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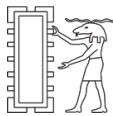
Studi Africanistici

Serie Egittologica

4

Animals in Religion,
Economy and Daily Life
of Ancient Egypt and beyond

a cura di
R. Pirelli, M.D. Pubblico & S. Ikram



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Preface

Since time immemorial, animals have played a key role in all aspects of Egyptian civilization. They were believed to be the manifestations of divine power on earth through which believers might easily address their concerns to the gods, they provided food, raw materials, were a mainstay of the economy, a measure of wealth, and inspired art, language, and literature. Among the hieroglyphic signs of Alan Gardiner's Sign-list, more than one hundred and fifty belong to the animal world. The omnipresence of fauna has long been regarded as a curious and/or odd expression of Egyptian culture. Yet this situation has changed over the last years, with the number of research devoted to this topic growing considerably.

The International Symposium on Animals in Ancient Egypt, the Middle Nile and their hinterlands (ISAAE) was founded with the aim to trigger a meaningful dialogue between peers coming from different research fields, who share an interest in the interactions between animals and humans in ancient Egyptian and Nubian societies, thus fostering a useful exchange of data, techniques, and methods, which will widely contribute to advance the state-of-the-art on the topic. The first two previous editions of the ISAAE, hosted by the Musée de Confluences in Lyon and the American University in Cairo, offered significant progress and inspiration in this field. The Third Symposium was hosted at the University of Naples "L'Orientale" (UniOr) from 15th to 17th June 2022. The ISAAE3 was organized by the Department of Asian, African and Mediterranean Studies (DAAM) of the UniOr in partnership with the American University in Cairo.

The main objective of the ISAAE3 was to provide an insight into the role of animals in Ancient Egypt and beyond, from the 5th millennium BC to the 7th century AD, to report on the most recent advancements in this field, to pave the way for future research, and to identify potential challenges. The three intensive days of meetings and discussions provided a valuable opportunity to exchange and update theoretical and field research topics, as well as technical issues related to modern research technologies. Scholars from all over the world (Europe, United States, Egypt, Japan, Australia) have addressed a plethora of animal-related topics: archaeozoology, slaughter,

mummification and related modern preservation-restoration techniques, funerary practices, religion, terminology and writing, arts and crafts, nutrition, economy and resources exploitation. These studies have been carried out also applying ground-breaking technologies and advanced methodologies, such as 3D imaging, CT-scans, radiography, radiocarbon dating, as well as a variety of chemical analyses.

This volume collects the results of these investigations, thereby broadening our knowledge on the role of animals in religion, economy and daily life of ancient Egypt, and beyond.

Rosanna Pirelli, Maria Diletta Pubblico, Salima Ikram

Acknowledgements

The 3rd International Symposium on Animals in Ancient Egypt, the Middle Nile and their hinterlands (ISAAE3) has been organized thanks to the effort of various institutions and people, to whom the editors are very grateful for their commitment to the success of this event.

We are indebted to the University of Naples “L’Orientale” (UniOr), and especially to the Dean, Roberto Tottoli, and the Director of the Department of Asian, African and Mediterranean Studies (DAAM), Andrea Manzo, for accepting to host the Symposium and the logistical support. We would like to thank the other members of the Scientific Committee: Andrea Manzo (DAAM, UniOr), Cinzia Oliva (Freelance Restorer), Stéphanie Porcier (Labex Archimède, Montpellier).

We want to express our gratitude to the members of the Organizing Committee: Elena D’Itria (DAAM, UniOr), Ilaria Incordino (White-Levy Programme for Archaeological Publications, Cambridge, MA), Stefania Mainieri (Museo Egizio, Turin), and Anna Salsano (Independent Researcher), without whose efficiency and commitment the Symposium would not have taken place.

Moreover, we thank our sponsors: the University of Naples “L’Orientale”, the American University in Cairo, the Grafica Montese S.N.C., the Royal Trophy S.R.L., the Study Center about Africa (CESA), the Interdepartmental Services Center for Archaeology (CISA), the National Archaeological Museum of Naples (MANN) and the Archaeological Parks of Pompeii and Herculaneum.

We would like to express our warmest thanks to the reviewers, who took time away from their busy schedule to help us in the double-blind peer review process of the articles published in this volume. A special thanks also goes to the UniOr Press for the editorial work.

Finally, we would like to acknowledge all the participants to the Symposium, for having broadly contributed to the advancement of the discipline by sharing their research.

Rosanna Pirelli, Maria Diletta Pubblico, Salima Ikram

Abstracts

Ceramic, Wood, Stone & Bronze:

Considerations about the Materiality and Value of Containers for Animal Mummies kept in the Museo Egizio, Turin

Johannes Auenmüller & Federica Facchetti

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The Museo Egizio, Turin, preserves a significant collection of animal mummies and containers for faunal remains. The currently running *Turin Animal Mummy Project* has committed itself to the comprehensive documentation and publication of these objects. The present article provides a preliminary overview of the different materials used to make the animal mummy containers in the collection: ceramic, wood, stone, and bronze. Questions about the value of the materials and the “functional materialism” of the animal mummy containers made in these different materials are also addressed. The present paper is intended to stimulate discussion on the economic significance and materiality of the animal coffins that were a significant part of the ritual offerings of certain animal mummies involved in the enormous animal mummy industry of the 1st millennium BC and beyond.

Keywords: *Pharaonic Egypt, 1st millennium BC, animal mummy containers, materiality, economic value*

Gift to Sobek

Preliminary Results of the Analysis of a Young Crocodile Mummy in the Allard Pierson

Ben van den Bercken¹, Marinus Hoogmoed², Roel Jansen³, Nick Lobé³, Mario Maas³ & Zosja Stenclak³

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The Allard Pierson – Collections of the University of Amsterdam is investigating its thirteen animal mummies, including a young crocodile that was recently acquired and never previously investigated. The crocodile mummy was CT-scanned and x-rayed. After preliminary analyses and discussion, it was featured in a small exhibition in the Allard Pierson. The scanning process yielded data that tells us more about the individual animal, the mummification process and the post-depositional life of this specimen. Research is still ongoing to answer questions on species, traumas, more traces of the mummification process, and its provenance history.

Keywords: *crocodile mummy, provenance, CT-scanning, morphological analysis, species determination*

The Faunal Remains from the “Economic Annexes” at the Temple of Millions of Years of Amenhotep II (Luxor, West bank)

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In the southern area of the Temple of Millions of Years of Amenhotep II a labyrinthine structure consisting of very small to medium rooms have been unearthed. The presence of several walls with episodes of rebuilding testifies

to the active reconfigurations of the area from the 18th Dynasty to the Ptolemaic period. In addition, the presence of rooms with ovens, remains of ostraca and large numbers of pottery sherds clearly testify to the diverse activities carried out in this sector of the Temple.

The excavation of the fills overlying the floors allowed us to collect a small but significant faunal assemblage that dates, probably, to early episodes in the development of the Temple.

The faunal complex is composed of fragments of bones of mammals, birds, and fish along with the shells of freshwater bivalves. These appear to represent the remains of meals consumed by the persons (probably scribes) that worked in the temple.

