at a perceived 'upper', or heavenly, quality of bone and ivory, perhaps as it derived directly from an animal (or animal-spirit), making it more appropriate to appear around the head. Siltstone, being from the desert, might have related more closely to the 'lower', earth, perhaps meaning it was important to have it appear on the lower half of the human body.

The structured nature of these formations could show a clear importance on the correct physical and spatial assemblage of relevant creatures. This could show an artistic custom

which respected a cosmological ordering of the world. Further examples of ordering may have occurred not only on the level of the artefact, but also on the level of groups of artefacts. One artefact may have existed, whether it was itself doubled or not, as part of a non-physically connected set of twins, for example. The above figure shows how connections between artefacts may have been made on the level of the human body. Groups are often found, as a nature of the archaeological record, in grave contexts. It is through these fairly formalised, and yet paradoxically individual, structured deposits that cosmological and social ideas of the multiple might have been displayed.

The breaking and making of groups within life and death, amongst artefacts as well as humans is an intriguing concept with many social ramifications. If each component artefact of a group belonged to separate people, perhaps they viewed themselves as also belonging to a human group, where the artefactual group exists as the cause or as a reflection of this union. The sharing or splitting of objects might have mirrored an ordered cosmology, with the grave acting as the vessel for displaying these iconographies. Viewing multiple zoomorphic objects within a single grave, might now be understood further as related more to ideas of social interactions. The human body in life and death might have been the vessel for enacting cosmological relationships between animals, materials and artefact types. It seems that the appearance of hybrid forms, as well as assemblages shows how animal forms were transformed beyond purely naturalistic depictions, into vessels through which social beliefs and processes might have been contained and displayed. The grouping of an artefact might, therefore, have further emphasised or strengthened connections between the deceased, social groups, place, animal, and every aspect of the cosmos.

Section 2: The journey beyond art

2.1 The further aggregation of animal forms

This section will explore the further uses of animal iconography in life and in death relating to status and elite control. The dataset gathered for this dissertation will be analysed in order to discuss and assess the processes affecting zoomorphic design. Discussions will also focus on how zoomorphic forms, and the symbols behind them, were possibly used by elites.

Humans in the Predynastic period were not simply relating to animals in terms of economic and agricultural purposes. It is likely that complex zoomorphic symbols gained significant power catalysing elite appropriation of concepts and forms. Furthermore, new meanings afforded to zoomorphic forms might be related to the greater diversity in object types seen in the late Predynastic and Early Dynastic periods, such as the appearance of zoomorphic gaming pieces, bier/bed legs and large animal statues. Predynastic and Dynastic art have traditionally been seen as dissimilar, due to the difference in scale of artistic display (Wengrow 2005: 100-101), as well as the high level of variation in Predynastic artwork. Disparities in art may be explained by the actions and influences of ruling elite groups. Many artisans may have been relocated to centres of wealth by the ruling elite, possibly removing them from their more rural lifestyle, and creating close associations between artwork and the wealth and power of elites (Davis 1989: 126). Sapping artistic potential from non-elite areas resulted in the simplification of certain objects, such as cosmetic palettes (Stevenson 2011: 70-71). This could potentially show that either zoomorphic design was always seen as symbolically unimportant and easily lost, that traditional symbolic views were fundamentally altered by the aggressive process of unification (Mosjov 2005: 11), or that the creation and consumption of representational artwork adapted without an underlying change in social beliefs.

Different animals seem to gain importance in the Late Predynastic period, such as the scorpion figurines which were found at Hierakonpolis, as well as the fly and 'bull's head' amulets which seem to grow in importance across sites such as Hu, Armant and Ballas (see MAP 7 & 8). Certain types of Predynastic artefacts seem to have been eliminated or radically altered in the 'Protodynastic' period. The functional, social or religious uses of an item may have been replaced by stylistically different objects derived from centrally agreed or imposed trends. The use of fly and 'bull's head' amulets appear to date mainly between Naqada IIC and IID (with continuation into the Early Dynastic period), and they may have acted as a more standardised replacement for zoomorphic combs or hairpins which ranged from Naqada I to IIC/D. Although functionally dissimilar, with one being worn in the hair and the other being attached to cord around the body, the use of such objects for outward display or magical protection on the body is arguably analogous. Favouring the smaller amulets may have reflected a need for associating oneself with many more socio-political groups at once due to increased population. The amulets were worn alongside many different types of beads around the neck, wrist, waist or possibly the head (Stevenson 2011: 70), where many different messages were potentially conveyed. The ways in which people publicly conveyed messages certainly would have changed in Naqada III, as most objects which were previously decorated became plain and standardised (Tassie 2014: 407-409).

The many small votive animals, such as those found at Tell el Farkha (Ciałowicz 2007) may highlight a more cultic and ritualised understanding of zoomorphic objects. Such votive offerings feature many human, animal and hybrid forms, some of which are unique and unattested earlier in the Predynastic period (Ciałowicz 2011). The process of changing material culture, which seems to have begun around early Naqada IIC (Flores 2003: 14-16), may have been accompanied by a change in religious or mythical beliefs. The increased sedentism and decreased hunting in the Predynastic period might also have affected human-animal relations. However, Broad religious or economic alterations may not have been the only factors contributing to changes in material culture and attitudes. Small scale social practices related to animals may have affected the way in which people depicted them. One example of this would be the evidence for captured and confined baboons and elephants at Hierakonpolis coupled with the abundant Late Predynastic to Early Dynastic period examples

of carved baboon figurines (Van Neer, Linseele & Friedman 2004: 111-112) and artistic depictions of elephants (Needler 1984: 357-358). Images of these animals possibly became more detailed or widely available as a result of the closeness to a confined animal an artist was afforded at Hierakonpolis. Also at Hierakonpolis, the burial of domestic species in graves had replaced the burial of wild species by Naqada III (Van Neer, Linseele & Friedman 2004: 116). Here, a new religious belief, or a shift in the relationship between human and animal, where the wild is tamed and made familiar (Friedman 2004: 159), could arguably have directly resulted in the formation of a new religious practice (Teeter 2011: 212) or new and different artistic styles. The minutia of human-animal interactions is hard, however, to fully understand or recreate. For instance, there are multiple ways in which certain animals may have either fled from, or welcomed their farms, cages or other anthropogenic constructs (Emel & Urbanik 2010: 205-206). Observed changes in material might not necessarily show a drastic change in belief or interactions, but an adaptation to the opportunity of using a new medium to convey an aspect of previously held beliefs.

When and where certain new forms and material types appear, as well as how they were received between different cultural phases and periods is difficult to determine accurately. It is hard to assume absolute and direct continuity between periods within the Predynastic, as the nature of these transitions are poorly understood (Flores 2003: 8). This means that objects were potentially reinterpreted and understood differently following various factors including a migration of people, an imposition of cultural beliefs or simply the passing of time. Different communities across the Nile may have had rich heritages of ancestral traditions, which might not have survived into the Dynastic periods. It is possible, however, that changes occurring towards the Dynastic Period illustrate a coalescing and formalising of beliefs already held by many. For example, at Hierakonpolis there can be seen an increase in the appearance of zoomorphic amulets in the Late Predynastic period, which may have been functionally replaced by zoomorphic figurines in the Early Dynastic period (Jórdeczka 2004: 461), showing how there may have been a continuous symbolic or religious belief underlying a seemingly discontinuous artefact type. The ways in which humans perceived animals may not have changed, but the evolution of society, possibly through the unification process, could have changed the ‘ecology of the image’ (Moorey 2001: 14). The following sections will consider

and analyse possible factors and processes that could underlie the ways in which human-animal interaction was manifest in the Predynastic period in order to establish such image ecologies.

2.2 The archaeology of animal and human taboo

Ideas of taboo and totemism have been used previously in an attempt to understand archaeological phenomena, for example the artwork and faunal remains of Göbekli Tepe, and Çatalhöyük (Russell 2012). These sites, feature pre-literate Neolithic cultures who enacted unknown rituals and customs related to the consumption and depiction of animals. For Çatalhöyük, Lewis-Williams and Pearce used elements of anthropological thought related to cosmology and animal-relations in order to explain the nature of animal iconographies at the site (Lewis-Willams & Pearce 2005: 103-122). Therefore, applying taboo and totem theories to Predynastic Egypt might offer a new perspective on their animal-related practices. The fact that taboo formation in Predynastic Egypt is not currently understood requires the use of theoretical anthropological approaches. In this case it may not give us concrete formulas, yet it offers a process of analysis with some potential conceptual and practical use. Understanding taboo in Predynastic Egypt is difficult due to the potentially ephemeral traces on the archaeological record such beliefs would have. Even in Pharaonic Egypt, with the presence of many written documents, the nature of taboo animals is not a clearly understood topic. In some artistic representations of Pharaonic Egypt it can also be seen that, due to the taboo nature of depicting certain actions, homonyms and homophones are used instead (Angenot 2015: 110-113). If such attitudes towards taboo existed among people of the Predynastic period, then zoomorphic artwork may only offer hard to unpick cryptic references to taboo.

2.2.1 Taboo and the relationships between human and animal

In the minds of farmers, it may have been true that they viewed household animals as a close extension of their personal self, while their livestock and farm animals were as familiar and valued as their human family. It might also be postulated that there does not necessarily need to be a line of division, where an individual's family, in their opinion, may have consisted of human and non-human animals. Evidencing this might be the practice of animal interment

within human cemeteries, and even within individual graves also containing humans. Mortuary organisation, with its trappings and comforts of the living world, may be seen as a permanent extension of how individuals viewed the act of sleeping. In this case, the act of burying animals alongside humans might have progressed out of a living practice of keeping certain animals as close as a family member. The sometimes communal arrangement of animals within human cemeteries could show how relationships involving animals worked on a level above the individual, at least in a mortuary context (Tassie 2014: 346). This means that the veneration of animal forms, or the association with animal clans could have been publicly understood. Freud theorised that systems of animism, which pertains to a spiritual or even dualistic cosmological ordering, may have derived from associating sleep with death (Freud 1950/2004: 88-89).

The compounding of animal symbols may have led to the formation of many layered cosmological and world views. The expression of these world views might have resulted in the formation of totemic clans. The Nuer people of Sudan (discussed above) have certain totemic views of social organisation and the cosmos, which are coupled with rules of taboo (Evans-Pritchard 1949: 228). Understanding if totemism, or the sometimes related idea of consumption taboo, was evident in Predynastic Egypt could potentially help explain certain phenomena, such as the frequency or complexity of animal images on artefacts. Zoomorphic artwork in the Predynastic period, and the ways in which it was used, has the potential to help us understand cultic or funerary practices as well as social relationships. It can be inferred that the importance an animal had in a ritual context, may have related to an importance placed upon the real animal by the Predynastic Egyptians. Although settlement evidence is relatively lacking for Predynastic Egypt, the sepulchral evidence seems to reveal how animals were incorporated and embodied into the cosmological and spiritual world of the Egyptians (Wengrow 2006: 69-71). Mortuary organisation, as well as the presence of amuletic or hybridised animal forms might potentially relate to ideas of totem and taboo. It has been discussed above how artistic forms may have resulted from connections to places, individual and group identities, channelled through the material and form of the object. The special relationship humans had with animals may have expressed itself in cosmologically-related social practices, such as the formation of consumption taboo.

Taboos have been variously viewed as systems derived from the functional restrictions on dangerous actions, as well as the basis for constructing group identities (Russell 2012: 28-29). Settled farmers exist within socio-spatial groups of decreasing familiarity, from 'home' to 'outside of their cultural zone' and it is this process of dividing the world that is seen as leading to similar classificatory groups. Tapper builds upon the theory, previously expressed by Leach (1966), that consumption taboos may inherently and congruently come into existence alongside the formation of human partnership taboos (Tapper 1994: 54). This means that parallels might be seen between the ways in which societies divided up the different aspects of their world into objects of varying taboo (see **Figure 36**). Human sexual taboos may be seen as having analogous, or mirrored, restrictions related to the consumption of flesh, for example, incest, the act of fornicating with a sibling or close relative, may inhabit the same 'close to self' category of taboo that would inhibit the consumption of a family pet. The theory of relating human and animal taboo categories can be seen as an extension of Freudian principles laid out in '*Totem und Tabu*' (Freud 1913). Freud notes that totemism, related to the veneration of specific animals, is clearly related to laws of human marriage and sexual relations (Freud 1950/2004: 4-5). Freud's example of the Australian aborigines highlights the practice where groups may be organised in a system of 'clans' where sexual intercourse is considered incestuous between members of the same animal group (Freud 1950/2004: 7-8). Although not explicitly evident in Predynastic contexts, the formation of social groups along the Nile must have resulted from some form of social cohesion, perhaps cemented through the use of taboo and laws.

Leach's description of this perceived phenomenon also highlights the possibility of 'conscious' and 'unconscious' taboo (Leach 1966: 30-31), whereby certain actions are actively forbidden as a 'bad action', and others are simply not understood to be an action, whether good or bad. There are two optimum categories of relationships, 'normally edible' and 'marriage preference', which are not tabooed, and seem to exist within the perfect distance from self to permit socially acceptable interactions. How the two realms of taboo may have mirrored each other within a socio-spatial landscape, after the ideas of Leach and Tapper, are expressed below.

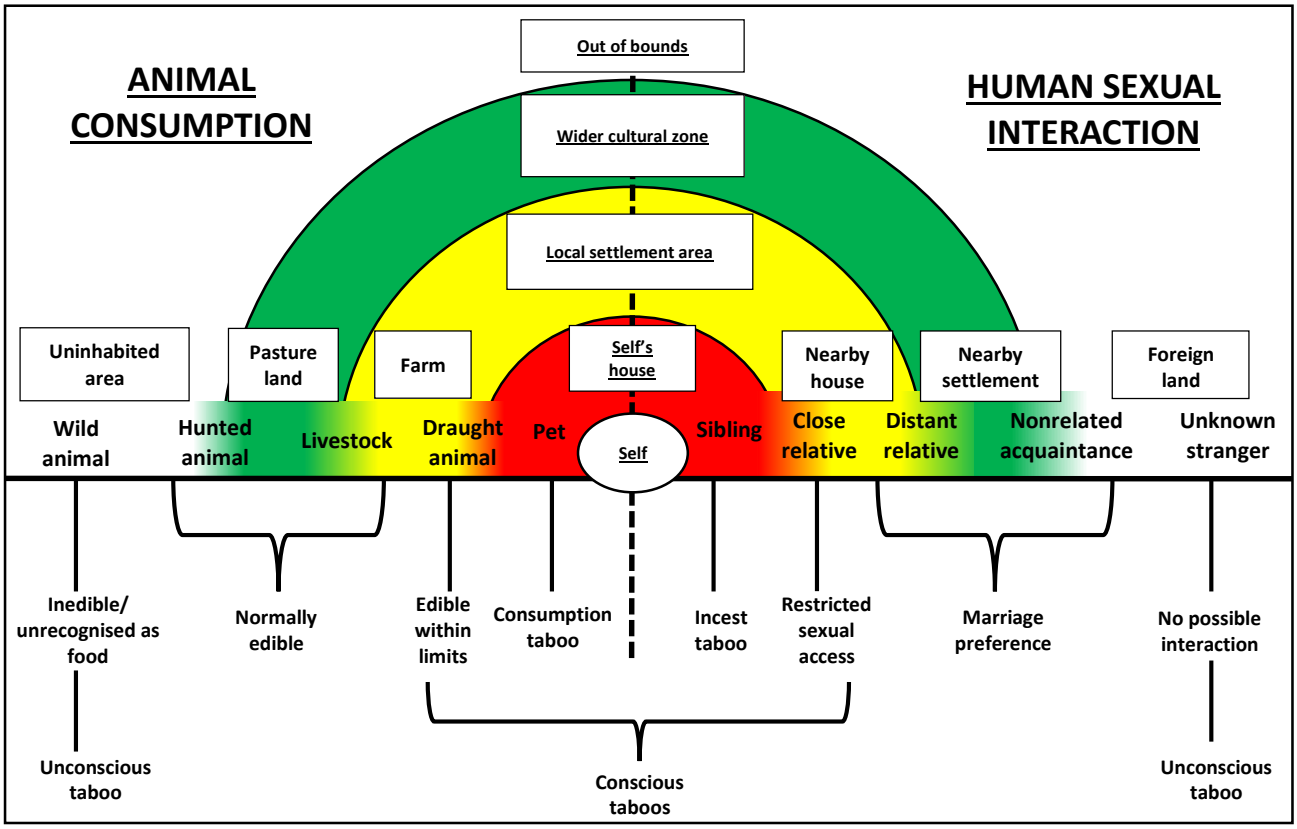


Figure 36. A chart expressing a combination of anthropological views in relation to taboo. The chart shows how different geo-social realms of human and animal familiarity might possibly have related to taboo formation. Individuals along the horizontal line represent humans and animals related to the self, radiating from more to less familiar. The square text boxes refer to places and zones these individuals might have inhabited. Below the horizontal line are the relevant taboo categories.

Some of the terminologies used in the chart, such as 'pet', are not necessarily relevant or evident in the Predynastic period. A 'pet', in terms of a study on taboo and human-animal relations, might simply be understood as an animal close to the individual, perhaps living in or around their settlement. Although there seems to have been the domestication of many animals in the Predynastic period, including early experiments with the wild cat at Hierakonpolis as early as Naqada IC-IIB (Van Neer *et al*. 2014), the modern understanding of a 'pet' should not be transferred back onto past communities. The individuals recognised, such as a 'close relative' intentionally inhabit a vague position between spatial areas, as the

true nature of where one might find a relative or a certain type of animal is incredibly diverse. For example, a hunted animal may take the form of a hippopotamus which may exist in an 'uninhabited area', but one might also hunt an ostrich found to be eating nearby vegetation in 'pasture land'. The positioning, therefore, should act as a relative guide, emphasising the relation to self in terms of familiarity, not specific geographical placements. It is the geographical placement of certain animals, as well as the reasons behind not eating them, which have been used to critique Leach's overall model and how certain species fit into it (Russell 2012: 30-31). It might also be noted that commensal creatures which cannot be placed into a single space, due to their boundary-crossing nature, might have been symbolically understood as transgressors or pests (Knight 2000: 15).

If the above model can be applied to Predynastic Egyptian cultures, then it is possible that they may have organised the human world along similar lines of division to the animal world. The connection between consumption, animals, mating and humans might also have worked on another level (see **Figure 37**). In most societies, there is a blanket restriction on mating with animals, as well as consumption of human flesh regardless of the relation to one's self. So it can be seen that in certain societies there will be a mirroring of the graduation and form of taboos expressed upon the interactions with both humans and animals.

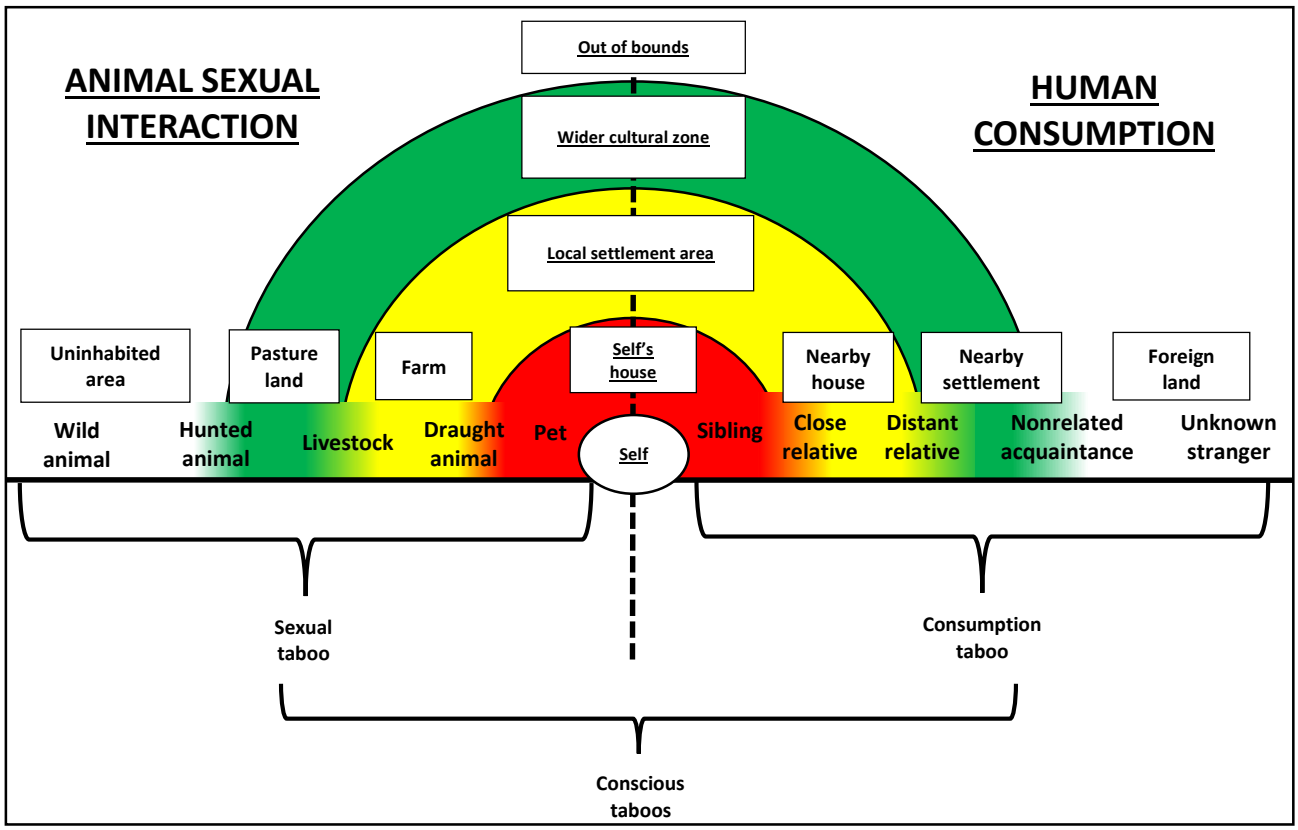


Figure 37. This chart expresses the outright restriction of animal sexual interactions and the consumption of human flesh seen in many cultures.

The intriguing aspect of this apparent relationship is the implication for understanding the ways in which farming societies may have viewed their animals. Unfortunately there is limited information on the ways in which Predynastic Egyptian households or farmsteads were organised. This means that it is not understood whether kinship ties were formed primarily through clan identification, blood lineages or another method. Social organisation would then impact upon how the Egyptians viewed their world in terms of what was and was not acceptable. Consumption taboo is also not well understood, but may be glimpsed through excavated food waste, potentially informing us about which animals were consumed and, thus, which were not. Another form of taboo may have existed in relation to the deposition of animal carcasses in the Predynastic period. For example, at Hierakonpolis there is evidence for the eating of pig, yet it is underrepresented in burial contexts (Van Neer, Linseele &

Friedman 2004: 123), perhaps implying that it was suitable for consumption, but unsuitable as a sort of offering in funerary feasts. In the Early Dynastic period, pig seemed to gain more economic importance, as their presence in the faunal record suggests that they outnumbered cattle, sheep and goat (Ikram 1995: 31). In later Egyptian periods, pig was usually omitted from the offering formula of meats and goods presented to deities or the deceased (Collier & Manley 1998: 37-39), yet it was still consumed by many of the population (Ikram 1995: 31). The workmen's village at Amarna, dating to around 1350-1330 BC, contained many pig bones, as well as evidence of pig butchery sites (Kemp 1984), yet there seems to have been the ritual harming and spearing of pigs, possibly related to their religious or socially taboo nature (Legge 2010). Disparities suggesting some form of taboo might also have existed in terms of artistic representations, whereby the visage of a certain species would be present on many objects, yet it might be underrepresented in the faunal remains (Russell 2012: 40-41). An example of this might be the frequent depictions of birds in the present database, often specifically recognisable as ostrich, yet ostrich bones are scarce in the Predynastic period, implying that they were not widely consumed (Muir & Friedman 2011: 583).

In terms of the commensal 'transgressors' of boundaries, there were a few instances of Predynastic individuals having consumed mice, as noticed by Grafton Elliot Smith at Nag el-Deir (Dawson 1924: 83). An unspecified amount of children were found with mice in their digestive tracts, leading to the speculation that this practice related to a later Egyptian spell for mothers and children (Marshall 2015). Although evidence for this practice is limited in Predynastic contexts, it is an idea which is pervasive enough to have survived in some form in modern Egypt and Nubia, where mice can be consumed medically (Azzam 2010: 190). Perhaps it was their very transitory and 'close' yet 'far from self' nature which inspired such curiosity or hinted at their powerful or remedial nature.

The importance of these beliefs and animal-human relationships is that these ideas may have become cemented in a period before settled farming, merely being passed on through tradition. Although, in the case of Merimde, any cosmological beliefs or social rules formed might not have passed on to subsequent occupants at Merimde due to a hiatus of occupation

and distinct shift in material culture between layers I and II (Tassie 2014: 205). Differences between personal views and practices may not have only been caused by temporal changes. A 'logistically mobile' hunter from Merimde, for example, may not have viewed their geo-cultural space as having the same spheres of familiarity as a sedentary farmer of the same period. As a culture, or an individual's zones of familiarity changed, due to a modification in economy, their ideas of taboo might also have been affected. Even if this statement is not true for consumption of animals, other social ideas or artistic and religious practices may have centred upon ideas of human interaction and cosmological relationships. It is possible that actions related to humans and animals were affected by the views that these actions were analogous to other relationships. The perceived relationship between hunting and human sexual relationships or gender differences, for example, has been proposed as part of the reason why hunting persisted after it was no longer essential for survival (Russell 2012: 159-161). This discussion shows that the above model is not so vague as to be entirely useless, as the mere sparking of questions related to the topics of economy, human-animal relationship and geo-cultural spaces serves to further the ways in which the source material may be analysed.

When dealing with the relationship between humans and animals it is possible to fall into the traps of anthropocentrism, ethnocentrism or essentialism, whereby it is assumed that all human cultures act in unique ways with animals, while unquestioningly using the western scientific tradition of viewing those humans as biological 'cousins' to the animals (Ingold 1994: 1). In this respect, it must be understood that there may not have been a unique connection between the human and animal worlds alone. With a multitude of possible planes of physical and metaphysical existence, it should not be assumed that the laws of taboo created for the human world were only reflected in animal consumption. For example, consumption taboos may have existed and seemingly mirrored the formula of taboo in the human world for certain plants and crops. In this instance, crops or fruits grown near to the house are 'normally edible', while certain flowers or weeds may be inedible, or require extra processing making them 'edible within limits'. Social taboos of language, interaction, dress and other actions may also potentially be broken down into corresponding categories ranging from the familiar to the unknown. Plants also clearly had some importance to the Predynastic Egyptians, with the

appearance of many botanical artistic motifs, the burial of organic matter in graves, as well as clay objects resembling fruits. For example, fig-shaped clay objects were found at Naqada (Petrie & Quibell 1896: 26), as well as garlic bulb and date-like objects excavated at Abydos (Hartung 2011: 472-476). In artistic elements, there are many examples of what might be seen as trees and plants, most notably the symbolic 'Naqada plant' (see Hendrickx & Eyckerman 2012: 44-51). These examples, as well as others, show how different aspects of nature were converted into artwork, and used for social interaction and the display of culture (Wengrow 2006: 99). In other words, animals may not necessarily have inhabited a special role, and human taboo formation may have been transposed upon other systems of taboo relating to many interlocking aspects of the physical and non-physical world.

