Animal Rows and Ceremonial Processions in Late Predynastic Egypt

Francesco Raffaele

Introduction

It is well known that Ancient Egyptians regarded the animal world with enormous interest. This concern originated in the curiosity, amazement, trust, gratitude, love, protection, respect, confusion and fear that animal features and behaviour might provoke: indeed there was a bulk of aspects in past peoples' life wherein domestic and wild species did play meaningful roles.¹

It is therefore natural that most of the earliest Egyptian forms of expression we use to define "art" included accurate representations of the fauna which lived at that time in the different environments of the Nile Valley and beyond. In many cases, the scenes reproduced on artefacts (and rock-art) were actually *centred* on animals, or on any realistic and imaginary form of interaction between animal and human beings. The proper comprehension of the status of theriomorphic implements and iconography (zoomorphic palettes, animal figurines, animal graffiti, carvings, depictions and single signs) has been for long time a matter of scholarly debates.

Since many samples of early figurative arts are now lost, owing to the antiquity and the perishable character of most of the supports which were used, predynastic art is not as relatively explicit as that of later periods, and this severely affects

¹ The importance of animals in life and death of ancient Egyptians can be inferred considering the manifold relationships with them subsisting in any cultural compartment: sustenance economy, trade, medicine, magic, mythology, religion, cult, ceremonies, funerary rituals, (divine) kingship, iconography, arts, writing, architectural features were all connected, through concrete or abstract links, with positive and negative properties of the other living creatures. Bibliography on fauna in ancient Egyptian culture (only general works): Boessneck 1988; Houlihan 1986, 1996; Brewer and Friedman 1989; Brewer, Redford and Redford 1994; Osborn and Osbornová 1998; Germond 2001; Vandier 1952: 556f.; Störk, s.v. Fauna, in: *LÄ II*, 1977: 128-138; Brunner-Traut, s.v. Tierdarstellungen, in: *LÄ VI*, 1985: 561-571; id., s.v. Tier, Verhältnis zum, in: *LÄ VI*, 1985: 557-561 (and related entries on the Lexikon).

² Valuable in clarifying the multitude of facets and purposes condensed in ancient Egyptian art (vs modern art definitions) are the discussions of Baines 1994 (with references) and the latter author's translation and revision of Schäfer 1974 (1986): 9-68.

³ The interpretation of predynastic art has long been controversial: as discussed below, it is not always possible to precise the exact purpose of the different objects typologies and their use before the final destination. For many archaeological finds, even those from well documented contexts, the identification of the original use(s) remains problematic. Consequently, also the approaches to the significance of their "decorations" have to rely on hypotheses.

investigations about the general meaning of fauna-based imagery and about the symbolism of the species.⁴

However, the inventory of archaeological finds from predynastic cemeteries, settlements and further contexts presents us with a good range of object types.

In this paper I will focus on the possible significance of animal rows (also denominated friezes, files or processions) which decorate⁵ the handles of ceremonial knives, maces and other implements of Naqada IID-IIIB date (c. 3400-3100 BC).

1. Contextualization

The analysis of any specific characteristic of the artistic repertoire can't prescind from some considerations on the broader contexts in which these minimal units (the single elements and motifs of the figurative programme) are found. Apart from any (here unfeasible) critical discussion on the validity of structuralistic, functional and further approaches, it is in fact clear that neglecting the entire cultural dimension in which craftworks were created, used and discarded, would mean renouncing to primary clues and to much more solid bases for the comprehension of these objects' inmost essence and purpose(s).⁶

⁴ As a preliminary caveat (cf. par. 4.2), it must be pointed out that diachronic and cross-cultural comparisons of "single units" (of the religious, iconographic and symbolic inheritance conveyed in the Egyptian art), are susceptible to incur in anachronistic, erroneous conclusions. Contrarily to fundamental notions of broader range (as archetypal models, myths, religious beliefs, philosophies, symbolic metaphors) apt to remain relatively unchanged to the effect of time and of external influences (e.g. Huyge 2002: 194f.; Le Quellec 2005), more particular elements (as styles) are instead largely prone to modifications, rielaborations, additions or even elimination from the artistic milieu – owing to ideological needs, rulers' decisions, new rules of decorum, changing representational canons, foreign cultures borrowings, historical events and other agents. Additionally, and more obviously, it should be remarked that difficulties in modern explanation of past traditions are often the unavoidable result of the gap existing in the logic principles, ideological constructions and cultural conventions rooted in human minds so many millennia apart from each others, as ancient Egyptians' and our own ones are; corruptions may even issue for later Egyptians' misinterpretations of their ancient predecessors' traditions.

⁵ The terms "decoration, decorative" does not necessarily imply a secondary function (and even less one of mere embellishment): in general, the figurative apparatus might have been either an accessory, additional feature, more or less tightly connected to the main purpose of the artefact (i.e., contributing to accomplish its scope), or the very core and key-element of the object effective meaning and value. For sure, carved, incised and painted figures have, not seldom, attracted more scholarly attention than the other attributes of the items on which they appear!

⁶ The *intracultural* patterns of decodification are certainly to be preferred to *exogenous* approaches (ethnographical parallels or diachronic comparisons: cf. note 4): the former ones fully rely on characteristics proper to the studied cultural ambit, eventually accepting the latter ones as an eventual theorical research direction, to be pursued only if corroborated by further positive proofs. For indicative methodological avenues: Midant-Reynes 2003: 310ff. (*chaîne opératoire*); Wengrow 2006: 176ff. (*holistic account*).

The theme of animal rows is mainly (but not exclusively) found on classes of luxury items which M. Hoffman used to name *powerfacts*.⁷ The term efficaciously resumes the restricted diffusion of this crafts production within the uppermost levels of the early regional polities⁸: elites and royal courts were the creators of the ideology of power, apt to legitimize and maintain their privileged positions in the material world (society) and on the supernatural level (relationship with divine entities both during the life-time and in the afterlife). Elites exercised a major impulse to trade of precious materials and they supported full time craftsmen specialised labor.⁹ It is obvious that upper classes (and indirectly the sovereign himself with the political organization he represented), were the main beneficiaries of the positive effects that powerfacts would grant, through the purported properties of their materials, decorations and uses.¹⁰ Yet, as we'll see shortly on, it is not so easy a task to relate such objects to a given social ambit.

⁷ Hoffman 1979: 298ff., 336ff.; id., 1982: 145f.; Campagno 2002: 154f. On prestige items also see Bard 1992, 1994; Trigger 1990; Baines 1989.

Although this paper deals essentially with art, it is nonetheless important to specify that political circumstances of the second half of the IVth millennium must have had a heavy bearing on the origin and development of various cultural sub-systems of the Late Predynastic societies, including those responsible for the artistic and monumental creations. The full array of factors and implications can't be listed, but an omnicomprehensive analysis of luxury items is likely to shed new light on structural composition and area of influence of the political realities which invented, produced and used those items: ideological and practical values of materials and finished craftworks, mechanisms of long distance trade of raw materials, powerfacts mutual exchange and gifts, identification of stylistic patterns, associations with other objects or attributes, interpretation of the meaning of decorative elements and their occurrence on different media and in different places... The history of Naqada II-III won't be reconstructed only by the decoding of artistic representations, which are highly biased by symbolic messages, but I'm sure that deeper and broader research approaches will help field archaeology in setting the scene for a better understanding of the evolution and interrelations of Egyptian (pre political Unification) complex chiefdoms or proto-states. For some hints about how historical-social processes (like the birth of kingship or the relations among chieftains) might influence or imprint artistic creations, cf. Finkenstaedt 1984 (carved representations on palettes) and id. 1980, 1985 (regional styles of C-ware paintings).

⁹ On early Egypt evidence for the processes of specialisation and generic theoretical models of its development: Takamiya 2004a. On craft specialisation parameters (context, concentration, scale, intensity): Costin 1991. Examples from Pre– and Early Dynastic Egypt: Midant-Reynes et al. (eds.) 2008: 3-239 and from other ancient cultures: Wailes (ed.) 1996.

¹⁰ The composition of the funerary equipment in predynastic cemeteries, validates the assumption that early tombs' gravegoods must have had very similar functions as later periods ones. We can therefore extend to older phases (and to slightly different contexts) the theories about the magic, apotropaic qualities of some items and images, which would serve to provide divine favour and strength during the earthly life (in war, work, rituals) and protection or nourishment in the afterlife.

At the basis of many religious beliefs, there is the concept that *sacrifice* is a prime means to obtain supernatural favours: for this reason, important magic implements had to be crafted in raw materials which were rare or difficult to procure (coming from *mythical* sites, distant, exotic lands or from parts of dangerous animals), thus having an intrinsic symbolic value by

Nor so straightforward and flawless an undertaking is trying to identify the circumstances in which the various categories of archaeological finds were actually used: the fact that they ended up as gravegoods or in temples caches doesn't rule out further (possibly even more significant) uses.¹¹

The fully developed figurative motif of multiple animal rows appears, during the late predynastic period (Late Naqada II – Early Naqada III), ¹² carved on three broad types of artifacts: on handles of ritual weapons (knives and maces), ¹³ handles of personal care items (combs, hairpins, spoons) and on further articles types from temples or tombs (furniture parts, boxes, household implements, wands, seals).

The detection or differentiation of social status and sex of the owners of prestige goods is not always possible, especially for the material from older excavations.

themselves. Costly finished items would then be obtained after a long, hard, skilled manufacture of those materials (in the case of ceremonial knives, both the handle and the blade required sharp and minute craftsmanship). The ultimate *activation* of the magic essence of *powerfacts* (and decorations) would certainly involve proper rituals. Finally the symbolic value which *ceremonial* objects came to embody would serve in the aforementioned sacred occasions.

¹¹ Apart from the esoteric properties inherent to the manufacts (cf. note 10), the definition of powerfacts implies these items would have the more material (yet not secondary) finality to enhance the prestige, and perhaps display the status, of their possessors also in consideration of the fact that their ownership was apparently allowed to a restricted number of persons (or social strata) and plausibly only after sovereign's concession or gift. Their intended function (and impact) was in some respects similar to other cases of extreme luxury and wealth display, as monumentalisation and conspicuous consumption of valuable resources, including animal and human lives. For some kinds of portable objects, it cannot be excluded that many changes of ownership (and heirloom transmission) did occur before their final burial: in the case in point, such likelihood has to be referred to either the whole ceremonial knife or to the single flaked blade. See below for details about the uses and users of these typologies of artifacts.

¹² The earliest known scenes of this kind date from middle predynastic as the painted decoration on the C-ware vessel from Abydos tomb U-415 (Naqada IC). Carved or applied animal friezes on vessels rims and tools handles are also known from various periods, earlier, contemporary or later than the Naqada II-III transition (see below, paragraph 4.2).

¹³ For a general introduction on the subject of animal rows cf. this paper on-line abstract at: www.anse-egypt.com/ANSE_2008-congress.htm. The fundamental bibliographical references, with descriptions of each example and discussions about the possible meaning are: Benedite 1918; Vandier 1952: 533-560; Asselberghs 1961: 94-126; Ridley 1973; Kelley 1983; Ciałowicz 1992 and 2001: 166-176. Davis 1992: 1-70, has interesting semiological premises, but then most of the methodology seems to rely onto rather arbitrary chronological and functional hypotheses and the theories about the significance of relief scenes (and even more the utilization and ritual manipulation of ceremonial palettes) present evident overinterpretations. New knife handles found at the Abydos cemetery U are published by Dreyer 1999 and Hartung 2008. Recent clearing of the ivories from the Hierakonpolis Main Deposit cache have been published and compared to other known examples by Whitehouse 1992 (mace handles), 2002 (knife handles) and 2004 (plaques). The corpora from Hierakonpolis can be found in Quibell 1900, Quibell and Green 1902 and Adams 1974. Cf. Needler 1984 for the funerary context (Abu Zaidan, tomb 32) of the Brooklyn knife and Churcer 1984 for the identification of species carved on its handle.

One of the aspects that Midant-Reynes' work on large flint knives emphasizes is their extreme rarity (in funerary contexts). ¹⁴ Yet, nearly all of the individuals in whose burials ripple-flake flints were found, did lack clues of very high status, which is in striking contrast with the known evidence (elaborately carved handles) from the elite cemetery U at Abydos (and from early temples caches).

This might indicate that the decorated handle did actually add a good deal of value and power to the flaked flint: the alleged supernatural qualities of the handle's (hippopotamus or elephant) ivory and of its carved imagery, would transform an already archaic, mythical (the ideal form of) weapon into an even more important tool, turning it into an object of superior class, meaning and power: a true powerfact.

The possibility of an effective use of such weapons is still a partially unsolved matter.¹⁵ I believe that, although the very function of the tool was performed by the blade, the handle was not less important, giving the user a full protection through the contact with his hand. The decorations thus acted as a filter, providing the *cutter*

¹⁴ Midant-Reynes' 1987 evaluates the technology and funerary context of the inhumations accompanied by ripple-flake blades (associations with other gravegoods and possible social status of the deceased) and she also analyses the representations on knife handles. Ripple flake knives were ground on both sides, but only one side received the fine (hammer-) pressure flaking; carefully flaked micro-denticulation extended on both sides of the edge of the blade. from the tip to a few centimeters before the butt (see Crowfoot Payne 1993: 172ff. and Appendix 4). In the known decorated knives, the blade was generally mounted on the handle with the flaked face turned on the same side as the circular boss on the handle. Although it can be supposed that all the knives with decorated handle had a ripple-flake blade, it is sure that most of such blades were provided with handles made of perishable materials (as known for other flint types too, as large bifacials, fish-tail Pesesh-Kef: cf. Friedman 2004b). About 50 ripple-flaked blades are recorded in Midant-Reynes' study out of thousands of published tombs: for sure tomb looting has contributed in diminishing the number any valuable object, including knives, but these blades remain very rare also in undisturbed cemeteries as at Minshat Abu Omar. Nearly all the sexed owners of ripple-flakes were adult males (cf. Hikade 2004b: 10). The burials exhibited only an average wealth (i.e. tomb size and amount of funerary equipment), with the exception of Abadiyah / Diospolis Parva cem. B tomb 217 and, but to a minor degree, Abu Zaidan tomb 32 (containing three such blades, the broken one of which was associated to the renowned ivory handle with ten rows of minute animals carved on each side: see Needler 1984: 268f., 57ff., 124f. for this latter tomb context).