Keywords: *Temple of Millions of Years, Amenohotep II, "economic annexes", faunal complex*



Wandering Falcons:

On the Referent and Meanings of Nemty Hieroglyphs ( / , G7A / G7B)

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The hieroglyph  /  (G7A / G7B etc.) has been described as a falcon on a boat, on a crescent, or on a throw-stick. To date, studies have focused on its phonetic reading – which is Nmtj and not *antj – and have paid only cursory attention to its visual referent. A new approach to the reality of signs should consider elements that have been overlooked: their earliest attestations (from the fourth and third millennia BC) and their palaeographic features; the texts relating to the god Nmtj; and, above all, the ethology, life cycle and habitat of the Falconidae of the Nile Valley. This last set of factors is essential for understanding the nature of ancient Egyptian falcon hieroglyphs and the extent of ancient Egyptians' knowledge of the animal world.

Keywords: *Ancient Egypt, hieroglyphic writing, falcons, Nemty, nest*

Food for Thought:**Considering the Presence of Zoomorphic Figurines in
Predynastic Egyptian Burials**

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This paper explores whether the animals represented as clay zoomorphic figurines in Predynastic burial contexts dating to Naqada IA–IID (ca. 3,800–3,325 BC) may be evidence of a novel Predynastic folk taxonomy relating to food or consumable products. This follows a long-standing belief that zoomorphic figurines in Predynastic graves are replicas of the real animals in the burial context. The specific purpose of their replication and its benefits for the deceased still require further study, particularly when we encounter animal subjects that are not typically envisioned as ‘food’. Their potential purpose in the burial is compared with zooarchaeological evidence for the partial and complete remains of animals in contemporaneous graves to explore whether zoomorphic figurines and faunal remains may, in some circumstances at least, be considered complementary in their funerary significance.

Keywords: *Predynastic Egypt, zoomorphic figurines, folk taxonomies, resources, burials*

**Animals Remains from the Egyptian Collection of the Civic
Archaeological Museum of Milan:****Conservation and Study Project**

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The Egyptian Collection of the Civic Archaeological Museum of Milan holds twenty-three animal mummies, almost all from private collections, except for seven baby crocodiles which come from Achille Vogliano's 1930s excavations at Tebtynis (Fayyum). As part of the ongoing refurbishment works of the permanent exhibition in the Egyptian galleries (presently closed and expected to reopen within some years), the museum launched a comprehensive diagnostic study and conservation project of the mummified remains from Egypt, both human and animal. The group of animal mummies, which have never been the subject of a scientific examination, thus underwent a series of diagnostic and conservation studies. In the present paper the preliminary outcomes of the project will be presented. The examinations allowed in some cases to re-evaluate old and erroneous interpretation of the remains. During the conservation project, special attention was paid to providing the animal remains with supports, in order to provide safe and correct handling during storage and/or display, to avoid invasive treatments of the most fragile items, and thus to allow future studies.

Keywords: *animal mummies, Egypt, conservation, CT-scanning, textile, votive offerings*

Zooarchaeology in Old Kingdom Egypt: A Comparison Between Animal Iconography and Faunal Remains of the Bagrus Fish

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Old Kingdom Egypt's iconography provides a wealth of animal species and rural activities. Due to their standardised nature, iconographic contexts can be categorised according to their environment, and animal species can be identified through the figures' study.

Although *decorum* has been widely recognised in Egyptian art for decades, it has mainly focused on general figures and representation patterns. Thus, the question arises whether *decorum* also applies to animals and whether the

depicted species were indeed present in the daily life of Egyptians. Comparing animal iconography with zooarchaeology remains an essential and inevitable step in gaining a better understanding of these issues.

The primary goal of this research is to identify any inconsistencies between the Old Kingdom iconography and zooarchaeology, as well as explain these inconsistencies using texts, zoological and ecological data. As a result, this study reveals important discrepancies regarding *Bagrus* sp., which is absent from the iconography but predominant in faunal remains. Accordingly, it challenges the way artistic images are captured and the cultural knowledge they represent.

Keywords: *zooarchaeology, Bagrus sp., animal iconography, Old Kingdom iconography, decorum*

The Valuable Role of Animals in the Kerma Culture

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Animals played a relevant role in the beliefs and ideology of the communities of the Middle and Upper Nile Valley, and the importance of fauna in the contexts of Kerma culture is undisputed. A considerable number of animal bones, especially cattle, sheep, and goats, have been recovered during the excavations of the ancient town and necropolis demonstrating that the subsistence and the ritual sphere of these populations has been strongly linked to animals. This paper will allow us to better understand the social and religious value of fauna, both domestic and wild, who not had only an economic role among Kerma people but also played an important part in the symbolic and religious domain. Combining the results of the archaeozoological studies with the iconographies representing animals found in Kerma sites, aims to provide new insights into the nature of the religious beliefs and customs of the Kerma populations.

Keywords: *Ancient Nubia, Kerma culture, fauna, funerary practices, symbolic role*

Meroitic Lexemes Concerning Animals

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The main information about Nubian fauna during the Meroitic period is derived from archaeological sites and iconography. Although some Meroitic inscriptions allude to animals, it is still difficult to learn about animals because of our very limited knowledge about the Meroitic vocabulary. At present, of the published list of thirty-nine lexemes with a confirmed meaning, fewer than ten words refer to animals. Three of those included in the basic vocabulary present a convincing comparison between the North Eastern Sudanic (NES) languages, mainly based on the ongoing studies of proto-NES. The other lexemes, outside the basic vocabulary, provide acceptable correspondences. The iconography associated with the main number of words has been important to support their identifications and meaning.

Keywords: *Meroitic language, Animals, Meroitic Inscriptions, parallel Texts Method, contextual analysis*

The Deformation of Cattle Horns in the New Kingdom Period

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Cattle were important agriculturally, economically and religiously to the ancient Egyptians, and as a result they are depicted frequently in art. In some of these representations, cattle are shown with or undergoing a physical modification of their bodies. This paper will examine one of these practices, horn deformation. The artificial deformation of cattle horns is represented in two-dimensional art scenes from elite tombs throughout the Pharaonic period, and this paper will focus on examples from the New Kingdom (c.1550-1069 BC).

Drawing on ethnographic comparisons, the process, purpose, and welfare implications of Egyptian modification will be discussed. Evaluation of the practice has revealed that, on balance, the Egyptians were not concerned with animal welfare when modifying the appearance of their cattle.

Keywords: cattle, horn deformation, animal modification, Egyptian art, animal welfare

Wrapping it Up: Animal Mummy Studies in 2022

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This article will present a brief history of the study of animal mummies before discussing the current state of the field and possible future directions for its development. It is an update of a paper (Ikram 2019) presented at the first Symposium of Animals in Ancient Egypt, held in Lyon in 2016.

Keywords: *Animal mummies, radiography, isotope analysis, ancient DNA, zoonotic disease*

Mythical Animals of Kush. Remarks on the Imaginary Creatures and Religion in Kerma

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The contribution will deal with some imaginary creatures occurring in the Kerma art. Indeed, mythical animals like criosphinx, winged giraffe and

hippo with anthropomorphic body and others were represented in the capital city of the kingdom of Kush in Kerma Classique times (ca. 1750-1550 BC). The features of these mythical animals will be described, and their occurrence will be outlined, with specific focus on the contexts where they were represented. Some hypotheses on their meaning and on their relevance in the Kerma ideology and religion will be proposed.

Keywords: *Kerma, Kush, religion, imaginary creatures*

Animals of Ancient Kheny: The Rupestrian Collection

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This paper presents an overview of animals depicted within the Swedish concession area of Gebel el-Silsila and Shatt el-Rigal, spanning the Prehistoric to the early Islamic period. It includes commentaries on stylistic, technical and chronological phases of the rock art, and present an overview of distribution patterns as well as a relative taxonomic morphology for the more frequent motifs. Main emphasis will be on the early material as it represents the largest group. The paper presents a relative stylistic timeline, divided into nine phases, based on the morphology and production technique used for the petroglyphs. Commentaries on empirical indices and temporal significance should be read as preliminary reflections and in a wider analytical perspective of general trends.