2.3 The potential for totemic beliefs in the Predynastic period

Totemism is a system of thought and cosmological organisation centred mainly upon the formation of groups united by a kindred relationship usually to a spirit-animal, but also to other aspects of the cosmos, where societal laws and practices relate to totem-animals and totem-groups (Lang 1912/1994: 117-128). Totemic beliefs have been studied among North American and Australian cultures, but may also be found among peoples of Africa (Freud 1950/2004). Owing to the vast geographical, and sometimes temporal, differences between cultures of the world, totemism might be understood in different ways, for example it does not necessarily imply that a clan is descended from its totem species, and totemic thinking may have been used in relation to many animal symbols (Russell 2012: 24-26). Understanding possible totemism in the Predynastic period might shed light on how society was organised into different groups. The following discussion will, therefore, outline the ways in which totemic beliefs might have been made manifest through group identity. The elite appropriation of totemic identities might also have led to the representation of animals with more complex, religious and political concepts.

It has been noted, perhaps due to the veneration of zoomorphic deities, that Ancient Egyptian beliefs related to animals could potentially be related to a form of totemism (Lévi-Strauss 1962/1964: 17). The presence of zoomorphic deities in the Predynastic period, however, is not explicit (discussed below). Without a canon of religious zoomorphic artwork, other aspects of Predynastic culture may be examined in order to understand if totemic beliefs existed. The use of animal remains, and the consumption of animal symbols can be seen at many archaeological sites, and totemic studies might help us understand the ways in which kinship groups worked (Russell 2012: 26-27). The Predynastic Egyptians were certainly from an age of increased organisation and ordering of the world around them. Distinct artefact types and clothing styles would have differentiated certain Nilotic peoples from those who came from other areas of the Near East, Nile Valley and Africa. Increased craft specialisation would have also made distinct the different workers within Egypt. Wealth and power would have played an important role in social differences, with ‘elite’ burials being seen at many sites from the end of Naqada I to the start of Naqada II (Tassie 2014: 388-389). Despite broad

similarities in material remains, regional differences in sites within Egypt can also be seen as early as Naqada I (Patch 2011: 212). It would not have been uncommon, therefore, for the Egyptians to have thought in terms of grouping, ordering and different types of relationships that may have existed between or within groups. Within local areas, people would have organised themselves into even smaller groups, which may have defined their identity in life and in death. At Cemetery U at Abydos, as early as Naqada I, there can be seen the grouping of graves, which might have corresponded to family groups or clans (Hartung 2010: 107-108).

It is impossible to know how Predynastic Egyptians may have viewed ideas of cosmological ordering, but it is likely that many would have questioned their own place in the world, along with how they related to other creatures and 'living' material around them. The artefactual and artistic evidence shows us that certain animals can be placed together with certain other animals, for example, the use of turtles on hybridised palettes, the prevalence of twinned bird motifs, or the Late Predynastic assemblages of wild animals on elaborate palettes and knife handles (discussed below). Groups of zoomorphic and anthropomorphic artefacts have been found within Predynastic graves, bound with leather, for example human amulets bound at Naqada (Petrie & Quibell 1896: 29), or placed in boxes, as in the case of hippopotamus amulets originally encased in a basket at Badari (Brunton & Caton-Thompson 1928: 51). How these groups of animals and artefacts related to human relationships and connections to place has been discussed above. The combinations of animals, however, also extends to the hybridisation between humans and animals. In order for these sorts of 'mixed' iconography to mean anything, the symbols of humans and animals must have had their own unique importance and meanings separately. The combination of human and animal might imply an inherent desire to be related to the animal in some way (discussed below). Although certain groups of people in the Predynastic period may have related themselves to animals, the nature of this relationship is not well understood. It is possible that these beliefs extended to what we might call a widespread 'religious' worship, but it is hard to determine whether differences existed between socially or cosmologically pervasive icons and 'religious' ones.

The formation of relationships between organic or inorganic entities may have functionally explained the world around the Egyptians, as well as informed ritual activity (Layton 1997: 83-84). This leads to a rather functional and proto-scientific interpretation of Predynastic cosmology. Regardless of the ways in which certain aspects of the world were venerated, ideas may ultimately have stemmed from the need to explain the world logically. The symbols and ideas formed through this process may also have been used to justify elite power or laws (Layton 1997: 85-86), perhaps evidenced by the use of animal motifs on the Narmer Palette. For example, Narmer, who appears to be enacting his lawful and justified power over his enemies, can be seen wearing an animal tail and animal-headed amulets; the charging bull is possibly a representative of him, while the entire piece is surmounted by two large cattle-human hybrid heads on both sides. Zoomorphic and therianthropic artwork may have been used in this example to convey certain aspects of identity, power or control. The appearance of some of these icons outside of this context might then also point to similar sorts of ideas. For example, hairpins or combs which also depict a motif similar to the 'Bat' human-cattle head might have been understood as a cultural identifier, or as a symbol of power. The connection between animals, power, and human elites might have formed through the use of myth or magic, where it was reflected within the canon of symbolic artwork. The development of powerful animal spirits may have initially been used by individuals or groups of lower, non-elite status until appropriated and made exclusive by elites for the means of legitimising power or identifying themselves with specific groups. This idea might explain the decline in zoomorphic palettes in non-elite sites in the Late Predynastic period as political homogenisation developed (Stevenson 2011: 70-71). The elites may have, in a way, restricted the use of these powerful icons, redistributing the iconographic power to a select few only. Cosmetic palettes then lost their zoomorphic qualities in non-elite contexts, while expensive and labour-intensive ceremonial palettes feature glyphic extensions of zoomorphic icons.

The potentially ephemeral nature of animal veneration makes the phenomenon difficult to assess. If the trajectory of the society is used as evidence, however, it can be seen in the Navajo tribe of North America that certain work animals are treated in a manner not consistent with a Western idea of respect. Taking work animals who are no longer of use into unpopulated plains to die, as well as the apathy towards youths who torment animals, are

traits observed both in the post-hunter Navajo people (Reichard 1963: 143) as well as in some modern Egyptian villagers. Relationships between hunting societies and animals may have influenced later, domestic-era beliefs through continued symbolic understanding (cf. Williams 2010: 99-101) and the creation of origin stories (Harrod 2000: 105). The ways in which societies treat animals may be linked to their socio-religious backgrounds, creating the potential for prehistoric Egyptians to have felt strongly connected with the natural world in an analogous manor to totemism. Zoomorphic objects in this case, would then be artefacts from the liminal zone between the world of the living and the supernatural world of the animal-kin. The potential for a post-hunter-totemically structured Predynastic Egypt is intriguing but not explicitly evident.

2.3.1 Totemism as related to identity, society and political organisation

The focus on animals local to the Nile valley, seen throughout the Predynastic period, perhaps shows that individuals or groups wished to be protected from not only the unfamiliar beasts, but also unwelcome and unknown human outsiders. This identification with local animals may then strengthen the view that animal motifs acted as clan or cultural identifiers. There is the potential for humans to have valued their own 'clan' over others, as soon as differentiations arose. This is perhaps a fundamental, and utilitarian notion, if the 'clan' is viewed as an extension of one's family. It is possible that cosmological animal icons were intrinsically linked with identity and place, to the point where these images were not useful or important outside of Egypt. The plain, rectangular siltstone palettes of the Early Dynastic period were exported, or locally imitated, at various sites outside Egypt, across the Levant (Sowada 2000). Interestingly there is no demand for such goods prior to this period, and the stylistic traits of the palettes seem to show strong Egyptian influence specifically in the first half of the first Dynasty (Jacobs 1996: 127-128). The fact that earlier, zoomorphic palettes are not exported or mimicked outside of Egypt shows that there was no need for such items. This shows a very specific and localised phenomenon, whereby the symbolism of the animal was perhaps not as powerful on a large regional-basis. The exporting of the plain form of cosmetic palettes in

the Early Dynastic period could show that zoomorphic palettes were not socially relevant outside of Nilotic society. It has also been suggested, due to the relatively small-scale and temporally narrow nature of this trade, that the palettes were merely a product of contemporary tombs being robbed in the Early Dynastic period (Sowada 2000: 1533). The nature of regional trade and influence in the Predynastic period is not as well understood, and the lack of elite control may have made exporting zoomorphic palettes difficult pre-unification.

The associations formed between different elements of the universe may have extended into a metaphysical realm. Animals may have had command over supernatural elements in the minds of the Egyptians. When animals would act in ways that humans could not explain, there was perhaps an ascription to a supernatural force. For example, the way in which baboons howl at the sun rise, conjured the idea, explained in later Egyptian History, that they worshipped and ushered in the sun each day (Helck & Otto 1986: 73). There are also Dynastic Egyptian beliefs centred on the jackal as a guide for spirits, which may have derived from a common belief that following in the footprints of a jackal will lead you to water (Mojsov 2005: 19). The multitudinous behaviours and eccentricities of animal life may have captivated the Egyptians sufficiently to formulate explanatory stories and beliefs. Although it has been noted that ascribing animals with unearthly power in the ancient world is so common that it must have been instinctive (Roberts & Choe 1984: 109), the essentialism of this phenomenon should not be assumed. Without taking an essentialist view, it is still possible to theorise about the reasons for supernatural ascriptions, such as the idea that the perceived 'wildness' of an animal may have agitated the human mind as to catalyse reactionary elucidations (Mundkur 1994: 178). This means that the uncontrollable nature of an animal might have necessitated explanatory beliefs, mythical tales or ritual actions, effectively restoring order.

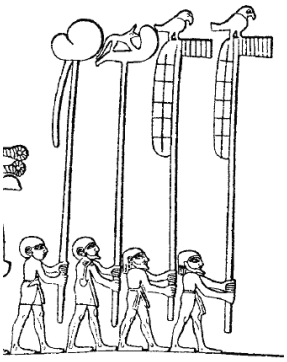
If animals were in fact believed to have had supernatural traits or powers, it is possible that further cosmological ordering did occur (Roberts & Choe 1984: 109). Some animals may have had close associations with certain people or powers, and some may have been seen as hierarchically more important than others. By the time of Narmer, there is clear value in

disseminating ideologies of superiority over 'the Other'. In a way, those who subscribe to the power of, and agree with the legitimacy of the animal icons of Egyptian kings would prevail. Perhaps ceremonial artefacts such as the Narmer Palette implied messages such as: 'all those who are opposed to, or are inferior to the might of the king's animal-spirits, will be defeated'. Images of bulls and lions appear more frequently in the Early Dynastic period, perhaps replacing animals such as ostriches or tortoises. These changes may have reflected a change in the types of totems Egyptians were affiliated with, where acts of war and union may have altered the totemic landscape of Egypt. In the example of royal power, images of the bull and lion (or sphinx) which are related to the king in later Egypt, may have superseded the animal-images related to inferior clans or elite powers. In this way, the taboo, or possibly enforced restrictions, of symbolic and artistic expression stemmed from the fear of external power, as well as the need to legitimise kingship (Baines 2007: 289-290). Alterations in animal-identities could be explained better if more zoomorphic objects are located in Lower Egypt, which might have been the original, totemic place of bulls and lions, perhaps evidenced by the wealth of cattle figurines from Merimde Beni-Salame. The lack of zoomorphic artefacts, however, leaves understanding the precise locations of animal-clans difficult.

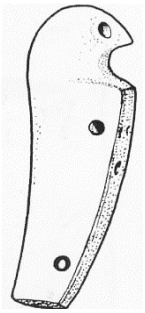
The division of the natural realm, coupled with the connections between human and animal may have created the potential for what might be termed 'totemic' beliefs. Objects of zoomorphic character may then have been used for domestic veneration of an individual's animal kin, or for outward display as a tribal indicator. The socio-political, and arguably religious power of these motifs may have stemmed from the use of zoomorphic objects, as well as parts of animals, as totemic 'talismans'. It has been argued that the very act of domestication of animals in the Near East had stemmed from extant totemic relationships with animals, or some form of religious connection (Wengrow 2006: 60-61). It has been argued that the veneration of animals can be seen as an indicator of past totemism, (Smith 1885: 219-220), but it cannot be assumed that the trajectory of every society would have been the same. Smith (1885) theorises that there were totemic structures within early Arabic tribes, and, although he did not definitely prove this, the evidence may point at least to a veneration of animals within tribal association and group nomenclature. The outward display of totem identities, such as through the public and shared nature of a totemic name (Vecsey

1993: 61), can be seen as being helpful to the interpretation of items of display as potentially signifying tribes or lineages. The Nuer people of Sudan, as adults, are named after their favourite animal, a process which has been viewed as an orientation of the 'self' in relation to an important object (Myers 2007: 33). Predynastic Egyptians may have displayed their own personal affiliations with objects close to self through the conspicuous display of zoomorphic figures on objects of daily and personal use. The names of early rulers which are interpreted as the nouns of animals and objects, such as Scorpion, Shell, Fish, Elephant, Dog and Falcon (Dreyer 2011: 134-135), show how humans might be associated with totemic-spirits. Even if this practice was not common among non-elites, the names of these rulers might show at least how totemism was appropriated and politicised by kings.

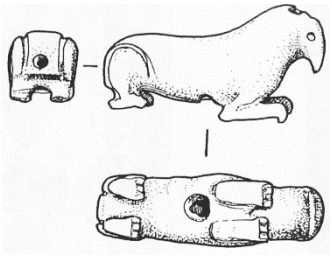
Individuals from a certain area may have identified themselves with a specific animal, real or mythical, and this affinity with the 'totem' may have become cemented when the place formed its name, both in spoken and written language. It might then be expected that one discrete totemic group would be found overwhelmingly with one type of animal. In later Egypt there were standards which would represent the various provinces along the Nile, several of which featured zoomorphic designs (DuQuesne 2007: 7). The idea of mounting animal figurines on standards, which can be seen ultimately on the Narmer Palette, may possibly have mirrored local heraldry deriving from the sacred worship of zoomorphic forms (Mojsov 2005: 5). On the Narmer palette there can be seen several men carrying staffs with icons of birds and a canid (see **Figure 38**). The shape on which the canid is sitting, as well as the object on the staff behind must also be noted for their unusual form. These staffs perhaps not only venerated zoomorphic forms, but also icons that are harder to recognise, showing the cultural specificity of these images. The use of the therianthropic heads atop the palette itself could also have signified some form of heraldic emblem (Davis 1992: 119), perhaps specifying a clan or place of origin.



1.



2.



3.

Figure 38. Images showing the relation between artistic representations of standards, and small figurines with drilled holes: **1.** A detail of the Narmer palette featuring 'standard bearers' (after O'Connor 2011: 147, fig.16.4); **2.** The bird figurine from Naqada Grave 721 (Crowfoot Payne 1993: fig.4, no.17; Ashmolean No. 1895.136; L 5.5 cm); **3.** The unusual canid figurine, also from Grave 721 (Crowfoot Payne 1993: fig.4, no.16; Ashmolean No. 1895.138; L 4.3 cm).

It has been suggested that the mounting of an icon on a standard, or the fact that it is made of a precious material, is evidence of that icon's status as a deity (Roth 2011: 194-197). Grave 721 at Naqada yielded three pink limestone figures, of a bird, canid and lion, with holes which may have been used for placement on a standard (Roth 2011: 196). A fourth figure, a hollow lead hawk (Crowfoot Payne 1993: fig.3, no.6), was most likely the outer casing for the limestone hawk figurine (Crowfoot Payne 1993: 14). This grave, of Naqada IIC date, featured objects which meet the potential criteria of godly icons: figurines with drilled holes for mounting, and an expensive lead-covered example. Perhaps the occupant of the grave had these figures mounted in some sort of cultic context during their life, or perhaps the individual was actually a standard bearer, like those featured on the Narmer palette. It must be noted, however, that these figures are miniatures, with the lion, canid and bird measuring 3.3, 4.3 and 5.3cm in length respectively. These icons may have been miniature, symbolic examples of standards, as those seen on the Narmer palette appear to be much larger. Sizes on ceremonial palettes, however, seem to represent the relative importance of elements, rather than realistic sizes. If standards were only as large as the examples from Naqada, then the

enlargement of them on ceremonial palettes shows that they had great symbolic importance. The use of small figurines on standards would have restricted the visibility to those closest to them, who were perhaps the elites worthy of viewing the icon. As the objects from Naqada Grave 721 were all placed together, it is also possible that they served a combined purpose, where their small size was offset by the power of the menagerie. Other similar objects, also of small size were found at Hierakonpolis including fragments of calcite scorpions from HK6, Tomb 23. They feature drilled holes, are less than 10cm in length, and date to Naqada IIB, giving them a similar date to the figures from Naqada. Whether these icons had a cultic or political use, it cannot be ruled out that they were also signifiers of identity, clan, place, or status within groups. Following the idea of totemism, it is clear that if individuals felt a relationship with an animal 'clan', it was likely not exclusive to one species. A flexible system of identity and status projection may have existed where individuals found power through associating with many animals, which is also suggested by the hybrid cosmetic palettes (Petrie & Quibell 1896: pl.xlvii, figs.11 & 12).

2.3.2 Totem-animals in life and death

It was clearly important for people to be associated with specific animal forms, and people must have had a clear idea of their place in the cosmos, related to these beings. People seem to have worn the animal icons about their person during their life and would be buried with them in death. Small objects were worn as amulets, where the meanings behind the symbols must have been readily understood by viewers. This could perhaps tell us that it was important for individuals to be recognised as belonging to a certain group. Although amulets have been found with leather attachments in the grave, it is not understood whether the larger 'stemmed' palette types were actually related to human attire, if at all. Even though palettes might not have been worn on a daily basis, it does not lessen any close personal association humans may have had with the iconography on them. It has been proposed that palettes were, in fact, used within buildings (Patch 2011: 197), where they might have been on display on the wall, or possibly suspended from the ceiling. Perhaps upon entering a house

it became clear with which clan the occupants identified themselves. At Merimde Beni-Salame, in the later phase of occupation, there can be seen the insertion of hippopotamus bones into the thresholds of houses, a practice which might have formed from the relations between humans (Tassie 2014: 239-240). Across South-West Asia in the Neolithic period, the treatment of human and animal bodies can be seen as being related to human relationships and houses (Wengrow 2006: 69). This perhaps shows a wider trend in the objectification of corpses, which may have been articulated and altered, including the burial of animals within human graves, in order to respect and preserve connections between and within social groups.

In terms of the present study, double and single birds are the most common animal motifs at sites where enough objects have been found to show a reasonable trend. Of the sites where at least 20 objects exist in this database, the following feature avian objects as their most frequent: Abadiyah, Badari, Hu, Matmar, Mostagedda and Naqada (see CHART 1). Fish objects are also very common, and notably they outnumber avian objects by around a factor of three at Hierakonpolis. Perhaps this statistic can be explained by the fact that there is a greater diversity of zoomorphic objects at Hierakonpolis compared with most other sites. This might reflect the clear focus on an animal menagerie or zoo, as part of an elite ritual or display of power at HK6. At both Mesa'eed and El Amrah the differences between the number of bird and fish objects are very slim, even including the reported 31 fish palettes found at El Amrah (Randall-MacIver & Mace 1902: 46). At El Mahâsna around 10 cattle figurines with only a few bird objects were found. At the much earlier site of Merimde Beni-Salame, there can be seen many cattle objects of the Early, Middle and Classic Merimden periods. Owing to the vastly different ecological and socio-economic status of Merimde Beni-Salame, the relative lack of bird-shaped objects cannot be compared directly with later sites of the Nile Valley.

Although individuals may have associated themselves with specific totems, they may not have been bound by geographical areas, and larger settlements may have consisted of people from many different ‘clans’. This might explain the diversity of animals found in Predynastic cemeteries. Yet, the appearance of several different animals within one individual’s grave

may show flaws in this interpretation. It is also possible, however, that a more fluid, multifaceted view of identity or kinship was held by people in the Predynastic period. Diversity of animals within a grave might suggest an individual could belong to many 'clans', where perhaps aggregating a large variety had certain social and cosmological benefits. It has been argued that archaeological sites might display a diversity of totemic symbols, yet their totemic culture may have existed in a wider context (Russell 2012: 27-28). Totemism in Egypt may have extended to the belief that all animals could provide power to an individual in life and in death. Perhaps the early elite cemetery of HK6 at Hierakonpolis, with the extensive burial of captured wild animals who were slaughtered for burial, was the ultimate extension of deriving mortuary power from animals (Friedman 2011b: 39-40).

Some forms of totemic beliefs centre upon the idea of being descended from animal spirits, where totem relations are equated to blood relations (Freud 1950/2004: 7). If animals were used so heavily in the whole mortuary realm, then they would be ever present when discussing or venerating human ancestors. Animals and images of them were chosen to be forever entombed with the deceased, a fact of which their immediate descendants would have been aware. The reverse of this process may have been true, whereby humans ascribed animals with ideas of ancestor, leading to the formation of zoomorphic artefacts. Among many agricultural societies there can be seen the connection between animals and spirits, often connected to human ancestors (Morris 2000: 23-25). As an anthropological analogy of this process, it can be seen in some Native American belief systems, that animals and even plants can be representative of ancestors (Bruchac 1992: xiii-xiv). It has also been noted of the African Ashanti people from Ghana, that humans are sometimes visited by animals, therianthropes or fantastical forms in their dreams, which is seen by them as the embodiment of an ancestor (Lincoln 1935/2003: 64-65). Among the cattle-herding Himba people of Namibia, sacred herds of cattle are associated with ancestral spirits (Crandall 2000: 78 & 222-223). Regardless of whether Predynastic Egyptians viewed animal spirits as their ancestors or cosmologically linked them to death, they certainly would have related animals to their human ancestors and the process of interment.

Consideration of the possible ways in which totemism may have operated could provide a useful framework for understanding Predynastic animal imagery. It has been shown how different types of artefacts, as well as the use of them in life and death, may have related to ideas of social grouping centred upon the respect of totemic animal-spirits. If animals, or icons of them, came to represent cultural groups and places, then the use of these animals in representational art would have worked as metaphors. Zoomorphic artefacts might then be understood not only as symbols of mythical animals, but also as short hand for all of the people and places associated with the power or veneration of that animal.

2.4 The transformation of animals into symbols

It has been shown how animals, as well as other forms, came to represent complex notions of place and personhood. Animal forms were perhaps used for totemic association, as well as the outward conveyance of this socio-cultural grouping of the individual. Animal forms, and the hybrid variants of them, perhaps became the vessels for storing and transferring ideographic information. The objectification of the animal form perhaps catalysed the use of it in many more ways which became more divorced from the nature of the real animal. The combination of several different forms, each containing high levels of information, would have enabled the transference of strings of information. Such information could be conveyed through the use of writing.

Hieroglyphic writing apparently reached a fairly solidified structure of encoding complex linguistic ideas by the later second dynasty, after development throughout the Early Dynastic period, with roots in the Predynastic period (Baines 2007: 117, 137). It has been argued that writing in Egypt emerged relatively 'suddenly' with no long, visible history of development (Wimmer 2004: 343). The preference for animal icons in hieroglyphic script might, however, suggest that Predynastic zoomorphic artwork influenced certain aspects of the script. Hieroglyphic writing was composed of symbols representing elements of the known cosmos, with many signs depicting animals or parts of animals. It is hard to know the exact reason behind including zoomorphic symbols in the written language, but this thought process may have stemmed from the Predynastic period. Animals themselves might have related to concepts which would later be formalised into written words. The use of animals in early hieroglyphic writing points to their use in connection with places. For example, the use of the crested ibis as meaning *ʒḫ.t*, 'land of sunshine/light' (Regulski 2010: 123), the new born bubalis buffalo referring to *ỉw.t mḥ.w* 'which comes from Lower Egypt' (Regulski 2010: 103), and Naqada III bull heads relating to buildings (Regulski 2010: 116). The development of writing through the necessity of accounting and trading explains the abundance of place and product names (Wengrow 2011: 101), most notably the 'proto-hieroglyphs' from Tomb U-j at Abydos. The signs found on vessels and labels have been interpreted as estate or area names, written using animals which might have derived from the names of rulers, such as Scorpion,

Shell, Fish, Elephant, Dog and Falcon (Dreyer 2011: 134-135). The Tomb U-j artefacts use signs other than animals, but the usual formula is a tree/plant and an animal sign (Dreyer 2011: 134). There need not have been such a preference for animals when images were chosen to represent ideas, as other early written languages did not feature nearly as many animal glyphs. However, it can be seen on several seals from the Indus Valley civilisation, that animals such as buffalo were an important part of their repertoire (McIntosh 2008: 124). Close to its conception, hieroglyphic writing was not only integral to accounting but also display, albeit only for the select few elites (Baines 2007: 37, 117), which could perhaps explain the retention of pictographs, as opposed to schematisation and abstraction.

It is possible that many animal images already had pictographic significance, as totemic representations, at the time of the emergence of proto-hieroglyphs. The non-linear and relatively organic development of writing must be remembered, however, as in some instances glyphs were seemingly more ritual, and in others more prosaic (Wengrow 2011: 103). The highly ritual aspect of items such as the tomb U-j labels may be evidenced by the fact that they are not the most efficient means of accounting, and would have required expensive materials and expert crafts people (Wengrow 2006: 205-206). In some instances it may have been possible for a place name to have been written using a specific animal, not for its phonetic value, but for its symbolic connection with the building, town or area. It has been noted of fully developed hieroglyphs in Dynastic Egypt that the hieroglyph itself embodies the essence of the article being described (Forman & Quirke 1996: 10). Emphasising the importance of the link between word and object, is the fact that the pictorial origins of hieroglyphs remain intact, at least in formal and regal contexts. This is in contrast to the development of more arbitrary letters in the rest of the Near East, such as the schematic cuneiform script used in Mesopotamia where writing was not as important in artistic display (Baines 2007: 117-118). There are even examples where elements of the hieroglyphic text were reorganised into the artistic elements from which they originated, such as the omission of determinative hieroglyphs in favour of the iconic elements below the writing from a scene in the Old Kingdom tomb of Raemka (Angenot 2015: 99-100). It seems that representational artwork, as well as administration, was ‘interlinked’ with the early development of writing (Baines 2007: 117). It might then be argued that zoomorphic images themselves had great

significance and their persistence throughout the Predynastic period foreshadows a later, linguistic importance (Forman & Quirke 1996: 10-13). Animal iconography existed and thrived on many objects in pre-literate Egypt, and only died out as the unification brought about new means of expressing ideas. The lack of decoration on Early Dynastic objects, as well as the decline in bodily display seems to coincide with the development of writing in Egypt (Wengrow 2011: 100). The symbolism of bodily display, however, may have been transferred to other means of display, such as through clothing or hairstyle. Hairstyles, for example, seem to diversify and become more elaborate, especially for women, in the Early Dynastic period (Tassie 2009: 133). It is also possible that the need for the physical display of culturally and religiously significant actions and symbols was diminished with the advent of writing, whereby the scribe could portray the names of people or locations as well as significant activities through text (Patch 2011: 66). Although not proving causation, it is likely that the more traditional methods of conveying ideas rapidly became obsolete as proto-hieroglyphs began to accrue more symbolic power, while simultaneously being used to enforce political power. It has been argued that the early dissemination of writing to the masses of Egypt had a limited impact in terms of its use for daily administration (Baines 2007: 129-130), yet hieroglyphs may have gained popularity as powerful tools of ritual and cultural display. The siltstone dishes of the Early Dynastic period might have functionally replaced zoomorphic palettes of the Predynastic period, and examples of these objects feature carved hieroglyphs. For example, a beetle with human arms can be seen holding 'was'-sceptres on a dish from Abydos. The appearance of a beetle also highlights the more prolific uses of creatures which were seemingly ignored in the earlier periods.

Figure 39. Stone bowl with carved beetle and sceptres from the First Dynasty, reign of Den (Roth 2011: 199, catalogue 180).