¹⁵ The question is important for the comprehension of the way in which these tools were actually used: most scholars accept their eminently symbolic role, owing to the very weak consistency of the attachment of blade to handle. The functions as both ritual and prestige items also applies to fish-tail bifacial knives (slightly more frequent in predynastic tombs than ripple flakes) which mostly appear to have never been used as well (Hikade 2004b). Yet, while it is true that any violent use would have visibly affected the fragile micro-denticulation of their blade, this also might depend on what was cut, how and how many times (cf. D. Holmes' results, quoted apud Roth 1992: 129, n. 76: Egyptian flint microstucture starts to exhibits traces detectable in use-wear analyses only when flint has been repeatedly used). In my opinion it could be even thought that some ritual weapons were used *only once* (or however very rarely), e.g. on the throats of powerful enemy chiefs, and maybe just for the *first cut*. It'd be interesting to compare the characteristics of Egyptian ceremonial knives and their ritual use with those known from other cultures as the classic (Maya) and postclassic (Aztec) Mesoamerican peoples.

with a shield from potentially dangerous effects (cf. par. 4.3) of his action: killing was a delicate matter, hence, even in (ritual) butchering or sacrifices, the defense from negativities did remain a primary concern.¹⁶

It is remarkable, though perhaps obvious, that several aspects concerning the practical and symbolical use of knives are valid for ceremonial maces as well.¹⁷

Some time before the end of Naqada II, the leading forces of the major regional polities started to adopt precise strategies aiming to further increase the status differentiation and the social discrepancy vis a vis the mass of dominated population. This was achieved adopting a number of measures inherent to both the realm of life and death: in the latter case, along with a progressive tradition of differentiating tombs on the basis of their size, of selected and detached location, abundance and variety of funerary equipment, it seems that a restriction to the use of certain objects was introduced as well.¹⁸

As anticipated, it remains very hard to try to identify the social strata which might have felt necessary or useful to carry a knife with animal decorations, into the voyage to the afterlife. ¹⁹

¹⁶ It is known that many populations all over the world have (or have had) dedicated rituals or simple "prayers" by which the hunter asks forgiveness to a divinity for having slain one of his creatures. S. Aufrère hints at similar practices inherent to the extraction and transformation of Earth mineral resources (apud Midant-Reynes 2003: 339-40, n. 494 description of the eventual prophylactic functions of greywacke palettes and the choice of the *bekhen* stone). Midant-Reynes (ibid.) parallels the rocks powdering procedure to the act of inflicting death to living creatures. The comparisons might be brought forth, pointing out similar function of raw materials, finished manufacts and decorative programme on ceremonial palettes and ritual weapons (on palettes cultual uses cf. O'Connor 2002; Köhler 2002: 505-507).

¹⁷ Not seldom heavy maceheads had a narrow hole in which only slender (wooden) maces could have been fitted, and the latter might be even clad by fragile hollow ivory handles. All this would render few verisimilar their effective use to inflict violent blows, which would have caused serious damage to the weapon perhaps even before the impact with a human head. It is probable that more ordinary maces were employed in the rituals of enemies smiting (cf. Droux 2005: 32), while an alternative use of great maces, i.e. standing on the ground, is suggested by a decoration on a Hierakonpolis ivory, now in Oxford: Adams and Ciałowicz 1997: 13, fig. 6; Whitehouse 2002: fig. 1-2). Scenes on ritual weapons' handles have a uniform imagery (infra).

¹⁸ Archaeology suggests that similar *tendencies* affected different categories of objects, as the elaborately decorated knives, palettes and maces. For the concepts of restricted knowledge and access to artifacts, representations and writing cf. Baines 1989, 1991, 1995; Baines and Wengrow 2004; Midant-Reynes 2003: 336-342 (*confiscation des pouvoirs*).

¹⁹ Funerary uses were developed, already as early as Naqada I, in a way that authorises us to believe there was an underlying unity of "basic concepts" along the lower course of the Nile Valley, and these would form the foundations of dynastic Egypt religious beliefs, philosophy and ethic. As tomb was to become the house for the Afterlife (or a model of the royal palace, in case of sovereigns' burials, as first attested in the elite cemeteries of Hierakonpolis loc. 6 and, few centuries later, at Abydos U) it is clear that also the composition of gravegoods should reflect the need, the duties and the amusements which the deceased had during lifetime (just as shown in the successive millennium Old Kingdom tombs scenes).

Despite the aforementioned value as badges of an elite status, powerfacts might have been implements which the tomb owner had used (or produced) himself during his life. It has been suggested that some of the tomb equipped with recurring types of object could indicate the owner's profession.²⁰ This would have interesting implications for the knives' owners, especially if we consider the alternative funerary and ritual contexts in which knives (and even isolated flint blades) have emerged.²¹ I'll return on this aspect in the conclusive paragraph.

Conversely, the material from Abydos U cemetery leaves few doubts about the lofty status of their owners: elite members (local chiefs and their relatives).²²

2. Raw Materials, their sources and symbolism

Before venturing into the proper iconographical analysis, a further premise is needed in order to add some data on the symbolic value of the materials used for ceremonial knives. Although the knife blade is not the main object of this study, the role of flint (chert) cannot be overlooked, considering the millennia of Egyptian flint-working tradition for offensive-defensive purposes and utilitary ones.²³ The powerful inner symbolism of bifacial and ripple-flake blades is witnessed by the frequent cases in which they're found dismounted from the relative handles, and perhaps by the ritual breaking of blades, aiming to deprive these weapons of their harmfulness for the living.²⁴ On the other hand, representations of knives recur on executation figurines

²⁰ Especially when tombs of soldiers, priests, physicians or artisans are dealt with (cf. Davis 1983 for the latter case). For Early Dynastic evidence of large collections of blades (either in flint or in copper) found in Early Dynastic mastabas, cf. bibl. in Helck, in: LÄ IV: 109-112 entry. Cf. note 15 for the question of the actual use of the elaborately worked ceremonial knives.

²¹ An additional, remarkable find from a domestic context is the fine ripple-flake blade from loc. 11 at Hierakonpolis (Watrall 2000: 12, noticing the similar finds from loc. HK29A, associates them with animal butchering. Cf. Hikade 2004a for stone industry from the Nekhen settlement).

²² Eg. [U-503]: Hartung (in Dreyer et al. 1998): 91ff., pl. 5a-b; Dreyer 1999. [U-127]: Dreyer (in Dreyer et al. 1993): 26f., pl. 6; Dreyer 1999; together with the ripple-flake blade, a fish-tail knife was found in this tomb: Hikade, in Dreyer et al MDAIK 52, 1996, 33-39; for the sealings and their motifs, in relation with those on handles: Hartung 1998: 189f.; Hill 2004. [U-181]: Hartung (in Dreyer et al. 2000); Hartung 2008, fig. 3 and 6. Other fragments from U-273, U-261: Hartung 2008, fig. 4 and 5 respectively).

²³ The bibliography on flint industry is vast (cf. n. 14 and Midant-Reynes 1987, for ripple-flakes). To restrict the references to the specialised production of ritual and luxury items, for which were chosen raw materials of distinctive colors, translucence and other peculiarities, we have to mention the important Naqada II workshops of the Hierakonpolis HK 29A temple: Holmes 1992; Friedman 1996; Takamiya 2008: 9 ("...manufacture in a special, high-status area and the presumed distribution to elite persons"). Although flint was not a rare or exotic raw material (various mines have been found between Asyut and Qena), it was certainly a precious resource, given the wide range of activities in which it was necessary. Contrarily to the production for household uses, the workmanship of exquisitely flaked blades was accomplished by highly specialised classes of craftsmen. On "chert and flint" see: Aston et al. 2000: 28-29 and K. Kromer's entries, Feuerstein and Feuersteingeräte, in: LÄ II, 207-215.

²⁴ The intentional smashing of blades would render such weapons ineffective for the supposed use in the Afterlife by the deceased: hence it is more logic to think that breakings are accidental

and as a graphic expedient to *kill* potentially dangerous hieroglyphic signs: there are numerous indications that the chert knife was acknowledged by the Egyptians as the *ritual weapon* by excellence.²⁵ Among other cultures, flint is associated with chthonic forces (owing to its subterranean origin and its capability to inflict deadly injuries) and with celestial phenomena (for its property to strike fire), but these beliefs don't seem to have any ascertained, direct parallel in ancient Egypt.²⁶

I can't exempt from mentioning a refined, if very rare, "by-product" of the most skilled flint manufacture: beautiful votive flints, shaped in animal silhouettes.²⁷

Ivory is one of the mostly suited materials for fine carving craftworks: it was subject to an impressive variety of uses, and several statuettes, amulets, tags and other artifacts made from this material ended up in tombs or in temples cachettes.²⁸

post-deposition events. Weapons dismounting remains instead a feasible ritual caution, as the deceased would be capable to reassemble the weapon himself. On ripple flake intentional (?) splitting: Midant-Reynes 1987: 200; on depotentiation of fish-tail bifacial knives (detached from their handles): Friedman 2004b; also cf. Whitehouse 2002: 432 about ritual maces' systematic deconstruction.

²⁵ The Egyptian word *ds* means flint and knife: cf. *Wb V*: 485, 16 and 486, 4-9; Faulkner, *Concise Dictionary*: 316; Helck, in: *LÄ IV*: 109-112; Ritner 2008: 163-167 (note 758). Owing to the antiquity of flintknapping, chert had a sacred status per se (e.g., in the ritual of the Oryx sacrifice). Flint knives in distinctive fish-tail shape (*Psš-kf*) have a long history of ritual use (Roth 1992, 1993).

²⁶ Among late antiquity Mediterranean peoples, the ceraunia (thunder-stones or thunderbolts: cf. Johanson 2009), were thought to originate where lightning strikes the earth, a common world-wide belief shared by some Precolumbian cultures of Mesoamerica and by Eastern Asiatic ones.

²⁷ Cf. Petrie 1902: pl. 26, nr. 292-294; id., 1903: 27, pl. 10, nr. 220; Capart 1904: 147-150; Vandier 1952: 412f.; Petrie 1920: pl. VII, 1-10; Needler 1984: 365-67; Osborn and Osbornová 1998: 4; Hendrickx et al. 1998 (catalogue of the +50 known pieces); Friedman 2000, 2006, this volume. Generally small, simply shaped flint figurines have been said to represent "the product of the flint knapper's pleasure and pride in his own virtuosity" (Needler 1984: 335), which would account for the irregularity and rarity of their deposition. Late classic period Maya artisans used to have a similar specialisation: but while most of their products turn out to be comparable to the majority of the Egyptian ones, Maya large flint (and obsidian) eccentric blades have no parallel in the World art: cf. Schele and Miller 1986: pl. 25, 26, 114 (the latter one, from Dallas Museum, is nothing short than a masterpiece, showing the profiles of three men within a monster-shaped canoe sinking down into the underworld; size: cm 25 x 41 x 2). These objects were dedicated as votive offerings in ritual and funerary contexts: buried inside pyramids or beneath stelas, a similar use as the provenanced Egyptian samples of Naqada I-III date, which mostly come from votive caches associated with temples or burial complex (rather than from the burials pits themselves): cf. Adams 2002: 22-23; Hendrickx et al. 1998: 12f.

²⁸ For ivory figurines (human, animal, fantastic beings and model objects, from temples' and other structures' deposits): Petrie: 1902; id.: 1903, 23-29, pl. 2-10 (Abydos temple, M-chambers); Quibell 1901, Baumgartel 1968, Adams 1974 (Hierakonpolis temple, Main Deposit); Dreyer: 1986 (Elephantine, Temple of Satet and Abydos temple); Van Haarlem 1995, 1996, 1998, Belova and Sherkova 2002 (Tell Ibrahim Awad); Chłodnicki and Ciałowicz 2006, Ciałowicz 2007: 20ff., fig. 8-30 (Tell el-Farkha). For ivory tusks: Finkenstaedt 1979; Hendrickx i.p. For tusks, tags, combs and pins decorated with anthropomorphic features: Nowak 2004.

In Egypt, ivory was also used since the dawn of the writing tradition, to confect small administrative items, as inscribed seals and etiquettes (later "year labels"). 29

Many more types of ivory objects are known in the categories of daily use personal accessories (pins, combs, spoons, vessels, boxes) and of furniture parts.³⁰

Until recently, the determination of the proper source for this material, i.e. hippopotamus or the rarer elephant ivory,³¹ was only occasionally ascertained in the publications: for sure both these animal species' dangerous character and their fierce behaviour must have affected the symbolic and effective value of the raw material they furnish.

Hippopotamus was still widely diffused in the Egyptian Nile Valley and Delta during the (late) predynastic period.³² Massive body and violent temper are the main aspects of this animal's ambivalent symbolism: its size, aquatic habitat and protective behaviour with puppies originate the association of (female)³³ hippos with motherhood, childbirth and prosperity (the scope of votive figurines)³⁴ and, by extension, a more general apotropaic and prophylactic function (which accounts for the hippopotamus shaped vessels and palettes, apt to serve as containers or supports for the use of important cosmetic and medical substances).³⁵ The dangerous nature, a tangible threat for humans and their cultivations, and the irritable disposition of male hippos, have generated the other aspect of its religious connotation, the wicked one, exemplified by the identification of hippopotami with the elements of chaos, evil, with the enemies of the king and, later on, with the god Seth. These latter beliefs had their highest expression in the hippopotamus ritual hunt, an apotropaic practice (and a concrete security measure) already performed by early Naqada period chiefs.³⁶

²⁹ On earliest labels: Dreyer 1998, Kahl 2003, Piquette 2008. On earliest seals/sealing: Kantor 1952, Boehmer 1974a, Podzorski 1988, Hartung 1998, Hill 2004, Honoré 2007, Di Maria 2007.

³⁰ E.g., Quibell 1901, Capart 1904: 151-193, Vandier 1952: 409-435.

³¹ See Krzyszkowska and Morkot 2000, for a synthesis on ivory sources, procurement and uses.

³² Cf. Störk, s.v. Nilpferd, in: *LÄ IV*, 1982: 501-506; Osborn and Osbornová 1998: 144-148.

³³ They had to shield the offspring from frightful prowlers as crocodiles: Boessneck 1988: 47f.

³⁴ Hendrickx and Depraetere 2004; Droux and Friedman 2007; also see bibl. in note 28.

³⁵ Hendrickx and Depraetere 2004. Several stone and ivory figurines reproduce the animal with head down and shut mouth, showing no signs of aggressivity (yet there are some exceptions), as it is also known from small stone and ivory hippos with a vase carved on their back. Further representations of hippopotami in peaceful circumstances are painted on Naqada I-IIA C-ware (Scharff 1928; Crowfoot-Payne 1993: 79f., nr. 600) and modelled to form a row of more specimen on a pottery vessel rim (Adams 1987: cover, from Mahasna, Manchester Museum 5069 and one in the British Museum: these seem to indicate that the hippopotami are protecting the vessel liquid contents as a mimicry of what they use to do in the real life around their own watery spot) or on a ivory wand (or clapper, from Hierakonpolis HK6, royal tomb 23 complex: Friedman *this volume*, Droux and Friedman 2007). There are numerous hippopotamus shaped Naqada II greywacke palettes, some hippo-topped ivory combs and at least two votive flint-knapped figurines (Friedman 2000: fig. p. 14 and p. 17) reproducing this animal.

³⁶ On hippopotamus symbolism and representations in predynastic art: Von Bothmer 1948, Behrmann 1996, Hendrickx and Depraetere 2004 (with appendices of known early attestations of hippo-shaped vessels, figurines and representations on various media). Hippopotamus ritual

Both the aforementioned characteristics of hippopotami themselves and of their own defense/attack weapons, tusks, did influence and enhance the symbolic status of finished ritual implements made with such material: the positive (protection) and negative (menace, violence) properties were transferred to the persons who owned and manipulated these objects, on the basis of sympathetic magic principles.³⁷

Elephant certainly retained much of the symbolism proper to the hippopotamus, owing to the similar behaviour and impressiveness of the species. However, the African elephant was much rarer, and it was already progressively disappearing from Egypt as the regional cultures developed towards the dynastic state. ³⁸

It seems that the status of the elephant as a *numinous* entity in ancient Egypt did reflect the effective presence of this pachyderm within the range of more or less direct human influence: it is in fact well attested on various predynastic artifacts, but as it started to become an *exotic* species, later in Naqada III and during the dynastic period, this animal gradually lost all of its religious (and artistic) relevancy.³⁹

Predynastic archaeological evidence suggests that the role of elephants in the imagery was much less widespread (in geographical and social terms) than that of the hippopotamus, coherently with the relative diffusion of the two species.⁴⁰

hunt iconography is documented on early Naqada vessels and on the Gebelein textile paintings, incised on rhomboidal palettes (Stocholm Mus. EM6000) and in Rock-Art scenes: Vandier 1952: 282f.; Säve-Soderbergh 1953; Hendrickx i.p.; Hendrickx and Eyckerman i.p.; Hendrickx and Förster i.p.; Hendrickx and Eyckerman this volume; Hartung this volume. For a young hippopotamus (subsidiary) burial from Hierakonpolis HK6: Friedman this volume.