Keywords: *animals, Gebel el-Silsila, rock art, Shatt el-Rigal, Swedish mission*

Collars on Cats and Dogs in Life and in the Afterlife: Function and Fashion in Early Roman Egypt

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A rich repertoire of collars is depicted on dog and cat representations from the Roman age, including terracotta figurines, wall paintings and mosaics from the 1st to the 3rd centuries AD. These depictions give insight into both the practical function of collars on companion animals and possible ‘fashion’ trends in this respect. Substantiating the review of iconographic sources is archaeological evidence of cat collars – the iron or copper-alloy rings with a locking device as well as bead collars – uncovered by the Polish-American expedition working at Berenike (Red Sea, Egypt), where a cemetery of companion animals (“pets”) from the 1st and 2nd centuries AD has been excavated since 2017. The authors present the source material, both iconographic and archaeological, looking at the functional design as well as aesthetics of the animal collar in early Roman Egypt.

Keywords: *Early Roman Egypt, Berenike, small animal/pet necropolis, cat and dog burials, collars*

The Imperial Iseum in Benevento and its Zoomorphic Gods

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The texts of Domitian's two obelisks in Benevento inform us that in 88/89 AD, Rutilius Lupus had a temple built in the Samnite city and dedicated it to the goddess Isis to celebrate the emperor's victorious conclusion of the Dacian Wars.

Although none of the ancient buildings found so far in the city can be attributed to an Iseum, the existence of such a temple is confirmed by a large number of anthropomorphic and zoomorphic statues, a few epigraphs and some architectural elements, most of which were found in a section of the foundations of the ancient city walls; most of the fragments of the two obelisks and another group of objects were found scattered in different areas of the city.

Of the approximately fifty artefacts, numerous statues represent 'pharaohs', in both human and sphinx form; two are anthropomorphic deities, three depict priests, and several statues represent sacred animals: four falcons, two baboons and three Apis bulls; another bull is carved in high relief on an architectural frieze.

This extraordinary set of artefacts - belonging to different historical periods, from the Pharaonic to the Ptolemaic and finally the Roman era - represents one of the largest concentrations of Egyptian and Egyptianising materials belonging to a single cultic context of the imperial period outside Egypt.

Beginning with the publication that Wolfgang Müller devoted to the analysis of the Benevento 'Iseum' in 1969, a lively debate (not yet concluded) has arisen on the nature of the temple, its possible location and the relationship of this monument to the other temples dedicated to Isis scattered throughout the Empire.

In order to provide an interpretative key to answer, even partially, some of these questions, my paper will briefly present all the Isiac sculptures in the Samnite Iseum, with a particular focus on the symbolism expressed by the

zoomorphic deities, especially in relation to their role in the representation of Domitian's imperial image.

Keywords: *Iseum, Benevento, Domitian, zoomorphic deities, Egyptian royal ideology.*

A Study of Egyptian Animal Mummy Styles (SEAMS) Project: An Introduction

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The mummification of sacred animals is a religious phenomenon which was widely spread throughout Egypt. Egyptians believed that some animals were living manifestations of gods on earth and they took care of them during their lifespan, while some others were intermediaries between humans and deities. These latter animals possibly were reared in sacred enclosures and killed to be sold to worshippers, who donated them to the corresponding god as votive offerings, in return for favors and protection. Unfortunately, the large-scale illegal pillaging of animal necropoleis during the 19th and 20th centuries, as well as the relative disinterest of mainstream Egyptology, caused a great loss of information of these objects, especially relating to their date and origin.

In contrast to other forms of Egyptian material culture, animal mummies have only a limited epigraphic apparatus that normally helps in reconstructing their story. However, the increased demand of votive animal mummies between the Third Intermediate Period and the Roman Period promoted a certain degree of craft specialisation and potentially changes at both a chronological and geographical level, especially in terms of wrapping techniques and styles. A Study of Egyptian Animal Mummy Styles (SEAMS) project aims to investigate the mummies' bandage weaves, which represent the sole iconographic apparatus of these artefacts, through the development of an innovative interdisciplinary methodology that integrates traditional research

approaches with new technologies in order to demonstrate that they are markers of specific periods and workshops. In doing so, SEAMS is set to fill the gap in current knowledge on the contextual data of votive animal mummies and shed light on their manufacture. This paper presents the methodology and the expected results of this project, which will form a major contribution to our knowledge by providing essential information to explore a so far uninvestigated topic.

Keywords: *Animal mummies, craft, stylistic variations, regionalisms, chronology*

Some Remarks on Roman Period Mummy Masks from Kellis with the Jackal Motif:

An Update on Regionalism and Craftsmanship in the Western Egyptian Desert

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Excavations carried out by the Dakhleh Oasis Project on the outskirts of the settlement of ancient Kellis, in Egypt's Dakhleh Oasis, brought to light an extensive cemetery with hundreds of rock-cut tombs. Exploration of this area, now known as the Kellis 1 Cemetery, revealed the presence of several burials where the bodies were equipped with decorated cartonnage coverings. This paper focuses on a particular type of mummy masks discovered in the cemetery to reprise the discussion on specific iconographical features and an exploration of the identification of their place of manufacturing.

Keywords: *Kellis, cartonnage, craftsmanship, mummy mask, jackals*

List of Abbreviations

ÄA	Ägyptologische Abhandlungen. Wiesbaden.
ÄAT	Ägypten und Alten Testament. Münster.
AZANIA	Journal of the British Institute in Eastern Africa. London.
Acme	Annali della Facoltà di lettere e filosofia dell'Università degli Studi di Milano. Milano.
ACER	The Australian Centre for Egyptology: Reports. Sydney.
ACES	The Australian Centre for Egyptology: Studies. Sydney.
ADAIK	Abhandlungen des deutschen archäologischen Instituts, Abteilung Kairo (DAIK), Ägyptologische Reihe. Glückstadt-Mainz-Berlin.
AegGreg	Aegyptiaca Gregoriana. Città del Vaticano.
ÄgLev/ Ä&L	Ägypten und Levante: Zeitschrift für ägyptische Archäologie und deren Nachbargebiete. Vienna.
AJA	American Journal of Archaeology. New York.
ANES	Ancient Near Eastern Studies. Leuven-Paris-Walpole.
Antiquity	Antiquity. Quarterly Review of Archaeology. Newbury, Cambridge.
ARC	Archaeological Review from Cambridge. Cambridge.
ArOr	Archiv orientální. Prague.
ASAE	Annales du Service des Antiquités de l'Égypte (SAE). Cairo.
ASE	Archaeological Survey of Egypt. London.
AV/AVDAIK	Archäologische Veröffentlichungen, Deutschen Archäologisches Institut, Abteilung Kairo. Berlin-Mainz am Rhein.
AW	Antike Welt. Zurich-Mayence.
BABESCH	Annual Papers on Mediterranean Archaeology. Leuven
BAR IS	British Archaeological Reports International Series. Oxford.