The power of the liquid or material ground within these dishes might have equalled that of the products ground upon earlier palettes. The use of material on these objects might only have been imbibed with power upon contact with the zoomorphic glyph. In this respect, the physical nature of the object is irrelevant, and it was merely useful in catalysing the transfer of power from the glyph to the material. It could be argued that materiality played an important role in the formal carving of hieroglyphs in the Pharaonic periods. The permanence and provenance of the material was a priority, as can be seen with the preference for inscribing durable stones and gold, acquired from the deserts which would house the dead (Forman & Quirke 1996: 7). As the hieroglyph became more of a formalised idea, there was perhaps a shift in the way in which power was gained from them. The standardisation of form and size catalysed the combination of many more signs onto one object at one time. This might have been seen as more efficacious for deriving power, so the nature of palette usage shifted dramatically. It is possible that animal depictions painted on vessels, or carved on to

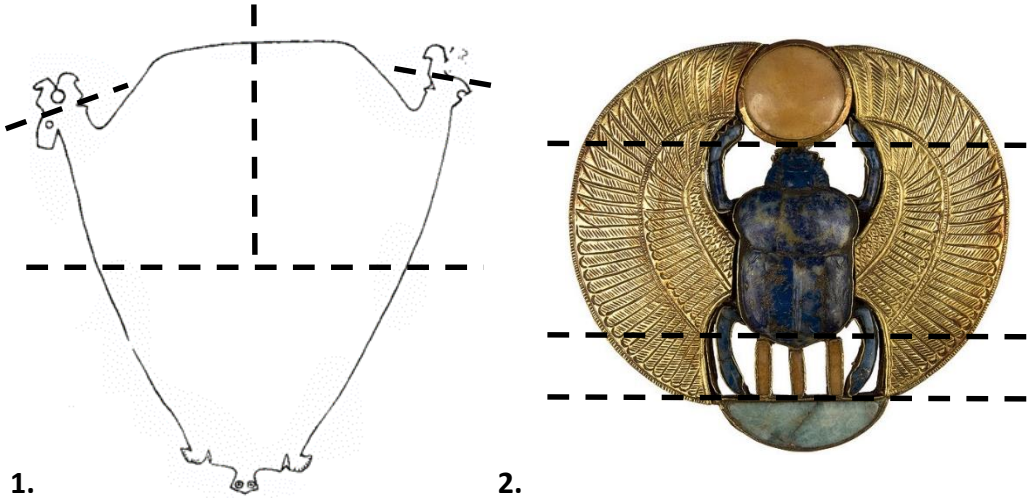
palettes and combs were, in a sense, spiritual forerunners of the hieroglyphs in as much as they had the potential to store the power of the species depicted.

1.  **2.** 

Figure 40. Images showing the similarities between the three-dimensional 'bull's head' artefact and the inked 'royal beard' hieroglyph: **1.** A 'bull's head' amulet of hippopotamus ivory from Naqada Grave 1788, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC6005); **2.** An inscribed and inked ivory tag from Abydos, Tomb of Djet with the 'royal beard' hieroglyph on the bottom left (Teeter 2011: 227, catalogue 83).

There seems to be a rather intriguing link between the 'bull's head' amulets and the hieroglyphic sign for the 'royal beard' (see **Figure 40**), possibly related to the king's desire to be the bull (Hendrickx 2002: 288). The signs are similar, with the rounded, curving elements and a line at the bottom, yet the hieroglyph seems to flare outwards, while the amulet tapers to the end. It is suggested that the king wished to have the attributes of this amuletic icon for its magical and prophylactic powers, but it is also possible that other people wanted to wear this amulet to be more like the ruler or identify themselves as one of his followers. This would imply, however, that the hieroglyph of the beard representing the king was established and known at least by Naqada I. The hieroglyph and amulet share some similar attributes, and this possible parallel between amulet and written language opens up the potential for many other unknown ideas and words to be read from other Predynastic iconographies. The combination of many elements, which can also be seen amongst the corpus of decorated vessels, would have drawn together many different symbolic meanings into one image (Hendrickx 2011: 79-80). Combining a small number of signs to convey a complex messages is a feature of the brief hieroglyphic texts on administrative labels. The process can also be witnessed in later Egypt,

where an object or statue consisted of many aesthetic elements which also doubled up as readable hieroglyphs.



1. **2.**

Figure 41. Objects with hypothetical division lines, where separate elements might have been understood: **1.** The palette found in Naqada grave 271, of Naqada IIB date (Petrie & Quibell 1896: pl.xlvii, fig.11; Ashmolean No. 1895.841; L 20.5 cm); **2.** A pectoral from the New Kingdom in The Museum of Egyptian Antiquities, Cairo (http://www.globalegyptianmuseum.org/detail.aspx?id=14836; Cairo No. JE 61888)

One of the key principles of reading hieroglyphs centres on the hierarchy of signs and the order in which they are read. For example, the above pectoral features a winged beetle and sun, elements of rebirth, yet it can be separated into symbols of hieroglyphic importance (see **Figure 41**). It can be read as *'nb ḫprw rꜥ'*, 'Neb- kheperw-re', one of the names of King Tutankhamun. Understanding the nature of early hieroglyphs is difficult due to the lack of preservation of key developmental stages of the process. The combination of many natural elements, however, can be seen on painted vessels, as well as on carved artefacts. These early images may have influenced later hieroglyphic signs. It is hard to say, therefore, whether an early composite image had already taken on its later meaning. If the above palette, from Naqada IIB, is to be read in terms of its hieroglyphic values, it would be very difficult. It might be broken down into the head of a bubalis, *'šs3'* to be wise, or to know (Faulkner 1988: 271),

and a turtle, '*štyw*' (Faulkner 1988: 273). The bubalis might have been read without having horns at this point, however (Regulski 2010: 103), perhaps meaning that the 'horns' should be substituted for ostrich heads, '*niw'* (Faulkner 1988: 125). These transliterations come from Middle Egyptian, and it would be hard to prove that these readings or meanings had already been cemented as early as Naqada IIB. Their presence in hieroglyphic texts have a determinative use anyway, meaning that they were designed to accompany phonetic symbols, assisting in the interpretation of the words. Perhaps the early stages of the written language may have been more simplified, with fewer signs needed for a word, but at the same time these words may have had less clear meanings. Earlier, proto-hieroglyphic alternatives might include ibex or bull heads from at least Naqada IIIA-B (Regulski 2010: 116), or perhaps an overall meaning similar to the hybrid Early Dynastic gazelle-fish (Regulski 2010: 110). If any of these signs, or early versions of them, are to be read then it is interesting to note the repetition which also occurs. It is possible that the repetition of the animal simply pluralised its meaning, giving the palette the power of many animals. The different sizes and amounts of the animals might also hint at the nature of subject-object relationship seen in later Egyptian artwork, commencing with the Narmer Palette, where the subject was magnified, and the object was multiple and miniature (Hartwig 2015a: 49-51). In this case, the turtle might be the subject, with the various animals extending from the other half of the palette representing the object. Pluralisation may also have been related to more linguistic, rather than artistic functions, where the resulting phrase could have been repeated like a chant, prayer or song. The vocalisation of these elements may have been key to their use during a mortuary ritual.

It has been argued, based on the importance of names in Dynastic Egypt, that even in the earliest periods, powerful forces were likely to have been strengthened through the act of naming (Luft 2004: 417). In terms of animals, there can be seen some examples of onomatopoeia in later Egyptian hieroglyphs. The most common example of onomatopoeia is the word '*miw*', meaning 'cat' (Faulkner 1988: 104), which is commonly believed to have derived from the sound of a cat's miaow. Other examples may have existed, but are harder to understand, due the minute variations in accent which may have existed, altering a word's pronunciation dramatically. Another complicating factor, is the inconsistent way in which

people perceive and translate animal sounds into onomatopoeic words in different languages. Possibly '*rw'*, meaning 'lion' (Faulkner 1988: 147), represented a roar, while *'m3i'*, also meaning 'lion' (Faulkner 1988: 101), might have represented a deeper or louder miaowing sound. The use of '*b3*' for ram might have aurally resembled bleating, yet cognates of this word might also imply that rams were related to concepts of sexual potency or the human spirit (Ward 1978: 158-163). Words relating to unintentional sounds of animal movement might also have been expressed through language. Ancient Egyptian words using the sound '*p3*' related to birds taking flight and flapping their wings (Ward 1978: 25-27), where the plosive sound may have mimicked the concussive yet muffled beating of a bird's wings. The reading of many other words might yield similar conclusions, but none of these prove their usage in the Predynastic period. These examples do, however, hint at the ways in which language might have developed, relating to animals. The noise of a being may have somehow represented the essence of it. When forming words using the rebus principle, it was perhaps important, at least in hieroglyphic writing, for sounds to remain connected to their individual iconographic components.

In the earlier periods of Predynastic culture it is possible that the written language was developing in a novel way, yet this progression would suddenly alter, influenced by trade and centralisation. Evidence of this could perhaps be seen by certain complex elements, for example those found on ornamental palettes of the Late Predynastic period. Perhaps the conglomeration of pharaonic power influenced the style and speed of hieroglyphic development. Perhaps even the royal serekh, *'srḫ'*, had some relation to physical zoomorphic objects. The symbol, first appearing around the Naqada III period (Ataç 2015: 426), represents a palace façade topped with an image of a bird, later identified with the deity Horus, and it contains the Horus name of the king (Faulkner 1988: 236). A similar motif may be viewed on top of Predynastic bone and ivory combs, which are overwhelmingly topped with avian icons (see **Figure 42** & MAP 10).

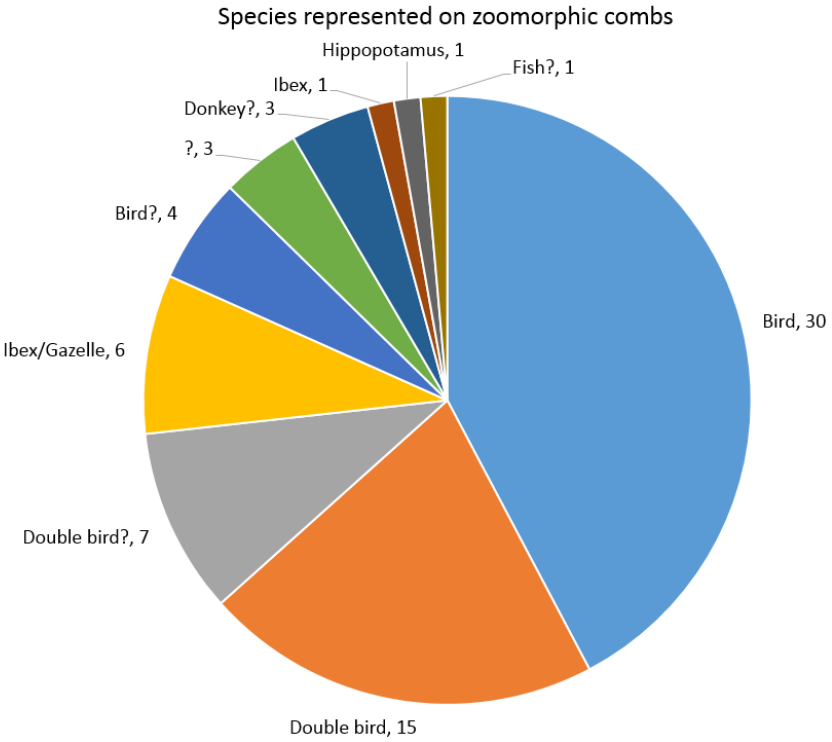


Figure 42. A Pie chart showing the amounts of different animals depicted on zoomorphic combs (Total N=71).

The use of birds atop combs perhaps worked to mark out personal and social identity. The use of birds surmounting the iconographic serekh building might have, therefore, conjured ideas of identity or cultural affiliations. Combs were not intended for brushing, but they were worn in the hair so that the icon could be displayed, much as with hair pins, which can be seen on the well preserved hair of a skull from Abadiyah (Petrie 1901: pl.vi, B378). The highly visible and customisable nature of the head, and especially the hair, would have been an ideal point of focus for displaying aspects of identity (Tassie 2009: 42-43). The combs as isolated objects do somewhat resemble early serekhs, with the teeth of the comb as the vertical lines under the name of the ruler. The teeth, being worn in the hair, however, would not readily be seen by others, leaving the bird and the blank space as the two elements on display. However, this blank space, possibly comparable to the area in which the Horus name would be written, is almost always left undecorated. Examples have been found of serekhs without a ruler's name inside, such as the example from el-Beidah where the name might have

actually been represented by the two birds on top, 'Double Falcon' (Braun 2011: 113). This creates the potential for a serekh symbol to be understood without any hieroglyphic writing within it. Interestingly, the inward facing double falcon symbol may also be seen on top of a large siltstone palette found in the Cairo Museum, 'JE 38182'. This might show how written symbols could easily be translated onto carved items of personal use and display. The double-bird serekh also hints at the potential for double-bird topped combs to be understood as a name, although the falcons on this serekh face each other, rather than away from each other.

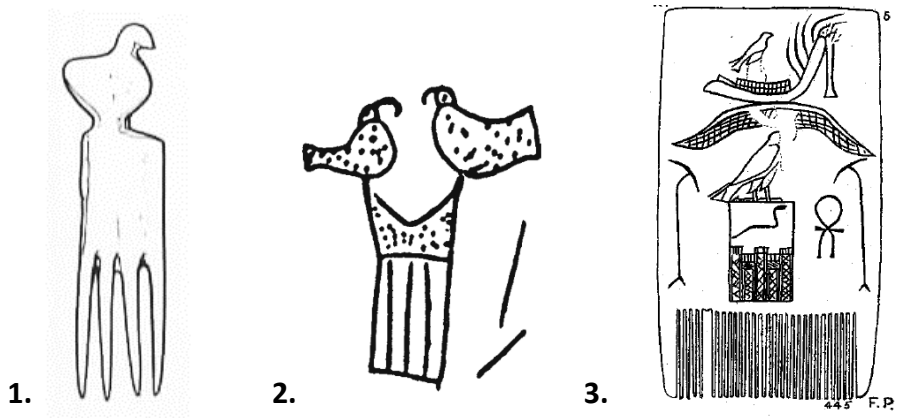


Figure 43. Images showing possible similarities between serekhs and combs: **1.** An ivory comb from Grave U160 at Hu (Crowfoot Payne 1993: fig.78, no.1915; Ashmolean No. E.3957; L 6.6 cm); **2.** A punctate designed serekh from a vessel from el-Beidah (Braun 2011: 113, fig.12.13); **3.** The comb of Djet from Abydos (Petrie 1925: pl.xii, 5; Cairo No. JE47176; L 8 cm).

The serekh may have mimicked certain ideographic aspects of the comb, as they were both symbols of cultural and economic importance. It should also be noted that a comb of king Djet bears a serekh carved on its surface (see **Figure 43**). This could show how there is little relation between the two symbols, as it becomes clear that this example bears little resemblance to the comb. Regardless of whether there was any relation between the serekh and the hair comb, the similar focus on the bird may simply go to further emphasise the

importance of this motif in the Predynastic period. The motif in this instance, is the animal on top of an object, not necessarily only the bird. This means that animal details carved on top of palettes, hair pins or combs might all have worked as signifiers of identity, name, culture, or regal/elite affiliation. Although it has been argued whether the palace façade of the serekh originated in Mesopotamia or Egypt (Ataç 2015: 425-426), it seems likely that topping the icon with a bird grew from Predynastic Egyptian notions of zoomorphic embellishment. The combination of the palace and avian iconographies may have emerged out of two separate icons of power or place, which were unified through a close relationship between these two areas (Serrano 2002: 10).

One last connection with hieroglyphic writing is the matter of orientation. Egyptian hieroglyphs of humans and animals are conspicuous for their side-facing manner. This trait of hieroglyphs is useful for the understanding of the way in which texts were to be read. Outside of hieroglyphic writing, on many forms of two-dimensional artwork in Dynastic Egypt, there can be seen the specific orientation of bodies to the side with some elements facing frontal, which was perhaps the ideal method to incorporate all important elements of the human or animal (Peck 2015: 360-361). In the Predynastic period, zoomorphic palettes, amulets and combs are overwhelmingly oriented in the same manner, side-facing (see **Figure 44**). It can be argued that the schematic nature of these depictions, and the use of silhouettes necessitated a profile of the animal to be created in order for the symbol to be understood. It is unclear whether the orientation had any bearing on later hieroglyphs, or merely had a similar aesthetic and functional origin. Human representations in the Predynastic period, in stark contrast to the majority of anthropomorphic signs, are almost always depicted as forward facing (see **Figure 44**). On decorated ware, humans also appear mostly front on, while most animals appear in portrait. This is perhaps one of the clearest distinctions between human and animal in representational artwork.

1. 

2. 

3. 

4. 

Figure 44. Objects displaying the difference in orientation between forward-facing humans, and side-facing animals: **1.** Human comb from Naqada Grave 1411 of Naqada I date, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC4308; L 4.5 cm); **2.** Hippopotamus comb from Hierakonpolis (http://www.hierakonpolis-online.org/index.php/explore-the-predynastic-cemeteries/hk6-elite-cemetery/tomb-72); **3.** Human amulet from Naqada Grave 1757, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC5453; L 5.1 cm); **4.** Bird amulet from Mesa'eed Tomb 185, no. 2, of Naqada II date, photograph © MFA (mfa.org/collections/object/; Boston No. 11.223; L 5.9 cm).

The stylistic trait of humans facing the side, with forwards oriented eyes, had not yet developed before the Narmer palette. Humans depicted on combs and amulets were shown with both eyes clearly facing forwards. Even on a curious anthropomorphic palette without provenance, the human faces forwards (Petrie 1920: pl.xliii, fig.1). It can be argued, however,

that in the Predynastic period the forward-facing eye was something already depicted on zoomorphic objects. For example, the eye was often represented by an inlaid bead on siltstone palettes. The bead was multifunctional in the way that it could represent the forward-facing eyes of a turtle, as well as the eyes of a quadruped in profile. The consistent shape of the bead might allude to the fact that it is always facing the user directly, regardless of the orientation of the head. It could perhaps be argued that in Pharaonic Egypt, the depiction of humans as having eyes which faced the viewer on the side of their heads was a trait developed from zoomorphic artwork. Throughout Pharaonic Egypt, however, the unnatural composition of forms to display differently oriented elements was also used for objects, not only humans and animals (Peck 2015: 362-363).

At some point prior to the creation of monumental palettes, such as the Narmer palette, artistic trends radically alter. Perhaps the decline in use of ivory and siltstone amuletic 'tags' in around Naqada IID (Tassie 2014: 371) was related to this change in artistic style. It could be argued that the standardised form and size of human and animal hieroglyphs, acted as a means of 'controlling chaos' (Fekri Hassan, personal communication, 18/04/14). The 'control of chaos' seems to be a major theme of Naqada III ceremonial objects (Patch 2011: 140), which sometimes featured proto-hieroglyphs. Large palettes feature the taming of beasts by men, while knife handles and other ceremonial objects place various animal menageries into registers of equal sizes, anticipating the spacing of hieroglyphs. Perhaps the increasing complexity of society caused some form of concern within people's minds, which may have expressed itself as a symbolic desire for control. The formation of uniform signs may, however, have had a more practical function. In order for early hieroglyphs to have worked as administrative tools in the wider context of the Near East, signs became uniform, reflecting the need for standardisation in systems of trade (Wengrow 2010: 82-83).

The orientation of zoomorphic objects does not imply any linguistic use, but it does at least hint at how animals may have worked on a different iconographical plane to humans. One exception to the side-facing rule is the turtle. Turtles are depicted as if they are seen from a bird's eye point of view. The turtle also exists as one of the very few exceptions to the rule in

hieroglyphic writing, where it is also depicted from above (Gardiner's sign list number I2). This sign, however, was only used very rarely in Egyptian texts. On decorated ware, the animals which are not depicted sideways, are crawling animals, such as scorpions, lizards and arguably snakes (cf. Petrie 1921: pl. xxxvii, figs.78A-D). There might have already existed a subdivision of animals in the minds of the Predynastic Egyptians, that is, walking and crawling animals. This artistic division appears again in the formalised hieroglyphic writing of the Dynastic Egyptians where the signs for scorpion, scarab beetle, centipede and lizard are all viewed from above (Gardiner's sign list numbers L7, L1, L5 and I1 respectively). The world may then have been organised based on the motility of an animal; humans move forwards, some animals walk along, and others crawl on the floor. Visually, the difference may have been noted by the number of legs a creature had, where more than two legs would signify something as being able to move in a non-human manner. The connection between motion and where the motion takes place, might also suggest a hierarchy of creatures; humans are important enough to face the viewer (with 2 legs), walking animals are slightly lower and will not face the viewer directly (with 4 legs), while crawling creatures look up at the viewer from their lowly position (with 4 or more legs). It is interesting to note that the most complex hybridised palettes, those from Naqada graves 271 and 1738 feature a turtle as the basis for the palette. The forward facing aspect of the turtle is perhaps rather discontinuous when combined with the profile-view mammalian heads. Perhaps hybridisation worked on an aesthetically pragmatic basis, whereby the hind limbs of the turtle seemed to be a good candidate for embellishment, regardless of the perceived dimensionality of either animal. It has also been suggested, however, that the crawling insect and creature hieroglyphs of Pharaonic Egypt were simply depicted from above because this was the most efficient way to depict the characteristic elements of these animals (Peck 2015: 368).

The idea of the animal not forming a whole, but rather a discontinuous amalgam of separate ideas might hint at the 'readable', logographic nature of the symbols. Even if it is possible to 'read' certain Predynastic artefacts, however, this still might not imply their direct influence on the written language (Davis 1989: 131). Even if elements of these palettes were not understood to have any linguistic value, their significance as individual ideas may have allowed them to be combined into a more complex idea. The combination of animals on

hybrid palettes might show how animal parts could be separated, which was perhaps conceptually similar to the use of animal body parts in hieroglyphs. Whether the hybrid forms worked as linguistic tools or not, it is clear through their prolific use that they were of importance not only to artisans and artefact owners, but to elite and royal ideologies. It seems that Predynastic artwork may have had at least some influence on the style and orientation of later hieroglyphs, with pieces such as the Narmer Palette displaying an intermediary, experimental phase of the blending between figural artwork and writing (Ataç 2015: 427).

2.5 The politicisation of hybrid and animal forms

Hybrid animals are well attested in Egypt's Pharaonic period; certain deities, demons and other powerful beings were often depicted in the official canon of artwork as having the bodies or heads of animals (Görg 2004). It is hard to understand the reasons behind the formation of certain mythical animals. It is possible that the nature of wild, non-human animals inherently causes agitation among humans, and there is a semi-instinctive desire to control or rearrange the chaos (Mundkur 1994: 178). The various examples of hybridisation in the Predynastic, might have influenced the formation of later deities in Egypt. The so-called 'Seth animal', for example, appears to have had its roots in the Predynastic period with possible depictions such as the figurine from Naqada grave 721. Although this particular example lacks the characteristic squared ears, it does have the unusual pointed face (Crowfoot Payne 1993: fig.4, no.16), and while not explicitly a hybrid animal, the figurine from grave 721 is certainly unnatural in some way. The cultic use of this figurine alongside the more realistic animals found in the same context, might show how this creature was perceived to be as real as a lion or a bird. As this object was possibly related to standard bearing, there can be seen a parallel on the 'Scorpion Macehead', where there are at least two standards topped with animals distinct from the jackal owing to their characteristic ears, snouts and tails. This Late Predynastic example shows the ways in which hybrid creatures could be incorporated into artistic scenes of a complex symbolic nature. Evidence from Late Predynastic knife handles also shows the existence of other hybrid animals, like the ibex-fish hybrid (Huyge 2004). This type of hybrid, although not apparent on many examples with good provenance, may have rough parallels in early written linguistic symbols, such as the Early Dynastic 'gazelle with fish-like posterior' sign (Regulski 2010: 110).

1.  **2.** 

Figure 45. Mythical creatures which are seemingly hybridised fish and gazelle: **1.** Sign number 'e30', showing a hybrid aquatic gazelle animal (Regulski 2010: 392, e30); **2.** Two similar animals from the Naqada IID Abu Zaidan knife handle (Huyge 2004: 825, fig. 2; Brooklyn No. 09.889.118).

Upon the surface of ornamental palettes there can also be seen other different types of hybrid beasts. On the Two Dogs palette there are many animals which are being hunted, or hunting. This palette seems to depict clearly those animals which were hunters, and those which were seen as prey. The interlinked mythical animals, known as 'serpopards' or 'serpo-felines', are featured on both sides of the Two Dogs palettes as hunters, and also appear on one side of the Narmer Palette. This creature clearly had a large geographical area of influence, as the serpopard can also be attested in Mesopotamian iconography (Ataç 2015: 424). The short-lived appearance of this creature in Egypt suggests that it had greater popularity in Mesopotamia, where it might have originated (Silverman 2011: 203). The Two Dogs palette also features another predator which seems to be some form of griffin, sphinx or lamassu. The head seems to be avian, and the body feline. From the back protrudes great wings, or possibly the fin of a fish. A similar beast on the Gebel el-Tarif knife handle has the same protrusion from its back, but on this example the protrusion could even be seen as leaves, some form of plant life, or ram's horns. Fragments of an object from Abydos also possibly show the same creature (Raffaele 2010: 283, fig.9). It is an unusual, and unique creature, yet it might have been a feline variation upon the *mer*-gazelle. The association with a lion, rather than a gazelle, however, makes it seem more of a predator, and an agent of control and domination. On the Two Dogs palette the creature seems to be chasing its bovine prey. Placing these hybrids in the environment alongside more clearly realistic animals, perhaps implies their perceived existence in nature together with non-hybridised animals. It has been

theorised of Neolithic beliefs in general, that humans may have perceived spirit-animals to have inhabited the real world, as well as a more cultic, supernatural realm of existence (Lewis-Williams & Pearce 2005: 144-145).

1.  **2.** 

Figure 46. The 'griffin' creature seen on late Predynastic ceremonial objects: **1.** A portion of the Two Dogs palette (http://xoomer.virgilio.it/francescoraf/hesyra/palettes/dogs2.jpg; Ashmolean No. E.3924; total H 42.5 cm); **2.** A similar creature on a portion of the Gebel el-Tarif knife handle (Davis 1992: 64, fig.20; Cairo Museum).

Perhaps the mythical griffin creature also had some relevance in the wider culture of the Near East and was absorbed, along with the serpopard, into a different, and more formalised creature within the early Egyptian corpus. Mirroring the hybridisation of material cultures from Upper and Lower Egypt in Naqada III (Tassie 2014: 406-7), these new mythical beasts may have stemmed from an artistic or social amalgam. It is also possible that the use of mythical animals on ceremonial objects may have been imported or exported, whereby the knowledge of exotic, powerful animals was important for certain elite cultures across the Near East. Egypt traded goods with the Levant and Mesopotamia most conspicuously in the Naqada II and III periods (Ataç 2015: 424). Objects which were imported or influenced from the Near East were found in the elite graves of HK6 (Friedman 2010: 68-69), showing how power and wealth were related to wider communication and trade networks. Artisans of the Naqada II and II periods, creating ceremonial knives and palettes, would have been heavily

influenced by, and perhaps in full-time employment of an elite class who were increasingly interested in foreign art (Ataç 2015: 424).

If hybrid and mysterious creatures became associated with foreign powers, then the depiction of these animals may have worked as a representation of specific cultures and states, as well as Egypt's relation to, or dominance over them (Raffaele 2010: 270). It might have been necessary for elites to display their power over cosmologically important forms in order to maintain their power and influence (Lewis-Williams & Pearce 2005: 288).

2.6 Human-animal transformations

2.6.1 Identification of the 'Bat' head motif

When examining certain forms of Predynastic artwork, there can be seen a certain blending between animal and human forms. Unlike previously discussed artefacts, such as the hybridised turtle palettes, the combination between human and animal is less clear in the Predynastic period. Certain forms may only hint at metamorphosis, with more definite therianthropism appearing later, such as on the ceremonial palettes of the Naqada III period. If certain forms, like the bovine king, or 'Bat' head symbols can appear at this period, then it is likely there were some antecedent beliefs or symbols which had influenced their appearance. The subjective interpretation of some forms will lead to an uncertain presence of therianthropism. Given the clear importance of hybridised animals, assemblages and multiplicity, it is understandable to look for hints of metamorphosis and conglomeration between human and animal. Although not proving its existence in the Predynastic periods, there is a later deification of therianthropic forms. Regardless of whether these forms existed as divine beings or not in the Predynastic, they still may have existed as artistic or conceptual forms.