³⁷ The dualistic nature of iconography and beliefs about hippopotami was not necessarily relevant for ancient Egyptians, and however there is no contradiction in such apparently antithetical construct: similar bi-valences occur with lions and bulls, early royal symbols but, at the same time, made object of (royal) ritual hunting, as many predynastic representations do attest.

³⁸ Störk, s.v. Elefant, in: LÄ I, 1975: 1214-1216, Osborn and Osbornová 1998: 125-130, Krzyszkowska and Morkot 2000: 323f., Lobban and Liederkerke 2003.

³⁹ On the other hand elephant tusks, which were procured with middle to long distance trade (initially through A-Group polities intermediation), remained quite a wealthy resource all through the Egyptian history, and it is probable that their material value grew with inverse proportion to the supernatural importance of the animal, when the species became extinct in Egypt. It is hard to guess whether predynastic Egyptians made any distinction (in symbolism and use) between ritual object made of elephant- as opposed to hippopotamus ivory.

⁴⁰ Some examples: Brussels, MRAH E7062, rhomboidal palette with incised elephant (and a Z-shaped sign) on the tip, from Abadiyah tomb 102 (Naqada IC-IIA): Hendrickx and Eyckerman i.p., Friedman 2004a; Late Naqada I – Naqada II elephant shaped palettes and amulet-palettes: Berlin 14423, Brussels E7061, London UC6159, Oxford 1895.859 (Crowfoot-Payne 1993, cat. 1979, incorrectly identified as a hippopotamus: the latter is never shaped with concave back on palettes, as instead elephant sometimes is, i.e. with marked curved humps one the head and at the end of the back; cf. Friedman 2004a: 153 for other misinterpretations and possible modern forgeries), Cairo CG14144, Geneva (D1161) and Boston museums (cf. Friedman 2004a: n.7); incised elephant on a B-ware jar from Naqada t. 879 (Friedman 2004a: 154f.); painted on a C-ware bowl from Mahasna t. H97 (British Mus. EA49025: Friedman 2004a: 151ff., fig. 14.1-2; Scharff 1928: 268f., fig. 5); a flint elephant fragment (Friedman 2006 and this volume). The interpretation of the so called bull's head amulets as representing a frontal elephant head (most

Yet, there are different clues pointing out the possible emergence of a superior characterization, within the elite and royal sphere, that the elephant was gradually achieving during the period from late Naqada I to early Naqada III.⁴¹

To conclude this paragraph, it can be fairly assumed that ivory had a relevancy of its own as a raw material, owing to its origin from the offensive and defensive weapons of two huge mammal species. This latter characteristic, and the excellent qualities as support for carvings, are the main reasons for the use of this material as ritual weapons' handle (and for other ceremonial or daily life implements which also had some *amuletic* function). The harmfulness of the flint blade, was complemented by the powerful symbolic properties of the handle, ⁴² which protected his user from any danger connected to the ritual employment of the weapons against animals or other humans. Further defence was provided by the magic essence of the decorations figurative language.

3. Animals and chaos, Animals at bay (hunted, bound and slain)

In the studies on ancient Egyptian art and iconography, the theme of disordered representations of animals has been long ago identified as a metaphor of chaos, of the impending evil forces, potential menace for the humanity and for the realization of "order". The archetypal dualism of the Egyptian religion finds its reuniting element in the concept later expressed with the term *Ma'at* (which entails several distinct aspects of ethics and beliefs). The king is the primary agent of the order

recently by Van Lepp 1999) has not gained general favour (e.g. Hendrickx 1998a). Contrarily to hippos', tridimensional figurines of elephants are extremely rare: a row of (originally) three pottery elephants modelled on the rim of a C-ware/Fancy form vessel (Berlin Mus. 22388: Scharff 1928: 269, pl. 27.2; Grimm and Schoske 2000: 20-21), elephant ivory figurine: UC16108, a pottery figurine in Brooklyn Mus. 09.889.325 (cf. Adams 1998).

⁴¹ At least two elephant burials in the early elite/royal cemetery of Hierakonpolis HK 6 (tomb 24 and 33): Adams 1998, 2002; Van Neer et al. 2004; Friedman 2004a, and *this volume*; elephants in predynastic iconography: Friedman 2004a; Anselin 2003; in Naqada I-III Egyptian rock art: Ikram 2009 (Kharga), Darnell 2009 (Theban Western Desert), El-Hadidy 2002 (HK61C), Huyge 2002 (El-Kab); contrarily to the hippopotamus, the elephant is depicted as a hunted species only in rock art (not later than Naqada I), never on portable artifacts. Linguistic studies of the terms for elephant, ivory and related toponyms: Breyer 2003, Anselin 2003, 2004b, Jimenez-Serrano 2004. Elephant in relation with the *Per-Wr* archaic shrine (which structure has elephant tusks and tail): Badawy 1954, Dreyer 1998: 120ff. (contra: Kahl 2001b, who interprets the recumbent animal as an early form of the god Seth; cf. Baqué-Manzano 2002: 38), Whitehouse 2002 (Elephant on snakes beside the *Per-Wr* shrine on a decorated knife handle, cf. below), Morenz 2004: 90ff., 114ff. (elephants as emblematic writing for *Wr-Potentaten*). See below for the elephant standards on D-ware, the motif of elephant trampling on intertwined snakes and elephant as an alleged royal name or a possible designation of "sovereignty".

⁴² It must not be by chance that also later apotropaic wands were mostly carved in ivory.

⁴³ Cf. Asselberghs 1961: passim, 286ff.; Kemp 1989: 46ff.; Baines 1995: 115f. Death is often rendered with chaotic assemblages of distorted, upset animal or human bodies (palettes, rockart); for the motif on early seal impressions: Hill 2004: 25f; cf. next chapter for the rendering of the opposite concepts through the use of disordered compositions vs lined ones in registers.

preservation: it is only with his presence and intervention⁴⁴ that opposite realities such as chaos and order, foreign enemies and Egyptian state, Desert and Nile Valley, Upper and Lower Egypt, wilderness and settled spaces, can be mastered, cemented and unified within the supernatural ruling essence of kingship. This institution appears to be the most powerful theological creation, more relevant and more prominent (at least archaeologically) than any other one related to the supernatural creed, especially in pre- and early Dynastic times, and despite a theoretical subjection of kings to gods.⁴⁵

Fundamental or ephemeral traits which would then become the ideological pillars of dynastic kingship are already in active development during the predynastic period: this can be inferred by several artistic conventions, religious practices and chieftains' paraphernalia proper of the Upper Egyptian predynastic tradition, which will be inherited by the very offspring of Naqada culture, the Dynastic State.⁴⁶

Cosmic control exerted by the predynastic chief, is a basic belief which was metaphorically expressed, in the figurative corpora,⁴⁷ with sovereigns (in human or animal form) dominating nature by hunting/fighting, capturing/binding and sacrificing/slaying both wild game and human foes (foreigners, enemies, rebels).⁴⁸

Hunt has attracted much interest and, as far as ideological backgrounds, it constitutes a parallel system to that on which I am focussing here.⁴⁹

Venatic practices (and their artistic transfigurations) are usually interpreted in a symbolic manner. Their very purpose is neither to secure food sustenance nor to magically propitiate its successful procurement:⁵⁰ hunting representations are the *replica* of rituals, which were performed to establish some form of symbolic control of man over nature and its phenomena. This was re-enacted on artifacts decorations

⁴⁴ Cf. Campagno 2002: 2 ff.; Baines 1995: 100ff.

⁴⁵ Cf. Kemp 1989: 53-83; id. 1995: 46f.; Baines 1995: 129.

⁴⁶ Fattovich 1970; Baines 1995; Campagno 2002: 153ff. On cultural continuity from pre-through early dynastic Egypt: Kemp 1989: 46ff.; Hendrickx and Eyckerman *this volume*.

⁴⁷ Other symbolic means of display were funerary architecture and rituals and, since Naqada IIIA-B, the royal name propaganda (*serekh* signs): Baines 1995.

⁴⁸ In many respects, wild fauna living in the Desert, realm of the unknown, is indeed equated to the enemy coming from foreign territories to threaten the civilized world. Common to many ancient cultures, is the importance of capturing live enemies, in order to submit them to rituals of different kind, generally aiming to convoy the force of the captured and sacrificed foe to the victorious ruler (or to his deities). Humiliation, mutilations and annihilation of the imprisoned and defeated ones are means of apotropaic and propitiatory magic, aiming to grant or favour further successes. Cf. Ritner 2008: 160.

⁴⁹ Or the antecedent stage (to animal rows representations and ritual): procuring live game. For a general presentation on hunt cf. H. Altenmüller's related entries in *LÄ III*, 219-236. See also Vandier 1952: 282-286 (for later attestations: Vandier 1964 passim, id. 1968 passim).

⁵⁰ It is argued that even for periods when hunting was a primary means of sustenance, the artistic repertoire did not necessarily reflect magic practices of hunting propitiation: there might be serious discrepancies between the species which were artistic subjects and those effectively hunted for food (e.g. Late Palaeolithic Lascaux, Niaux, Altamira: Leroi-Gourhan 1989: 1428).

in order to achieve, through the "magic of representations", the same purposes as those of the actual hunting and cultic practices.

It can be hypothesised that each single animal species' hunt (as also each hunting method, within the two main environments of desert and riverine marshes) must have had its own distinct ritualistic procedures, ideological connotations and magical scopes.⁵¹

The motif of binding is universal in terms of sympathetic magic associations.⁵²

Although bindings and ropes may even express quite peaceful ideas as of belonging, embracing, uniting, restraining, pulling, leashing, taming or surrounding (in protective and generally positive acceptations),⁵³ the more straightforward conceptual associations, i.e. its use in venatic or martial contexts with the significance of capturing, controlling, blocking, neutralizing and subjugating, does largely prevail in early pictorial imagery.

The employment of the visual metaphor of binding with the latter meanings, occur in fact with a certain frequency in predynastic art, either involving wild and domestic fauna of or since late predynastic with regard to human captives. 55

Trampling underfoot, different forms of humiliation, ritual punishment, slaying, mutilation and (aftermath of) sacrifices are frequently encountered in the representative repertoire yet, this time, they are exclusively reserved to the human

⁵¹ Cf. Altenmüller, in: LÄ III: 224ff.; Hendrickx i.p.; Morenz 2004: 169ff. Examples of different hunting techniques and hunted species: with Dogs: on Brussels B-ware E2631, Hendrickx 1992; Vandier 1952: 285; with traps and lasso: Hierakonpolis tomb 100 painting (Vandier 1952: 261-270; Ciałowicz 2001: 157ff.; Hendrickx and Eyckerman *this volume*); Crocodile: Vandier 1952: 281-284; for Hippopotamus hunt, cf. above. Fowling (Vandier 1968: 307-398; K. Martin, in: LÄ VI: 1051-1054; Kemp 1989: 49) is not attested before the First Dynasty (cf. one of the Hemaka disks from S3035, Cairo JdE70165: Henein 2001).

⁵² Ritner 2008: 113ff.; id., 142ff.; Schäfer 1974: 155ff.

⁵³ As are the *Sma-Tawy* or the *Šn* (royal cartouche) compounds. Among the cases of representations in which ropes or leashes retain this non-offensive meaning, there are those of dogs held with leashes: U-503 knife handle (see below), perhaps giraffes (Berlin 15129, late Dware: Scharff 1931: 150f., fig. 58; for the motif of the *giraffe on leash* in African rock art: Van Hoek 2003). Some rock art panels showing boats being pulled by men also fall in this category (Gharb Aswan: Hendrickx et al. 2009, Hendrickx and Gatto 2009) although in other cases, boats, a metaphor of royal-divine power (Huyge 2002: 201; Hendrickx and Eyckerman *this volume*), may exert direct control on animals and humans via the ropes (with no man to hold them): cf. Gatto et al. 2009: 163-164 (Wadi Abu Subeira), Hendrickx et al. 2009 = Winckler 1938: pl. 14.2 (Wadi Qash site 18, a panel which attests both the pulling and controlling ropes).

⁵⁴ Cf. the cases of lazo hunting. C-ware: Turin S1827 bowl and S1823 twin vessel (Donadoni Roveri and Tiradritti 1998: cat. n. 33 and 40 respectively). Also see the leashing of fantastic animals, as serpopards on the recto of Narmer palette (a mixed form of leashed dogs/felines and snakes ambivalently positive and negative powers?). Cf. also Dreyer 1999: fig. 11c-e (U-127).

⁵⁵ Some examples: C-ware: Brussels MRAH E3002, Abydos U-415/1-2; Abydos U-239; London UC15339; Gebel el-Arak (Louvre E11517) knife handle, Oxford Knife handles E4975, E4808 (Whitehouse 2002); Hierakonpolis Ivories, Quibell 1900: pl. 12.4, Droux 2005; Bull (Louvre 11255) palette standards; Royal Macehead (London UC 14898) in Adams 1974: 3, pl. 1-2.

subject.⁵⁶ The archaeological evidence and motivations for actual animals and human sacrifices has been much debated.⁵⁷ It is symptomatic that, as far as both the practices should have effectively taken place in (late-) predynastic and early dynastic period, iconography tends to be(come) relatively explicit about these rituals only in connection with the human cases, whereas the animal realm (out of the hunting domain) seems to be protected by more rigid laws of decorum which would discourage the representation of slain specimen.⁵⁸

Whatever animals might stand for in art and in culture, the forces they represent (*zoophanies*) are held at bay with only a limited and sheer necessary use of force and violence, and always within ritualized contexts or specific symbolic boundaries, as in hunting (and representation thereof) and in the rarely encountered compound of the "*Master of the Animals*", ⁵⁹ or the "control signs" (see below).

Despite the highlighted differences, which mostly seem to depend on reasons of *etiquette*, the treatment of the (hostile, savage) animal and human forces' manifestations obeys to a general unity of underlying motivations and aims; this results in the parallel, homologue expressions in the areas of iconographic canons, artistic conventions and ritual practices.

⁵⁶ The king smiting his enemies (usually by smashing their heads with a mace) is one of the mostly diffused and incisive motifs (nearly an emblem) of Egyptian monarchy. Cf. Hall 1986; Köhler 2002: 500f.; for some predynastic examples: C-ware, Abydos U-239/1 (cf. note 72 below); Hierakonpolis painted tomb 100; Hierakonpolis ivory: Droux 2005: 41-42; id. 2006 (Oxford E4012). For a treatise on captives and enemies in Naqada art, and a catalogue of objects and representations ascribable to the themes of royal execution, binding and death of prisoners cf. Droux 2005. For mutilated corpses on the Narmer palette: Davies and Friedman 1998; Vinci 2004. It is remarkable that the instances wherein art displays human corpses (either warfare victims or sacrificed captives) are always surrounded by a symbolic context (lion and vultures in the Battlefield Palette) or encased within the explicit purposes and modalities of ritualism (examples quoted above). Similarly the known representations of dead animals always fulfil an highly symbolic and metaphorical scope (as the plovers hanging on standards in the Scorpion macehead) which is also valid for any hunting type with ritual connotations.