BdÉ	Bibliothèque d'Étude. Paris.
BEHE	Bibliothèque de l'École Pratique des Hautes Études. Paris.
BiAe	Bibliotheca Aegyptiaca. Bruxelles.
BIFAO	Bulletin de l'Institut Français d'Archéologie Orientale (IFAO). Cairo.
BMSAES	British Museum Studies on Ancient Egypt and Sudan. London.
BSAK	Studien zur Altägyptischen Kultur – Beihefte. Hamburg.
BSEG	Bulletin de la Société d'Égyptologie de Genève. Genève.
CdÉ	Chronique d'Égypte. Bruxelles.
CENiM	Cahiers d'Égypte nilotique et méditerranéenne. Institute d'égyptologie François Daumas, Univ. Paul-Valéry. Montpellier.
CG	Catalogue général des antiquités égyptiennes du Musée du Caire. Cairo.
CIL	Corpus Inscriptionum Latinarum. Berlin.
CT	De Buck 1935-61
EES	Egypt Exploration Society. London.
EES-ExMem	Egypt Exploration Society-Excavation Memoir. London.
EPRO	Études préliminaires aux religions orientales dans l'Empire romain. Leiden.
Enchoria	Enchoria – Zeitschrift für Demotistik und Koptologie. Wiesbaden.
ERA	Egyptian Research Account. London.
Estrat crític	Revista d'Arqueologia. Barcelona.
EU	Egyptologische Uitgaven. Leiden.
GM	Göttinger Miszellen. Göttingen.
GÖF IV	Göttinger Orientforschungen IV. Göttingen.
IBAES	Internet Beiträge zur Ägyptologie und Sudanarchäologie. London.
JAA	Journal of African Archaeology. Frankfurt am Main-Leiden.

JARCE	Journal of the American Research Center in Egypt. Boston-New York.
JAS	Journal of Archaeological Science. London-New York.
JAS-Rep	Journal of Archaeological Science: Reports. London-New York.
JDAI	Jahrbuch des Deutschen Archäologischen Instituts. Berlin.
JEA	Journal of Egyptian Archaeology, EES. London.
JNES	Journal of Near Eastern Studies. Chicago
J. Nat. Hist	Journal of Natural History. Milton Park.
KAW	Kulturgeschichte der Antiken Welt. Mainz am Rhein.
KUSH	Journal of the Sudan Antiquities Service. Khartoum.
LD Erg.	R. Lepsius, 1913. <i>Denkmäler aus Aegypten und Aethiopien, Ergänzungsband</i> . Leipzig.
MÄS	Münchener Ägyptologische Studien. Berlin-Munich-Mainz am Rhein.
MASCA	Museum Applied Science Center for Archaeology. Philadelphia.
MDAIK	Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo (DAIK). Mainz-Cairo-Berlin-Wiesbaden.
Menes	Menes. Studien zur Kultur und Sprache der ägyptischen Frühzeit und des Alten Reiches. Wiesbaden.
MIFAO	Mémoires publiés par les membres de l'Institut français d'archéologie orientale. Cairo.
MYTHOS	Rivista di Storia delle Religioni. Caltanissetta.
MonAeg	Monumenta Aegyptiaca. Bruxelles.
MRE	Monographies Reine Élisabeth. Bruxelles.
NAWG	Nachrichten von der Akademie der Wissenschaften zu Göttingen, Philologisch-Historische Klasse. Göttingen.
OBO	Orbis Biblicus et Orientalis. Leuven - Paris - Bristol.
OIMP	Oriental Institute Museum Publications. Chicago.
OLA	Orientalia Lovaniensia Analecta. Louvain.
OLP	Orientalia Lovaniensia Periodica. Louvain.

OrAnt	Oriens Antiquus. Pisa-Roma.
PALMA	Papers on Archaeology of the Leiden Museum of Antiquities. Leiden.
PAM	Polish Archaeology in the Mediterranean. Warsaw.
PES	Prague Egyptological Studies. Prague.
PdÄ	Probleme der Ägyptologie. Leiden.
Philippika	Philippika. Marburger altertumskundliche Abhandlungen. Wiesbaden.
P.L.Bat	Papyrologica Lugduno-Batava. Leiden.
PN	H. Ranke, 1935. <i>Die Ägyptischen Personennamen</i> . Glückstadt.
QuadMusEg.	Quaderni del Museo Egizio. Torino
REM	Répertoire d'épigraphie méroïtlique. Corpus des inscriptions publiées, I, II, III. Paris.
RdE	Revue d'Égyptologie. Paris-Louvain.
RGRW	Religions in the Graeco-Roman World. Leiden.
RiME	Rivista del Museo Egizio. Torino
SAAC	Studies in Ancient Art and Civilization. Cracovie.
SAK	Studien zur Altägyptischen Kultur. Hamburg.
SDAIK	Sonderschriften des Deutschen Archäologischen Instituts, Abteilung Kairo. Cairo
SMET	Studi del Museo Egizio di Torino. Torino.
SNR	Sudan Notes and Records. Khartoum.
TLA	Thesaurus Linguae Aegyptiae. Berlin.
UEE	UCLA Encyclopedia of Egyptology. Los Angeles.
UGÄÄ	Untersuchungen zur Geschichte und Altertumskunde Ägyptens. Leipzig-Berlin-Hildesheim.
Urk. I	K. Sethe, 1903-33. <i>Urkunden</i> . Leipzig.
UZK	Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Instituts (ÖAW). Vienne.
VDI	Vestnik Drevnej Istorii. Moscou-Saint-Pétersbourg.
Wb.	A. Erman, H. Grapow, 1926-61. <i>Wörterbuch der Ägyptischen Sprache 1-7</i> . Leipzig
ZÄS	Zeitschrift für ägyptische Sprache und Altertumskunde. Leipzig-Berlin.

Mythical Animals of Kush.

Remarks on the Imaginary Creatures and Religion in Kerma

Andrea Manzo

Introduction

The site of Kerma in Upper Nubia, 60 Kms upstream of the Third Cataract of the Nile (Fig. 1), gave its name to a culture active roughly between the mid-3rd and the mid-2nd millennium BC. Moreover, the region of Kerma represented the core area of a complex hierarchical social organization which from ca. 2000 BC was labelled as Kush in the Egyptian textual sources.¹ This hierarchical society, which from a certain point onward was certainly a state, was a partner and a competitor of Egypt on the Middle Nile for almost 1000 years.² The characteristics of the Kerma/Kush state have recently been discussed³ showing that we may have a case of an African

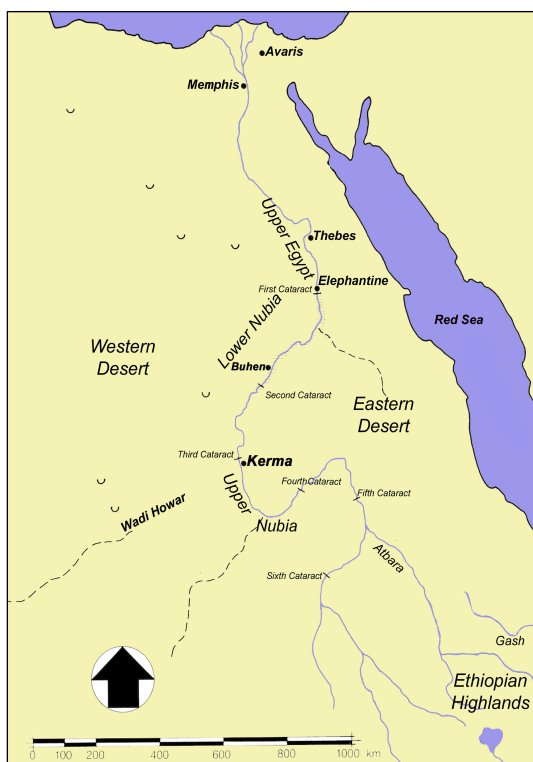


Fig. 1: Location of Kerma and of the regions and sites mentioned in the text.