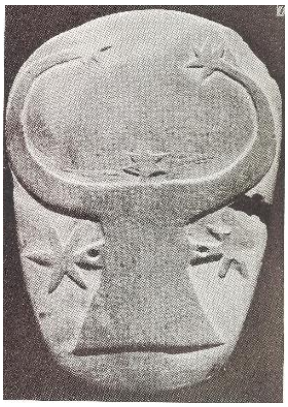
1.  **2.** 

Figure 47. Therianthropic cattle-human heads from Hierakonpolis: **1.** A detail from the siltstone Palette of Narmer, public domain (http://en.wikipedia.org/wiki/Narmer_Palette#mediaviewer/File:Narmer_Palette.jpg; Cairo No. CG14716; total L 64 cm); **2.** The design on the rim of the reconstructed fluted porphyry vessel in the Petrie Museum (Burgess & Arkell 1958: pl.ix, fig.3).

Considered one of the earliest therianthropomorphic gods, 'Bat', is most conspicuous for its appearance on the top of the Narmer palette (Roth 2011: 199-200). Without textual evidence, or clearly votive depictions, it is hard to ascribe the term 'goddess' in these early periods. This term is also difficult as there are no clear female attributes, nor any means of discerning a gender at all. By this point in Naqada III, it seems that Bat had already taken on some religious importance, which has often lead to the assumption that cattle horns featured on earlier palettes are a reference to her. Bat's visage appears on a small number of objects, none of which show a complete body. In later periods a more female Bat is depicted as a human, and is related to cattle in a similar way to the goddess Hathor (Wilkinson 1999: 244-245). The lack of a full body could imply that Bat was not fully deified in the Predynastic periods, yet the fact that cattle and human elements were already hybridised could mean otherwise. There was clearly such a strong association between the cattle and the anthropomorphic form, that they were fused into this hybrid creature. Perhaps it was the memory of a real person or people that inspired the creation of this motif, persons who were significantly related to cattle in their life. In these early forms, the motif has a human face, bovine horns and ears, and is sometimes connected to 'stars'. At best, it may be said of this motif that it had special significance in relation to royalty, and perhaps cosmology by the reign of Narmer. It may not be stated for certain what the icon represents, and it is hard to know whether the

representation remains consistent across spatio-temporal areas or not. It does seem, however, that some form of celestial cattle is intended, arguably an early form of Bat, or the deceased celestial bull-king (Graves-Brown 2010: 16). The placement of this human-cattle hybrid amongst the stars may have stemmed from a cosmological ordering of the world. Ordering is arguably seen on the hybridised palettes from Naqada graves 271 & 1738, which might have placed turtles in the water, horned animals on the land, and birds in the sky. A further extension of this might have placed cattle, or hybridised versions of them, in the night sky or in an extra-terrestrial setting. The fact that the stars are roughly oriented in the same way on the Hierkaonpolis vessel, the Abydos seal and the Gerza palette possibly suggests that they represented a real constellation. The flattened chin may have even represented the straight line of the horizon beneath the five stars of this constellation. The orientation of the stars seems to best resemble Orion, and the emphasis on this constellation may have related to the veneration of stellar activity as being related to periods of flood and good harvest (Hassan 2004: 790).

1.



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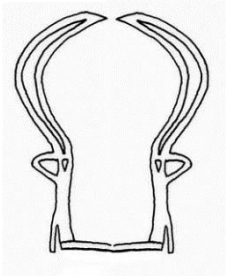


4.

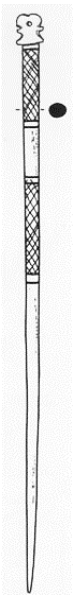
Figure 48. Artefacts with similar images to the 'Bat' head, but without any defined facial features: **1.** A seal impression from Tomb U 120 at Abydos of Naqada IID date, with the possible 'Bat' symbol, here highlighted in red (after Hartung 1998: 213, abb.12.22); **2.** The siltstone palette from Gerza Grave 59, of Naqada IIC-IID1 (Petrie, Wainwright & Mackay 1912: pl.vi, fig.7; Cairo No. 34173; H 15 cm); **3.** A pot mark from Hierakonpolis at the Temple HK29A (Hendrickx 2005: 15); **4.** A reconstructed pot mark, also from Hierakonpolis, from Tomb 16 (Hendrickx 2005: 14).

Owing to the variety of materials on which this motif has been found, there is not one clear method of depiction. The Gerza palette, of Naqada IIC-IID1 date (Stevenson 2009c: 108), represents a similar icon to those found on the Narmer palette and the Hierakonpolis vessel, yet it does not have a face. It is of siltstone, much like the Narmer palette, so it is clear that the inclusion of a face was technologically possible, yet it was perhaps stylistically not suitable

on this artefact. The centre of the face, or even the empty space between the horns, may have acted like the circular portion between the serpopard necks on the Narmer palette, which perhaps indicated where pigment might have been ground. This formation of ritual, empty spaces upon the palette might have anticipated later, ceremonial palettes, of which the Gerza example is arguably the 'ancestor' (Stevenson 2009c: 107-108). The palette from Gerza was functionally used, and traces of malachite were found on the reverse, plain side (Petrie, Wainwright & Mackay 1912: 22). The use of the plain side perhaps means that the decorated side need not have been restricted in its design. Without facial features, the remaining features must have been recognisable enough for onlookers to have understood the motif. A fragment of a knife handle, from Abydos, features several 'Bat' head emblems without facial features, yet the human figures on either side appear to have originally had their eyes, mouths and noses depicted (Hartung 2010: 119, fig.5.c). As the 'Bat' emblem is on the same object as the human figures, there was certainly not a technical limitation. Perhaps depicting this icon without a face was symbolically important or respectful of the creature it depicted. Despite only two examples clearly having facial features, the orientation of the face in every example may show its hybrid nature, owing to the fact that generally Predynastic carvings portray animals in profile and humans facing forwards. The stars and facial features do not seem to be essential for the recognition of this icon, but the presence of horns, ears and an overall trapezoidal shape are constant. It could be assumed, therefore, that the face shape and the presence of horns and ears would have been enough for Predynastic Egyptians to have recognised and understood the design. The trapezoidal nature of the form may even have related to the 'royal beard' hieroglyph discussed above.

2.6.2 Schematisation of the 'Bat' head: The blending of different forms

When the facial design is stripped down, the 'Bat symbol' could be confused with a double-bird motif. In order to help with the distinction between this motif and the double-bird motif, it is useful to recognise examples that are more clearly representing the cattle face (see **Figure 49**). A hairpin from Naqada is topped with a design that could be seen as the outline of this 'Bat' face, with curved horns, two ears and a squared chin.



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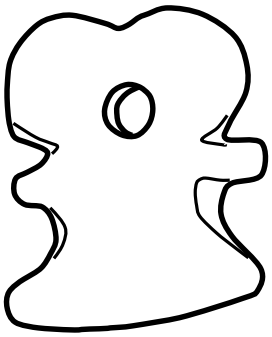


2.

Figure 49. An object displaying a possible variation upon the 'Bat' head motif: **1.** The hairpin from Grave 1774 at Naqada, of Naqada I date (Crowfoot Payne 1993: fig.77, no.1888; Ashmolean No. 1895.952; L 20.3 cm); **2.** A tracing of the detail from the top of this hairpin (After Crowfoot Payne 1993: fig.77, no.1888).

The inward-curving horns seen atop the Narmer palette may have been pragmatically stylised on the above hairpin, to form a complete loop. When attempting to depict a head in the style of the therianthropic examples, the artisan may have intentionally simplified the design to suit the small and brittle nature of the bone hairpin. The joining of the horns on smaller artefacts may have sufficed when intricate stars or facial features would have been impractical or unnecessary details. If this loop was understood as representing the horns of a

cattle-human head, leaving the intended symbol unaltered (Hendrickx & Eyckerman 2012: 38), then several other artefacts may be interpreted as representing a similar motif.

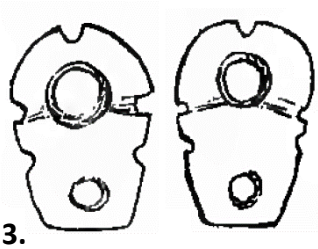
1.  **2.**  **3.** 

Figure 50. Amulets displaying a hard to understand form, possibly related to the 'Bat' therianthropic face: **1.** Amazonite amulet from Tomb K 128 at Nag El-Hai, of Naqada IIC-D2 date, photograph © MFA (mfa.org/collections/object/; Boston No. 13.3499d; H 1.5 cm); **2.** the serpentine amulet from Grave Q23 at Ballas, of Naqada IID2 date (Crowfoot Payne 1993: fig.72, no.1699; Ashmolean No. 1895.894; L 1-1.6 cm); **3.** Two shell amulets from Grave Q709, also at Ballas (Petrie & Quibell 1896: pl.lvii).

All of the above amulets are missing the characteristic trapezoidal face, but they all appear to feature inward curving horns, small protrusions for ears and flattened chins. Instead of an outward pointing chin, however, they mostly feature the opposite, a chin that narrows towards the base. The 'horns' appear to have notches remaining in between the tips of the horns which might have served to tell the onlooker that two inward curving horns were intended. The hole at the bottom of each could be interpreted as not only being functionally used for suspension, but also representative of the mouth. These forms might also be interpreted as the hieroglyphic 'ankh' symbol, genitalia or clothing (Baines 1975).

An analysis of fine use-wear on these types of artefacts would aid in understanding which of the holes were used. This might also help determine in which direction these amulets faced while they were suspended. As these forms are highly schematised, slight differences in

orientation and position can greatly affect a modern interpretation of the form. It is possible that these objects had some relation to later amulets, which appeared more anthropomorphic in nature. The ears may in fact represent arms, while the horns might have been seen as legs, with the hole signifying the bowed legs of a dwarf. Although perforations and notches may have been intended for a functional purpose of suspension from string, it should not be assumed that they did not also serve an aesthetic purpose. Certain beads seem to emphasise the quadrupedal nature of the animal through the addition of a hole near the bottom of an otherwise plain body (see **Figure 51**). This hole was used to suspend the bead on string, but it is likely that it also served this dual aesthetic purpose.

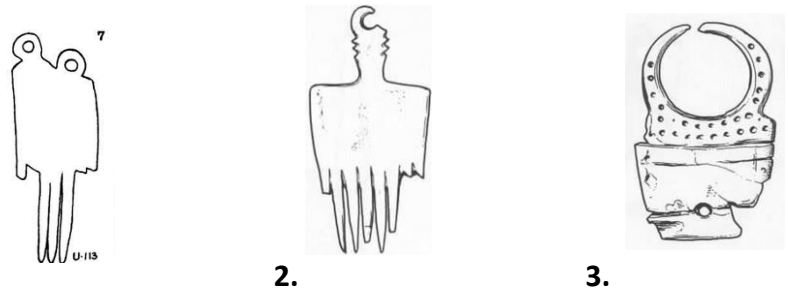
1. 

2. 

Figure 51. Amulets displaying how a drilled hole might have been used for stringing, as well as differentiating the front and hind legs of the animal: **1.** Amulet from Badari Grave 5740 of the Badarian period, photograph © Trustees of the British Museum (www.britishmuseum.org; BM No. EA59704; L 2.2 cm); **2.** A calcite bead from Grave 5108 at Matmar (Brunton 1948: pl.xv, fig.1).

It would be best, therefore, to err on the side of caution and attempt to find an iconographic explanation for every hole and notch found on an object. There must have existed many nuances of forms, where every single hole and notch, no matter how function for suspension, might have had aesthetic or symbolic importance. If the above forms, with two holes and notches, are to be understood as representing motifs analogous to the more complete 'Bat head' examples, then variations upon this form could include completely joined horns. This means that the icon may have been schematised even further, to remove the slight notch which separated the two individual horns. Several other excavated artefacts of personal

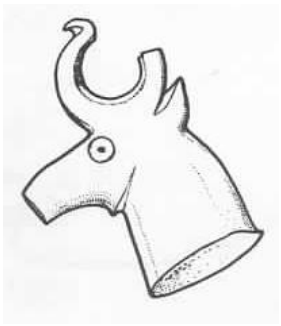
decoration have circular motifs, but it is unclear to what extent these may be related to the above forms.



1. **2.** **3.**

Figure 52. Examples of looped combs and amulets, which might display variations upon the incurving horns of the cattle-human face: **1.** A comb from Grave U113 at Hu (Petrie 1901: pl.x, fig.7); **2.** A bone comb from Naqada Grave 1852, of Naqada IIC date (Crowfoot Payne 1993: fig.78, no.1908; Ashmolean No. 1895.938; L 7.6 cm); **3.** An ivory amulet from Grave 149 at Naqada, of Naqada II date (Crowfoot Payne 1993: fig.83, no.1997; Ashmolean No. 1895.922; L 7.4 cm).

The clear examples of the Bat motif feature straight or inward curving horns, giving some precedence for the full incurving horn set creating a loop. It is not so clear, however, how this motif may then have been extended to an outward curving variant. Inward curving horns may have simply become the artistic norm, as cattle in Predynastic Egypt appear to have varied according to actual horn shape (Hendrickx 2002: 279). Without clear examples of the therianthropic heads with outward curving horns, this form must be understood as another example of horned animal.



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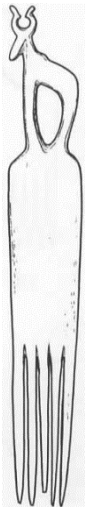
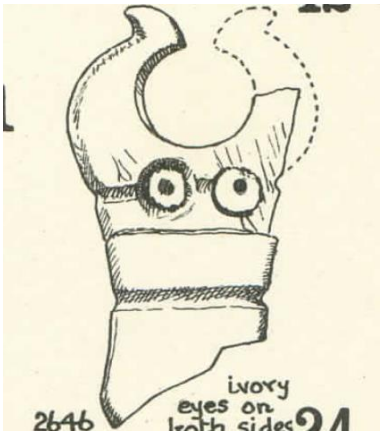


2.

Figure 53. Images demonstrating how horns were sometimes stylistically similar to 'double-bird' motifs, perhaps intentionally increasing the potency of the zoomorphic object: **1.** Mammal head with a shell inlaid eye, most likely from a siltstone palette, from Naqada or Ballas, of Naqada II date (Crowfoot Payne 1993: fig.75, no.1807; Ashmolean No. 1895.870; L 5.4 cm); **2.** A bone comb from Grave 1586 at Naqada, of Naqada IIA date (Crowfoot Payne 1993: fig.77, no.1904; Ashmolean No. 1895.942; L 17 cm).

The above artefacts feature horns on top of the head, but the horns are curved outwards much like the double-bird motif. Interpretation now becomes difficult as these examples of horns create the potential for interchangeability between motifs. For example, the above examples may have intentionally conjured images of the double-bird atop an animal's head in order to multiply the symbolism behind the object. When this double-bird/horn motif appears without an animal below or eyes on the 'bird's heads', is it possible to decide what image was intended? Further complications arise when it is not clear whether a face is intended to be depicted at all (see **Figure 54**). The below examples bear some resemblance to the amuletic Bat heads above, with the hole at the bottom of the 'face' and a circular delimitation of the horns. The following have also been inlaid with circular beads most likely representing eyes, aiding in the interpretation of them as faces. They do not, however, have ears and their horns curve outwards in the double-bird style.



1.

2.

3.

Figure 54. Amulets with forms of uncertain meaning, which seem to show elements of a therianthropic nature: **1.** Ivory amulet from Grave 2646 at Matmar (Brunton 1948: pl.xvi, fig.12); **2.** One of three ivory amulets from Grave 3759 at Badari (www.ucl.ac.uk/museums/petrie; Petrie No. UC9541; L 8 cm); **3.** The original excavation drawing representing the three objects from Grave 3759, showing the complete 'horns' (Brunton & Caton-Thompson 1928: pl.liii, fig.49).

The above examples may indeed represent bovine or part human faces, but there is still the potential for a double-bird interpretation owing to the distinctive shape of the 'bird heads'. The circular inlays may either enhance the aesthetic value of the piece without any specific anatomical interpretation, or they may represent the eyes of a hybrid cattle-human face with horns. The inlays may, however, represent breasts or nipples with the protrusions above representing the raised arms of a human being. The holes on these amulets might have represented female genitalia, further associating it with human forms. Examples of amulets and combs that most clearly represent humans invariably have heads with pointed chins (for example, Petrie 1920: pl.ii, fig.1, & pl.xxix, fig.23), whereas the above examples either do not have heads or they have been stylistically incorporated into the object below the arms. It has been noted that these types of inlays on the 'chest' area of an object may represent eyes, breasts or ears (Hendrickx & Eyckerman 2012: 52-54). When it is difficult to assume whether

an icon is zoomorphic or anthropomorphic, it should also be understood that caution should be taken when labelling it as intentionally therianthropic. This amalgamation of forms may have represented a mythical creature, or the hybridisation may have had roots in real life metamorphoses, whereby certain members of the community may have worn horned headdresses, masks and costumes in performance rituals. In both instances, perhaps the form is not truly therianthropic, but more like a mythical, or 'cryptozoological' form.

2.6.3 Human-Cattle transformation: A potentially therianthropic example from Naqada

In order to further understand the cattle-human hybrid of 'Bat', it is useful to examine other instances of this type of transformation. It is hard to point to any distinctly cattle-human artefacts in the Predynastic period, but a vessel from Naqada, of Naqada IIA date, perhaps hints at the nature of cattle-human transformations (see **Figure 55**).

The vessel from Naqada appears to have a human face with a long, large nose and circular breasts. The additions of long, curved 'arms' or 'horns' wrapping around near the face, as well as down towards the breasts are also present. This icon can be understood as being a human head with a female body embellished with unnatural and transmutative animal horns. Given the possible female interpretation of the vessel, it might relate to certain types of Predynastic female figurines where the upraised, curving arms have been viewed as visual synonyms for bovine horns (Tassie 2014: 372). The vessel may have represented a sepulchral compound, whereby the human coalesced with the animal and developed horns. This therianthropomorphism may have related to other mortuary practices such as shrouding human bodies in animal hides. The image may then represent an attainable ideal for the specific dead, or perhaps a more vague conception of ancestors or deities who have already been transmogrified. Some similar elements might be seen on a much earlier figurine found at Merimde Beni-Salame (Eiwanger 1992: Tafel 89, IV.952). People at Merimde Beni-Salame may have greatly valued cattle iconography, as many examples of cattle figurines have been

found there. The chronological differences between Merimde Beni-Salame and Naqada, however, make it hard to draw direct comparisons.

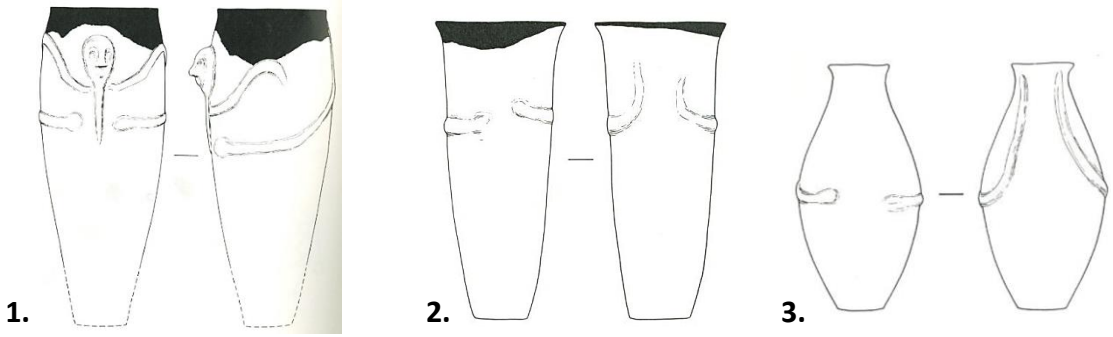


Figure 55. Clay vessels,all of Naqada IIA date, with slender strips of decoration, possibly representing horns, or human arms: **1.** From Naqada Grave 1449, now reconstructed in the Ashmolean Museum (Crowfoot Payne 1993: fig.22, no.105; Ashmolean No. 1895.122; H 42.8 cm); **2.** From Grave B101 at Abadiyah (Crowfoot Payne 1993: fig.23, no.106; Ashmolean No. E.3195; H 20.3 cm); **3.** From Grave U179 at Hu (Crowfoot Payne 1993: fig.23, no.107; Ashmolean No. E.2952; H 19.3 cm).

The 'horns' stemming from below the head on the vessel, however, may potentially depict a human clavicle or a necklace. The lines from the breasts may also simply represent human arms, albeit abstractly. When understood as purely anthropomorphic, the vessel might also be more regal in nature, perhaps conveying an icon similar to a face with a pharaonic false beard. If the protrusion under the chin were to also be viewed as part of an animal, then it might be the beard of a goat, or the 'mane' of a Barbary ram. It is also possible that the 'horns' of the motif related to that of Bat, with the male, bearded face representing the ruler. The ruler may have been seen as having power due to their ability to control, or spiritually connect with animals. It would have been desirable for the king to have become like an animal, especially a bull, as can be seen through many aspects of early royal artwork (Hendrickx 2002: 287-288).

Although a few vessels of human character have been excavated from Predynastic contexts (*cf.* Crowfoot Payne 1993: fig.22, no.104 & fig.31, no.574), the two horned examples from Abadiyah and Hu (see **Figure** 55) bare the closest resemblance to the example from Naqada Grave 1449. The two vessels seem to feature a reduced version of the motif from Naqada. Patch has argued that the pot from Hu represents hands and arms, possibly of a mothering figure (2011: 105-109), and presumably the Abadiyah example would feature the same. If these are viewed as reduced forms of a cattle-human hybrid motif, then they may simply depict bovine horns. When comparing this to the Naqada vessel, it could be interpreted that the rounded terminations of the 'arms' are the breasts being held by the hands. If, however, one were to follow the discussion on how the 'bull's head' motif might relate to female figurines, then the upwards curving decorations which terminate in points might be seen as the hands curling around the breasts (Hendrickx & Eyckerman 2012: 38-40).

These various interpretations, one of regal power, the other of female-forms and motherhood, seem highly dissimilar. If the cattle-human form was understood as a female deity, however, then it could be understood how the ruler would have strived to appear as the progeny of the celestial, motherly goddess. Regardless of the interpretation of the Naqada vessel, the example hints at the transformative actions of humans and human figures. Humans were able to appear as incomplete parts with only schematic lines referring to other elements. Ideas of how a human should be depicted or how they should be interpreted were perhaps altered by royal ideologies. The use of horns in connection with human beings might have become intrinsically linked with royal ideologies, altering the artistic relationship between human and animal elements.

2.7 Elite practices related to animals and transformation

If the transformation between human and animal in representational artwork stemmed from a real practice, then it may have involved the use of animal dress or masks. Active animal transformations are possibly hinted at through the presence of clay masks at Hierakonpolis, with arguably feline eyes. Fragments of two relatively complete masks were excavated at Hierakonpolis, along with fragments of at least two more. They were located around the complex of Tomb 16, which featured the earliest known above-ground funerary structures, perhaps dating from Naqada IC-IIA (Friedman 2011a: 85).

1.  **2.** 

Figure 56. The straw-tempered Nile clay masks from the area of the elite Tomb 16, HK6 of Hierakonpolis of Naqada II date. Although the smaller has been termed 'feline', they both exhibit angular eyes and unnatural features: **1.** The larger, and more complete mask (Adams 2000: 4; Cairo No. JE99152; H 20 cm); **2.** The more 'feline', and slightly smaller mask (*Nekhen News* 2010: 32).

Both masks could have fitted over a human face, and had the potential to have been used during life. Although found in sepulchral contexts, the weight and shape of these masks imply that they would not have easily attached to the deceased while laying on their side (Adams 2000: 4). Regardless of whether the masks were meant to be mounted onto the faces of the deceased, they may still have represented equivalent masks used by certain members of the community. They feature holes for the eyes and mouth, as well as holes by the ears allowing for attachment to the head using some form of cord or string. Despite the location of

fragments indicating around 6 other masks (*Nekhen News* 2010: 5), these examples are, as of yet, unique to Hierakonpolis for this period making interpretation difficult. The practice of using masks may have been restricted to the funerary practices of this elite area, as this is the only known context for them. It may have even been a practice restricted to one family, or one group of elite people. Despite the unknown extent of these early mortuary practices, it is clear that they had lasting impacts upon later Egyptian history (Friedman 2011b: 39). The arguably more feline nature of one of the more complete masks (Adams 1999: 4), however, may point towards a wider trend in transmorphic practices. Both masks have thin noses and feature long, angular holes for the wearer to look through. The thin, skewed eyes might be anthropomorphic, but coupled with the high, angular cheek bones, a more feline interpretation might be understood. Although the smaller mask has been termed more 'feline', both of the more complete masks feature similarly angled eyes. It could be argued that these are simply schematic representations of a human face, complete with the characteristic pointed chins (or beards) and eyebrows. On the other hand, the pointed chin might represent the thin, pointed jaw of a feline. It is also possible that the top of this mask might have extended into an unknown form, perhaps horns or hair. Although not a completely feline face, it should not be ruled out that it may represent a more subtle blend between human and cat.

The wearer might have used the magic of the cat, or lion, to assist in hunting. The elites of the Nile Valley would have developed a strong, intimate connection with the hunting grounds of areas such as the Central Eastern Desert, leaving their mark in the form of rock art, and bringing back many animals (Lankester 2012: 277-279). The many wild animals buried around the Hierakonpolis funerary complex supports the idea that the practices such as hunting or feasting emerged as elite or religious activities. Perhaps the character of the animal, such as speed or ferocity was channeled while hunting. Although the masks do not explicitly suggest ferocity, speed or other powers, the attributes of an animal which were seen as useful if bestowed upon a human may have been obvious to the observer (Patch 2011: 196), and not necessarily artistically emphasised. It might also have been the case that the animal being worn was the animal being hunted; the feline mask might have been worn while capturing the leopard found buried in the elite HK6 cemetery (Friedman 2011a: 87). The shamans

among the African *|Xam* hunter-gatherers have been known to wear caps made from the scalps of springbok, which gives them command over the animal (Lewis-Williams & Pearce 2005: 142-143). Power over animals, necessary for the hunt, may have derived from animal-spirits or deities, and may have been chanelled through portable zoomorphic artefacts (such as the flints found at Hierakonpolis) or masks.

The fact that the masks from Hierakonpolis were made of clay might have made them too heavy or uncomfortable for use on actual hunts, and their form might have been a ceremonial representation of lighter masks or even face paint. On the more complete mask, the eyes, hair, eyebrows, mouth and 'beard' were highlighted with red paint (Friedman 2011a: 91), which perhaps mimicked a real-life painting of the face and head. A twisted lock of human hair was also found near the masks, which might have originally attached to them, forming some sort of headdress (Adams 1999: 4). Anthropological evidence from North America shows how feathers and paint are common additions on anthropomorphic and therianthropic masks used to enact ceremonial and mythical tales (Lévi-Strauss 1975/1982). In this respect, the possibly therianthropic nature of the masks might have been used in ceremonies to emulate and evoke the story of a communally recognised mythical or heroic being. It is possible that masks or depictions of hybrid beings were the physical product of oral mythologies, which may have worked on the 'same axis of signification' (Morphy 1989: 13). Ceremonies may also have related to seasonal changes in vegetation, climate or wealth, where the ritual hunting or killing of an animal may have had great social importance (Russell 2012: 162-163).