⁵⁷ For human sacrifices (also during the first dynasties): Albert and Midant-Reynes 2005; Albert, Crubézy and Midant-Reynes 2000; Crubézy and Midant-Reynes 2000 (predynastic Adaima); Baud and Etienne 2000; Menu 2001; Morris 2007. – Animal sacrifices: Flores 1999; Strandberg 2009 (gazelles); Bonnet et al. 1989 (dogs: in Neolithic, Kerma and Meroitic Sudanese Nile Valley). Rock art: Huyge 2002: 202 (cattle as sacrificial animals in Horizont. III-V = Naqada III to MK, in the ElKab area). Animal burials: Van Neer et al. 2004.

⁵⁸ See the conclusions (and note 108) for possible reasons.

⁵⁹ A central, pivotal figure, representing the power of chieftainship or sovereignty, holds with his outstretched hands two rampant beasts (felines or bulls) symmetrically blocked on his sides. Known examples: Hierakonpolis tomb 100, Gebel el-Arak knife handle, Hierakonpolis ivory (Quibell 1901: pl. 16.2). Cf. Boehmer 1974b: 27-31; Sievertsen 1992: 22-26. A similar motif on C-ware: Donadoni Roveri and Tiradritti (eds.) 1998: 142 (Turin S1827), 146 (Turin S1823).

4.1 Animals in rows (rows, registers and order)

Contrarily to the discussed figurative theme based on the "chaotic" layout of characters, the sharp linear arrangement of elements constitutes an efficacious expression of order, balance and control. ⁶⁰

As register composition is introduced in visual arts, this device is soon adopted in this kind of compositions to improve the organization of animal files and to further enhance the contrast between the savage character of the displayed bestiary and the rigorous order by which they proceed. ⁶¹

Past scholars have offered several explanations for the motif of animal rows.⁶²

When the broader "decorative programme" of knife handles (and other objects') is confronted with contemporary arrangements of captives processions or smiting and offering bearers⁶³ on handles and other predynastic artifacts, it appears that a common ideological intent is concealed beneath the dissimilarly looking surface.

Apart from the particular hypotheses, various scholars have noticed the fact that, when these carvings decorate knives (and their arrangement follows the longer axis of the weapon's handle), the animal rows are invariably directed towards the blade.

This is a valid clue indicating the role, i.e. the fate, reserved to those animals. Similar compositions, as on the Metropolitan Museum Knife handle and on A-Group related powerfacts, show that bound prisoners are forced towards a shrine by

⁶⁰ Despite the displayed multitude, horizontality and peacefulness are the first sight impression that animal rows carvings suggest to the observer. Cf. Asselberghs 1961: 273; Baines 1995: 115: "Rectilinearity of the line expresses order, in addition to the clarity it gives to a composition"; cf. Groenewegen-Frankfort 1951: 17ff.; Davis 1976, 1982; Hendrickx 1992: 20f.: Hill 2004: 29.

⁶¹ Cf. also the late ceremonial palettes and the carved ivories from Hierakonpolis Main Deposit.

⁶² Benedite's (1918) pioneering study already stressed the recurrent repetitions in the arrangement of the species (and of particular compounds of species) within the theories of beasts on different objects. He proposed that they could allude to folkloristic legends or mythical tales, but also underlined a possible magical symbolism of sustenance economy and a link with geographical or totemic clan emblems (pre-nomoi). Vandier (1952: 539-556) described the animals rows on all the known objects categories and (p. 556-560) resumed all the previously expressed ideas adding comparative material from the Near East and suggesting a foreign input for their origin (also see Ciałowicz 2001: 166-176 for the recent theories about the different types of carving decorations). Ikram (2001: 129) in a study on hyenas notes that on the handle of the Pitt-Rivers knife they are "shown as potential victims of the knife. Thus their inclusion on the handle might act as a vehicle for sympathetic magic to aid the hunter". Hendrickx (2006) interestingly compares the hunting with dog scenes to the more peaceful later animal rows, setting the motifs in their chronological frame. Hartung (1998: 210f.) and Hill (2004) compare the motifs on sealing with those on the knife handles (cf. note 13 above). Van Neer at al. (2004: 118-119) observe that the animal themes on ivory carvings and other artefacts increase in Naqada III, that is when the burials attestation (of the same wild species represented in art) ceases at Hk6.

⁶³ From Abydos U-cemetery (Naqada IID-early IIIA): Hartung *this volume* (fig. 6); from Hierakonpolis Main Deposit: Whitehouse 1992, 2002, 2004; Adams 1974.

the king himself or on behalf of him, in order to make them meet their destiny after ritual sacrifices. ⁶⁴

On purely speculative grounds, it could be argued that the animal procession's final goal should have been a similar shrine, a perishable material structure which would correspond to a temple's dedicated butchery area (HK29A) or to the funerary complex and fences structures attached to the HK6 royal cemetery (possibly similarly to the U-j tomb external area, which would later shift to separate funerary enclosures). The absence of the representation of these structures on the knives with animal rows is hard to explain, as it would not seem to contradict any principle of artistic decency as instead representations of dispatched animals would.⁶⁵

Animal Rows compositions consist of multiple semantic layers and they must have had multiple symbolic intents.⁶⁶ The accepted allusion to the control of natural phenomena and of the environment, rendered with the representation of ordered friezes, are in my opinion complemented and reinforced by the hint to massive ritual sacrifices, of which the animals rows are a "masked" premise (as well as the consequence of fruitful ritual desert hunt). Slaying of animals must have effectively taken place (e.g. HK 29A), obeying to the same symbolic and magic principles as their less glamorous, but equally effective, representative counterparts.

Later in the Predynastic and in the Early Dynastic period, the importance of these rituals must have diminished or vanished and the focus of violent ceremonies would eventually rest on the sole motifs of captives presentation and punishment, which practices seem to have really taken place at least in the restricted context of high elite and royal funerary ceremonies.⁶⁷

⁶⁴ Cf. Williams and Logan 1987; Williams 1986; Williams 1988: 38ff.; Raffaele 2003: 118-121; Hill 2004: 55-68. Some early gifts/offering bearers procession (as the one carved on the tomb U-127 knife handle, in fig. 2.6) are equally directed towards a structure which is possibly a shrine (rather than a mountain as reconstructed by Dreyer 1999: 205-206 and fig. 10a; the ship prow identification seems to me more likely, although I advance it might be an elephant trunk as well, thus resulting in the same shrine identification as on the Oxford E4975 in Whitehouse 2002: 429, fig.1). As stated above, tributes presentation has a very similar symbolic significance to the parade of live animals and captives, all being homages to the supreme power of the ruler (or deity) whom receives them. For association of animal rows and shrine also cf. next note.

⁶⁵ But see the temple (or tomb?) niched façade with bucrania on the walls preserved on the fainted carving of a large (elephant?) tusk from the Main Deposit in the Hierakonpolis temple (fig. 3.8): Quibell 1900: pl. 14; Whitehouse 2004: 1123, fig. 6. About the lack of temple/shrine on the knife handles scenes, I'd suggest (still as a crude hypothesis) that the knives' leather shaft might have been fashioned or painted to look like an archaic shrine, so the animals would have had their actual "destination" represented when the weapon was set in place.

⁶⁶ The meaningful occurrence of identical arrangement of animal species in the first (two) rows of the carvings is explored below, in paragraph 4.3.

⁶⁷ The analysis of the archaeological data is not always unambiguous, e.g. in the determination of the precise circumstances in which possible cases of sacrificed beings would be buried, and in establishing with full confidence (as in the case of some recently found evidence from Hierakonpolis and Adaima) the very origin of attestations of violent death (which might have otherwise depended on punishment, warfare or other causes different from the ritual ones).

Animal representations of the same period as the corpora from Hierakonpolis (Main deposit, i.e. "Dynasty 0" or later) tend to be more and more simplified and the suggested original meaning might have been lost, the inner purpose forgotten or changed towards a more undifferentiated apotropaic function (as Middle Kingdom magic wands) or a kind of heraldic mannerism. A distant echo of ritual slaughtering is perhaps preserved in the *Imy-wt* fetish, known since Hor-Aha's reign year labels.⁶⁸

4.2 Earlier cases of animal rows representations

Any single product of the ancient material cultures which archaeologists may discover, is a mine of information about the ideas of those who invented and used those forms of expression. The interpretative work about past peoples' intellectual nuances is not dissimilar from the decipherment of a forgotten script, and it can be also compared to the recomposing of a puzzle. Although in our case we will never have all the tesserae, each new element may add important indications on the layout of the goaled hidden picture.⁶⁹

Old and recent discoveries of elitary artistic productions, ⁷⁰ reveal the existence of an homogeneous body of ideologies and related intellectual devices.

There are some interesting *prototypes* of animal rows on C-ware painted decorations on which they appear in a interesting and undoubtedly meaningful association with other motifs.

The thematic convergence and coexistence of animal hunt (or animal rows) scenes beside more exquisitely political subjects⁷¹ (capture and smiting of prisoners, on C-ware⁷² vessels, Hierakonpolis painted tomb 100, Abydos U-cemetery knife

⁶⁸ Indeed the origins of the fetish might be earlier: cf. the late D-ware Chicago OIM 29786 in Logan 1990. Other predynastic ritual scenes implying skinning of animals: Hendrickx 1998b.

⁶⁹ The meanings of the artistic expressions and of details in the figurative repertoire can be very hard to determine: no code is provided to us, as the underlying motivations and significances were plainly known to the artists' patrons, and it would have been pure nonsense for them to fully explain (on or by the artifacts themselves). Since motifs and styles do evolve as progressively as, e.g., the developments in writing, architecture and religion systems (and often with similar reactions to the external impulses), a look at the primeval forms (or at the later issues) may shed new light on the purposes and on other characters of the *portrayed subjects*, but always bearing in mind the caveats outlined above (cf. note 4) about the possible fragility of interpretations based on diachronic models spanning centuries of history.

⁷⁰ Especially in the Upper Egyptian sites of Abydos and Hierakonpolis as well as, slightly later, in Lower Nubia (Seyala cem 137: Smith 1993; Qustul cem. L: Williams 1986) more than at Naqada itself and elsewhere in the Nile Valley and Delta. Cf. Kemp, 1989; Wilkinson 2000; Midant-Reynes 2003. A comparably "coherent" documentation is provided by the Egyptian Desert rock art, which shows several elements of unity with the known (and mainly funerary) aspects of Naqada I-IIIB predynastic culture, despite the arguably different intents and ideological referents of the two representational systems (cf. Huyge 2002).

⁷¹ Hendrickx and Eyckerman *this volume*. For a simplified diachronic evolution of the motifs of hippopotamus and desert hunt, presentation of prisoners, tributes, enemy smiting and others, as known from the Abydos U, B and Umm el-Qaab necropolis, see Hartung *this volume*: fig. 6.

^{72 [}U-239]: Hendrickx and Eyckerman this volume; Hartung, in Dreyer et al. 1998, 84 (tomb);

handles, Gebel el-Arak handle; Gebel Tjauti 1), is a further hint that seemingly odd appearance may disguise common or complementary symbolic purposes.

4.3 Analysis of single elements: symbolic metaphors or semantic indicators?

The "classic model" of the animal rows theme (i.e. the standard sequence with three or more files and equal composition of the upper rows) dates from Naqada IID on.⁷³

Although issues related to the absolute datation and to the relative chronological sequence of the ceremonial knives are not discussed here, it has to be remarked that the period in which such objects appear immediately precedes the one of the earliest known forms of true writing in Egypt (Naqada IIIA1).⁷⁴

Equally interesting is the fact that an abrupt adoption of the administrative practice of sealing does occur at Abydos in Naqada IID (possibly under the influence of Naqada), as witnessed by the rich flourishing of clay-impressions with animal subjects and other themes found in the U-cemetery elite burials.⁷⁵

Köhler, ibid., 111f., fig. 13, pl. 6d-f (C-ware vessel); Köhler 2002: 503f. [U-415(1-2)]: Hartmann, in: Dreyer et al. 2003: 80f.; Hendrickx 2006; Hendrickx and Eyckerman *This volume*; Hartung *This volume*.

⁷³ Cf. Boehmer 1974b; Hartung, in: Dreyer et al. 1998: 98-100; Hartung 1998: 210; Dreyer 1999: 203f., fig.7 (Abydos K1262b, a new fragment showing the first four rows of an handle, with the elephant on snakes and waders + giraffe in the first two rows); Whitehouse 2002. For an earlier example of fishtail blade with golden flat handle decoration (resembling the D-ware style of Naqada IIC vessels with boats) cf. Quibell 1901 = Cairo Mus. CG 64868. The new Abydos examples are fundamental for anchoring the other known specimen on a certain chronological base (previously, only the Abu Zaidan t. B32 knife came from a known archaeological context). Style and motifs comparisons with reliefs on other objects can be of further aid in dating.

⁷⁴ See Dreyer 1998; Dreyer 2000; Kahl 2001, 2003; Morenz 2004.

⁷⁵ From Abydos U-cemetery: Hartung 1998. Naqada: Di Maria 2007 (from Petrie's South Town, a settlement area in which a structure appointed to administrative-control duties has been located: cf. Barocas 1986; Fattovich et al. 2007; Pirelli 2007; Di Pietro 2007). Basing also on comparisons with early Uruk and Elam glyptic, and with styles and motifs of the first Egyptian "imported" seals (Nagada IIB-C, for which cf. note 29 above) it has been possible to argue that the Naqada sealing material must represent the oldest evidence (early-middle Naqada II) for such a practice in Egypt, predating of at least one century the Abydos U-cemetery finds. This eventuality is totally in agreement with the known archaeological evidence from Naqada up to the Naqada IIC-D phase and it would also explain the rather sudden appearance of the sealing tradition in the nearby region of Abydos, late in Naqada II. This proximity would soon become an obstacle, in political and economical terms, for the emerging Abydene elite, managing to take over the control of the regional trade and resources (early Naqada IIIA), which would finally result in the decline of the Naqada polity (cf. Wilkinson 2000). According to a proposed interpretation of the Gebel Tjauti rock inscription 1 (Hendrickx and Friedman 2003), Abydos might have obtained the direct access to the southern resources after an alliance with Hierakonpolis, by-passing the Naqada-controlled Qena Bend through the use of the Theban Western Desert tracks. This situation definitively cut off Naqada from the Nile Valley trade system, and its decline was perhaps further aggravated by fatal warfare episodes, one of which is possibly attested in the Gebel Tjauti 1 rock inscription (contra Kahl 2003b).

Finally, it has to be noticed that rock art inscriptions (of this genre: also cf. Regulski 2002) are among the very few documents to which a sheer political and historical value is attributed with

Writing, as other inventions (even those for which a foreign influx can be ascertained), usually appears after more or less prolonged periods of gradual adaptation and improvement of its features, which usually leave traces in the archaeological yield.⁷⁶

Despite its relatively simple structural organization, the writing evidence first found at Abydos, cemetery U (particularly in tomb U-j) appears as a rather full fledged system, ⁷⁷ a fact that should imply the existence of *rawer* antecedents.

These latter are possibly to be found in the late Naqada II sealing themes, as it has been already suggested by the presence of possible proto-hieroglyphs among the signs found on seal impressions (or the use of the *rebus principle*). ⁷⁸

Other verisimilar examples of this kind may be some of the *composite signs* of the animal rows and related motifs, as the following discussion will show. This doesn't mean that handles decorations were a proto-writing, only that they may host a few sparse witnesses to the initial genesis of the hieroglyphic signs principles (ideography and perhaps logography) and contain semantic devices akin to writing.