¹ Török 2009, 86-87.

² *Ivi*, 64-156.

³ See e.g., Emberling 2014.

“path to complexity” here, as those described for later phases by Susan Keech McIntosh.⁴ Among the features that often characterize these complex African societies are the light bureaucratic apparatus and the limited adoption of writing technologies. In the case of Kerma, king Kamose’s (c. 1550 BC) stela, erected at Karnak temple, mentions despatches sent to the ruler of Kush that suggests that letters in Egyptian were read (and likely written) in the royal court of Kush within the framework of diplomatic relations.⁵ However, the presence of inscribed Egyptian objects in Classic Kerma funerary assemblages cannot be regarded as definitive proof that access to Egyptian texts was widespread among the Kerma/Kush elite, as has sometimes been suggested.⁶ Nevertheless, an admittedly extremely limited number of other texts, which are always related to and presumably written on behalf of the Kushite rulers, are known.⁷ These other texts confirm that Egyptian texts were produced in Kush. Therefore, their limited number can only be explained by the limits of our present knowledge, with other texts still awaiting to be discovered, or, indeed, by the specific features of the Kerma/Kush state.

Be that as it may, the almost complete lack of textual sources largely compromises our possibility of reconstructing several aspects of the Kerma culture and religion is certainly one of these. As a consequence of this, the contribution of religious studies on Kerma/Kush to an understanding of the later Kushite Napatan and Meroitic religion is very limited, the reconstruction of the religion(s) of the regions South of the First Cataract before the Egyptian conquest being almost completely based only on indirect evidence from Egyptian sources, moreover those that mostly focus on Lower Nubia.⁸ At the same time, the lack of textual sources increases the potential that an archaeological and iconographic approach can have for the study of the religion of Kerma/Kush.⁹

⁴ McIntosh 1999.

⁵ Török 2009, 112-113; Cooper 2018, 154.

⁶ Cooper 2018, 149.

⁷ *Ivi*, 144.

⁸ See e.g., Almansa-Villatoro 2018, 170, 175-180, 185-186; see also Kuckertz and Lohwasser 2016, 26-27.

⁹ Kendall 1997, 76; Manzo 2008, 169, 2011, 209; Török 2009, 140.

The Study of the religion of Kerma/Kush

Despite the paucity of textual evidence, insights into the religion of Kerma/Kush can be obtained from monuments and material culture.¹⁰ The architectural features of the sacred buildings at Kerma provide evidence, as do the decorative programs characterizing some of them. For example, it has been pointed out that the functional role of the terrace on top of several Kerma chapels and temples may suggest that the religion of Kerma/Kush had sky and perhaps more specifically solar connotations, as is also possibly supported by the adoption of the winged sun disc as the decoration of the lintel of chapel KII and of the vault of the funerary chamber of tumulus KIII.¹¹ This may be also confirmed by the adoption of the pylon, which at least in Egypt had a solar symbolism, yet in Kerma its addition served to monumentalize the entrances of the main Classic Kerma religious buildings.¹²

A crucial contribution to the study of the religion of Kerma/Kush in archaeological terms is the research conducted by Charles Bonnet in the Eastern Cemetery at Kerma. In this area of the site, he extensively excavated a large mud brick structure, labelled KXI by Reisner, which turned out to be a royal funerary chapel dating to Classic Kerma times (ca. 1750-1550 BC).¹³ As perhaps also Chapel KII, Chapel KXI featured a complex painted decorative program, which was discovered by George Andrew Reisner.¹⁴ However, these decorations were largely overlooked by the American archaeologist.¹⁵ A large part of the decorative program consists of representations of animals.¹⁶ Although no imaginary creatures occur amongst these, it will be referred to many times in this article for the purposes of comparing and for contextualizing the representations of imaginary creatures from other Kerma assemblages roughly dating to the same period. The decorative program of KXI is of further importance because its study undertaken by Bonnet and Török certainly represents a starting point in the use of an iconographic approach towards the

¹⁰ Howley 2017, 220-221.

¹¹ Reisner 1923a, 136; Bonnet ed. 1990, 89; Kendall 1997, 23, 46, 65, 77-78; Bonnet 2000, 111-112, 120, 132, figs. 86, 87, 139; *id.* 2004, 65, 152, 160; Manzo 2008, 11-12; see also Török 2009, 155; Minor 2014, 228-229, 231; Howley 2017, 221; Cooper 2018, 148-149.

¹² Manzo 2008, 174-175.

¹³ Bonnet 2000, 54-102, see also *id.* 2004, 157.

¹⁴ Reisner 1923a, 265-271.

¹⁵ Bonnet 2000, 12, 65.

¹⁶ *Ivi*, 65-94.

aim of providing insights into the religion and, broadly speaking, ideology of Kerma/Kush.¹⁷

In KXI both domesticated and wild animals, such as cattle, hippopotamuses, giraffes, fish, birds and a crocodile are represented in ordered rows as well as components of more complex scenes. Indeed, the ordered rows of animals in these representations recall aspects of Egyptian Pre- and Proto-dynastic art in terms of their general organization.¹⁸ Moreover, they also show parallels with the decorative programs of the Fifth Dynasty Solar Temple of Niuserra at Abu Gurob, the Sixth Dynasty funerary temples and the Eleventh Dynasty Chapel of Neferu in the Temple of Mentuhotep II at Deir el-Bahari.¹⁹ It has therefore been suggested that they may refer to the capability of the ruler of Kush to dominate the chaotic forces of nature, which are embodied by the animals themselves, but also to guarantee thanks to the god(s) the ordered alternation of the seasonal cycles. Different, but not necessarily alternative, hypotheses can also be proposed: these representations may serve the further function of indicating the real, pretended or merely symbolic control of the ruler over the different territories symbolized by the animals that lived therein.²⁰ Indeed, the rows of cattle may also refer to the fact that the power of the ruler may be represented in this specific social context in terms of his control of a large number of cattle, which is reflected in the hundreds of skulls of cattle, possibly sacrificed during funerary rituals, arranged around the tumuli of the high-ranking people at Kerma.²¹

A further feature of Kerma art that is possibly related to religion is clearly represented by the rows of wild animals on the foot boards of the beds sometimes found in graves of the Classic period at Kerma, by the mica ornaments originally decorating caps and possibly other garments, and by the large-sized *faïence* sculptures and plaques from the same funerary contexts.²² In particular, many have remarked that the ivory inlays and the mica ornaments are related to religion in several iconographic and stylistic features.²³ Moreover, these representations also recall the rows of animals found on the decorations

¹⁷ Bonnet 2000, 95-102; Török 2009, 144-151.

¹⁸ Bonnet 2000, 76.

¹⁹ *Ivi*, 101-102.

²⁰ *Ivi*, 95-96.

²¹ *Ivi*, 142.

²² Reisner 1923b 265-280; Bonnet 2004, 157; see also Wenig 1978, 38; Manzo 2011, 210; Howley 2017, 221.

²³ Reisner 1923b, 272-273; Wenig 1978, 36; Wildung ed. 1997, 102; Manzo 2011, 210.

in funerary chapels KII and KXI,²⁴ and their interpretations may be the same proposed for the decorative programs of the funerary chapels.²⁵ Indeed, when considering the nature of the monuments and the objects characterized by these decorations and the general contexts where the objects with these decorations were discovered, it is highly likely that the decorations had a religious meaning.