The action of wearing a mask, and hiding one's humanity, might have afforded the wearer a special kind of animistic protection, whereby the user would inhabit another personality, while their own lay dormant and secure. The process of concealment within an animal form, is not unusual to the mortuary realm, where deceased were wrapped within animal hides. It is possible that this existed as an extension of real world practices. It has been stated that studying what is depicted on a mask offers a limited understanding compared to conceptually understanding what the mask does not depict, and what it might have transformed (Lévi-

Strauss 1975/1982: 143-145). Some artistic elements, from Late Predynastic palettes hint at the physical, transformative connection between the hunter and the hunted (Hendrickx 2011: 80-81). This view of the masks might support a therianthropic interpretation. Even if the masks were not specifically used for hunting, the entire elite practice does offer some ideological and cultic evidence for therianthropomorphism amongst the ruling classes. It is the connection with elitehood which makes a hunting interpretation more likely, as hunting became associated with elite power. The whole act of hunting would have become ritualised as hunting was not economically useful by around Naqada IIB-C (Van Neer, Linseele, & Friedman 2004: 120-122). Amongst representational artwork there can also be seen hybrids, possibly pertaining to a function of hunting, on the 'Ostrich' and 'Two Dogs' palettes. Humans may have had the ability to merge with a desired species for magical or ritual purposes, where representational artwork then reflected these metamorphoses. The 'Hunter's', 'Ostrich', and 'Two Dogs' palettes all feature beings which may be seen as costumed or masked humans (Adams 1999: 5).

1.  **2.**  **3.** 

Figure 57. Characters on ceremonial palettes showing how animal clothing, or mythical creatures were possibly related to acts of wrangling or hunting: **1.** Spearman from the Hunter's palette, image © Trustees of the British Museum (www.britishmuseum.org; BM No. EA20792; total W 66.5 cm); **2.** An ostrich headed person on the Ostrich Palette, (http://xoomer.virgilio.it/francescoraf/hesyra/palettes/Manchester_palette.jpg; Manchester No. 5476; total H 41 cm); **3.** A person who seems to be part-animal on the Two Dogs palette, (http://xoomer.virgilio.it/francescoraf/hesyra/palettes/dogs2.jpg; Ashmolean No. E3924; total H 43 cm).

The Two Dogs palette came from the Hierakonpolis main deposit, but the Ostrich and Hunters palettes do not have good provenance. The palettes seem to be of Late Predynastic or Early Dynastic date, but the small number of excavated examples makes it hard to understand how representative these palettes were of artistic trends (Stevenson 2009a: 5). It has been argued, however, that representations on other object types, such as painted vessels from Abydos, may also represent masked humans in connection with hunting (Hartung 2010: 110). In this case, the masks are assumed to be avian, and it is a practice which Hartung believes was restricted to the Predynastic period, or at least the artistic depictions of this practice (Hartung 2010: 110-111). The Hunters palette shows hunters wearing feathers in their hair, or possibly a headdress, and they each have animal tails. This hunting outfit is most likely what the 'elites' of the Abydos vessels are wearing, which is better evidenced by the vessel featuring animal wrangling (*cf.* Hendrickx & Eyckerman 2012: 26-27, figs. 1c-e). These vessels, along with other similar examples, offer insight into the nature of human metamorphosis; the large figures appear to have feathers emerging from their heads, as well as animal tails (Hendrickx & Eyckerman 2012: 25). These figures may have either been of the elite class, chieftains or *de facto* kings. Their social status is important, as the elite past time of hunting might offer some explanation for their affinity with animals. The feathers and tails may have been collected during successful hunts, and used as a display of one's hunting expertise or status. Even symbols of these successes, such as hippopotamus amulets, may have acted like trophies (Tassie 2014: 371), used to visually affirm the elite's hunting skills. It could then be understood why such symbols would convey power and legitimacy of rule for early kings and elites. The symbol of a bull's tail hanging from the pharaoh's waist is such a pervasive one that it survived throughout much of Ancient Egyptian history, with the tail, or at least an effigy of one, become part of the ruler's official regalia. These items may also have been worn, however, for unity or cultural identification of the hunting party.

The Ostrich and Two Dogs palette seem to offer the possibility of another alternative. Functionally, some hunters may have employed subtle tactics of sneaking and baiting, whereby zoomorphic masks and animal hides may have acted as camouflage (Crompton 1918: 57-58). More spiritually, the power of the animal may have been channelled through transformative actions, and utilised during the hunt. Certain aspects of animals, which may

not necessarily have been artistically emphasised, but commonly understood, were possibly channelled through amulets giving the user passive or active powers for defensive or offensive use (Flores 2003: 49). For example, the tail of the bull might have given each hunter the perceived power, speed or ferocity of a bull, which might have been necessary attributes for taking down big game.

Anything that the elite Egyptians enacted during a hunt may have stemmed, through the preservation of tradition or interaction with nomadic communities, from non-agricultural traditions. The relationship between hunter and animal was not necessarily any more animalistic or primal compared to pastoralist relations with their livestock (Wengrow 2006: 61-62), yet these two relationships certainly involved different forms of engagement (Ingold 2000: 74-75). Elites, who lived in a society of domesticated animals, would then have to actively enter a new engagement, or 'contract' with the animals they hunted. Perhaps engaging with this alternative contract was achieved through connecting with a different identity, or associating with an animal spirit.

It is fortunate that the Two Dogs palette has the best provenance, as it features many interesting elements. Not only does it appear to have a human dressed as a giraffe, donkey or canid, but this character is also holding a large object to its mouth. This may have been a noise-making tube, used to confuse, scare, or entice prey. It might also have been a weapon of hunting, a blow-pipe. Also this palette features hybrid animals; serpopards and an unusual, winged griffin-esque creature. Given the context in which the giraffe-human hybrid appears, there is every possibility that it represents a mythological creature. As the anthropomorphic example seems to be interfering somewhat with the animal in front of it, it may have been some mythological creature who aided in the hunt, or perhaps was simply related to nature in some way. The entire palette may have depicted a mythical scene, such as a dreamscape or a mythically embellished historical event. Even though the terminus of this palette was Hierakonpolis, there is still the unknown factor of where it was originally made and used, much like with the Narmer palette (Stevenson 2009a: 5). No matter the function of animal clothing, there is every possibility that hunters were intentionally channelling ideas of animal

hybridisation. Therianthropism, in terms of viewing animals as related to humans during the hunt, is an anthropologically observable phenomenon which perhaps stems from an empathy of animal movement and actions, which is necessary for successful hunts (Russell 2012: 168-170).

2.8 The further combination of human and animal

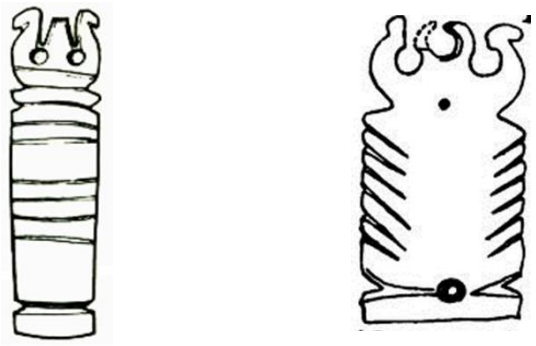
The discussed ambiguity between motifs of motherhood, pharaonic power and animal transformation might help interpret amuletic forms. The amulets discussed above, with the inlaid 'nipples' might now be further understood as representing some form of mothering/female figure. Other amulets of similar type go further to blend the distinctions between human and animal. Understanding how humanity might be so abstractly schematised helps in the reading of a human form, on an otherwise highly ambiguous form.

1.  **2.**  **3.** 

Figure 58. Anthropomorphic artefacts illustrating how inlays, incisions and holes may have represented different parts of the body, or clothing: **1.** A bone amulet from Grave T.24 at Naqada (Crowfoot Payne 1993: fig.81, no.1962; Ashmolean No. 1895.133; L 6.2 cm); **2.** A siltstone amulet from Grave 271 also at Naqada (Crowfoot Payne 1993: fig.81, no.1960; Ashmolean No. 1895.132; L 8.2 cm); **3.** The ivory figurine, or hairpin from Grave 271 at Naqada, of Naqada I date (Crowfoot Payne 1993: fig.3, no.8; Ashmolean No. 1895.129; H 17.2 cm).

The presence of inlays can be seen on the example from Grave 271 at Naqada as representing nipples, due to the clear presence of a face with eyes above. There are stylistic similarities between this example and the Badarian artefacts from Grave 3759. It could then be said that the Badarian examples also feature nipples and the head may have been replaced with horns or two bird heads. A comb from Grave 1562 at Naqada also seems to feature a being with

horns or birds in place of a head (Crowfoot Payne 1993: fig.77, no.1903). Other parallels can be seen between anthropomorphic and zoomorphic objects, for example the two examples from T.24. If the incised lines on the body of anthropomorphic amulets, such as on the above examples from Graves T.24 and 271 at Naqada, are viewed as clothing or ornamentation, then the ivory amulet from T.24 and the amulet from Grave U119 at Hu may have also represented human bodies.



1. **2.**

Figure 59. Amulets with incised lines, which may have had some relation to anthropomorphic amulets: **1.** Ivory amulet from Grave T.24 at Naqada, of Naqada IIB date (Crowfoot Payne 1993: fig.81, no.1963; Ashmolean No. 1895.917; L 5.5 cm); **2.** An amulet from Grave U119 at Hu (Petrie 1 901: pl.x, fig.12).

The motif on the top of these objects could be interpreted as representing schematic human heads with upraised arms, but the scale of their 'heads' in comparison with more obviously anthropomorphic examples makes this interpretation less likely. This double-bird motif may simply be atop the amulet with the extraneous incisions used for aesthetic purposes, or it may be that the double-bird icon had a special meaning when used as a replacement for the human head. It is also possible that the inlays on the 'double-bird' examples, do still represent nipples, yet we are viewing the bottom half of the human body, with the extensions representing legs. So as the amulet hung downwards, it would appear to show the torso, legs and possibly genitals of a human being. This separation of the human body is evidenced by the way in which these amulets do not portray a complete human body. No arms are present, and at the very most, these forms end at the waist. Amulets appear to only feature

fragmented humans, despite the presence of complete bodies on other artistic forms such as flint, vessels and figurines. On amulets it is entirely possible that other portions of the human body were represented, albeit in a difficult to read way.

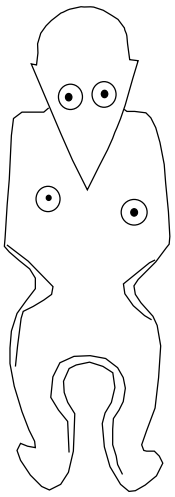
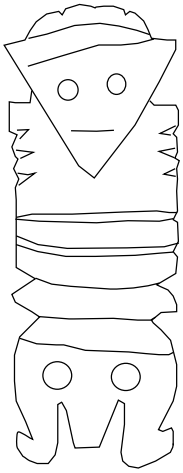
1.  **2.** 

Figure 60. Two composite images showing a theoretical complete body, if one were to view certain amulets as representing upper and lower halves of a human body: **1.** This composite uses the pendant from Grave 271 at Naqada as the head (After Crowfoot Payne 1993: fig.81, no.1960), with an ivory amulet from Grave 3759 at Badari used to show legs and feet (After Brunton & Caton-Thompson 1928: pl.liii, fig.49); **2.** The second composite uses the bone amulet from Grave T.24 at Naqada as the head (After Crowfoot Payne 1993: fig.81, no.1962), with the ivory amulet from the same grave representing legs, feet and possibly stylised genitals (After Crowfoot Payne 1993: fig.81, no.1963).

If Predynastic amulets were viewed as having prophylactic powers, then the representation of open legs might have been used to improve fertility, or perhaps ensure a safe birth. The use of separate parts of the human body might have allowed for a more targeted, and precise magic. For example, the upper half of a human, without arms, might have safeguarded against ailments of the core body, vital organs and brain. The horizontal incisions, and notches might have represented areas which might be protected from harm along the trunk of the body. This division of the human body along the transverse plane might also tie into previously discussed notions of cosmological and binary division of the 'upper' and 'lower'.

All of the minute details found on these small representations might be interpreted in various ways. Holes, inlays, incisions and scratches are used on multiple object types with varying results. A comparison of these examples might uncover the nuanced meanings behind their use. Understanding the extra details featured on items of personal use is difficult considering the great variety of styles. The context of the detail is key to understanding it. For example, if an object is clearly anthropomorphic, then the details might be related to known human anatomical features, or clothing. It is when a form is vague, or therianthropic, when the language of incisions or perforations becomes less clear. Perforations and incisions are found commonly on anthropomorphic objects as seemingly representing necklaces, tattoos and clothing. Zoomorphic objects, however, feature eyes as the most common form of elaboration beyond a plain silhouetted figure. Many siltstone palettes have also been worked to incorporate extra details, such as the fins of a fish or the toes of a turtle. The avian examples of palettes, however, are relatively unworked, apart from the form of double-bird palettes with projections between the heads, which possibly represented feathers. Mouths are regularly depicted on fish, yet avian palettes do not feature incised lines defining the division of the beak, save for one example of a singular bird, from Grave 1694 at Mostagedda (Brunton 1937: pl.xliii, fig.8). The use of inlays or perforations as extra details other than eyes can also be seen on several, non-anthropomorphic objects with excavated provenances.

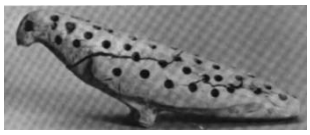
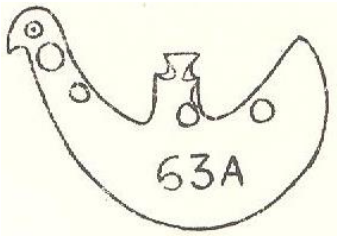
1.  **2.**  **3.** 

Figure 61. Artefacts showing how shallow holes were used as a form of decoration: **1.** Hippopotamus ivory amulet from Grave 1348 at Naqada, of Naqada II period (www.ucl.ac.uk/museums/petrie; Petrie No. UC5668; H 4.3 cm); **2.** A siltstone palette from Grave 171 at Naqada (www.ucl.ac.uk/museums/petrie; Petrie No. UC4690), and the ivory figurine from Burial 36 at El Ma'marîya (Needler 1984: pl.86, fig.5).

Understanding the use of perforations, which are also used to depict eyes, would aid in the interpretation of the form intended. Perhaps the many circles on the avian figurine from El Ma'marîya represented decoration on the feathers of the subject matter, which may have been characteristically spotted like a guineafowl, gadwall or other species. On smaller, amuletic objects these circles may have been reduced in quantity for practical reasons, where a much smaller amount would suffice to symbolically signify spotted decoration. On the ivory amulet from Naqada, the shallow indentations only appear along what could be considered the necks and heads of the two birds and not the more functional portion of the object. On the siltstone artefact from Grave 171, the holes could potentially represent the spines of a hedgehog or the oars of a boat, depending on how the object is interpreted. The Cairo Museum also curates two palettes with stems, but with opposing, pointed bird heads, and similar shallow holes. The objects, labelled '13 9 32 5B' and '13 9 32 5A', feature semi-circular sets of holes, much like the example from Naqada, yet the Cairo examples only feature five holes, excluding the hollowed eyes. In the same style as the Naqada example, they have a sixth hole in the centre, above the semicircle of holes, where the stem of the palette is. There also exist another two objects, similarly perforated with five, regularly spaced inlays along the body. These two artefacts were excavated at El Mahâsna, both from the same grave, H 22

wrapped in matting along with the body (Ayrton & Loat 1911: 15). The more complete of the two has a rounded head, with the more pointed end representing the tail. The other is broken at the head, with only the tail remaining.

1. 

2. 

Figure 62. Siltstone palettes with stems, showing how inlays might be added to the surface: **1.** From Abadiyah grave B109 (Petrie 1901: pl.xii, fig.37); **2.** Two from Grave H22 at El Mahâsna (Ayrton & Loat 1911: pl.xv, no. 3).

Perhaps there was a specific connection between the regular spacing of holes along the curvature and the shape of these stemmed palettes. The palette with stem from Abadiyah is a singular bird, with the head facing outwards, and has an unusual set of perforations. There are only four holes, not including the eye, which are unevenly spaced and of irregular sizes. It can also be seen from the publication, that at least two of these holes were fairly deep (Petrie 1901: pl.vi, B109). Particularly striking about this object is the indentation much larger than the eye, just at the neck of the bird. The grave B109, as well as containing several other amulets and figures, held an almost identical bird palette but seemingly without these holes. It could be argued that the drilling of holes on the body perhaps served a more functional purpose, as it is clear that the bird may have been identified without them. On this particular example, the holes seem unrelated to egg-shell inlays, owing to their varying sizes and depths. These holes may have been inlaid with a material which perished, or simply dropped out. The

small holes may have been used to store a small amount of ore, or pigment before being used upon the palette. Apart from these few examples, inlaid egg-shell beads were only used to represent eyes. Given the large corpus of palettes and amulets which use inlays in this way, perhaps the only way to interpret these inlays are as eyes. The only other use of inlays, with definite interpretations, are as nipples or breasts, but the evidence for this is lacking. The connection between palettes and eyes may have stemmed from the need for ground materials to keep eyes healthy and clean. The image of an eye, found on most zoomorphic palettes, may have allowed the user to improve their ocular health or strength, via the power the animal depicted. It has been suggested, through the presence of several plastered skulls, that Neolithic Near Eastern sites may have generally understood inlaid eyes as representing post-mortem or supernatural sight (Lewis-Williams & Pearce 2005: 72-77).

If the general shape of palettes with stems is to be accepted as boat-like, then the eyes might have afforded a boat with the power to 'see', or navigate clearly. The eyes, if they had become symbolic of good health, may have protected a boat in general, with prophylactic powers. These types of palettes might then have been favourable amongst individuals who used boats frequently for work and trading. The inlays may have even schematically represented humans who were on, or connected to the boat.

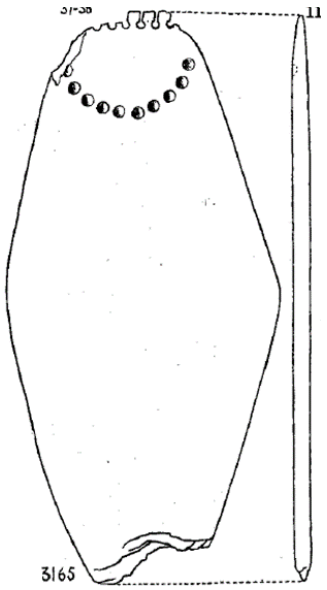


Figure 63. The broken siltstone palette from Area 3165 at Badari (Brunton & Caton-Thompson 1928: pl.lii, fig.11; Petrie No. UC9526; L 32.5 cm).

Viewing the ivory amulet from Grave 1348 at Naqada, the palette from Grave 171 at Naqada and the palette from Badari linked together, it can be seen that they share the same nature of perforated design; they all feature a semicircle of between 10 and 12 perforations. The perforations on top of the palette from Badari, however, makes it more difficult to interpret. Perhaps the uniqueness of this palette is due to the fact that it comes from a settlement context, rather than a sepulchral one. The relative lack of settlement evidence might mean that forms with perforations might have been more numerous, but for certain reasons were not included in grave assemblages. The palette, much like the other amulets with shallow holes, seemingly represents something akin to a necklace. The relation between this motif and a necklace might be seen best on the ivory objects from Grave 271 at Naqada which feature shallow holes in a semi-circle across the chest of the figures (Ashmolean No. 1895.129 & Petrie No. UC4253). The design on these anthropomorphic amulets might not necessarily have represented necklaces, however. It is possible that the semi-circular array of holes became representative of boats, animals or amulets and the owner of these artefacts may have embellished them with this icon.

The perforations on top of the palette from Badari may have reinforced this design, where the holes, and the repetition of them, enhanced their meaning or power. The drilled holes atop the object, although unique on full-sized palettes, can also be seen on a small number of amulets. The palette from Badari, being nearly 6 times larger than the amuletic versions, might have been an elaborate or ceremonial form of the amulet, conversely, the amulet might have been a compact reduction of the palette. The 'reduced' amulets may have been used as symbolic grave goods to represent the status or identity of the individuals who had used the full-sized palette. The idea that this form had meaning beyond purely aesthetic is possibly strengthened by the fact that this palette features an unusual style of notched decoration at, what is presumably, the top. This notched form could be seen as an extension of the double-bird form, whereby the central projection is repeated. There are examples of amulets with similar decoration; an amulet from Gebelein (Lortet & Gaillard 1909: 234, fig.169), and an example excavated from Grave a16 at El Amrah (Randall-MacIver & Mace 1902: 19).

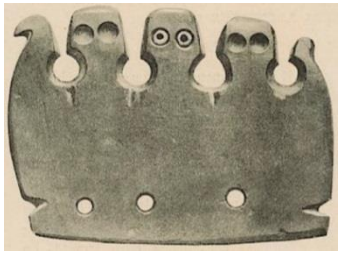
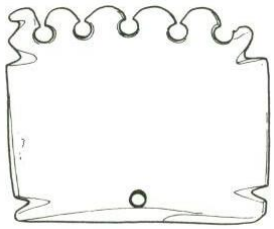
1.  **2.**  **3.** 

Figure 64. Examples of an uncommon type of amulet, featuring several nodules and perforations, possibly related to the double-bird motif: **1.** The example recovered in Gebelein (Lortet & Gaillard 1909: 234, fig.169); **2.** From El Amrah Grave a16 (Randall-MacIver & Mace 1902: pl.x, fig.7; Cairo No. 35156; L 10 cm); **3.** An amulet without provenance in the Ashmolean Museum, Oxford (Crowfoot Payne 1993: fig. 82, 1993).

The Gebelein example was actually located in a *sebakhin* spoil heap (Lortet & Gaillard 1909: 234). It seems to have a less abstract form when compared with the example from El Amrah. As it is of uncertain date, differences in form may be due to it actually being Early Dynastic in date, as some of Lortet & Gaillard's other finds seem to be (their finds from Khozam are highly unusual, but they have been left within the database, as there is not enough evidence to discount them outright). The Gebelein amulet appears to have three heads, which closely resemble turtle heads seen on many other palettes. Each head has two eyes of what is presumably shell inserted into shallow holes, although it appears not all of the inlays had survived. The El Amrah example also features inlays within shallow holes that do not perforate through to the other side, with the exception of the damaged portion on the left. Both items also create negative holes between the 'heads'. The El Amrah example, however, does not have very well defined 'heads' and these stem-like projections only feature one 'eye' each. Although a number of inlays are missing, the top row would have had eight eyes, and possibly at least another two, seeing as the far left and right stems may have originally extended upwards to match the bottom row. The even number of eyes may possibly suggest that heads, possibly turtle, are implied. The same might also be suggested on the bottom row of inlays, which also has an even amount of holes. The Ashmolean example, however, features no shallow holes or inlaid eyes, perhaps implying that they were not necessary for the correct

interpretation of the motif. The stems on the far left and right may have originally ended in a more bird-like shape, much like the examples from Gebelein and the Ashmolean Museum. These bird heads, however, may also be interpreted as the limbs of the turtle(s) as they extend upwards on either side of the heads, much like on turtle shaped palettes. The notched elements at the bottom of the amulet may even be seen as the hind limbs. If these pieces are conjuring images of larger cosmetic palettes, then they may have intended to depict several animals on one item, such as the turtle-mammal-bird hybrid palette from Naqada Grave 271 (Petrie & Quibell 1896: pl.xlvii, fig.11). The above examples might possibly depict bird-turtle hybrids.

Once again, the comparison may be made to non-zoomorphic iconography, where the amulet may have represented a boat with several cabins or perhaps a boat full of sailors. If these heads are to be viewed as human, combining this idea with the human legs interpretation proposed above might give these pieces a meaning of multiple children being born of one mother. It might also be the case that an animal was understood as giving birth to human children, or even the other way around. This blend of human and animal may fit into the more elite iconography of humans having the traits of animals. Amulets such as these may have represented a mythical story, such as the animal birth of the zoomorphic king. The artefact might also have represented the humans who are under the protection of the animal 'mother' once the power of the amulet was invoked.

When considering the objects that appear stylistically somewhere between horns and birds, it seems that the presence of perforations and inlays may be multifaceted and difficult to interpret. When finding a connection between the above examples, the more three-dimensional bird carving of ivory perhaps was used in life in a different way to the amuletic artefacts. The way in which people would have interpreted the symbols upon it may have worked in a different way. It is also possible that it was created with the sole intention of deposition into the grave. With the 'cosmetic' palette and the two amulets, however, it is more reasonable to assume their use within life, especially considering the non-sepulchral context of the palette from Badari.

It is interesting to understand the palette or amulet as taking on an extra form, beyond the initial basic outline of the shape intended. Shallow indentations may have been made by the user for various reasons. Certain examples might have stemmed from a functional use of grinding materials. The differing appearances of the holes may have been due to the differing cosmetic practices which may have existed. Some holes, for example the palette from Naqada grave 171, obscured the main grinding area, while examples like the palettes from Area 3165 at Badari and from Abadiyah grave B109 are higher and away from the centre. Certain cosmetic practices may have necessitated the use of small holes for inserting different ores or pigments, while the more common practice would have been to grind all ingredients on the flat surface. The two from El Mahâsna, however, have had their holes inlaid, reducing their functional use. There is no clear evidence on the nature of how perforations and inlays related, chronologically, to the initial inception of the piece. The holes may have been functionally used for processing collected ores, and perhaps inlaid when the stone was no longer quarried, and the artefact reached the end of its 'life'. The nature of stone working creates the potential for surface incisions to have been formed after the creation of the object. That is, scratches and drilled holes may have been additional to the initial form, created as and when the user saw fit. Indentations can be seen on many examples of palettes, showing how substances had been ground repeatedly upon the artefact. Light scratches are also a common feature on palettes, perhaps indicating another use of the palette involving the mechanical or ritual scarification of the surface. It should not necessarily be assumed, therefore, that all cuts and perforations functioned in the same symbolic realm as the iconography initially carved on the artefact.

Objects may have had their power reinvigorated through the act of altering the surface. This may have occurred when objects were rededicated to a new owner, where each inlay or surface decoration contained the memory of a previous owner. The reuse of palettes over many generations may have cemented a ritual importance of the designs, which may have once been more functional.

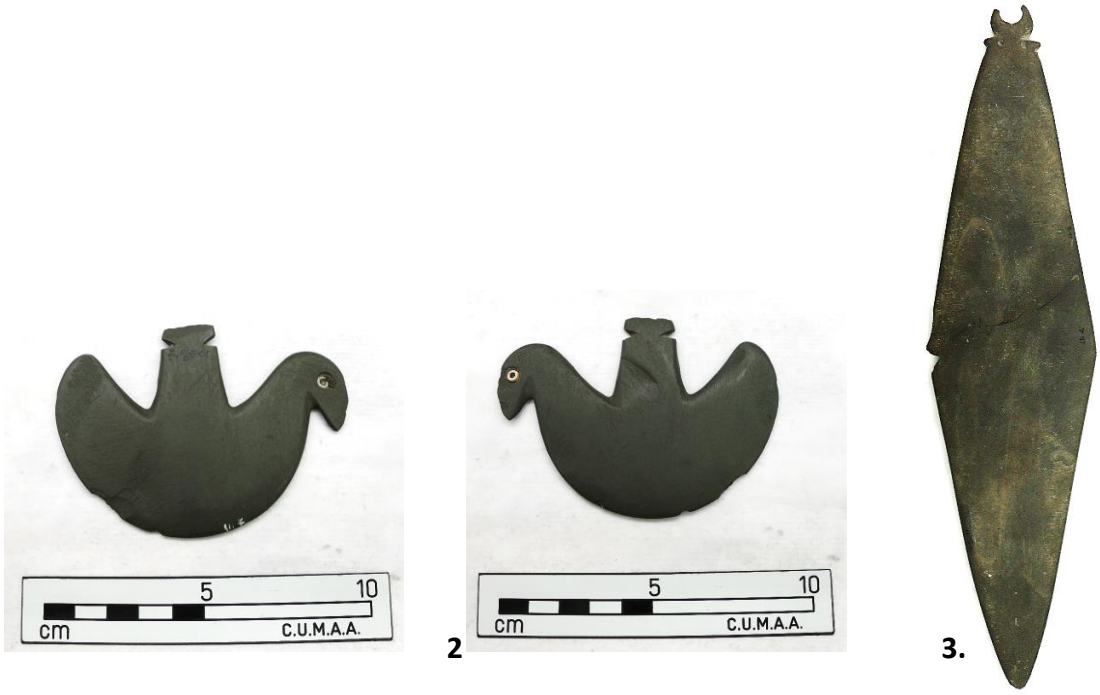


Figure 65. Siltstone artefacts showing how the surface, as well as the inlaid eyes were altered with shallow and deep scratches (Author's photographs, ©The University of Cambridge Museum of Archaeology and Anthropology): **1.** A bird amulet from Cemetery B at Abadiyah, showing the damaged inlay (Cambridge No. Z 18001; L 9.5 cm); **2.** The reverse side of the same amulet, showing the deep cut on the stem; **3.** A palette from Grave a97 at El Amrah (Cambridge No. Z 36137; L 24.5 cm).