The repetitive character of the first, or first two, rows of animals on all the known knife handles and on the Davis/Metropolitan Museum comb and Seyala Mace handle (cf. fig. 1), has been remarked since the original studies.⁷⁹

Until recently, this feature (as well as the precise identification of the represented animal species), has been one of the main objectives of the iconographic researches carried out on these artifacts.⁸⁰

Developing on this point, it seems logic that the rows of elephants on snakes and those with waders pecking a serpent (and inserted giraffe) must be of primary importance for the meaning of the scenes, 81 either in the symbolic sense or in a hypothesizeable semantic or quasi-linguistic one.

The always recurring compound of elephant on intertwined snakes takes us back to the symbolism of the elephant, one among the various early emblems of power and sovereignty.⁸²

scarce or no consideration at all for the possible symbolic, magic or ideological values (which are instead always regarded as the main factor behind in the portable objects decorations, and which hinder their reception as documents of any historical relevancy; cf. Köhler 2002; Wilkinson 2002). Some clarity should be made on this issue (I have outlined the problem in my lecture at the Origins 3 Congress, British Museum 2008).

⁷⁶ Full discussion and references on the origins and use of early writing in Egypt (and about eventual foreign influences) would cause my discussion to sail towards too distant shores.

⁷⁷ Cf. note 74.

⁷⁸ E.g. Kaiser 1990: 298; Hartung 1998: 208; Morenz 2004: 58ff.; Hill 2004: 19ff.

⁷⁹ Cf. Benedite 1918: 225; Vandier 1952: 545f.; Ciałowicz 1992, id., 2001: 174f.

⁸⁰ To the references in the previous note, add: Churcer 1984; Osborn and Osbornová 1998: 5-7.

⁸¹ Cf. Hendrickx and Förster i.p.

⁸² Cf. above and notes 40, 41. For the alleged identification of a "king Elephant" and of late Naqada II- early Naqada III royal names in some animal designations found on several artifacts, cf. Dreyer 1995, id. 1998: 173-180, id. 2000: 12-13. Dreyer's hypothesis originated from Williams' (1988b) discovery of part of Narmer's name among the signs carved on the lateral

The ethological and mythical-folkloristic rivalry between elephants and pythons in Africa, ⁸³ reinforced by the renowned Egyptian apotropaic value of the "trampling on the foe" metaphor (cf. above), has generated the almost univocal opinion that the compound of elephant on snake(s) should be reckoned as a symbol of the victory against (or control of) the evil forces. ⁸⁴

The symbolic value of serpents is, however, not so unambiguous inasmuch as several positive aspects of these reptiles are equally well known. 85

The idea that the snakes underneath elephant paws may have protective function has been already expressed. ⁸⁶ Although the subjugation metaphor would fit in this

bands (sash) in one of the Koptos Colossi. The theory was propelled by the interpretation of administrative notations from tomb U-j painted vessels and small incised labels: the compound of X animal + plant/tree would indicate an estate of a X-ruler, and such place designation was formed with the royal name of one of the several predecessors of the ruler buried in tomb U-j (dated to Naqada IIIA1). In the following years there have been several critics to this hypothesis, and different types of proofs have been submitted which mainly insist on the toponyms theory, i.e. the animals and other signs (Elephant, Scorpion, Falcon, Bucranium on a pole, Lion, Canid, Fish, Twin Pteroceras sp. shells and more) would simply be geographical references (or local temples/gods designations). The D-ware boats standards, topped by an Elephant or a Min-sign would have similar allusion to proto-nomos or local deities. For the Lambis truncata shells as indicators of the Red Sea region (or the Wadi Hammamat road to the Red Sea coast) cf. Morenz 2004: 126f.; for the possible association of Lambis lambis with Min (a nearly omnipresent the god in the Middle Kingdom period at Mersa Gawasis): cf. Manzo This volume; Friedman 2008 for 36 Nerita (Red Sea) shells deposit in HK6 cem. Structure D9. For the general criticism to Dreyer's early royal names theory and geographic interpretations: Kahl 2001: 105-106; id. 2003b; Breyer 2002. Goedicke (2002: 253) proposed a valid alternative to Williams identification of *Nar(mer) sign on the Colossi reliefs, i.e. a falcon tail (thus the whole sign would be a Falcon on a perch: cf. Kemp et al. 2000). Kemp's (Kemp et al. 2000: 232f.) was one of the first critics to Dreyer's model, and he first emphasized the possible role and royal association of the "control signs" (active beings represented at the end of animals rows, probably intended as the leading force which makes the group proceed); he also suggested a link between the predynastic animal files and the emblems of later phyles, (elaborating on Roth 1991: 199ff.) proposing associations with "...spiritual forces which could also act as signifiers of groups of people. Some of the latter provided goods for the burial of the ruler in tomb U-j at Abydos, but it is to the former that we should look for the explanation of the signs on the colossi. This direction of argument has the merit of addressing the dual nature of the contexts, sacred and administrative, within which these symbols appear." (Kemp et al. 2000: 236). For other considerations on Min and the Koptos colossi: Baqué-Manzano 2002; Belluccio 1998; Morenz 2004: 120ff., 135ff.

⁸³ See Hofmann 1970. The relative size (compared to the elephant) speaks for the identification as a species of pythons (cf. Franco 1996), whereas the head-neck shape and the rearing attitude seems more proper of the *Naja sp.*/cobras. Cf. Benedite 1918: 226.

⁸⁴ Cf. Hendrickx and Förster i.p.

⁸⁵ Cf. note 87; L. Störk, in: LÄ V, 1984: 644-652. It can be assumed that the ideological connotations of snakes changed according to the focus on different aspects of this animal behaviour and characteristics, or to the different species which were called in the artistic motifs.

⁸⁶ Cf. the quote in Logan 1990: 68, n. 75, to an idea expressed by S.B. Johnson (in: "Predynastic Serpents c. 4000-3200B.C. Late Predynastic uraei 3200-3000 B.C." *ARCE* 1986, Abstracts, p.

discussion (as the elephant would be understood as a royal metaphor, and the snakes as the forces of chaos to be blocked/overcome, a fitting emblem for sacrifices or a *shrine of sacrifices*: cf. Oxford E4975 handle), I believe that the significance of the compound-sign is rather unidirectional, and that the (mating) serpents do shield the elephant. Early Egyptian iconography preserves several cases of protective snakes.⁸⁷

On the other hand the reptiles in the second rows, beaked or devoured by wading birds/storks, just as those known on other decorations⁸⁸ have a rather clearer metaphoric allusion. The key to its meaning is provided by the Gebel Tjauti scene: in my opinion the compound of stork killing a snake is not much a general indication of victory or triumph, as instead a more particular designation of *capture*

²⁷⁾ which Williams would discuss (MMA, NY, Symposium on Ancient Egyptian pottery, Sept. 1986) agreeing on that in the main animals rows elephants do flank (rather than trampling on) snakes. Williams (1988: 15-16) quotes again Johnson's theory, specifying that serpents portrayed in active poses, vertically, or with upraised heads, would have a protective purpose, as later Uraei (cf. Friedman 2004a: 161; Franco 1996). For the compound, and its fecundity symbolism (compared to later Mesopotamic evidence) cf. Morenz 2004: 112-114.

⁸⁷ Some examples: Rhomboidal greywacke palette in Brussels Mus. (E2927; from a rich tomb of Mahasna, t. H17, dated Naqada IC, cf. Hendrickx and Eyckerman i.p.) has wavy lines ending with rounded extremity incised on the recto, evidently representing snakes. The authors (which also add further examples of predynastic decorations involving snakes) tend towards an interpretation of these reptiles (and particularly those lined up in vertical rows) as elements of chaos, which are apotropaically controlled and "literally eliminated through the use of the palette" as the repeated grinding of pigments has partly effaced their bodies. On the other hand the practice might have also aimed to obtain, through the grinding action, the effect of making the pigment assume the protective qualities of snakes, thus their body would become part of the powdered kohl. Similar magic practices are those documented on the Koptos Colossi (Kemp et al. 2000) and on other contemporary statues and later structures (as the Luxor and Karnak Temple) where the stone is rubbed in order to save the magic dust from these monuments. On a later palette in the Metropolitan Museum (28.9.8; cf. Raffaele 2003: 122) a snake outlines the circular saucer destined to the powdering, and is surmounted by a plain serekh. Vertical snakes are modelled on the external of a vessel from Abydos U cemetery (U-279, nr. 8: Dreyer et al. 1998: 113, fig. 12.2, pl. 6b) arguably to protect the contents (cf. those painted on Berlin 15129 late D-ware Gebelein vessel); thus the same function as the twin vertical snakes in reliefs on the stone jambs (?) of Netjerykhet complex at Saqqara (Hawass 1994: monumental lower entrances of the complex?) which do not seem dead (Hawass 1994: 51) being in active position flanking and protecting the king's serekh, the jackals and lionesses, which are represented in between the two long bodies of the snakes. For negative (?) vertical rows of snakes cf. Williams 1988: 22. The intertwined snakes on the Gebel Tarif (and the small University College 16294 and Berlin Mus. 15137) knife handles appear as protecting the rosette (rather than being controlled by it, as it has been instead recently advanced by Hendrickx and Eyckerman, i.p.) and finally a similar amuletic, positive function must be presupposed for the serpent relief which wraps all around the knife handle found in Abydos tomb U-503 (Dreyer 1999: 210f., fig. 12).

⁸⁸ Cf. Williams 1988: 7ff.; vultures: the much debated British Mus. 35324 vessel, and the late Dware painted bowl from Qustul L23 tomb, Williams 1986: pl. 84-85; giraffes: D-ware Berlin 15129. Stork: Gebel Tjauti panel 1 (flanking the capture of a rival by the victorious king): cf. Hendrickx and Friedman 2003; Friedman, Hendrickx and Darnell 2002 (and note 75 above).

(of enemy leaders or important preys), which meaning can be also applied to the composite signs generally found on the second (or first) line of the animal rows.

The giraffe has also been discussed to some extent in the ambit of studies on predynastic iconography, particularly for its association with the palm tree motif. ⁸⁹

According to the later hieroglyphic meaning of one of its names $(sr)^{90}$ it has been connected with the concepts of foreseeing and prophesying. A logographic (rebuswriting) value linked to the Sumeric word "prince" ($\check{s}arru$) has been also proposed. ⁹¹

The files of (wild) animals forming the remaining lines on the handles, do not seem to exhibit any recurring pattern of species arrangement, and are therefore possibly variant elements without an outstanding meaning, other than the fact that they should give an *account* of (ritual) hunt or of the addressing of animals towards a royal menagerie, or more probably, to the site of the sacrificial rites (cf. below).

Some of the animals are known to have had importance as sacrifice victims⁹² others have been even identified as early mixed forms with attributes from different species.⁹³

The elements which Kemp designated as "control signs" have attracted much interest, and have been connected to the concept of *control of the unrule*, and the function of order-maker performed by the king (or on his behalf). ⁹⁴

Apart from the curled tail dog, ⁹⁵ actively threatening or goading with an uplift paw the last animal of the row it follows, the *rosette* has been interpreted as a symbol of kingship. ⁹⁶ The sign spans a large part of the handle surface in some instances, and the union with the intertwined snakes is certainly a powerful symbol of apotropaic function, maybe alluding to the royal protection (i.e. for or by the king, in analogy with the *Bat* emblem on a recent find from Abydos tomb U-181). ⁹⁷

It seems that the closer iconographical and semantic analysis of some of the elements found on the animals rows compositions, reinforces the general considerations outlined above by paralleling the zoomorphic friezes with the human processions, and their respective ideological motivations and symbolic meanings.

⁸⁹ Cf. Westendorf 1978; Williams 1988; Ciałowicz 1992b; Osborn and Osbornová 1998: 148-151.

⁹⁰ E. Brunner-Traut, in: LÄ II, 1977: 600-601; WB IV, 189.15-18.

⁹¹ Morenz 2004: 114f.

⁹² Cf. notes 41 and 57.

⁹³ Cf. Huyge 2004; Kemp et al. 2000: 233; Baines 1993; Altenmüller, in: LÄ II, 1977: 74-77.

⁹⁴ Cf. Kemp et al. 2000: 234; Hendrickx 2006: 736ff.; Hendrickx and Förster i.p.

⁹⁵ Hendrickx 1992, 2006; Baines 1993; Sievertsen 1992: 26-30 (rampant dog attitude and its parallels in Near Eastern art); Gransard-Desmond 1999.

⁹⁶ Smith 1992 (Near Eastern motifs); Williams 1988: 31ff. (identification with a palm tree); Raffaele 2003 (in combination with royal figures or royal names); Hendrickx i.p.; Hendrickx and Förster i.p.

⁹⁷ The other *control signs* have received less comments. The relationship of the *Nar*-fish with the famous king Narmer (Naqada IIIC1) is certainly to be rejected, owing to the circa three centuries between his reign and the date of the Abu Zeidan knife handle. U-181: Hartung 2008.

The reference to the shrine "labelled" with the designation of the elephant on intertwined snakes and flanked by the king on the Oxford E4975 flat side⁹⁸ as well as the standing maces within animal rows in the Hierakonpolis ivories⁹⁹ allude to the common language of sacrificial rites which embues the whole decorative surface (and certainly also hint at the effective purpose) of these ceremonial objects.

If we apply the purported significances to the elements of the first two rows of animals, we obtain a "tripartite structure" of the ideal layout of knife handles scenes, a "*standard sequence*": this presents some analogies to the linguistic constructions, or may be "read" as such.

The *subject* is generally represented on the top row, and it refers to the royal power metonymically expressed via the association with a shrine (or a numinous entity), the elephant on snakes, which may otherwise symbolize the violent ritual of evil forces' annihilation.

The giraffe plus waders would indicate the "action": it is very hard to relate these animals to a proper *verbal* referent, but elaborating on the solar and positive allegory of these mammals and their capabilities to "foresee" (owing to their height), ¹⁰⁰ and adding the meaning of "capture" already discussed for the wader + snake compound (cf. Gebel Tjauti 1 scene), it would yield an allusion to a "profitable game capture".

The latter would be referred to the semantic *object* of the scenes, i.e. the remaining animal rows, which also constitute the object of the sacrificial rituals. ¹⁰¹

The files are lead by the same accessory elements who rule the processions as dogs use to do with herds. "Control signs" on animal rows might have the same function as the king's officials, who hold the captives by ropes and guard them with staves, as can be seen in the representations on knife handles with human processions. The *rosette* has a similar value (certainly more tightly connected to some aspect of kingship, as it is has been already evidenced) and it is also found, along with the ruler, in some of the ritual boats processions, equally implying ritual

⁹⁸ Whitehouse 2002. On the other (boss) side tied prisoners are presented and are perhaps intended to be offered to the ruler (wearing the white crown on the flat side) and possibly sacrificed in the mentioned shrine of the elephant. Very interesting is the possible appearance of the two elephants (one certainly on a snake) on standards of two boats in the Metropolitan Museum knife handle (26.241.1, boss side), which iconography manifestly alludes to human sacrifice (this new lecture of the small signs by G. Dreyer is mentioned in Friedman 2004a: 162).

⁹⁹ Whitehouse 1992. Also cf. the presence of animal bones (possibly from sacrificial offerings, in B. Adams' opinion, apud Whitehouse 2002: 427, n.15) found in the cache along with the carved ivories (cf. Quibell and Green 1902: 35).

¹⁰⁰ Cf. notes 89 and 90 above. For the giraffes with waders or ostriches: Friedman et al. 1999: 9, fig. 8 (on a straw tempered bottle from HK 43, tomb 104); Cialowicz 2002 (palettes).