It has been argued that in Classic Kerma times both the architectural and the iconographic expressions of the Kerman/Kushite religion may have featured local traits and elements of Egyptian origin, without excluding the contribution of other traditions from African regions further to the south, east, and west of Upper Nubia, that are unfortunately still very poorly known.²⁶ Moreover, when considering the large number of representations of animals in the art of Kerma, it has also been suggested that the gods of Kush may have been related to animals or animal hypostases.²⁷ In the case of some Egyptian-like figurative elements, like the so-called Taweret, they may be more related to the popular Egyptian religion rather than to the official one, as I have suggested elsewhere.²⁸ Nevertheless, this remark should certainly be reconsidered in the light of recent reassessments of classes of materials like birth tusks.²⁹ Indeed, elements, such as the so-called Taweret depicted on the birth tusks, have traditionally been regarded as expressions of popular religious practices, but Quirke has recently demonstrated how they expressed concepts and beliefs that are also widely found in the Egyptian elite sphere, as shown by the study of the contexts where the birth tusks were found.³⁰ Finally, some specific representations and the overall compositional pattern itself, which consists of several parallel ordered rows of animals, may be deeply rooted in the traditions of the Nile valley, as they already occur at the very end of the 4th-very beginning of the 3rd millennium BC.³¹

²⁴ Bonnet ed. 1990, 89.

²⁵ Manzo 2011, 216.

²⁶ Bonnet ed. 1990, 89, 91; *id.* 2004, 157, 171; Manzo 2008, 174-176, 2011, 213-214; see also Reisner 1923b, 5, 18; Wenig 1978, 31, 35-36.

²⁷ Bonnet 2004, 157-158, 160.

²⁸ Manzo 2011, 214.

²⁹ This term has recently been proposed for the objects which have traditionally been labelled as "magic wands", see Quirke 2016. It is adopted in this article because I think it is more suitable than the more traditional label.

³⁰ Quirke 2016, 9, 573.

³¹ Török 2009, 150-151; Manzo 2011, 214-215.

In this general context, a very specific group of representations that decorate the burial beds and the caps of the Classic Kerma period are what we can call imaginary or fantastical creatures that do not exist in nature.³² This study will provide an in-depth discussion of these creatures and aims to show through an analysis of their various types that they have much to contribute to an understanding of the ideology of Kerma/Kush.

Imaginary creatures in Kerma art

‘Imaginary creatures’ are animals that do not exist in nature and are often amalgams of different animals or animals that are multi-headed. These are most probably related to myths and religion. The various types of representations of imaginary creatures from Kerma, together with their dates and the contexts where they were found, appear in Tab. 1.

The majority of imaginary creatures appear on footboards of funerary beds. These were decorated on the inside, toward the bed’s occupant, with only a couple of exceptions in which the decoration occurs both inside and outside.³³ Reisner had already stressed that these figurative inlays only occur in the burials of the Kerman elite, while geometric inlays are more widely distributed.³⁴ Another location for such images is on leather caps, a typically Nubian craft that is unparalleled in Egypt, featuring representations, made of mica.³⁵ These caps also may have been painted as some of the mica representations show traces of colour.³⁶ A further venue for the appearance of imaginary animals is as amulet-beads³⁷ from funerary assemblages in the Classic Kerma sector of the cemetery at Kerma.³⁸ In addition, the ram-headed lion statue is part of a series of zoomorphic statues decorating the royal funerary complex KIII.³⁹ Imaginary creatures also decorate more mundane objects: an anthropomorphic cow decorates a stone potter’s comb, which may have been

³² Manzo 2011, 210-211.

³³ Reisner 1923b, 266, 269; see also Wenig 1978, 35.

³⁴ Reisner 1923b, 266.

³⁵ *Ivi*, 19, 272; see also Bonnet ed, 1990, 219.

³⁶ Bonnet ed, 1990, 218.

³⁷ These are beads whose shape suggests that they may have also had the function of amulets, which are a typical feature of the Kerma culture.

³⁸ D’Itria forthcoming.

³⁹ Reisner 1923a, 139-140; *id.* 1923b, 51; Bonnet 2000, 137.

Type	Objects and material	Contexts	Date	Reference
Anthropomorphic hippopotamus	Ivory inlays from beds	Tumulus K III: KIII.1, KIII.2, K309, 34; K439, S bed, body B and N bed, body A; K449, at the foot of the bed; Tumulus K X: KX B; in the filling to the north of east end; K1001: x; K1053, 1, on the bed; K1056, x; K1065, x	Classic Kerma (1750-1550 BC)	Reisner 1923b, 268-270, Pl. 54, 4, Pl. 55, 1, 4, Pl. 55, 2, Pl. 56, 2
	Mica decorations of caps and perhaps other garments	Cemetery K B: K B 4, surface; K B 15, x	Classic Kerma (1750-1550 BC)	Reisner 1923b, 280, Pl. 57, 2, nos 5, 6, 7
	Annulet beads	Tumulus K III: K311, 320, 338, 339; Tumulus K IV: K444, 453; Tumulus K X: KX B; K 1098; KXV, x and debris in the west; Tumulus K XVI: KXVI, C; K1604	Classic Kerma (1750-1550 BC)	Reisner 1923b, 125, Pl. 43, 2
Anthropomorphic cow	Potter's comb	Southern sector of the settlement	Middle Kerma (2050-1750 BC)	Bonnet ed. 1990, 89, Fig. 92, 155, no. 34
Winged graffe	Ivory inlays from beds	Tumulus K III: KIII.1, KIII.2, K309, 34	Classic Kerma (1750-1550 BC)	Reisner 1923b, 268-269, Pl. 55, 2
	Mica decorations of caps and perhaps other garments	Tumulus K IV: K435, 14; K451, x	Classic Kerma (1750-1550 BC)	Reisner 1923b, 277, Pl. 60, 2
Two-headed bird	Mica decorations of caps and perhaps other garments	Tumulus K IV: K451, x; Tumulus K XIV: KXIV, xi	Classic Kerma (1750-1550 BC)	Reisner 1923b, 277, 279, Pl. 59, 2, Pl. 60, 1
Ram-headed lion	Faïence/quartz statue	Tumulus K III: KIII comp. 4/3 and comp. 17/3	Classic Kerma (1750-1550 BC)	Reisner 1923b, 51, Pl. 37, 3-4
Multi-headed lion	Mica decorations of caps and perhaps other garments	Tumulus K IV: KIV A debris in entrance; Tumulus K X: K1044, 8, beside the skull of A	Classic Kerma (1750-1550 BC)	Reisner 1923b, 278-279, Pl. 56, 4

Tab. 1

a tool used in everyday life, as its specific findspot within the settlement at Kerma also suggests.⁴⁰

It is noteworthy that, with exception of the potter's comb, all objects decorated with imaginary animals are found in funerary contexts. Many of the objects with representations of imaginary creatures, such as the caps and possibly the other garments, the beds, and the necklaces comprised of amulet-beads, should be considered as grave goods, despite some of them, such as the beds,⁴¹ showing occasional traces of wear.

The diverse types of imaginary creatures recorded at Kerma are discussed in the following sections.

The anthropomorphic hippopotamus

The first and most common of the imaginary creatures is a hippopotamus with a standing human body, legs, hands holding a knife, and breasts, the latter of which clearly shows that we are dealing with a female creature (Fig. 2 a).⁴² It should be stressed that this anthropomorphic hippopotamus is sometimes depicted wearing a long skirt of local design, which is found in association with women at Kerma and C-Group contexts,⁴³ thereby confirming the female gender of the imaginary creature (Figs. 2 b & c). The anthropomorphic hippopotamus is also occasionally depicted with a kind of crest that ends with a tail on the back, perhaps intended to resemble that of a crocodile (Fig. 2 a). Moreover, some examples have long and thick arms, which are most likely to have been wings (Fig. 2 c).⁴⁴ This composite creature is found on both the decoration of the beds and the caps and it is also a common amulet-bead.⁴⁵ All these date to Classic Kerma times (ca. 1750-1550 BC).