The above bird amulet from Abadiyah features many fine scratches upon the surface of both sides. These scratches seem to have focussed on certain areas and in certain alignments. On both sides there can be seen scores cutting directly across the inlaid eye, although on one side this inlay is incomplete. It is possible that, with a stone or possibly metal tool, the user scratched across the eyes on both sides. This action might be what caused the damage to one of the eyes. There is also a large gash on the 'stem' on one side. This persistent scratching over the whole piece may have been conducive to the grinding of pigment upon the surface, but it is unlikely that the inlayed eyes were intended to be used for the grinding. The scratches over the eyes, however, imply either some form of practice related to the eyes, or unintentional damage related to the careless nature of grinding. The palette above, from El

Amrah, also covered in scratches, features roughly horizontal scores down the edges of the 'body', with more diagonal incisions near the 'head'. Again, there are localised differences in surface scratching, showing that actions took place in very specific ways upon the surface. It might also be relevant that the whole piece has been split in half. It might be argued, that these palettes were ritually damaged or 'killed' in order to nullify the power or danger the animal might exert upon the tomb owner. Although this kind of practice is seen later on in Egyptian history, notably the dismemberment and disabling of zoomorphic hieroglyphs (te Velde 1985: 66-67), it should not be assumed that this practice necessarily developed so early. It is possible, however, that a similar process might have occurred but for different reasons. For example, it is also possible that the user, during their life, may have scarred certain areas of the animal in order to gain the healing or protective powers of the animal. Regardless of the reason, there are certainly a number of palettes that are highly scratched, and not only in the areas where pigment was ground. This practice may have existed as some form of secondary use, completely unrelated to the grinding of materials.

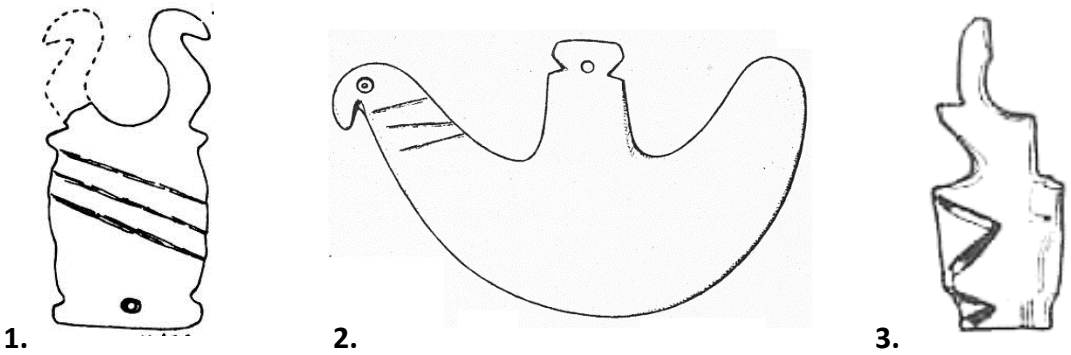


Figure 66. Amulets of bird, and possible double-bird form, showing how incised lines may be added: **1.** The amulet from Grave U104 at Hu (Petrie 1901: pl.x, fig.11); **2.** The siltstone palette from Cemetery 1800 at Mostagedda (Brunton 1937: pl.xliii, fig.11; Vienna No. 8123; L 14.7 cm); **3.** The amulet, possibly of elephant ivory, from Grave B102 at Abadiyah (Crowfoot Payne 1993: fig.83, no.1996; Ashmolean No. E.1010; L 1.5 cm).

The use of lines on these bird-like amulets might have worked in similar ways to the amulets mentioned above (like the two from Grave T.24 at Naqada). The amulets from Hu, Grave U104 and Abadiyah B102, however, feature much plainer designs. The carving of lines on the example from Hu, as well as the palette from Mostagedda (Brunton 1937: pl.xliii, fig.11) might also be seen as unrelated to the initial form. As these forms seem to relate to those of potential anthropomorphic character, the lines might work at a similar level of understanding, with lines represented clothing, jewellery or human anatomical features. Although it has been discussed above how a single, semi-circular row of holes might have represented a necklace, anthropomorphic artefacts in the Predynastic period do not consistently depict necklaces in this way. There are artefacts with more than one row of drilled holes, for example the amulet from Naqada Grave 1757 (Petrie & Quibell 1896: pl. lix, fig. 8A; Petrie No. UC5455), the combs from graves 1561 & 1411 (Crowfoot Payne 1993: fig. 77, 1901; Ashmolean No. 1895.1225 & Petrie 1920: pl. xxix, fig. 23; Petrie No. UC4308) as well as others. Necklaces on anthropomorphic objects might also have been represented by paint, for example the vegetable paste figurine from Naqada Grave 271 (Crowfoot Payne 1993: fig. 8, 30; Ashmolean No. 1895.128), or incisions, for example the ivory carving from Naqada Grave T.4; Ashmolean No. 1895.1205). Similar incisions or embellishments on zoomorphic artefacts might also have been understood as necklaces. Perhaps the use of lines and circles on amuletic objects was an abbreviated method of conveying anthropomorphism, whereby the viewer would have understood that the animal or icon is wearing clothing and jewellery. The relation to necklaces might even have been observable on the species of bird depicted. Certain birds have prominent collars, tufts and neck plumages that may have been depicted with lines, such as the brant goose, smew, African collared dove, Egyptian plover, and certain other pranticoles and plovers. Humans may have interpreted birds as having anthropomorphic attributes, and this might have been reflected in representational artwork.

Avian-human transmorphism might be seen on another set of objects, which have often been understood as having bird-like heads, with human bodies. The majority of these figurines were excavated at Ma'mariya (for example, Ucko 1968: 44, 47 & 48), while other examples with similar faces have been found at Naqada (Crowfoot Payne 1993: fig. 12, 49 & fig. 8, 30), Abadiyah (Ucko 1968: 500, pl. lxxvii), Abydos (Hartung 2011: 469, figs. 1a-1c), with certain

fragmented bodies from Mahâsna of a similar style, but no heads remain (Anderson 2006: 220 fig. 6.49).

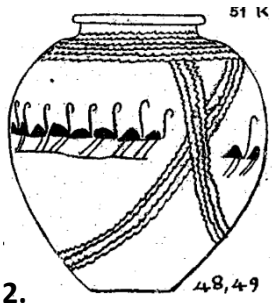
1.  **2.** 

Figure 67. Clay artefacts showing human forms which have been viewed as having bird-like faces: **1.** A figurine from Ma'mariya Tomb 2, of Naqada IIA date (Patch 2011: 112, cat. 93; Brooklyn No. 07.447.505; L 29.7 cm); **2.** A vessel from cemetery U at Abydos, of Naqada IC date (Patch 2011: 115, fig.34; Cairo No. U-502/1).

This type of figurine has often been interpreted as having the qualities of a human, as well as a bird. This is perhaps a fallacy, as the pinched clay face, is likely an abbreviated representation of the human face; an abstract nose and chin (Patch 2011: 112-123). If the extreme, downwards-curving heads of the female figurine are understood as human, there still exists the similarities between them and more avian examples of artwork. Rather than apply the avian interpretation onto the human figures, perhaps the reverse was true. Ostriches and bird palettes might have been given the schematic pointed chin of a human (see **Figure 68**). If it could be assumed that a human body would have an animal head, then it is possible for it to have worked the other way around.

1.

2.



3.

Figure 68. Images showing how schematised heads might possibly be viewed as avian, human, or a combination of both: **1.** A head of the palette from Mesa'eed, Tomb 197, no. 3, of Naqada I-II date, photograph © MFA (mfa.org/collections/object/; Boston No. 11.228; total L 10 cm); **2.** A decorated vessel featuring a row of ostrich (Petrie 1921: pl.xxxv, 51k); **3.** The upper part of a baked clay female figurine from Ma'mariya Tomb 2 (http://www.brooklynmuseum.org/opencollection/objects/4223/Female_Figurine; Brooklyn No. 07.447.502; L 31.2 cm).

Vessels from Cemetery U at Abydos have been interpreted as representing humans with avian masks, possibly dancers, in relation to a hunting scene (Hartung 2010: 110). The figures on this vessel have thin, pointed faces, as well as long strands of hair emerging from the backs of their heads, or masks (Hartung 2010: 118, fig. 4.c). Perhaps the retention of humanity was understood through the depiction of hair, as most bird depictions feature smooth heads, with feathers not often depicted. In this case, the only way for an onlooker to have understood a form as being an avian hybrid, might have been through the shape of the face. The similarities between a schematic chin and a beak does not prove the cross between human and bird, however. On the monumental palettes at the end of the Predynastic period, there can be seen clearer transformations between bird and human (see **Figure 69**). The Narmer palette features a falcon with one avian talon, and one human arm, while the Battlefield palette portrays standards with icons of birds holding captives with human arms.

1.  **2.** 

Figure 69. Elements from ceremonial palettes displaying avian forms enhanced with human arms: **1.** A detail from the Narmer palette (after O'Connor 2011: 146, fig.16.2; Cairo No. CG14716; total L 64 cm); **2.** A fragment of the Battlefield palette (Teeter 2011: 222, catalogue 80; Ashmolean No. 1892.1171; H 28 cm).

These examples of hybridisation may have had complementary meanings, given their similar contexts and content. In both examples, the bird-human hybrid is seen asserting dominance over a defeated enemy. The very notion of a bird taking on human aspects might have been seen as a symbol of power, divinity or kingship. The figurines with 'avian' faces might have existed as a forerunner to imagery such as these. Perhaps the variable appearance of arms amongst these examples could show an early foray into the deification of the avian form, which might have begun with the addition of human appendages (Roth 2011: 200). As they are found in burial contexts, there was perhaps a strong funerary meaning behind these figurines. If an avian hybrid was intended, it would have served a specific mortuary role, as compared with the later hybrids of war and suppression seen on the ornamental palettes above.

Regardless of whether these figurines should be understood as bird-like or not, it has also been noted that they resemble another type of animal. It has been argued that the curved arms on some of these figurines would have conjured imagery of cattle motifs (Hendrickx 2011: 79). The idea is that the curving arms are the horns of the bull head, the reduced stump

for legs is the bull's muzzle, while the breasts are the eyes of the bull. Evidence on the figurine, however, suggests that at least some of the figurines had painted black hair, and other similar examples point to the possibility of applied clay for hair. With a large amount of hair, these figures may have initially represented an image much closer to the 'praising' or 'dancing' figures seen among the corpus of painted vessels, rock art, as well as the Gebelein linen (Lankester 2012: 283-286). With the large, circular head or hair, this icon arguably becomes less like a cattle head motif, and therefore just human. These people are also depicted with their arms in various positions, holding hands or simply downwards. Notably, the vessel from Abydos features eight of these figures, physically moulded and attached to the rim, all with their arms pointed down and possibly holding hands. Furthermore, there are a number of figurines with 'avian' faces which were created without arms.

Despite the superficial similarity to horns which some of the human figurines may have, it is clear that the curving arms were not vital to this figurine type. It appears that the arms may have existed in many different states, and may have served the same purpose of portraying what were perhaps real world ritualised activities (Patch 2011: 114-115). This, coupled with the fact that the faces do not seem entirely bird-like, might give most of these figurines a simply anthropomorphic interpretation. It cannot be dismissed entirely, however, the idea that the curving arms may have conjured the imagery of bovine horns amongst the Ancient Egyptians. If one were to view these faces as avian, however, then the interesting point is raised that there are often connections between bovines and birds, such as the 'double-bird' motif found on many palettes (Hendrickx 2011: 79, Hendrickx & Eyckerman 2012: 23).

It has been argued that 'Bull's head' amulets, as well as a flint object from the Naqada cache provide an intermediary, or blending of the female and the bovine imagery (Hendrickx 2011 & 2002). It is the upwards curving horns which might be read as arms which adjoin with the 'eyes' or 'breasts' (Hendrickx & Eyckerman 2012: 38-40). The relation to eyes or breasts, as well as the interchangeability of the two, might be seen through one of the amulets from Naqada grave 1788 which appears to emulate egg-shell inlays. These inlays seem to only represent either eyes or breasts on Predynastic amulets and palettes. One 'bull's head'

amulet from Abadiyah Grave B378B even features both eyes inlaid with shells (Crowfoot Payne 1993: 210).

The ambiguity of these forms, which cause uncertainty in interpretation may have been intended, due to the schematic and non-naturalistic manner (Hendrickx 2011: 79). On these amuletic artefacts, there are no heads which would have given a clear anthropomorphic interpretation. When depicting humans, it is clear that the head is an important element. There are no clear examples of humans depicted without heads in this period, aside from the later decapitated victims of Narmer. These symbols, although perhaps crafted with some intention of ambiguity and nested meaning, should not necessarily be used to apply a bovine interpretation to other human figurines. It has also been noted by Hendrickx (2011: 79), that not all of the Ma'mariya type figurines are female. The lack of breasts on the male figures means that, if they are viewed as bull heads, they would not have eyes. It might then be argued that only the female versions of this figurine type could be interpreted as 'bull heads'. Despite the term 'bull's head' being used here, the form of the zoomorphic amulet type is not explicitly clear. It has been argued that the symbol may in fact depict the head of a ram or an elephant, although Hendrickx disagrees with these interpretations (Hendrickx 2002: 285-287).

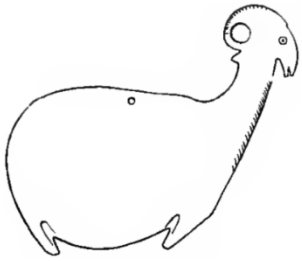
1.  **2.**  **3.** 

Figure 70. Images showing the possible similarities between the 'bull's head' amulet type, and the Barbary sheep, *Ammotragus lervia*: **1.** A Barbary sheep (©Egypt Independent at: www.egyptindependent.com); **2.** An ivory amulet from Naqada grave 1788, photograph © UCL (www.ucl.ac.uk/museums/petrie; Petrie No. UC6005); **3.** A palette from Naqada grave 1562 (Petrie & Quibell 1896: pl.xlvii, fig.1; Ashmolean No. 1895.855; W 18.3 cm).

Barbary sheep in particular have characteristically down-curved horns and are believed to have been hunted by the people of the Western Desert (Tassie 2014: 343). Perhaps these ancestral interactions with the animal cemented their use in symbolic portable artwork. The use of the Barbary sheep in Predynastic art can be seen more clearly on a palette from grave 1562 at Naqada, Ashmolean Museum 1895.855, due to the incisions along the neck resembling the mane (Crowfoot Payne 1993: 222). This palette, dating to Naqada IIA, may be contemporaneous with the grave 1788 pendant. The animal faces to the side, featuring a single horn in profile which curves to form a full circle, possibly giving weight to the idea of full circles, such as those seen on 'bull's head amulets', as symbolising Barbary sheep horns.

Patch, however, puts forward several lines of argument in favour of the elephant (Patch 2011: 52-56). One particular pendant displaying this motif, also from Naqada grave 1788, is actually made out of elephant ivory (Crowfoot Payne 1993: 207). It is plausible that the artisan may have chosen to strengthen the symbolism or magic of the item by capturing the image of the elephant using the elephant's own physical matter, supporting the identification of the motif as an elephant. The source of the material does not, however, always directly affect the image produced, as there are various examples of the motif in question carved from various stones and ivories.

The issue of the downward facing horns makes a bovine interpretation seem unlikely. It is possible, however, that the motif represents domesticated cattle with physically altered horns. The practice of altering horns may be evidenced at Badari where a large bovine skull features a horn bent downwards across the head, arguably related to their use in pastoralism (Wengrow 2006: 56). There is also evidence of deliberate horn alteration at Hierakonpolis, where two corkscrew horned sheep had apparently been bound around the head forcing their horns to grow in an upright orientation (Van Neer & DeCupere 2012: 9). The fact that these individuals were selected for burial may also suggest some symbolic significance placed on the shape and style of an animal's horns.

In terms of human transformations, the bull's head amulet is not explicitly related to female figurines, or even female-bird hybrids. The uncertainty in identification of form, however, does open the potential for this form to have intentionally represented a hybrid form. The forwards facing orientation of the head also hints at the anthropomorphic nature of the object, as human amulets are overwhelmingly looking forwards in portable artwork in the Predynastic. If the amulet is representing a bull with altered horns, then this might also show a reflexivity of symbolic form. The desire to alter the horns of domestic cattle might have been important due to the popularity of the 'bull's head' amulet form. Owing to the forward facing aspect of the amulet, and the possible relation to cattle, there might arguably have been a link between this form and the therianthropic 'Bat' head.

Figure 71. A detail of the Narmer Palette, public domain (http://en.wikipedia.org/wiki/Narmer_Palette#mediaviewer/File:Narmer_Palette.jpg; Cairo No. CG14716; total L 64 cm).

Narmer, on the 'smiting' side of the palette from Hierakonpolis, can be seen wearing small heads attached to his skirt or belt (see **Figure 71**). Although these objects feature upwards curving horns, they may have functionally been used in a similar way to 'bull's head' amulets. Although several of these amulets have been found in the context of necklaces (*c.f.* Crowfoot Payne 1993: fig.72, no.1713), there exist examples which are much larger. The examples from

necklaces are around 2 cm, yet other examples are closer to 4 cm and might not necessarily have been attached to necklaces. Perhaps the forward facing aspect, the flat chin and amuletic nature of these ‘bull head’ forms might relate them to a therianthropic form which was similar, yet possibly distinct from the ‘Bat’ head symbol.

2.9 The condition of animal/human towards unification

The hybridisation between human and animal offers a few possibilities into the Predynastic Egyptian views of their relation to animals. One view might be that the process of domestication 'emancipated' humans from the animal realm, where hybridised artwork existed merely as an intermediary leading towards the age when humans dominated artistic preoccupations (De Silva *et al.* 1965: 10). This would also assume some essentialism in the progression of civilisations to lead towards the veneration of the human form, a fairly outdated academic idea based upon the traditional thought that Ancient Greece hit an apex in human creativity. However, this theoretical process of animal to human as being related to humankind's status in the world does offer some interesting ideas. Every technical adaptation made by humankind arguably moves people further from 'nature' and the 'animal kingdom'. The alteration from being an animal, to being 'better than an animal', a human, was arguably an irreversible 'alienation from nature' (De Silva *et al.* 1965: 11-12). Despite how human habits had changed during the processes of civilisation and the domestication of animals and plants, it should not be assumed that Predynastic Egyptians viewed themselves as removed from their more 'animal' origins. Humans, in the minds of the Egyptians, may not have been seen as any more important than animals. The cosmos may have been separated into distinct categories, but it should not be assumed that humans, whether seen as being distinct from the animal kingdom or not, were viewed as having transcended from it. If anything, the abundance of animal iconography found in both wealthy and relatively poor graves, would suggest an overall appreciation of the potency of animals. Humans may have been viewed as incomplete or lesser without the aid of their protective animal spirits.

It is problematic to assume that there was an overall process of humanisation in terms of artwork, as zoomorphic and therianthropic icons persisted in Egypt at least until the Roman period. Rather than herald the end of zoomorphic artwork, early hybrids actually ushered in the age of multiplicity, mythical beasts and writing with animal images in Egypt. Humans appeared on artefacts in a similar way to animals, although it appears not as frequently. Despite the entire lack of excavated human-shaped cosmetic palettes, there are many anthropomorphic amulets, combs and figurines. It should also be noted that

anthropomorphic artwork gradually developed in the Predynastic period (see Ucko 1968) culminating in colossal, as well as finely ornate examples of statuary and figurines of the 'Protodynastic' period (Adams & Ciałowicz 1997: 46). It seems that large anthropomorphic sculptures appear around Naqada IIB at Hierakonpolis, with the colossi of Coptos dating to Naqada III perhaps being early statues of the anthropomorphic god 'Min' (Hartwig 2015b: 194-195). Humans, animals, or even places may have been venerated by some until beliefs were formalised, or conglomerated, and used by rulers to assert their power. From the earliest depiction of the unifying ruler, king Narmer, there can be seen the use of 'Bat' heads, therianthropic birds and other elite iconographies. The early rulers also seemed to depict the rebus of their own name as anthropomorphised animals, as can be seen on a label of king Aha, as well as a cylinder seal of Narmer (Roth 2011: 201).

The way in which humans were initially depicted, as forward facing, seems to greatly contrast the way in which they were represented on late Predynastic seals, palettes and labels. The human entered the plane of the animal, now side-facing. Humans took on animal attributes in other respects during the Predynastic period. The hybridisation of human and animal, as well as the adoption of animal names and attributes also seemed to be a key aspect of the mythology of early rulers. It has been argued that the human form ascended, and became something new during this period of zoomorphisation, while earlier depictions were pre-deification (Roth 2011: 200). Early kings assumed names such as Scorpion, Shell, Fish, Elephant, Dog, Falcon (Dreyer 2011: 134-135), Catfish and Cobra (Roth 2011: 200). Perhaps the kings' aims of becoming a deity, or 'god-king', were achieved through breaching the wall of anthropomorphic limitations, to combine with the already powerful animal spirits. From a modern perspective, the formation of a new identity might perhaps be made more powerful and legitimate through the inherent contradiction of 'animal and human' (Robertson 2013: 24-25). In the Predynastic period, however, the identities of animals may have been viewed as something more other-worldly, where the breaching of human limitations would have catalysed the creation of a supernatural and powerful identity. Humans might have become immortal ancestor-spirits or divine beings through the acquisition of animal powers.

It has been argued that the process of deification need not only apply to animals, humans or aspects of nature, but also of human-made constructs. Rather than only project ideas of humanity onto animals, humans may have also breathed life into any form of inanimate object (Freud 1950/2004: 89-90). The addition of animals, limbs or faces to inanimate objects, as well as rock art, may have allowed the image to enter the realm of the living and mobile (Lankester 2012: 288-290). It has been suggested that the 'Bat' head symbol became an early hieroglyph, used on the cylinder seal from Abydos Tomb U-210 to represent the name of Hathor, *ḥwt-ḥr* (Hill 2004: 27). This possibly gives the seal an association with a temple to Hathor, which could be linked to the way in which language and seals were attributed to the temple economy in Mesopotamia (Hill 2004: 27). The 'Bat' human-cattle symbol, represented ideas powerful enough to surmount the palette of Narmer. Arguably this hybrid image had impact beyond being the written form of a word, as most images in a pre-literate society may have done (Wengrow 2011: 100). The process of deification takes place possibly before the Old Kingdom, where more written and artistic evidence for Bat and Hathor appear. Does the mere existence of an animal-human hybrid necessarily mean that deification has already occurred? The hieroglyphic connection to a place name could lead to the possibility that the deity was named after a temple, and not the other way around. As in, the *ḥt-ḥr*, house of Horus, became an idea so powerful that the written form of its name grew in potency beyond the idea of the temple itself. It has been further posited that the 'house of Horus' was in fact a city, argued by Hollis to be Hierakonpolis (Hollis 2014). Hollis cites 'cultic' activity, as well as early appearances of falcon artefacts (see Friedman 2011b: 42, fig.4.18) as a good reason to assume the 'house', or temple of Horus was a term which might have fit Hierakonpolis. The growth of elite power in the area may have culminated in the veneration of the early temple and city itself as an extension of the ruler's dominance. It might have been favourable for ruler's to associate themselves with the wealthy city, for reasons of legitimacy. The cattle-human head may have been used to convey the idea of a king as being related to the power of *ḥt-ḥr* in some way. This hieroglyphic image might then have deformed over time to become the focus of worship itself, giving birth to Hathor or Bat as deities. This relies upon a misinterpretation of the sign by some, or many people, which is highly possible in the formative years of the written language when people would see potmarks and seal impressions without the capability to accurately translate them. Due to the illiteracy of the vast majority of the general population (Wengrow 2011: 100; Forman & Quirke 1996: 17) this

process seems possible, yet hard to track. It does open up the potential thought process that 'idea' into 'written idea' was not a one way system, and perhaps rather reflexive. The meaning behind an icon may have gained as much power as the icon itself, with the popularity of both feeding into each other. The power of the hieroglyphs themselves must also be remembered, as scribal artisans were clearly responsible for blending the notions of written and real. The name of king Aha, on an ivory label from Abydos, was written with a bird holding the mace and shield glyphs of his name, but the serekh itself is given human arms also (Roth 2011: 201). This intentional anthropomorphisation of the temple-form serekh shows the way in which constructs, as well as zoomorphs, might have undergone deification. Adding human elements to the otherwise non-human in hieroglyphic script might have either caused, or been a reflection of the gradual deification of certain motifs. The hieroglyphic '*was*' sceptre may have originally been an object of worship, and later it was misinterpreted as an animal, the mythical 'Seth animal' (Roth 2011: 198-199). This reinterpretation might have worked via the translation of the sceptre into a glyph. There is precedence for the translation of three-dimensional materials into the two-dimensional realm amongst the corpus of Predynastic artwork, even including a bowl from Mesa'eed painted with images of zoomorphic combs (Wengrow 2006: 104-107). Rather than a place or linguistic concept undergoing deification, Roth has proposed that inanimate objects may have been the original forms of gods (Roth 2011). Specifically, Bat, who was later associated with a sistrum, may have actually existed as this musical, ritual instrument before becoming a deity (Roth 2011: 198-199).

There are several complex and layered representations in the Late Predynastic period, some of which may have symbolised nascent ideas and beliefs which would become more formalised in the Early Dynastic period. Practices or mythologies relating to ideas of heroes or deities might have existed since the earliest prehistoric times, but owing to the pre-literate nature of these societies, the best archaeological evidence is arguably figurative artwork. These tales or practices, which might have related to artistic pieces, might possibly have lasted into the Pharaonic Period and beyond, giving some merit to relating later Egyptian myths to Predynastic artwork. Retrospectively imposing formalised Dynastic beliefs onto these early images should not be undertaken without caution, however. The relation of a certain object or animal to a specific deity is not irrefutably present until later periods in which

writing is well established (Griffiths 1980: 41). It has been shown that there exists a multitude of possibilities relating to certain zoomorphic and therianthropic forms. The level of local and personal belief found in Ancient Egypt should show the folly of accepting at face value the prescribed, formalised version of religion as being practised by everyone across all periods. Anthropological examples have also shown how geographically close societies may incorporate stylistic traditions from each other, yet the mythology or religious connotations behind the artefact may be distorted or completely inverted (Lévi-Strauss 1975/1982).