¹⁰¹ The repetition of these signs gives the idea of abundance and fits with the "literal sense" of the figurations; in the case of the first row, the repetition must depend on an artistic *horror vacui*, or however to the will to balance the composition aligning it with the lower elements. Cf. the Tehenu- (or Cities-) palette and later representations of domestic animals and cattle-counts about the artistic theme of multitude suggesting and promoting abundance and prosperity. For a study on pluralisation which also draws from these early documentation: Anselin 2004.

human sacrifices (as on the Metropolitan Museum handle, on the Qustul artifacts and on Narmer palette, here in conjunction with a ritual whose violent aftermath is explicitly represented; see fig. 2-3).

The boss side of the Gebel el-Arak knife handle, roughly follows the scheme outlined above, with the hero-like actor blocking the forces of nature or expressing royal power (the visual metaphor of the *Master of the Animals*) and the active elements (dogs/control signs) attacking or leading the wild fauna (no corresponding "verbal designation" is present here). The other side of the handle, presents battle scenes and subjugated captives, which bring us back to the association of hunt/animal files with victory and binding rituals on C-ware paintings (cf. n. 71-72).

The ceremonial practices involving animals, would partly complement (and perhaps magically imitate and fuel) comparable rituals involving the parade of tribute and gifts bearers and the presentation of captured enemies to the king. It seems that all the elements gathered above do point unequivocally towards animal sacrifices and connected symbolism. ¹⁰²

Conclusions. Holistic perspectives

The figurative programme of predynastic "art" is already a complex, rather differentiated and carefully defined system as early as late Naqada I: by that time it could have had multiple purposes and operate on different (socio-political) levels. The subgroup of artifacts discussed here, belongs to the upmost strata of artistic expression and fruition, connected to elitary uses and royal imagery. In my opinion, decorations of animal rows mimic the (mostly contemporary) scenes which show either human processions of dominated prisoners or prototypes of tribute and offering bearers (on knife handles, other ivories and, later, on mace-heads).

The character of these scenes, involving animal or human processions, looks extremely heterogeneous, but is so only to a minimal degree: the basic principle underlying the discussed decorations, is that both the models present (meaningful) moments of important rituals, which entail the display of abundance and quasi wasteful consumption of wealth by the upper strata of population. Power is thus ostensively exhibited, psychologically legitimized and magically reinforced through

¹⁰² Among the theories of animals on knife handles, the "objects", or designated victims, are all mammal species. Curiously enough, the elements which I have identified as not to be sacrificed, but conveying other significances, are either treading on snakes (which would thus someway protect the elephants, cf. above) or are capable to fly. The sole exception is the giraffe, which is again someway shielded by the wader who precedes and those who follow it. Dreyer's (1999: 203, fig. 6) indeed doubtful interpretation of the animal on Abydos K1262a handle fragment as an elephant, is therefore in my opinion quite impossible. On the other hand, later ivories from Hierakonpolis Main deposit (ref. quoted above) do present the theme of animals rows in a rather more manneristic form, and the original meanings might be lost... although on the other hand the mentioned fragment showing the standing maces beside giraffes and other animals (Whitehouse 1992), as also the animal rows as counterpoint of offering bearers' rows (Quibell 1900: pl. 6.6, 16.4) might retain the deep significance of the scenes (cf. Dreyer 1999: fig 10a).

the total control of all the varieties of natural resources: raw materials, finished products, wild and domestic animals and human lives.

The path that would lead to the sovereigns' divinization is being already trodden.

The main actor in this process is the king, but it is obvious that a single prime mover couldn't have propelled the state machine without the support of a rigidly hierarchised and organized net of classes, allowing a massive delegation of power. It is in fact "archaeologically manifest", that the co-responsible and co-beneficiaries of the successful progression of the state were ultimately *all* the upper classes, as shown by the high standards of the early elite cemeteries burials and gravegoods. ¹⁰³

Hence, the real interpretative problem of our scenes, is not whether do they represent actual events or symbolic ones, or if they have any narrative construct, pictographic-like reading patterns, deeper meanings... The key elements are all in front of our eyes: like all the predynastic complex representations on portable objects (and maybe most of all those on rock art ¹⁰⁴), the animal rows are visual replicas of ritual moments, ¹⁰⁵ possibly represented in litany-like form.

The connections of representations with real events, do exist as long as the former would be commissioned in view of the latter ones, i.e. the performing of actual ceremonies, thus in order to replicate and magically perpetuate some of their most significant phases. Certain precise indications noticed on the craft repertoire in object, could correspond to important details of the real ceremonial phases.

The key to this interpretation is offered by the roughly contemporary (but also earlier and later) evidence, as found on the same objects categories or on other

¹⁰³ The question of the ownership of the early dynastic Saqqara Mastabas, recently reanalyzed by Hendrickx (2008, in my opinion with -finally- definitive conclusions which I totally agree with), brilliantly summarizes this concept, though in a slightly later period: Old Kingdom (and later periods) royal monuments gigantism, has created a modern scholarly bias towards the interpretation of funerary structures, understanding that the royal ones should have been necessarily far larger and more impressive than those of even the highest officials and court members. Yet the problem needs only to be faced from a different point of view. It is certainly true that the king had the means and right to move and exploit greater resources and his funerals would surely be the most impressive celebrations and events in years (separate structures –the early dynastic enclosures, as Kemp suggested- were properly destined to host funerary rituals). However, that monumental impact which Pyramid builders mostly concentrated on the royal tomb complex, was, back in Pre- and Proto-Dynastic period, achieved with a massive (and more equally distributed) overbuilding throughout the whole complex of elite necropolis: this must have created quite an amazing effect. Even more important, it must be considered the fact that any kind of monumental structure must have been credited (in antiquity) primarily as a royal property, effort and concession, independently from the actual private "owner" (who was indeed only a mortal to whom the god-king had allowed e.g. the use of an impressively large tomb). From this perspective, it is evident that there must have been no contest aiming to build larger tombs: everything raising up from the ground was first of all and ultimately the material and supernatural expression of divine kingship. Any rivalry was quite unthinkable.

¹⁰⁴ Cf. Huyge 2002.

¹⁰⁵ Cf. Williams and Logan 1987 for the interpretation of boat processions and other ritual scenes as part of the "Royal Cycle" which would eventually originate the later Heb-Sed.

prestige items (see above): the motif of containment of the forces of nature, via the hunting, capture and ritual use of animals, blatantly mirrors the more explicit scenes related to warfare, bound prisoners processions and their ritual smiting.

In the case of animals, the leading motivation for such imagery is the same as the one at the origin of the effective rituals, involving exotic and domestic species, possibly symbolizing the control over different aspects of life, or different ethnic groups, or geographical areas. The sacrifice of animal (or humans) is also the most precious offering which can be made (in a "do ut des" perspective), as it involves the invaluable offering of life. The evidence from early "royal" cemeteries (namely Hierakonpolis HK6 and Abydos U and Umm el-Qaab) shows that sacrifices (either human or of domestic and wild game) played a major role in (funerary) rituals, as it is known to have been the case for other incipient states of the antiquity. ¹⁰⁶

What differentiates the zoomorphic imagery from the anthropomorphic one is that the iconographical details of the violent aftermath of such rituals (performed in early temples as perhaps the elephant-like *Per-Wr*), are crudely documented in the case of captives', whereas the animals' terminal drama is never shown on artifacts (and rock-art), possibly for reasons of *decorum* or because of the prevailing symbolic force and relevancy of the phase representing hunt acme. Yet the animals burials at HK6 (and the butchery-slaughtering activities at HK 29A) suggest a possible "final chapter" for the processions of animals. Some of the rows of postholes in the funerary complex of HK6 tombs, rather than support for roofs, might have been (quite hypothetically) wooden fences which would allow live animals to reach their burials, possibly to be dispatched on the spot.

Eventual, more specific reasons for such rituals and for animal inhumations, ¹⁰⁹ fall quite beyond the scope of this paper, although the general concepts outlined above, i.e. the widely accepted theories of *control of the unrule*, remain valid for both the ritual performances and for their representations on ivory and other media.

The literal reading of the "standard sequence" of the animal rows theme could be improved or perhaps criticised and challenged, but the attachment of the general sense with the aforementioned religious practices hardly can, as "decorations" are nothing less than a complement to the effective ritual performances in which the ceremonial, sacrificial knives were used.

¹⁰⁶ Cf. Trigger 1993: 94-98; Albert and Midant-Reynes 2005; Laneri 2007. Also cf. notes 56, 57.

¹⁰⁷ Cf. Gatto et al. 2009: 164.

Hunt was a dangerous practice, therefore a dangerous ritual. The hunter always risks to become a prey himself: so it is logical that the figurative means did privilege this topic moment whereas, in relation with captives, their ritualized annihilation did acquire a different cultural (socio-political) significance other than the one of magical perpetuation of victory; it thus needed to be repeatedly represented (similar interpretative problems subsist about "year-labels" and Royal Annals, envisaged either as mere ritual devices or real events' pseudo-chronicles cf. Baines 1995: 130; Baud 1999; Dreyer: 2000; id., in: EA 16, 2000: 6-7).

¹⁰⁹ Cf. above and note 57.

Bibliography

Adams, B.

1974 Ancient Hierakonpolis (with Supplement, 1974). Warminster.

1988 Predynastic Egypt. Aylesbury.

1998 Something Very Special down in the Elite Cemetery. Nekhen News 10: 3-4.

2002 Seeking the Roots of Ancient Egypt. A Unique Cemetery Reveals Monuments and Rituals from Before the Pharaohs. *Archéo-Nil* 12: 11-28.

Adams, B. and Ciałowicz, K.M.

1988 Protodynastic Egypt. Aylesbury.

Albert, J.P., Crubézy, E. and Midant-Reynes, B.

2000 L'archéologie du sacrifice humain: problèmes et hypothèses. Archéo-Nil 10: 9-18.

Albert, J.P. and Midant-Reynes, B. (eds.)

2005 Le sacrifice humain en Égypte ancienne et ailleurs. Paris.

Anselin, A.

2003 Le Lièvre et l'Eléphant. Cahiers Caribéens d'Egyptologie 5: 79-122.

2004 Histoires de pluriels. Essai d'archéologie du nombre en égyptien ancien. *Cahiers Caribéens d'Egyptologie* 6: 145-181.

2004b Problèmes de lecture et d'écriture – Le noms des polities Nagadéennes. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 547-573.

Asselberghs, H.

1961 Chaos en Beheersing: Documenten uit Aeneolithisch Egypte. Leiden.

Aston, B.G., Harrell, J.A. and Shaw, I.

2000 Stone. In: I. Shaw and P.T. Nicholson (eds.), *Ancient Egyptian Materials and Technology*. Cambridge. 5-77.

Badawy, A.

1954 A History of Egyptian Architecture. Vol. I. London.

Baines, J.

1989 Communication and display. The integration of early Egyptian art and writing. *Antiquity* 63: 471-482.

1991 Egyptian Myth and Discourse: Myth, Gods, and the Early Written and Iconographic Record. *JNES* 50: 81-105.

1993 Symbolic Roles of Canine Figures on Early Monuments. Archéo-Nil 3: 57-74.

1994 On the Status and Purposes of Ancient Egyptian Art. *CAJ* 4/1: 67-94.

1995 Origins of Egyptian Kingship. In: D. O'Connor and P. Silverman (eds.), *Ancient Egyptian Kingship*. Leiden – New York – Köln. 95-156.

Baines, J. and Wengrow, D.

2004 Images, Human Bodies, and the Ritual Construction of Memory in Late Predynastic Egypt. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 1081-1113.

Baqué-Manzano, L.

2002 Further Arguments on the Coptos Colossi. BIFAO 101: 17-61.

Bard, K.

1992 Toward an Interpretation of the Role of Ideology in the Evolution of Complex Society in Egypt. *JAA* 11: 1-24.

1994 From Farmers to Pharaohs. Mortuary Evidence for the Rise of Complex Society in Egypt. Sheffield.

Barocas, C.

1986 Les raisons d'une fouille et d'un survey: le site de Naqadah. CRIPEL 8: 17-28.

Baud, M.

1999 Ménès, la mémoire monarchique et la chronologie du IIIe millénaire. *Archéo-Nil* 9: 109-147.

Baud, M. and Étienne, M.

2000 Le vanneau et le couteau. Un rituel monarchique sacrificiel dans l'Égypte de la Ire dynastie. *Archéo-Nil* 10: 55-77.

Baumgartel, E.J.

1968 About some ivory Statuettes from the Main Deposit at Hierakonpolis. *JARCE* 7: 7-14. Behrmann, A.

1996 Das Nilpferd in der Vorstellungswelt der Alten Ägypter. Vol. II (Text). Frankfurt. Belluccio, A.

1998 Religione e cultura: le statue di Min «Medja» a Coptos. CRIPEL 20: 25-45.

Belova, G.A. and Sherkova, T.A.

2002 Ancient Egyptian Temple at Tell Ibrahim Awad: Excavations and Discoveries in the Nile Delta. Moscow.

Benedite, G.

1918 The Carnarvon ivory. JEA.5: 1-15 and 225-241.

Boehmer, R.M.

1974a Das Rollsiegel im prädynastischen Ägypten. Archäologischer Anzeiger 4: 495-514.

1974b Orientalische Einflüsse auf verzierten Messergriffen aus dem prädynastischen Ägypten. Archaeologische Mitteilungen aus Iran 7: 15-40.

1991 Gebel el Arak- und Gebel el Tarif-Griff: keine Falschungen. MDAIK 47: 51-60.

Boessneck, J.

1988 Die Tierwelt des Alten Ägypten. München.

Bonnet, C., Chaix, L., Lenoble, P., Reinold, J. and Valbelle, D.

1989 Sépultures à chiens sacrifiés dans la vallée du Nil. CRIPEL 11: 25-39.

Bothmer, B. Von

1948 A Predynastic Egyptian Hippopotamus. BMFA 46: 64-69.

Brewer, D.J. and Friedman, R.F.

1989 Fish and fishing in Ancient Egypt. Warminster.

Brewer, D.J., Redford, D.B. and Redford, S.

1994 Domestic Plants and Animals. The Egyptian Origins. Warminster.

Breyer, F.A.K.

2002 Die Schriftzeugnisse des Prädynastischen Königsgrabes U-j in Umm el-Qaab: Versuch einer Neuinterpretation. *JEA* 88: 53-65.

2003 Die ägyptische Etymologie von griechisch έλέφας = «Elefant» und lateinisch *ebur* = Elfenbein. In: S. Bickel and A. Loprieno (eds.), *Basel Egyptology Prize 1*. Aegyptiaca Helvetica 17. Basel. 251-276.

Campagno, M.

2002 De los Jefes-Parientes a los Reyes-Dioses. Surgimiento y Consolidación del Estado en el Antiguo Egipto. Aula-Aegyptiaca – Studia 3. Barcelona.

Capart, J.

1904 Les débuts de l'Art en Égypte. Bruxelles.

Churcher, C.S.,

1984 Zoological Study of the Ivory Knife Handle from Abu Zaidan. In: W. Needler, Predynastic and Archaic Egypt in the Brooklyn Museum. Brooklyn. 152-169.

Ciałowicz, K.M.

1992 La composition, le sens et la symbolique des scènes zoomorphes prédynastiques en relief. Les manches de couteaux. In: R. Friedman & B. Adams (eds.), *The Followers of Horus. Studies dedicated to Michael Allen Hoffman*. Oxford. 247-258.