As far as the animal components of this creature are concerned, the hippopotamus is a very common subject in the art of Kerma. It occurs widely in the decorative program of chapel KXI, as clay statuettes, and on *faïence* tiles from funerary chapel KII, as well as *faïence* statuettes, very likely imported from

⁴⁰ Bonnet ed. 1990, 155, no. 34.

⁴¹ Bonnet ed. 1990, 225; *Id.* 2000, 107.

⁴² See also Wenig 1978, 146-147, no. 45-46.

⁴³ Reisner 1923b, 19; see also Wenig 1978, 25, Fig. 5; Bonnet ed. 1990, 217; Kendall 1997, 58; Howley 2017, 221.

⁴⁴ Bonnet ed. 1990, 217; see also Howley 2017, 221.

⁴⁵ Reisner 1923b, 125; see also Bonnet ed. 1990, 89; D'Itria forthcoming.

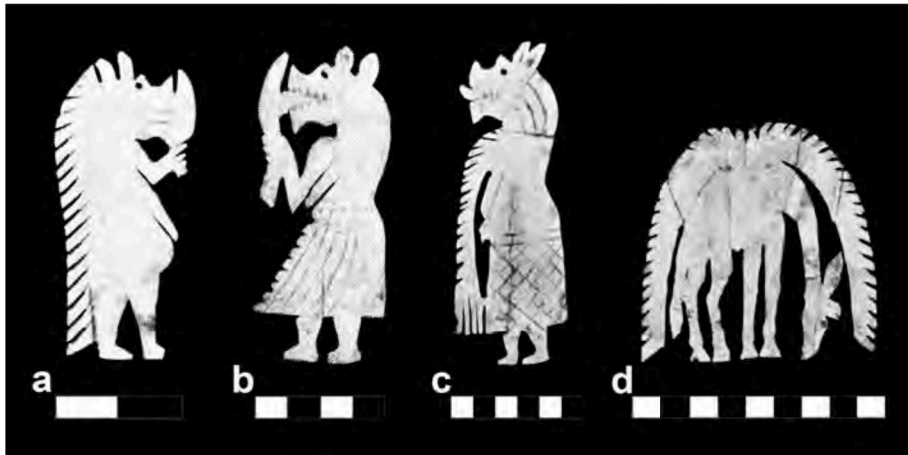


Fig. 2: a) Ivory inlay representing an anthropomorphic hippopotamus (Reisner 1923b, Pl. 55, 1, 4); b) Ivory inlay representing an anthropomorphic hippopotamus with skirt (Reisner 1923b, pl. 56, 2); c) Ivory inlay representing a winged anthropomorphic hippopotamus (Reisner 1923b, Pl. 55, 2); d) Ivory inlay representing a winged giraffe (Reisner 1923b, Pl. 55, 2).

Egypt.⁴⁶ Moreover, amulets in the form of hippopotami are common in Kerma material culture.⁴⁷ Hippopotami are obviously associated with water, and it is very likely that hippopotami had a significance related to prosperity, and fertility. This may be confirmed by the breasts that are sometimes depicted on the composite creature. Nevertheless, the hippopotamus also has a protective attitude for its calves and is an animal that can be aggressive. This characteristic may have held a further protective connotation for this composite creature, also when we recall the fact that it is sometimes represented with a knife in its hands (Figs. 2 a & b).

From the very beginning, this creature was very often labelled «Taweret» in publications on the Kerma culture.⁴⁸ It is impossible to know what this composite creature was called in Kerma, thus I prefer not to use the name Taweret. Nevertheless, the iconographic similarity the creature discussed here has to the imagery of the Egyptian Taweret, the patron of fertility and protector of pregnancy and childhood, is evident and also the function of the Kerma

⁴⁶ Reisner 1923b, 47, 128, Pl. 43, 2, Pl. 44, 2, 173; Bonnet ed. 1990, 89, 167, no. 83, 209, 212, no. 260; *id.* 2000, 72-76, 97-98; Chaix 2000, 164.

⁴⁷ D'Itria forthcoming.

⁴⁸ See e.g., Reisner 1923b, 266-280; Wenig 1978, 35-36; Curran 1990; D'Itria forthcoming.

anthropomorphic hippopotamus may have been at least partially similar to that of Taweret in Egypt. Moreover, it is interesting that both the Kerma anthropomorphic hippopotamus at Kerma and Taweret in Egypt are found depicted on both beds and amulets.

It should be stressed that during the first half of the 2nd millennium BC representations of imaginary creatures that potentially had an association with the Egyptian Taweret are not exclusive to Kerma, but they also occur in the Near East and in Crete, thus showing the wide diffusion of this specific iconography.⁴⁹ In particular, among the ivory carvings from El-Jisr, a Palestinian site dating to ca. 1500 BC, are several Egyptianizing elements, where a similar kind of representation to that at Kerma was also recorded.⁵⁰ Parallels have sometimes been drawn between this specific representation of hippopotamus at El-Jisr and the ones from Kerma.⁵¹

It is therefore highly likely that there was a direct link between the Egyptian goddess Taweret and the Kerma anthropomorphic hippopotamus. The way the representation of this figure and perhaps the deity itself found their way to Kerma may be traced through some of the Egyptian type birth tusks that are found in the same general archaeological contexts (tumulus KIII and KX) where the representations of Kerma composite animals are concentrated.⁵² Indeed, Egyptian birth tusks very often include representations of Taweret or, more appropriately, a hippopotamus-lion which has a mane and, sometimes, lion's legs.⁵³ However, these are not evident in the case of the Kerma anthropomorphic hippopotamus. Sometimes, the hippopotamus-lion is shown on the Egyptian birth tusks with a crocodile on its back, and this is reminiscent of the dorsal crest that occasionally features on the Kerma anthropomorphic hippopotamus.⁵⁴

The reference to the crocodile is indeed very appropriate, as, just like in the case of the hippopotamus, in the Kerma culture the crocodile may have held more than one significance: on the one hand the obvious aggressive side of its nature, and on the other a link to fertility and birth presumably due to its connection with water.⁵⁵ The symbolic importance of the crocodile in the

⁴⁹ Wengrow 2014, 63-64, 92, Fig. 6.1 a; Quirke 2016, 504, Fig. 5.116.

⁵⁰ Barnett 1956, 672, Fig. 465.

⁵¹ Curran 1990.

⁵² Reisner 1923a, 140, 186; *id.* 1923b, 260-261, Pl. 53, 1; see also Bonnet ed. 1990, 210-211, n. 254.

⁵³ Quirke 2016, 327-334.

⁵⁴ Bonnet ed. 1990, 217.