In a time before religious texts and formalised accounts of gods and demons, it is difficult to say when certain religious beliefs first occurred in Egypt. Despite the problems in not knowing how far back certain beliefs may have stretched, it could be argued that certain aspects of material culture were intrinsically linked to socio-religious beliefs. Although there may have been cultural continuity between Predynastic and Pharaonic Egypt, the iconographically distinct intermediary 'Protodynastic Period' (Adams & Ciałowicz 1997: 6) seems to allude to a sudden change in social organisation, fuelled by political struggles for power.

Conclusions

This paper has fulfilled its aims of streamlining the evidence for zoomorphic artwork with excavated provenance from the Predynastic period of Egypt. Manipulation of the data, as well as various discussions has shown some potential trends in the understanding of and relation to animals throughout the prehistory of Egypt. Arguments have been made for the strong connections between ancestors, place, death and animals. All of these ideas may have been cosmologically connected and expressed through the creation and use of certain zoomorphic objects. Materiality also played an important mediator, affecting and catalysing the use of animal powers. It is clear that certain animals were mostly reserved for specific uses; fish, and possibly other riverine creatures, were best suited on cosmetic palettes, while quadrupeds and birds feature frequently on combs and hairpins. The double-bird motif permeates various amuletic forms as well as palettes. There is also a clear emphasis on displaying cattle, and possibly other domesticates, as figurines. Perhaps the organisation of these forms across the body mimicked a cosmological view of the world; with birds in the sky (on hairpins, or as the horns of quadrupeds on combs), desert quadrupeds on the land (also inserted in the hair), semi-aquatic creatures partly in the water (such as hippopotamus or boat-like amulets potentially strung around the neck, or around the waist) and aquatic creatures in the hands, or placed on the floor (in the form of palettes, which were mostly too heavy for constant suspension on the body, so might have been used on surfaces). Domesticated animals, such as those which mostly appear on figurines, may have worked outside of this corporeally-centred cosmology of display, which might have pertained only to the wild elements. It has also been discussed, however, how these forms might have been placed on a surface, offering another interpretation of this cosmological order. The double-bird might have cosmologically had the power to transgress geo-ecological boundaries, and therefore existed on combs, amulets and palettes (yet no figurine examples are known). There are, however, many examples of objects which do not fit this general trend. As the anthropological discussions have shown, however, it would not be expected for these ideas to have remained unchanged between cultures and across time and space, especially with the differing economic and traditional origins of the Predynastic Nilotes.

Zoomorphic artwork in the Predynastic can be seen as being intrinsically linked with human-animal relations. It can be seen that zoomorphic representations point to a formalised relationship between humans and animals centred on the function of the artefact in life and the mortuary sphere. Animals seemed to be at the heart of material culture, as they were also part of the life-blood of human culture. Animals were ubiquitous in representational artwork, and certain icons seem to have had much more importance than anthropomorphic forms. These forms were so pervasive that they infested other aspects of representational artwork. The icon of the bird, for example, was so powerful that it became attached to other, non-avian depictions. The combination of several distinct elements can be seen through the use of grave assemblages and hybrid creatures. It could be argued that these hint at the importance of scale or diversity in terms of the afterlife. Wealth and power certainly led to the increased appearance of animals and zoomorphic artefacts in relation to grave goods, which can be seen at Hierakonpolis and Abydos. The continued, and arguably increased, power of animals is particularly important considering the development to a more urbanised and politically complex society towards the end of the Predynastic period. The royal connection with these symbols is perhaps key to this interpretation. The fact that early rulers would take the names of animals, coupled with the extreme advancements made in the written word due to the political and economic activities of the king, intrinsically links elites with zoomorphic hieroglyphs. There are hints that at least some zoomorphic objects, as well as other objects in the natural world, may have had some relation to language and proto-hieroglyphic writing. The homologous 'bull's head' amulet and 'royal beard' glyph seems to offer the best connection. It is also possible that the control of resources, namely ivory and siltstone, would have given elites the power to control artistic display on objects of these materials; palettes, amulets, hairpins and combs. This idea of elite control might explain the frequency of zoomorphic palettes from the Naqada II period, a time of advancements in craft specialisation, and centralisation of power. Supporting this idea is the fact that zoomorphic palettes and hair ornaments are quickly outdated around the time of unification, when they are replaced by other objects of hieroglyphic importance. The individual should not be lost in all of this, and it is not assumed that each burial represents a passive receiver of artistic goods. Choices were always made when depositing items into burials, and regardless of whether

motifs had a political or tribal relation, they were given a further mortuary purpose. Human agency can still be witnessed by the fact that these mortuary practises varied so greatly. Animal imagery on everyday objects in periods prior to Unification might be seen as the fluid development of zoomorphic pictorial representations.

This paper has also shown that a trend might be seen in the way in which humans related to animals, and how this then had an impact upon representational artwork across the different periods of the Predynastic. Regional and temporal differences in artwork might then coincide with changes in animal relations. The pre-sedentary peoples of the Egyptian deserts may have related to wild animals in a powerful way, as the hunt was essential for the continuation of life. Herder-pastoralists of the Valley might have adopted some of these beliefs, while continuing limited hunting, along with the powerful emphasis on water, and riverine animals. Ideas of fertility in a more pastoralist society understandably would have become more powerful. Humans are buried alongside animals, within animal skins and alongside animal effigies. The artefactual evidence has shown the importance of zoomorphic objects within the grave, whether isolated or in assemblages. Animals had prophylactic power in life, and were a magical element of protection or power in death. People would have related to animals perhaps in a totemic manner. As a result of the cosmological ordering of the world around them, humans may have regarded themselves as associated with animal spirits or clans. Humans might have relied upon the strengths afforded to them by powerful animal spirits via zoomorphic amulets. The seemingly supernatural and advantageous aspects of animals might have been channelled for prophylactic magic in life and death. As the animal icon became more associated with the grave, further connections may have been made between the animal and ancestry, place and identity. The resulting 'intermediary' phase of agricultural development and sedentarisation might be understood as a period of metamorphosis, hybridisation and the rise of therianthropomorphism. In this period there can be seen a rise of more human iconographies, as well as domesticated animals, as humans 'lost touch' with the 'wilderness'. Fewer people struggled with daily survival as food production and storage of surplus became 'centralised', at least at a small-group level, effectively removing the majority of people from the realm of the animal. Humans were depicted as forward facing, separating them from the profile view animals. Humans were recognisably distinct, and

perhaps importance was placed on the face, or the idea of forwards motion. Mobility also seemed to divide the animal kingdom into walking and crawling. Motion and orientation was an important artistic division between types of beings. Cosmologically, humans seem to have placed themselves and the animals around them into different realms of orientation, dimensionality and mobility, which was then reflected in artwork.

As humans amassed wealth and power, the elite practice of hunting increased the importance of hunted, wild animals in the canon of artwork. Humans once again became closely connected with the wild animals they hunted, where they would become a powerful animal during the hunt. The rise of local powers, and the road to Unification brought with it the coalescence of animal relationships, as well as the politicisation of previously held beliefs, iconographies and ideas. At the end of the Predynastic period, animals can finally be seen returning to the grave in large numbers as displays of wealth, alongside their super elite rulers who themselves were named after animals. The division in society, brought about by the differential distribution of wealth and power, can be seen as a main factor in the unusual compression of ideas seen at the end of the Predynastic period. Animal iconographies which were growing in the medium of public display and personal adornment, were taken by the elite in particular and used as elements of seclusion, exclusion and administrative tools. The king was an animal, given power by animal gods; ideas all expressed by the written animal language. The art of these early kings ushered in the paradigm of humans being depicted from the side. From examples such as Narmer, we can see the final transformation into the realm of animal, where humans shifted planes into the sideways-mobile category. Perhaps as a testament to the therianthropic nature of this transformation, or perhaps as a retention of distinct humanity, certain aspects were still seen as forward-facing, such as the eye. This was perhaps the key for ascension into a deified form for the king, where generally held beliefs on dimensionality and the cosmos were utilised by the artisans of the king. The blending of human and animal is also seen atop the Narmer palette, with the cattle-human hybrid heads. Again, these are hinting at how the orientation of the figure is connected to its species, or hybrid nature. The animal, already spiritually and culturally important, was used to form the animal-god-king. Rulers and their scribes also paved the way to the deification of non-human forms through the act of hybridisation.

An important feature of Predynastic artwork was the ability for the subject matter to appear in a new form. Not only were animals depicted on artistic items, but zoomorphic objects themselves were able to be represented in art. Objects could take on as much significance as the animals depicted. Importance was also placed on the dimensionality of an object. The creators of palettes, for example, were certainly mindful of the dual faces of the object. The use and understanding of the palette influenced the way in which animals were depicted. The use of both faces on many examples, meant that the object was understood as a three-dimensional object. Animals, although flat, were certainly dimensional, with eyes on both sides where appropriate. The nature of the animal icon as existing in multiple dimensions can be seen as a forerunner to the ceremonial objects of Naqada III. The artistic elements within ceremonial palettes existed in proto-registers, or sometimes in planes which curve around and adhere to the central circular motif. Yet, the large animals which would surmount and surround these palettes seem to exist across both faces of the palette. The dogs of the 'Two' and 'Four Dogs' palettes are complete through their depiction on two sides, while Narmer's 'Bat' heads were perhaps intentionally dualous, anticipating the facial duality of Bat.

It is hoped that this study has shown the importance of reinterpretation and contextualisation. If the archaeological evidence is not fully scrutinised, then only false conclusions can be reached. Even if certain objects and motifs were fairly common in the past, they still might remain hidden under alluvium, modern settlements or found without provenance. Every object without provenance must be understood as being of limited use to our understanding of artistic and social trends. Given the limited nature of the database, a much more comprehensive discussion is required on the topic to reach further conclusions. The inclusion of Predynastic rock art as well as decorated-ware motifs would give a much fuller understanding of how humans viewed animals in Prehistoric Egypt. Furthermore, the inclusion of anthropomorphic designs, as well as artistic impressions of non-biotic nature would aid in the understanding of how Predynastic Egyptians perceived, ordered and represented the entire world around them.

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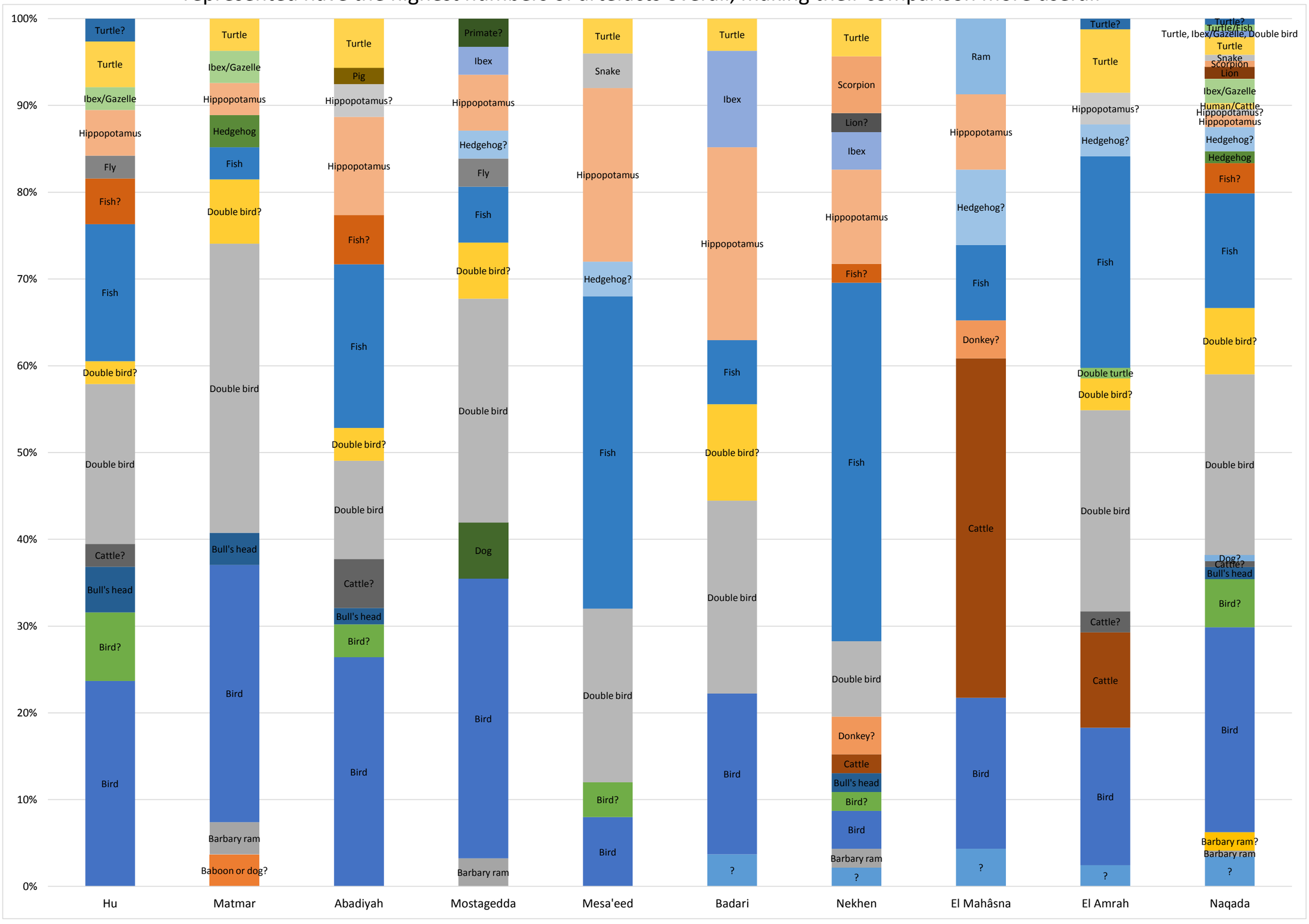
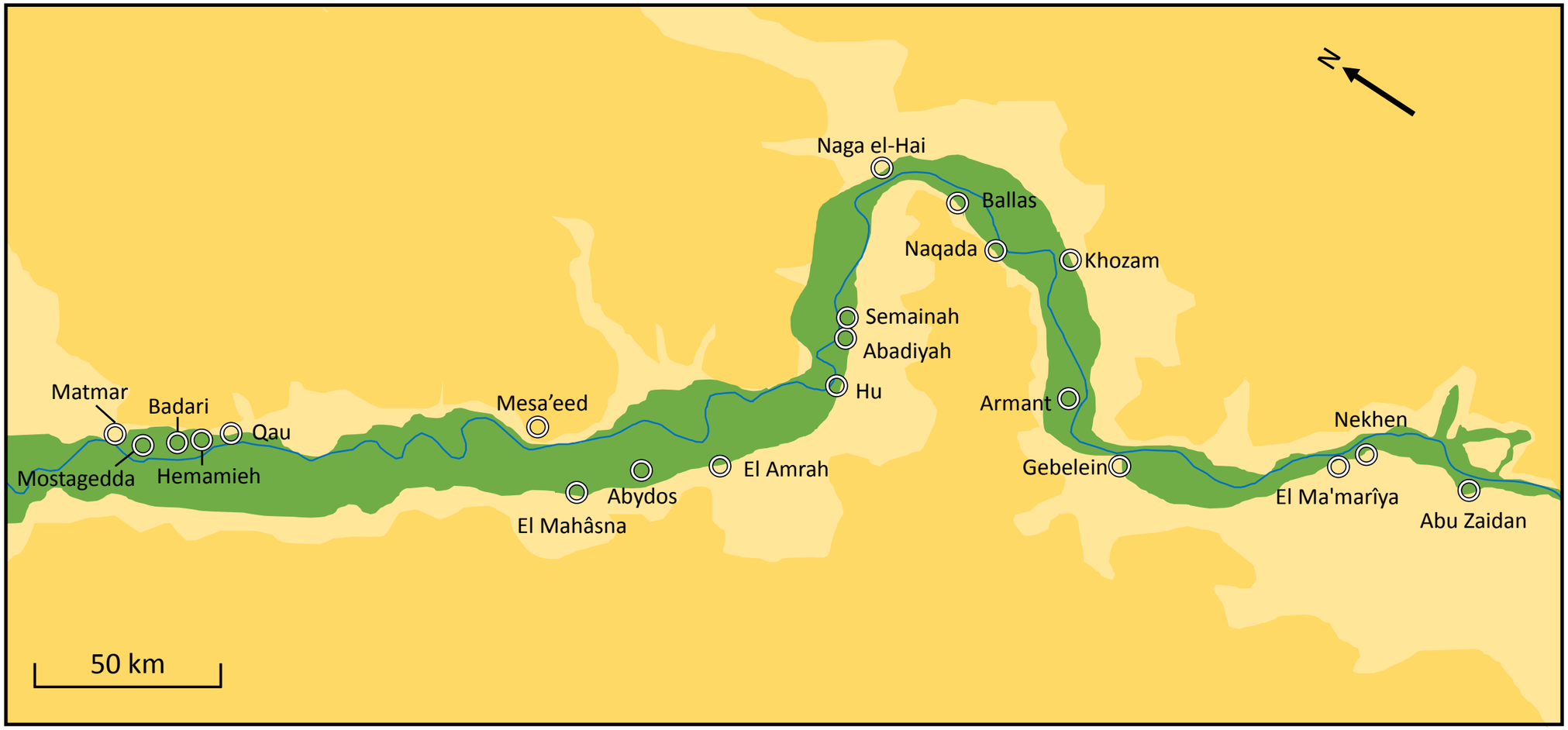
CHART 1

A 100% Stacked Column Chart showing the percentages and values of different animals depicted on all types of objects. The sites represented have the highest numbers of artefacts overall, making their comparison more useful.



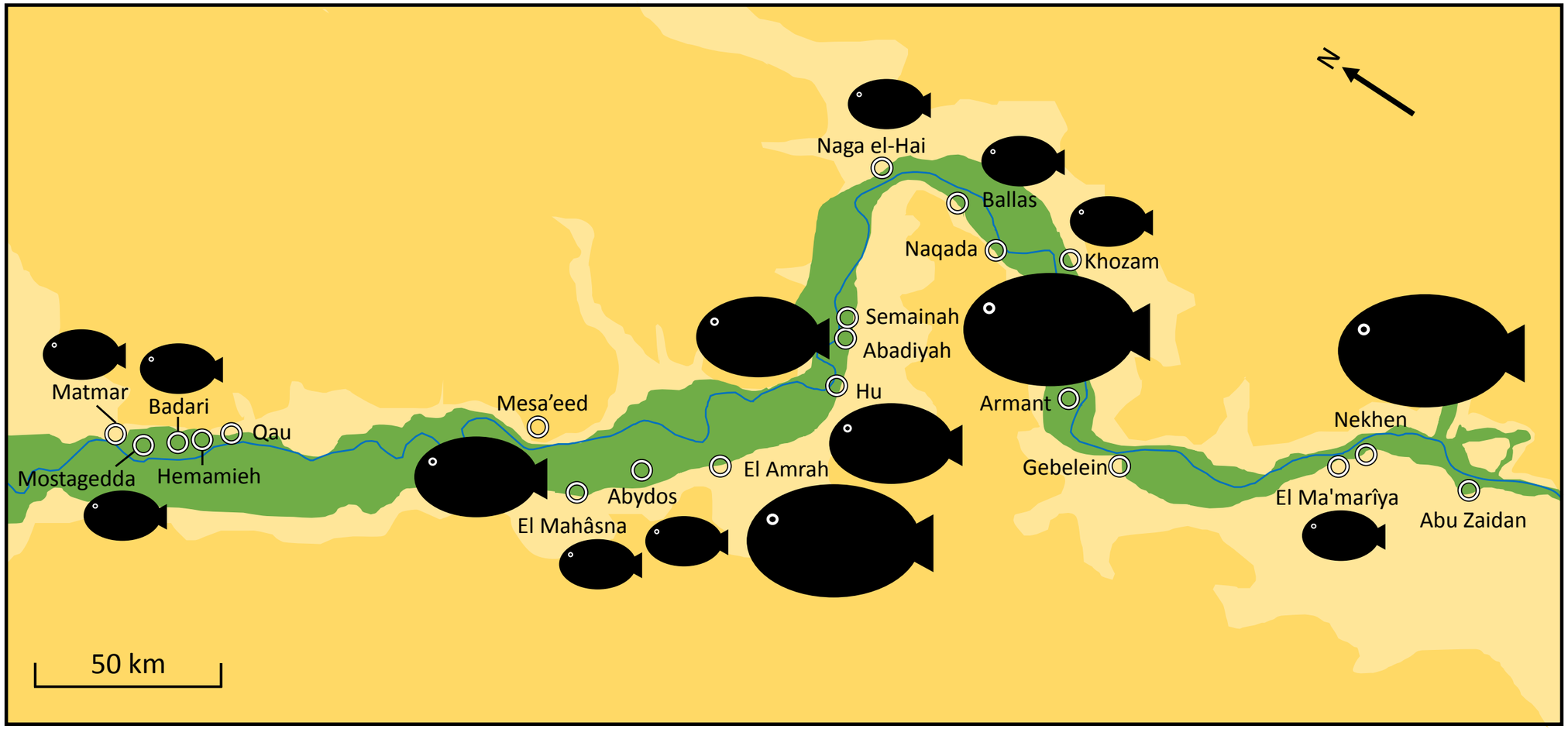
MAP 1

Sites from Upper Egypt featured in the database



MAP 2

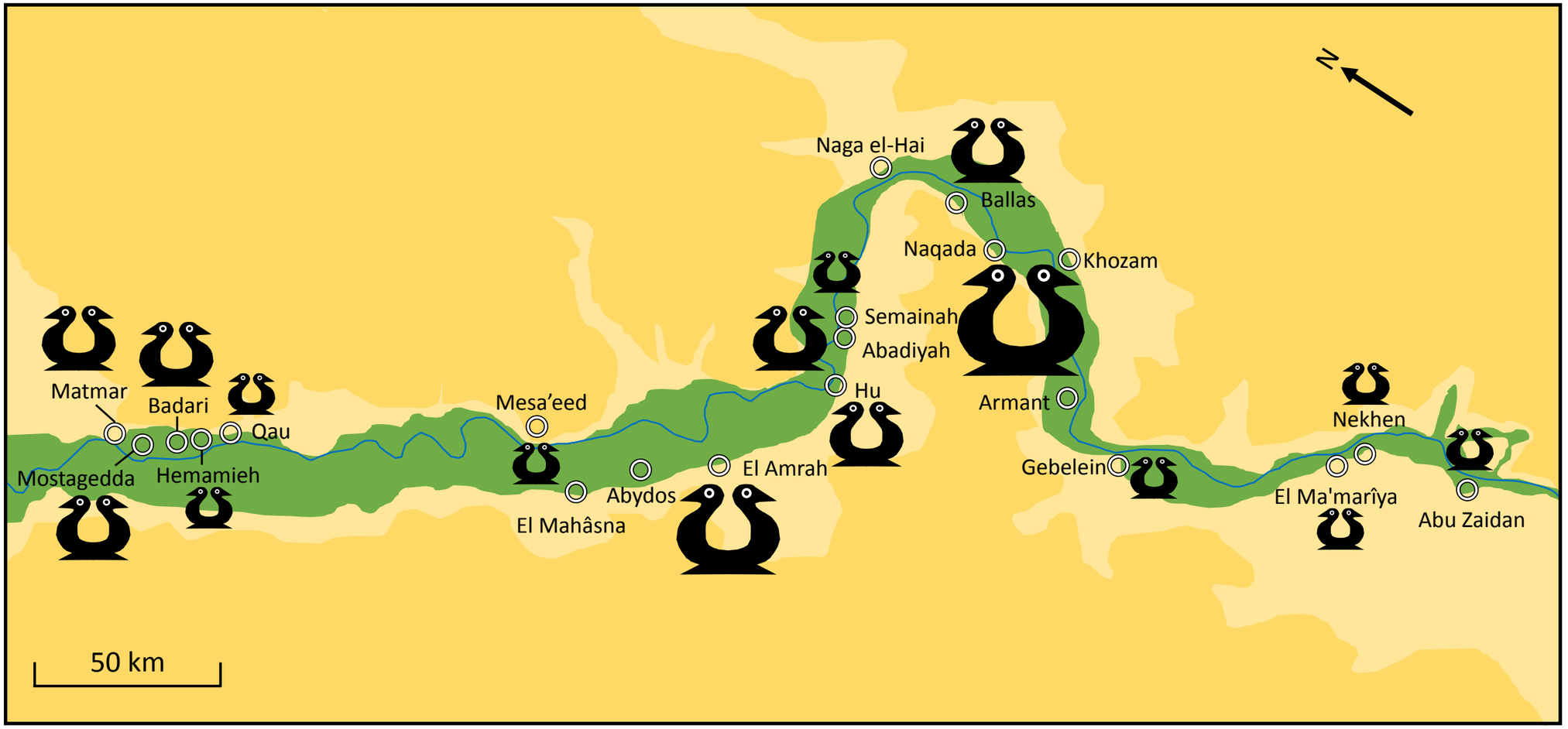
Distribution of fish shaped objects in Upper Egypt



1-5 6-10 11-15 16-21

MAP 3

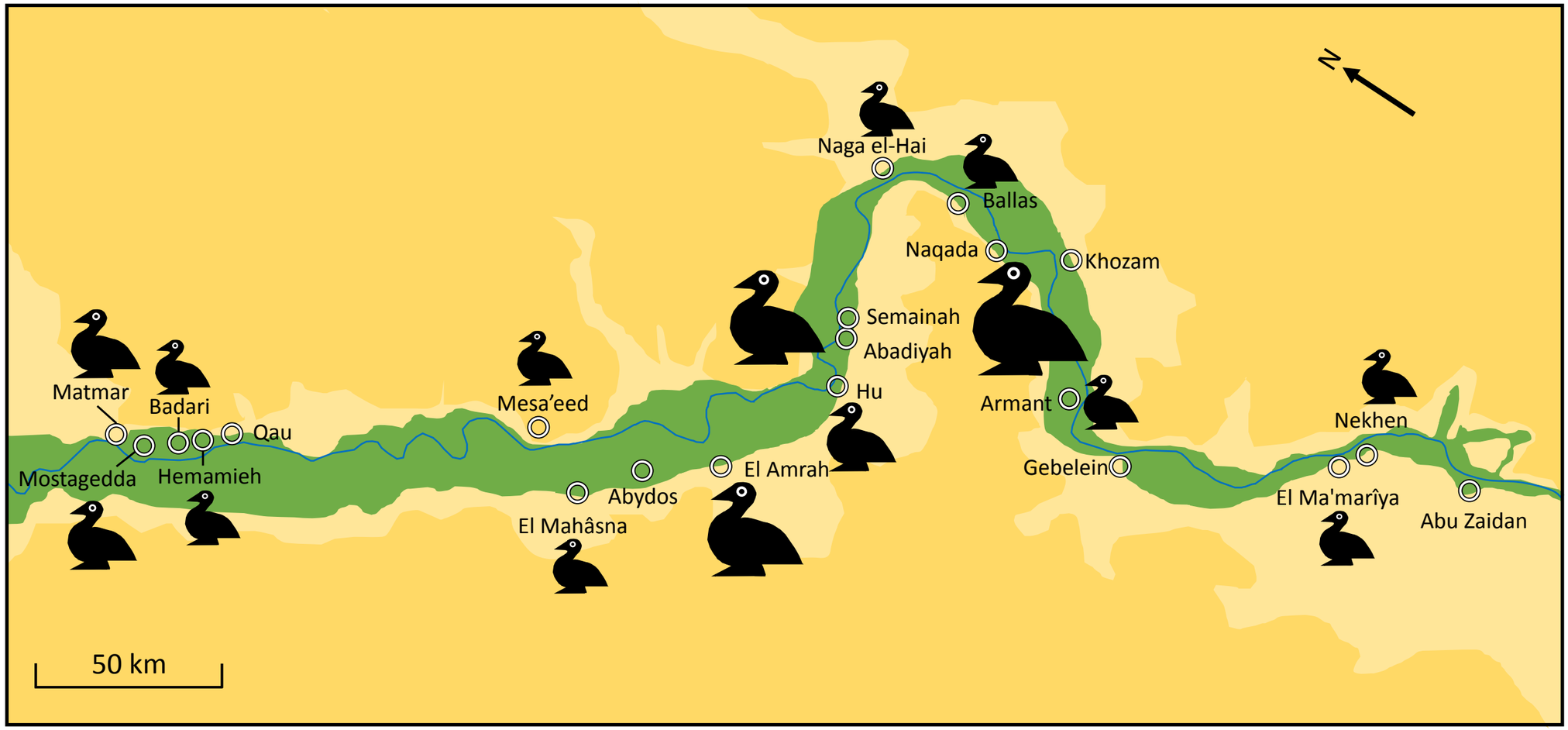
Distribution of double bird objects in Upper Egypt