1992b Problèmes de l'interprétation du relief prédynastique tardif. Motif du palmier et des girafes. *Prace Archeologiczne 53. SAAC 4.* 7-18.

2001 La naissance d'un royaume. L'Egypte dès la période prédynastique à la fin de la Ire dynastie. Krakow.

Ciałowicz, K.M. (with photographs by R. Słaboński)

2007 Ivory and Gold. Beginnings of the Egyptian Art. Poznań.

Chłodnicki, M. and Ciałowicz, K.M.

2006 Tell el-Farkha. Preliminary Report 2006. PAM 18: 127-153.

Costin, C.L.

1991 Craft Specialization. Issues in Defining, Documenting and Explaining the Organization of Production. In: M.B. Schiffer (ed.), *Archaeological Method and Theory*, Vol. III. Tucson. 1-56.

Crubézy, E. and Midant-Reynes, B.

2000 Les Sacrifices humains à l'époque prédynastique: L'apport de la nécropole d'Adaima. *Archéo-Nil* 10: 21-40.

Darnell, J.C.

2009 Iconographic Attraction, Iconographic Syntax, and Tableaux of Royal Ritual Power in the Pre- and Proto-Dynastic Rock Inscriptions of the Theban Western Desert. Archéo-Nil 19: 83-108.

Davies, V. and Friedman, R.F.

1998 The Narmer Palette: a Forgotten Member. Nekhen News 10: 22.

Davis, W.

1976 The Origins of Register Composition in Predynastic Egyptian Art. *JAOS* 96: 404-418.

1982 The Canonical Theory of Composition in Egyptian Art. GM 56: 9-26.

1983 Artists and Patrons in Predynastic and Early Dynastic Egypt. SÄK 10: 119-139.

1992 Masking the Blow. The Scene of Representation in Late Prehistoric Egyptian Art. Berkeley – Los Angeles – Oxford.

Di Maria, R.

2007 Naqada (Petrie's South Town): The Sealing Evidence. In: H. Hanna (ed.), *The International Conference on Heritage of Naqada and Qus region*. Vol.I. Cairo. 65-78.

Di Pietro, G.A.

2007 "Kleinfunde" from the Italian Excavations at Zawaydah (Petrie's "South Town"). In: H. Hanna (ed.), The International Conference on heritage of Naqada and Qus region. Vol. I. Cairo. 79-86.

Donadoni Roveri, A.M. and Tiradritti, F. (eds.)

1998 Kemet. Alle Sorgenti del Tempo. Milano.

Dreyer, G.

1986 Elephantine VIII. Der Tempel der Satet. Die Funde der Frühzeit und des Alten Reiches. Mainz am Rhein.

- 1995 Die Datierung der Min-Statuen aus Koptos. In: Kunst des Alten Reiches. SDAIK 28. Mainz. 49-56.
- 1998 Umm el-Qaab I. Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse. Mainz.
- 1999 Motive und Datierung der dekorierten prädynastischen Messergriffe. In: C. Ziegler (ed.), *L'art de l'Ancien Empire égyptien*. Paris. 195-226.
- 2000 Reichseinigung und Schriftentwicklung. In: A. Grimm and S. Schoske (eds.), Am Beginn der Zeit. Ägypten in der Vor- und Frühzeit. 2-15.

Dreyer, G. et al.

- 1993 Umm-el-Qaab 5./6. Vorbericht. MDAIK 49: 23-62.
- 1996 Umm-el-Qaab 7./8. Vorbericht. MDAIK 52: 11-81.
- 1998 Umm-el-Qaab 9./10. Vorbericht. MDAIK 54: 77-167.
- 2000 Umm-el-Qaab 11./12. Vorbericht. MDAIK 56: 43-129.
- 2003 Umm el-Qaab 13./14.15. Vorbericht. MDAILK 59: 67-138.

Droux, X.

2005 La représentation des prisonniers et des ennemis dans la culture Naqadienne. D'après une seléction d'objects provenant du 'dépôt principal' d'Hiérakonpolis. Mémoire de Licence Université de Genève.

2006 Headless at Hierakonpolis. Nekhen News 19: 14.

Droux, X. and Friedman, R.F.

2007 The Columned Hall at Hk6 and Other Wonders. *Nekhen News* 19: 7-9 (fig. p. 16, 32). El-Hadidy

2002 Hierakonpolis, My Dreamland. Nekhen News 14: 22-23.

Fattovich, R.

1970 Elementi per una ricerca sulle origini della monarchia sacra Egiziana. *Rivista Studi Orientali* 45: 133-149.

Fattovich, R., Malgora, S., Pirelli, R. and Tosi, M.

2007 Explorations at South Town by the Naples Oriental Institute (1977-1986). In: H. Hanna (ed.), The International Conference on heritage of Naqada and Qus region. Vol. I. Cairo. 46-56.

Finkenstaedt, E.

- 1979 Egyptian ivory tusks and tubes. ZÄS 106: 51-59.
- 1980 Regional Painting style in Prehistoric Egypt. ZÄS 107: 116-120.
- 1984 Violence and Kingship: The Evidence of the Palettes. ZÄS 111: 107-110.
- 1985 Cognitive vs. Ecological Niches in Prehistoric Egypt. JARCE 22: 143-148.

Flores, D.V.

1999 The Funerary Sacrifice of Animals during the Predynastic Period. Toronto (PhD).

Franco, I.

Review of: Sally B. Johnson, The Cobra goddess of Ancient Egypt. Predynastic, Early Dynastic and Old kingdom. London – New York, *CdE 71*: 67-73.

Friedman, R.F.

- 1996 The Ceremonial Centre at Hierakonpolis Locality HK 29A. In: A.J. Spencer (ed.), *Aspects of Early Egypt.* London. 16-35.
- 2000 Figures in Flint. Nekhen News 12: 14.
- 2004a Elephants at Hierakonpolis. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven Paris Dudley. 131-168.
- 2004b He's Got a Knife! Burial 412 at HK 43. Nekhen News 16: 8-9.

2005 Excavating Egypt's Early Kings. Nekhen News 17: 4-6.

2006 Bigger than an Elephant. More surprises at HK6. Nekhen News 18: 7-8.

2008 Excavating Egypt's early kings: Recent discoveries in the elite cemetery at Hierakonpolis. In: B. Midant-Reynes and Y. Tristant (eds.), Egypt at its origins 2. Proceedings of the International conference "Origin of the State. Predynastic and Early Dynastic Egypt", Toulouse, 5-8th September 2005. OLA 172. Leuven, 1157-94.

i.p. The Early Royal Cemetery at Hierakonpolis. An Overview. *This volume*.

Friedman, R.F., Maish, A., Fahmy, A.G., Darnell, J.C. and Johnson, E.D.

1999 Preliminary Report on Field Work at Hierakonpolis: 1996-1998. JARCE 26: 1-35.

Friedman, R.F., Hendrickx, S. and Darnell, J.C.

2002 Gebel Tjauti Rock Inscription 1. In: J.C. Darnell et al., Theban Desert Road Survey in the Egyptian Western Desert. Chicago. 10-19.

Gatto, M.C., Hendrickx, S., Roma, S. and Zampetti, D.

2009 Rock art from West Bank Aswan and Wadi Abu Subeira. *Archéo-Nil* 19: 151-168. Germond, P.

2001 An Egyptian Bestiary. Animals in Life and Religion in the Land of the Pharaohs. London.

Goedicke, H.

2002 Min. MDAIK 58: 247-255.

Gransard-Desmond, J.O.

1999 Les Canidae de la Prehistoire a la Ire Dynastie en Egypte et en Nubie. Paris.

Grimm A. and Schoske, S.

2000 Am Beginn der Zeit. Ägypten in der Vor- und Frühzeit. München.

Groenewegen-Frankfort, H.A.

1951 Arrest and Movement. An Essay on Space and Time in the representational Art of the ancient Near East. London.

Hall, E.S.

1986 The Pharaoh Smites his Enemies. A Comparative Study. München – Berlin.

Hartung, U.

1998 Prädynastische Siegelabrollungen aus dem Friedhof U in Abydos (Umme el Qaab). MDAIK 54: 187-217.

2008 Ein Fragment eines verzierten Dolchgriffs aus dem Friedhof U in Abydos (Umm el-Qaab). In: E.-M. Engel, V. Müller and U. Hartung (eds.), Zeichen aus dem Sand. Streiflichter aus Ägyptens Geschichte zu Ehren von Günter Dreyer. Wiesbaden. 183-194.

i.p. Hippopotamus hunters and bureaucrats. Elite burials at cemetery U at Abydos. *This volume*.

Hawass, Z.

1994 A Fragmentary Monument of Djoser from Saqqara. JEA 80: 45-56.

Hendrickx, S.

1992 Une scène de chasse dans le désert sur le vase prédynastique Bruxelles, M.R.A.H. E. 2631. *CdE* 67 (133): 5-27.

1998a Bovines in Egyptian Predynastic and Early Dynastic Iconography. In: F.A. Hassan (ed.), *Droughts, food and culture. Ecological change and food security in Africa's Later Prehistory.* New York - Boston - Dordrecht. 275-318.

1998b Peaux d'animaux comme symboles prédynastiques. CdE 73: 203-230.

2006 The dog, the *Lycaon pictus* and order over chaos in Predynastic Egypt. In: K. Kroeper et al. (eds.), *Archaeology of Early Northeastern Africa*. SAA 9. 723-749.

2008 Les Grands mastabas de la Ire dynastie à Saqqara. *Archéo-Nil* 18: 60-88.

i.p. Visual representation and state development in Egypt. In: S.J. Seidlmayer (ed.), Grenzbereiche der Schrift. Berichte und Abhandlungen der Berlin-Brandenburgischen Akademie der Wissenschaften. Berlin.

Hendrickx, S. and Depraetere, D.

2004 A Theriomorphic Predynastic Stone Jar and Hippopotamus Symbolism. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 801-822.

Hendrickx, S. and Eyckerman, M.

i.p. Decorated rhomboidal palettes from Predynastic Egypt in the Royal Museums for Art and History at Brussels.

i.p. Continuity and Change in the Visual representations of Predynastic Egypt. *This Volume*.

Hendrickx, S. and Förster, F.

i.p. Early Dynastic art and iconography. In: A.B. Lloyd (ed.), *The Blackwell companion to ancient Egypt*. Cambridge.

Hendrickx, S. and Friedman, R.F.

2003 Gebel Tjauti Rock inscription I and the Relationship between Abydos and Hierakonpolis during the early Naqada III period. GM 196: 95-110.

Hendrickx, S. and Gatto, M.C.

2009 A rediscovered Late Predynastic-Early Dynastic royal scene from Gharb Aswan (Upper Egypt). *Sahara* 20: 147-150.

Hendrickx, S., Huyge, D. and Adams, B.

1998 Le scorpion en silex du Musée royal de Mariemont. *Cahiers de Mariemont* 28-29: 7-

Hendrickx, S., Swelim, N., Raffaele, F., Eyckerman, M. and Friedman, R.F.

2009 A lost Late Predynastic-Early Dynastic royal scene from Gharb Aswan. *Archéo-Nil* 19: 169-178.

Henein, N.

2001 Du disque de Hemaka au filet hexagonal du lac Manzala. Un exemple de pérennité des techniques de chasse antiques. BIFAO 101: 237-248.

Hikade, T.

2004a Urban Development at Hierakonpolis and the Stone Industry of Square 10N5W. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 181-197.

2004b Prestige and Skill – Fishtail knives in Predynastic Egypt. *Nekhen News* 16: 9-10. Hill, J.A.

2004 Cylinder Seal Glyptic in Predynastic Egypt and Neighboring Regions. Oxford.

Hoffman, M.A.

1979 Egypt before the Pharaohs. London.

1982 Issues in Predynastic Culture History. In: M.A. Hoffman et al. (eds.), *The Predynastic of Hierakonpolis – An Interim Report*. Cairo – Macomb, Illinois. 139-148.

Hofmann, I.

1970 Zur Kombination von Elefant und Riesenschlange im Altertum. Anthropos 65: 619-632.

Holmes, D.L.

1992 Chipped Stone-Working Craftsmen, Hierakonpolis and the Rise of Civilization in Egypt. In: R. Friedman & B. Adams (eds.), *The Followers of Horus. Studies dedicated to Michael Allen Hoffman*. Oxford. 37-44.

Honoré, E.

2007 Earliest Cylinder-seal Glyptic in Egypt. From Greater Mesopotamia to Naqada. In: H. Hanna (ed.), The International Conference on heritage of Naqada and Qus region. Vol. I. Cairo. 31-45.

Houlihan, P.F.

1986 The Birds of Ancient Egypt. Warminster.

1996 The Animal World of the Pharaohs. Warminster.

Huyge, D.

2002 Cosmology, Ideology and Personal Religious Practice in Ancient Egyptian Rock Art. In: R. Friedman (ed.), Egypt and Nubia. Gifts of the Desert. London.

2004 A Double-powerful Device for Regeneration: The Abu Zaidan Knife Handle Reconsidered. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 823-836.

Ikram, S.

2001 The Iconography of the Hyena in Ancient Egyptan Art. MDAIK 57: 127-140.

2009 Drawing the World: Petroglyphs from Kharga Oasis. Archéo-Nil 19: 67-82.

Jimenez-Serrano, A.

2004 Elephants standing on Hills or the Oldest Name of Elephantine. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), Egypt at its Origins. Leuven – Paris – Dudley. 847-858.

Johanson, K.

2009 The Changing meaning of 'Thunderbolts'. *Folklore* 42: 129-174 (on line electronic journal: www.folklore.ee/Folklore).

Kahl, J.

2001a Hieroglyphic Writing During the Fourth Millennium BC: an Analysis of Systems. Archéo-Nil 11: 102-134.

2001b Die ältesten schriftliche Belege für den Gott Seth. GM 181: 51-57.

2003a Die frühen Schriftzeugnisse aus dem Grab U-j in Umm el-Qaab. CdE 78: 112-135.

2003b Das Schlagen des Feindes von Hu. Gebel Tjauti Felsinschrift 1. GM 192: 47-54.

Kaiser, W.

1990 Zur Entstehung des gesamtagyptischen Staates. MDAIK 46: 287-299.

Kantor, H.

1952 Further evidence for early Mesopotamian relations with Egypt. *JNES* 11/4: 239-250. Kelley, L.

1983 A Review of the Evidence Concerning Early Egyptian Knife Handles. In: J.K. Hoffmeier and E.S. Meltzer (eds.), *A Tribute to Professor Ronald J. Williams*. Chicago. 95-102.

Kemp, B.J.

1989 Ancient Egypt. Anatomy of a Civilization. London – New York.

1995 How Religious were the Ancient Egyptians? *CAJ* 5(1): 25-54.

Kemp, B.J., Boyce, A. and Harrell, J.

2000 The Colossi from the Early Shrine at Coptos in Egypt. *CAJ* 10(2): 211-242.

Köhler, E.C.

2002 History or Ideology? New Relations on the Narmer Palette and the Nature of Foreign Relations in Pre- and Early Dynastic Egypt. In: E.C.M. van den Brink and T. Levy (eds.), Egypt and the Levant. Interrelations from the 4th through the early 3rd Millennium BCE. London – New York. 499-512.

Krzyszkowska, O. and Morkot, R.

2000 Ivory and related materials. In: I. Shaw and P.T. Nicholson (eds.), Ancient Egyptian Materials and Technology. Cambridge. 320-331.

Laneri, N. (ed.)

2007 Performing Death. Social Analyses of Funerary Traditions in the Ancient Near East and Mediterranean. Chicago. [O.I.S. 3, on-line book]

Le Quellec, J.L.

2005 Une nouvelle approche des rapports Nil-Sahara d'après l'arte rupestre. *Archéo-Nil* 15: 67-74.

Leroi-Gouhran, A.

1989 Preistoria. In: Y. Bonnefoy (ed.), *Dizionario delle Mitologie e delle Religioni*. (1981¹): 1424-1438.

Lobban Jr, R.A. and Liedekerke V. de

2003 Elephants in Ancient Egypt and Nubia. Cahiers Caribéens d'Egyptologie 5: 59-78.

Logan, T.J.

1990 The Origins of the Jmy-wt Fetish. JARCE 27: 61-69.

Manzo, A.

 i.p. Typological and functional remarks on some structures at Mersa Gawasis (Red Sea, Egypt). This volume.

Menu, B.

2001 Mise à mort cérémonielle et prélèvements royaux sous la 1ère Dynastie. Archéo-Nil 11. 164-175.

Midant-Reynes, B.

1987 Contribution à l'étude de la société prédynastique: le cas du couteau "ripple-flake". $S\ddot{A}K$ 14: 185-224.

2003 Aux origines de l'Egypte. Du Néolitique à l'émergence de l'État, Paris.

Midant-Reynes, B., Tristant, Y., Rowland, J. and Hendrickx, S. (eds.)

2008 Egypt at its Origins 2. Leuven – Paris – Dudley.

Morenz, L.D.

2004 Bild-Buchstaben und symbolische Zeichen. Die Herausbildung der Schrift in der hohen Kultur Altägyptens. Fribourg.

Morris, E.F.

2007 Sacrifice for the State: First Dynasty Royal Funerals and the Rites at Macramallah's Rectangle. In: N. Laneri (ed.) 2007: 15-37.

Needler, W

1984 Predynastic and Archaic Egypt in the Brooklyn Museum. Brooklyn.

Nowak, E.M.

2004 Egyptian Predynastic Ivories decorated with anthropomorphic motifs. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 891-904.

O'Connor, D.

2002 Context, Function and Program: Understanding Ceremonial Slate Palettes. JARCE 39: 5-25.

Osborn, D.J. and Osbornová, J.

1998 The Mammals of Ancient Egypt. Warminster.

Crowfoot Payne, J.

1993 Catalogue of the Predynastic Egyptian Collection in the Ashmolean Museum. Oxford.

Petrie, W.M.F.

1902 Abydos. Part I. London.

1903 Abydos. Part II. London.

1920 Prehistoric Egypt. London.

Petrie, W.M.F and Quibell, J.E.

1896 Naqada and Ballas. London.

Piquette, K.E.

2008 Re-Materialising Script and Image. In: V. Gashe and J. Finch (eds.), Current Research in Egyptology 2008. Proceedings of the Ninth Annual Symposium. Bolton. 89-107.

Pirelli, R.

2007 Pottery discs and other Counters from Zawaydah (Petrie's "South Town"). In: H. Hanna (ed.), The International Conference on heritage of Naqada and Qus region. Vol. I. Cairo. 57-64.

Podzorski, P.

1988 Predynastic Egyptian seals of known provenience in the R. H. Lowie Museum of Anthropology. *JNES* 47: 259-268.

Quibell, J.E.

1900 Hierakonpolis. Part I. London.

1901 Flint dagger from Gebelein. ASAE 2: 131-132.

Quibell, J.E. and Green, F.W.

1902 Hierakonpolis. Part II. London.

Raffaele, F.

2003 Dynasty 0. In: S. Bickel and A. Loprieno (eds.), Basel Egyptology Prize 1. Aegyptiaca Helvetica 17. Basel. 99-141.

Regulski, I.

2002 Engraved Bovine Heads in the Elkab Area. *CdE* 77: 5-22.

Ridley, R.T.

1973 The Unification of Egypt, as seen though a Study of the Major Knife-Handles, Palettes and Mace Heads. Deception Bay.

Ritner, R.K.

2008 The Mechanics of Ancient Egyptian Magical Practice. Chicago. (4th ed.).

Roth, A.M.

1991 Egyptian Phyles in the Old Kingdom. The Evolution of a System of Social Organization. Chicago.

1992 The Psš-kf and the 'Opening of the Mouth' Ceremony: A Ritual of Birth and Rebirth. *JEA* 78: 113-147.

Säve-Soderbergh, T.

1953 On Egyptian Representations of Hippopotamus Hunting as a Religious Motive. Uppsala.

Schäfer, H.

1974 Principles of Egyptian Art. Oxford. (Revised edition: Oxford, 1986).

Scharff, A.

1928 Some Prehistoric Vases in the British Museum and Remarks on Egyptian Prehistory. *JEA* 14: 261-276.

1931 Die Altertümer der Vor- und Frühzeit Ägyptens. I. Berlin.

Schele, L., and Miller, M.

1986 The Blood of Kings. Dynasty and Ritual in Maya Art. New York – Fort Worth.

Sievertsen, U.

1992 Das Messer vom Gebel el-Arak. Baghdader Mitteilungen 23: 1-75.

Smith, H.S.

1992 The Making of Egypt: A Review of the Influence of Susa and Sumer on Upper Egypt and Lower Nubia in the 4th Millennium B.C. In: R. Friedman & B. Adams (eds.), *The Followers of Horus. Studies dedicated to Michael Allen Hoffman.* Oxford. 235-246.

1993 The Princes of Seyala in Lower Nubia in the predynastic and protodynastic periods. In: C. Berger, G. Clerc and N. Grimal (eds.), *Hommages à Jean Leclant*. Vol. 2. BdE 106/2. 361-376.

Strandberg, Å.

2009 The Gazelle in Ancient Egyptian Art. Image and Meaning. Uppsala.

Takamiya, I.H.

Development of Specialisation in the Nile Valley during the 4th Millennium BC. In:
S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 1027-1039.

2008 Return to the Temple Workshop: The Manufacture of Bifacial Flint Tools. Nekhen News 20: 8-9.

Tefnin, R.

1979 Image et histoire. Réflexions sur l'usage documentaire de l'image égyptienne. *CdE* 54: 221-229.

Teissier, B.

1987 Glyptic evidence for a connection between Iran, Syro-Palestine and Egypt in the fourth and third Millennia. *Iran* 25: 27-53.

Trigger, B.

1990 Monumental Architecture, a thermodynamic explanation. WA 22(2): 119-132.

1993 Early Civilizations. Ancient Egypt in context. Cairo.

Van Haarlem, W.M.

1995 Temple deposit at Tell Ibrahim Awad – a preliminary report. *GM* 148: 45-52.

1996 Temple deposit at Tell Ibrahim Awad – an update. *GM* 154: 31-34.

1998 Archaic Shrine Models from Tell Ibrahim Awad. MDAIK 54: 183-5.

Vandier, J.

1952 Manuel d'archéologie égyptienne. I. Les époques de formation. Paris.

1964 Manuel d'archéologie égyptienne. IV. Bas-reliefs et Peintures. Paris.

1968 Manuel d'archéologie égyptienne. V. Bas-reliefs et Peintures. Paris.

Van Hoek, M.

2003 The Saharan "girafe à lien" in rock art. Domesticated giraffe or rain animal? *Sahara* 14: 49-62.

Van Lepp

1999 The Misidentification of the Predynastic Egyptian Bull's Head Amulet. GM 168: 101-111.

Van Neer, W., Linseele, V. and Friedman, R.F.

2004 Animal Burials and Food Offering at the Elite Cemetery KH6 of Hierakonpolis. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), *Egypt at its Origins*. Leuven – Paris – Dudley. 67-130.

Vinci, S.

2004 I dieci 'tagliati' o della morte sacrificale al tempo di Narmer. In: S. Pernigotti and S. Vinci (eds.), Ricerche di Egittologia e di Antichità Copte (REAC) 6: 9-22.

Wailes, B. (ed.)

1996 Craft specialization and social evolution: in memory of Gordon Childe. Philadelphia. Watrall, E.C.

2000 Excavations at Locality HK11. Nekhen News 12: 11-12.

Wengrow, D.

2006 The Archaeology of Early Egypt. Cambridge.

Westendorf, W.

1978 Uräus und Sonnenscheibe. SÄK 6: 201-225.

Whitehouse, H.

1992 The Hierakonpolis Ivories in Oxford. A Progress Report. In: R. Friedman & B. Adams (eds.), The Followers of Horus. Studies dedicated to Michael Allen Hoffman. Oxford. 77-82

2002 A Decorated Knife Handle from the 'Main Deposit' at Hierakonpolis. *MDAIK* 54: 425-446.

2004 Further Excavation amongst the Hierakonpolis Ivories. In: S. Hendrickx, R.F. Friedman, K.M. Ciałowicz and M. Chłodnicki (eds.), Egypt at its Origins. Leuven – Paris – Dudley. 1115-1128.

Wilkinson, T.A.H.

2000 Political Unification of Egypt: towards a reconstruction. MDAIK 56: 377-95.

2002 Reality versus Ideology: The Evidence for 'Asiatics' in Predynastic and Early Dynastic Egypt. In: E.C.M. van den Brink and T. Levy (eds.), Egypt and the Levant. Interrelations from the 4th through the early 3rd Millennium BCE. London – New York. 514-520.

Williams, B.B.

1986 Excavations between Abu Simbel and the Sudan Frontier, Keith C. Seele, Director. Part 1: The A-Group Royal Cemetery at Qustul: Cemetery L. Chicago.

1988 Decorated pottery and the Art of Naqada III. A documentary Essay. München.

1988b Narmer and the Coptos Colossi. JARCE 25: 35-59.

Williams, B.B. and Logan, T.J.

1987 The Metropolitan Museum Knife Handle and Aspects of Pharaonic Imagery before Narmer. JNES 46: 245-286.

Winkler, H.A.

1938 Rock Drawings of southern Upper Egypt. I. London.

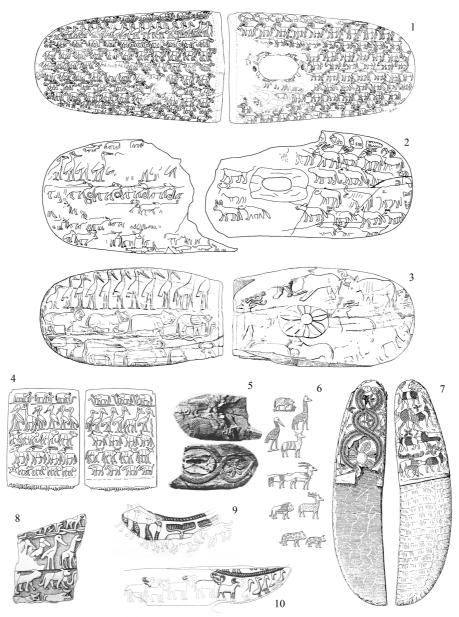


Fig. 1: (1) Abu Zaidan knife handle (tomb B32), Brooklyn Mus. 09.889.118; Needler 1984. (2) Pitt Rivers knife handle (Sohag), British Mus. EA 68512; Petrie 1896: pl. 77. (3) Carnarvon knife handle, MMA, 26.247.1; Benedite 1918. (4) Davis comb, MMA, 30.8.224; Benedite 1918. (5) Berlin Mus. knife handle, 15.137; Asselberghs 1961: fig. 51-52. (6) Seyala mace handle (gold), Smith 1993. (7) Gebel Tarif knife, Cairo Mus. CG 14265; Boehmer 1974b. (8) Abydos K1262 fragm.; Dreyer 1999: fig. 7. (9) Abydos K1104 fragm. tomb U-127; Dreyer 1999: fig. 11d. (10) Abydos K1104 fragm.; Dreyer 1999: fig. 11c.

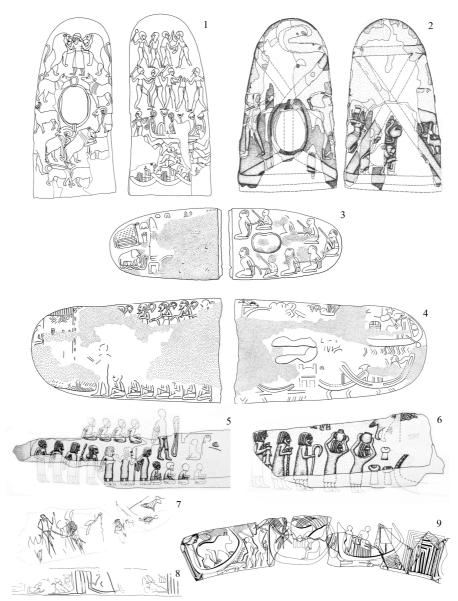


Fig. 2: (1) Gebel el-Arak knife handle (from Abydos?), Louvre Mus. E11517; Sievertsen 1992. (2) Abydos K3325 knife handle (tomb U-503); Dreyer 1999: fig. 12a-c. (3) Hierakonpolis knife handle (Main Dep.), Oxford, Ashmolean Mus. E4975; Whitehouse 2002. (4) Metropolitan Mus. (Carter) knife handle 26.241.1; Williams and Logan 1987. (5) Abydos K1103b1 fragm. (tomb U-127); Dreyer 1999: fig. 10b. (6) Abydos K1103b2 (tomb U-127); Dreyer 1999: fig. 10a. (7) Gebel Tjauti inscription n. 1 (detail): cf. note 75. (8) Archaic Horus incense Burner, Qustul (tomb L11), Williams 1986: pl. 33. (9) Qustul incense burner (tomb L24/1); Williams 1986: pl. 34. *NB: The images in these three figures are not to scale*.

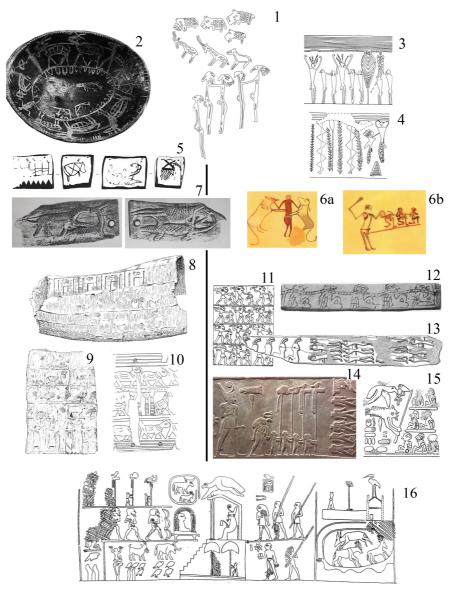


Fig. 3: (1) Abydos U-415 C-ware vessel; note 72. (2) Turin Mus. S1827, C-ware bowl; cf. note 54. (3) Brussels MRAH E3002 C-ware vessel. (4) Petrie Mus. UC 15339, C-ware. (5) El Amrah (t. a41) C-ware box; Ashmolean Mus. E2816; Crowfoot Payne 1993: cat. 600. (6a-b) Hierakonpolis t. 100 painting, details. (7) Petrie Mus. UC handle; Capart 1904: 69f. (8) HK Carved Ivory Tusk; note 65. (9) HK Carved Ivory; note 102. (10) HK ivory handle, note 99, 102. (11) Hk cylinder; Quibell 1900: pl. 15.4. (12) Abydos ivory; Petrie 1901: pl. 56.20. (13) HK Ivory: note 56. (14) Narmer palette recto, detail. (15) Hk ivory; Ashmolean Mus. E3915; Quibell 1900: pl. 15.7. (16) Narmer macehead, Quibell 1900: pl. 26b.