1-5 6-10 11-20 21-35

MAP 4

Distribution of bird shaped objects in Upper Egypt



1-5

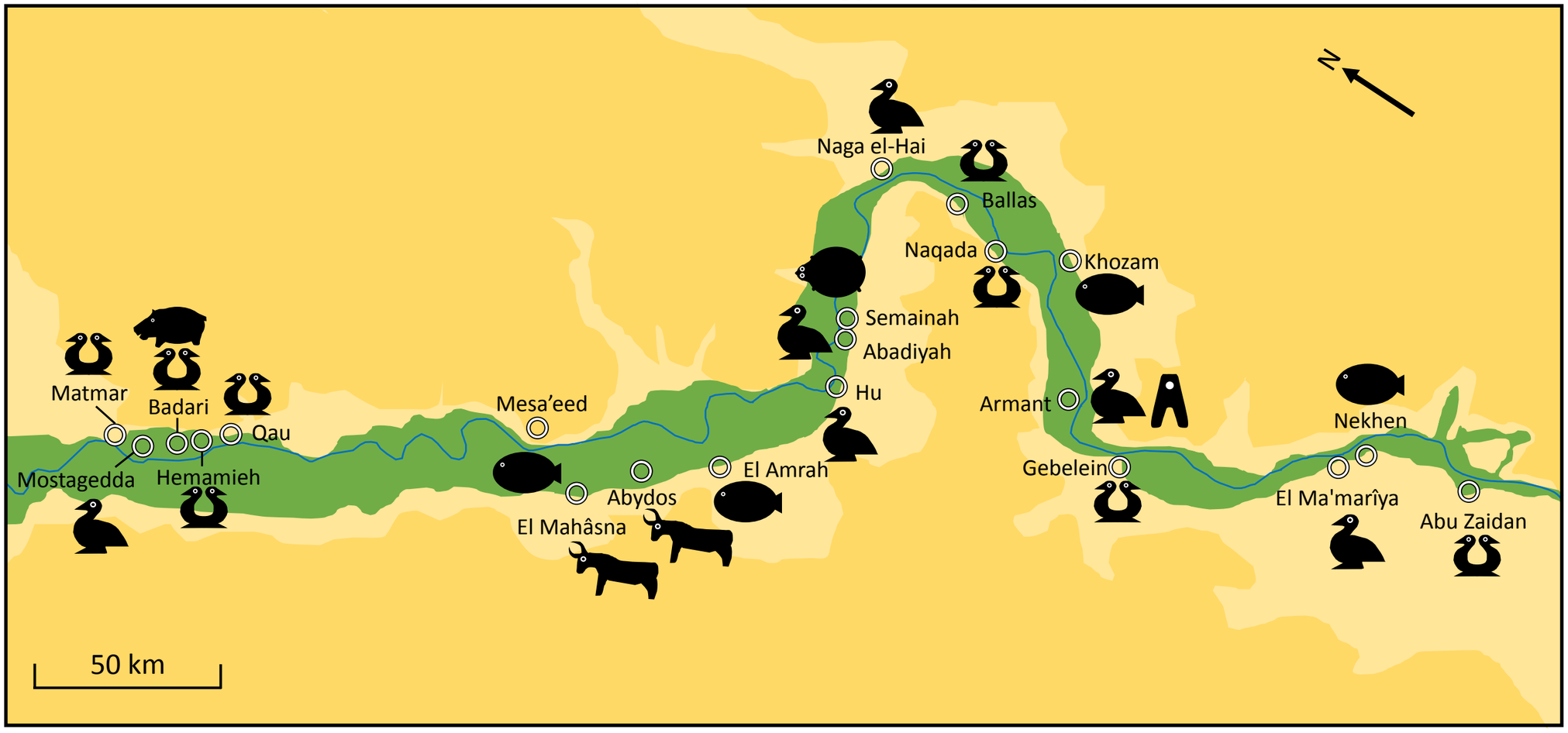
6-10

11-20

21-35

MAP 5

Most frequently depicted animals in Upper Egypt throughout all prehistoric periods



Bird

Double bird

Fly

Cattle

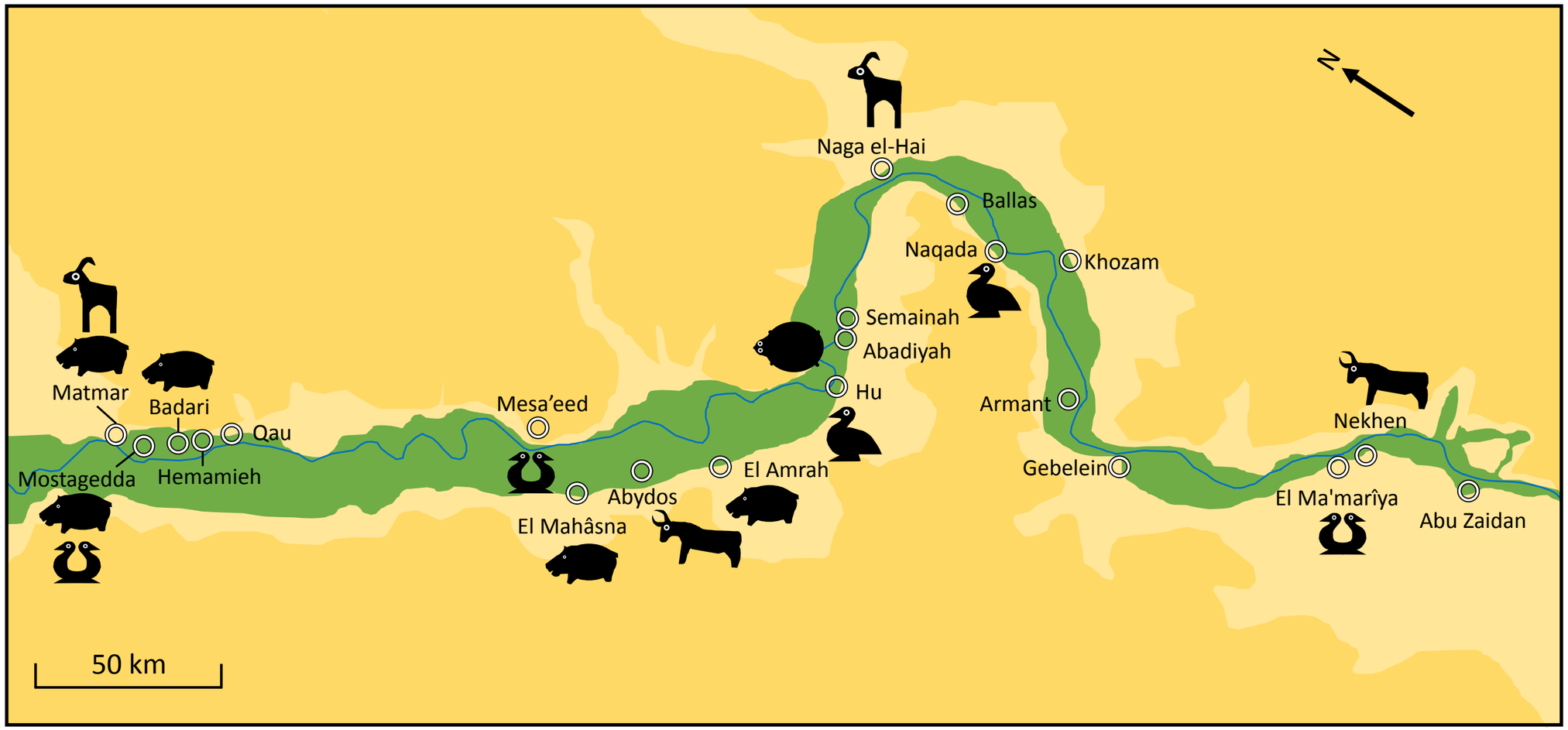
Hippopotamus

Turtle

Fish

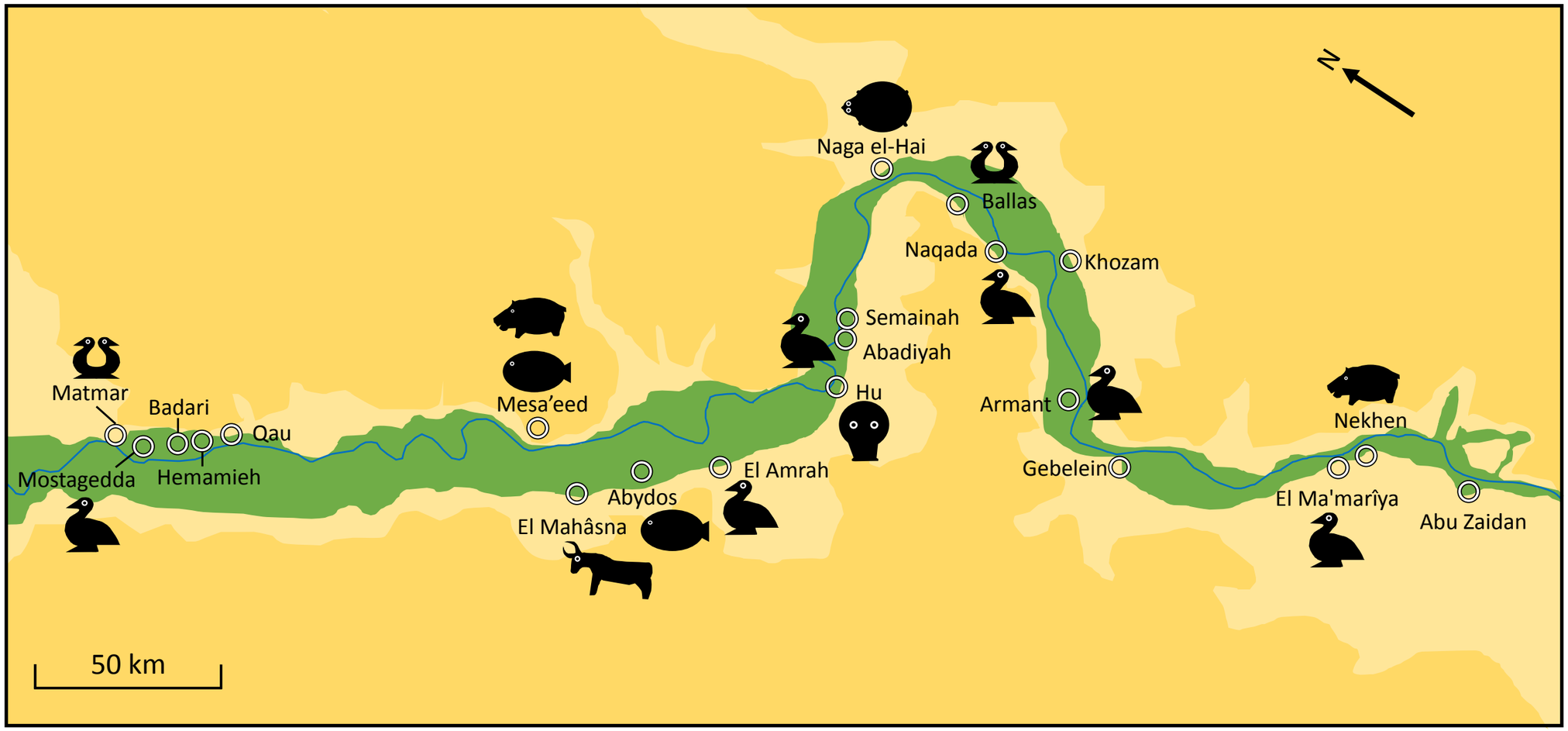
MAP 6

Most frequently depicted animals in Upper Egypt of the Badarian – Naqada IC periods



MAP 7

Most frequently depicted animals in Upper Egypt dating from Naqada IIA-C



Bird

Double bird

Cattle

'Bull's head'

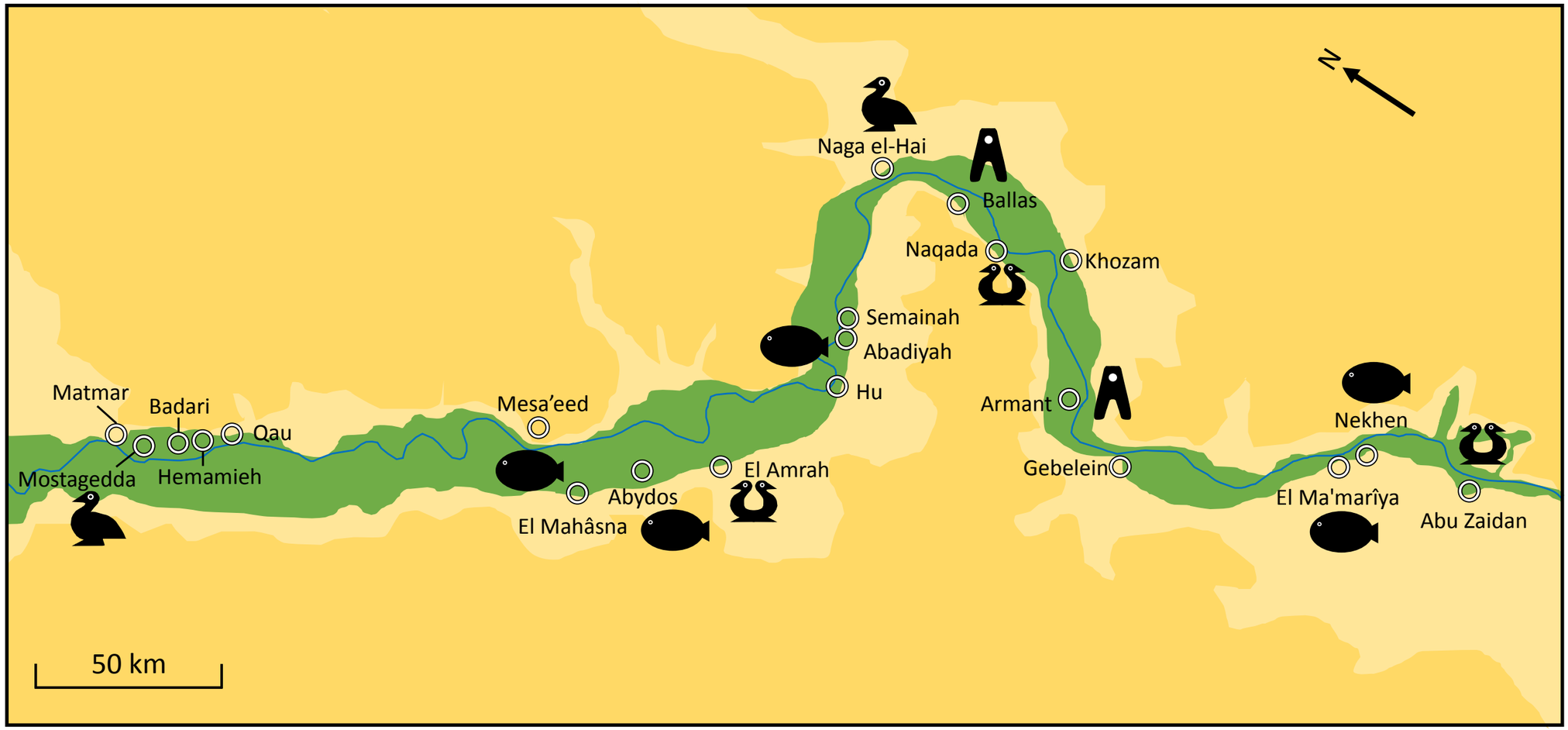
Hippopotamus

Turtle

Fish

MAP 8

Most frequently depicted animals in Upper Egypt dating from Naqada IID-III



Bird

Double bird

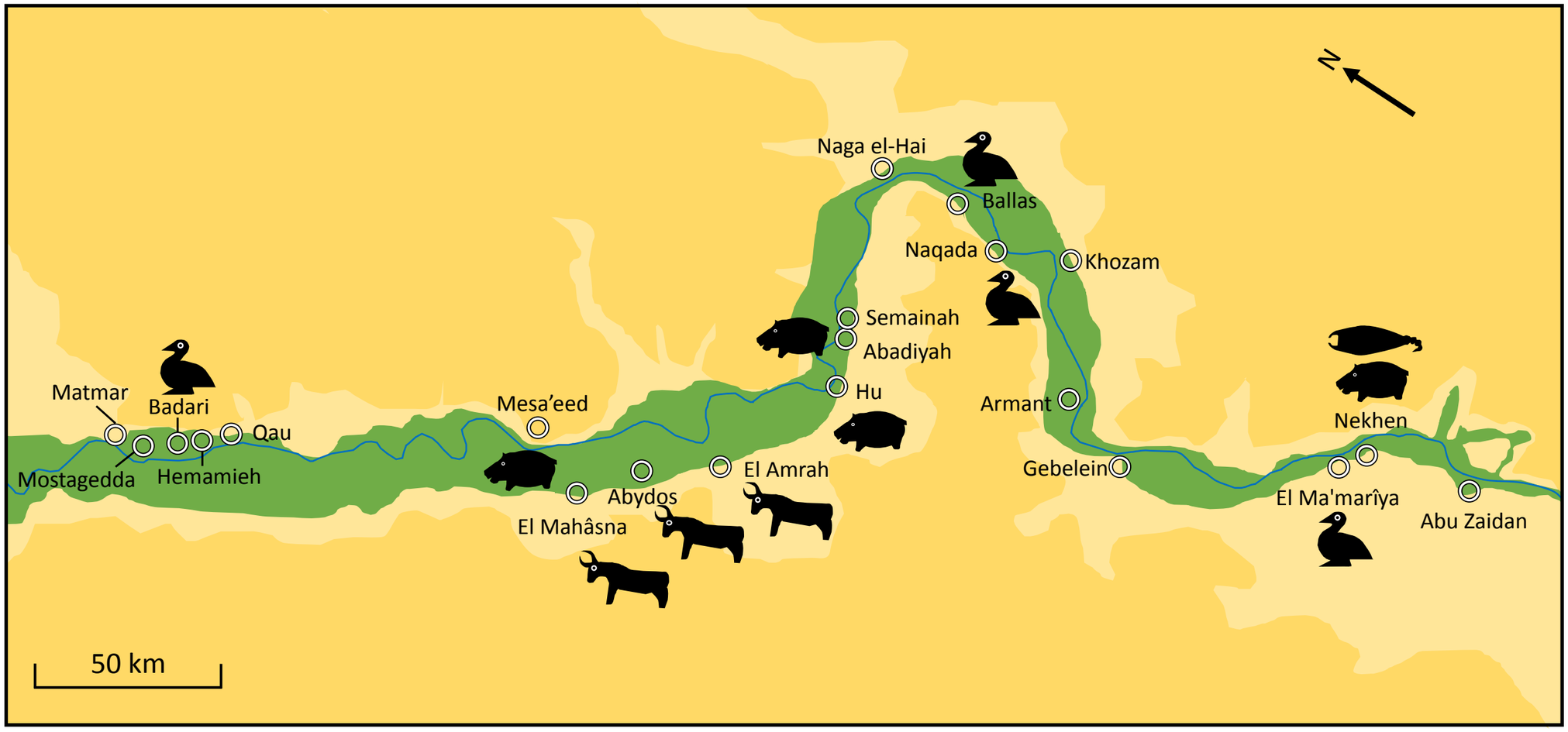
Fly

Turtle

Fish

MAP 9

Most frequent figurine types by site in Upper Egypt



Bird

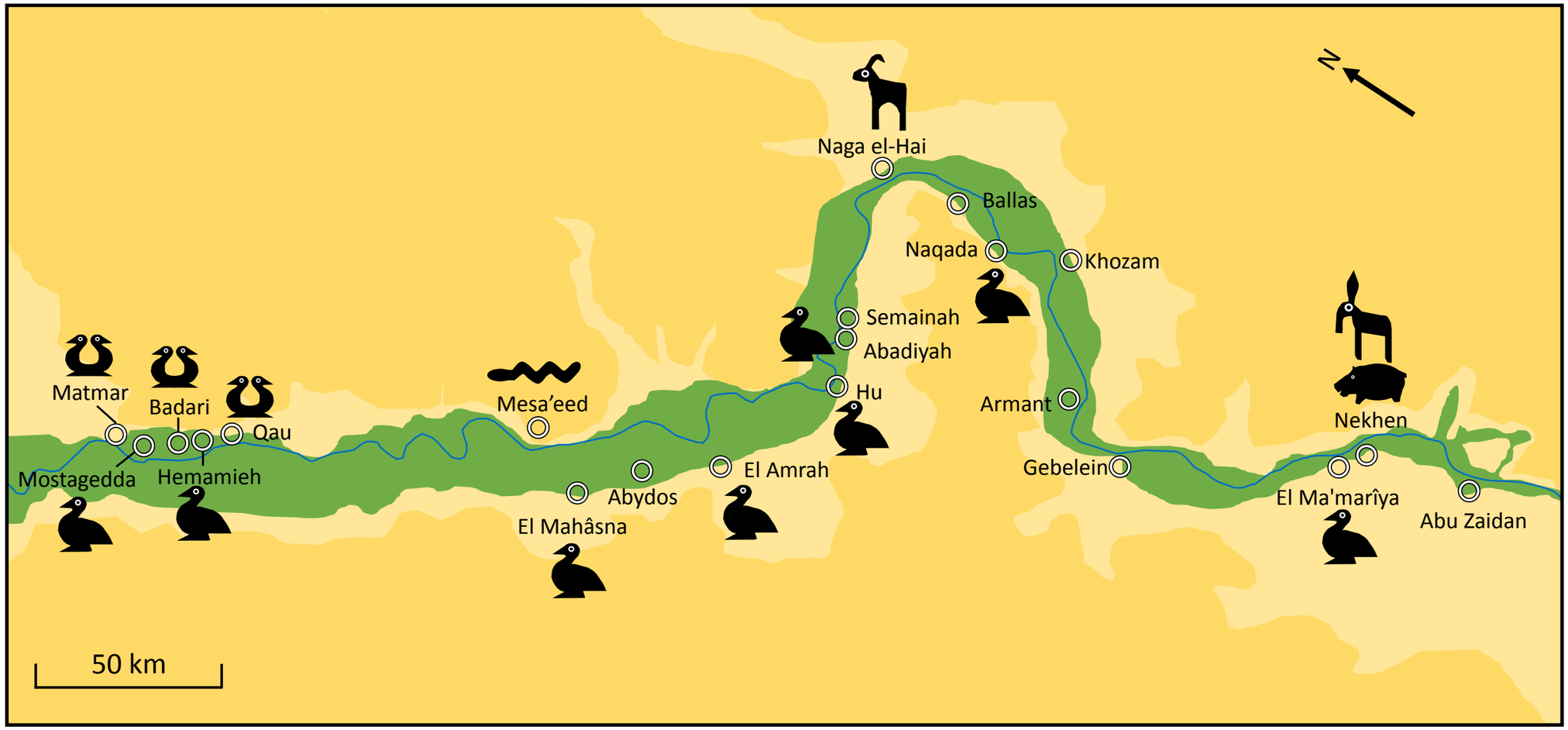
Cattle

Hippopotamus

Scorpion

MAP 10

Most frequent comb and hairpin types by site in Upper Egypt



Bird

Double bird

Ibex/Gazelle

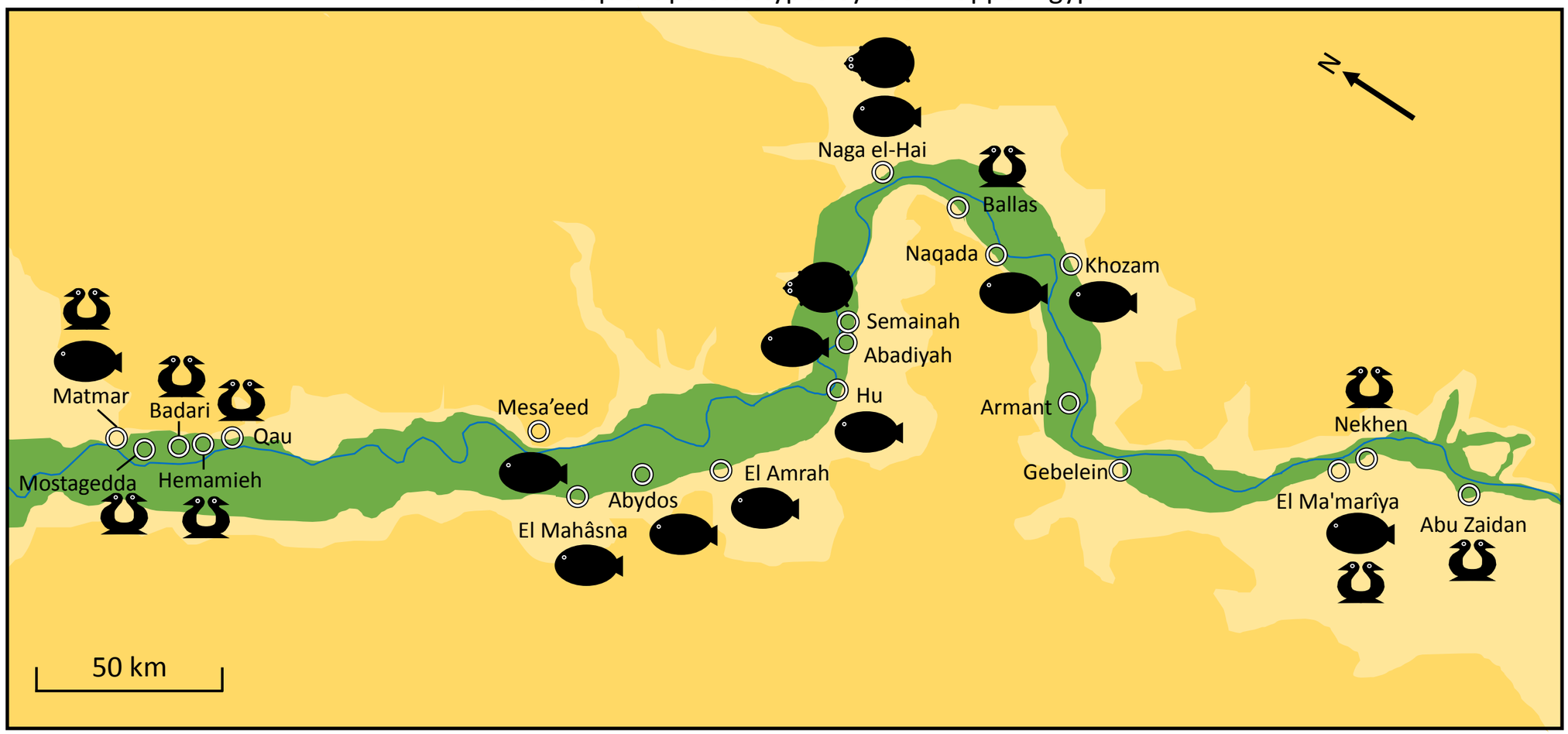
Hippopotamus

Donkey?

Snake

MAP 11

Most frequent palette types by site in Upper Egypt



Double bird

Fish

Turtle