⁵⁵ See also Chaix 2000, 168.

ideological context of Kerma/Kush also finds support in the presence of a glazed quartz statue of a crocodile in the KII-KIII royal funerary complex,⁵⁶ two clay statuettes of crocodiles in a foundation deposit in the sacred quarter of the city,⁵⁷ a crocodile represented on a decorated ostrich eggshell from a Middle Kerma house at Kerma,⁵⁸ some amulets representing crocodiles,⁵⁹ and some ivory inlays representing crocodiles.⁶⁰ Indeed, two crocodiles are incised on a spouted bowl of the kind often found in the tombs of children and they were perhaps used to feed babies.⁶¹ The presence of the crocodile on the bowl may be interpreted both as a reference to it being an aggressive and therefore protective animal, but also to it being a symbol of birth and fertility, especially when considering its association with water. Perhaps for this reason modelled crocodiles also decorate the body of ceramic pitchers which have a zoomorphic spout that was used to pour liquids.⁶² Interestingly, the zoomorphic spout on these vessels is sometimes in the form of a hippopotamus head,⁶³ thus confirming the ecological and perhaps also symbolic link between the two animals.

Finally, it should be stressed that not all the iconographic variants of the anthropomorphic hippopotamus may have been used at the same time: it has recently been suggested that the crested hippopotamus occurred in early Classic Kerma assemblages, while the crest disappeared later on and a skirt appeared from the middle Classic Kerma period, an addition which was still present when, at the end of the Classic Kerma period, wings begin to be represented on the Kerma anthropomorphic hippopotamus.⁶⁴

⁵⁶ Bonnet 2000, 135, Fig. 98.

⁵⁷ *Id.* ed. 1990, 90.

⁵⁸ *Id.* 1993, 8, fig. 11.

⁵⁹ Reisner 1923b, 124, 129, Pl. 43, 2; see also D'Itria forthcoming.

⁶⁰ Reisner 1923b, 270, Pl. 56, 1; see also Bonnet ed. 1990, 222, no. 290.

⁶¹ Bonnet ed. 1990, 89-90; Welsby and Anderson eds. 2004, 88, n. 70.

⁶² Wildung ed. 1997, 96, nos. 96, 97.

⁶³ Wenig 1978, 38; Bonnet ed. 1990, 215, no. 269; Kendall 1997, 89, no. 9; Wildung ed. 1997, 100, no. 99.

⁶⁴ Minor 2018, 257, Fig. 8.

The anthropomorphic cow



Fig. 3: Imaginary creature with human body and head of a cow (or other bovine) represented on a stone potter's comb (dimensions 7,4x2,85x1,1 cm) (courtesy Mission Suisse-Franco-Soudanaise de Kerma/Doukki Gel).

Only a single representation of a creature with a human body and the head of a cow (or another bovine) survives at Kerma. It is depicted on a stone potter's comb found in a house in the southern sector of the settlement (Fig. 3). The composite creature is represented sitting on a cube-shaped throne with a low backrest. This scheme recalls the well-known Egyptian cow goddesses (such as Hathor, Bat, Mehet-Weret). A possible relation with Egypt is also confirmed by the two *nh* signs on the front of her head. For these reasons, Bonnet suggested that this composite creature could be identified with the goddess Hathor of Memphis,⁶⁵ who is herself represented with a human body and an animal head in the New Kingdom, albeit a later period than the example from Kerma.⁶⁶ The fact that this representation seems to be an isolated example but perfectly matches the conventional representations

of Hathor or other cow-headed Egyptian deities has led some to suggest that it may have been made by an Egyptian or possibly a Nubian who went to Egypt and came into contact with the cult of a specific cow-headed deity and its iconography.⁶⁷

⁶⁵ Bonnet ed. 1990, 89.

⁶⁶ See Berlandini 1983, 41-42, 47-49.

⁶⁷ Török 2009, 155.

Ram-headed lion

Similar to the case of the anthropomorphic cow, we only have a single glazed quartz statue of a ram headed lion. The probability that the lion's or sphinx's body and the ram head, which were found in the KIII complex and are now in the collections of the Museum of Fine Arts (Boston), were originally part of the same statue was first suggested by the curators of the MFA (Fig. 4).⁶⁸ Considering that we only have a single representation of a ram headed lion from Kerma, the significance of this composite creature remains obscure. Nevertheless, the provenance of the statue from the royal funerary complex KIII suggests a symbolic connection with the ruler.

Indeed, the fact that the lion held considerable symbolic significance for the rulers of Kerma/Kush can be seen in two large *faïence* tiles that have representations of striding lions arranged symmetrically which may have guarded the two sides of the main entrance of the Eastern Deffufa, KII, the funerary chapel related to royal tumulus KIII in the Eastern Cemetery at Kerma.⁶⁹ The possibility that the standing lion may have been a royal symbol, such as the embodiment of the ruler, a semantic determinative, perhaps also corresponding to a specific epithet of the king of Kush, is suggested by its presence



Fig. 4: The two fragments of the glazed quartz statue of a ram headed lion: a) lion body (MFA accession number 20.1180; 33,1x43,6 cm); b) head of a ram (MFA accession number 20.1223; 9,4x10,6x8,3 cm) (by permission of the Museum of Fine Arts, Boston).

⁶⁸ Bonnet ed. 1990, 212, no. 259; *id.* 2004, 158; see also Wildung ed. 1997, 102, n. 104.

⁶⁹ Reisner 1923a, 129, 132, *id.* 1923b, 152, Fig. 181; see also Bonnet ed. 1990, 209, n. 251; Manzo 2016, 24.

on one of the few existing inscriptions of a king of Kush that has so far been discovered.⁷⁰ Considering the aggressive nature and the strength of the lion, these representations may have been intended to stress the aggressive and triumphal attributes of the ruler of Kush and, in general, of the elite, which is also evident in the deposition of weapons in their tombs and in some imagery of the elite⁷¹ and possibly by epithets given to the king of Kush.⁷² Of course, this is also not uncommon in the rest of the Nile valley and particularly in Egypt itself, where the lion had also been a royal symbol since the origins of the Egyptian state. At Kerma, lions made of bronze sheet were also used to decorate a bed in the KIII funerary complex,⁷³ while an ivory inlay possibly representing a crouching lion decorated a funerary bed in tomb K407.⁷⁴ Some amulets represented lions as well.⁷⁵

As far as the ram is concerned, this not a common subject in the art of Kerma, but its ideological importance is visible in the presence of caprine skeletons whose horns were pierced to fix a decoration consisting of a sphere made from ostrich feathers on top of their heads, which are found in some tombs dating from the end of the Ancient Kerma to Classic Kerma times.⁷⁶ It is feasible that this decoration may have had a connection to a specific attribute these animals possessed as they may also be compared to a C-Group statuette which has a sphere between the horns on top of its head⁷⁷ and to similar imagery found in Saharan rock art,⁷⁸ which may have been related to solar symbolism, as the circle on the ram's head was regarded as a solar attribute.⁷⁹ This feature may fit well in an ideological setting such as Kerma/Kush, where several elements suggest the centrality of solar connotations (see above).

In general, it has been highlighted that the religious meaning awarded to the ram may have marked both the C-Group and the Kerma cultures. Moreover, the later connection between this animal and the god Amon in Egypt may have its roots in the Nubian sphere as contacts with the Nubian cultures may

⁷⁰ Davies 2014, 35.

⁷¹ Manzo 2016, 17-23.

⁷² *Ivi*, 24-25; Cooper 2018, 152-153.

⁷³ Reisner 1923b, 204; Bonnet ed. 1990, 216, no. 272; see also Wenig 1978, 151, no. 52.

⁷⁴ Reisner 1923b, 269.

⁷⁵ D'Itria forthcoming.

⁷⁶ Bonnet ed. 1990, 73-77, 90-91; Kendall 1997, 58; Bonnet 2004, 158.

⁷⁷ Wenig 1978, 129, n. 20; Wildung ed. 1997, 57, no. 51.

⁷⁸ Muzzolini 1994.

⁷⁹ Bonnet ed. 1990, 90.

have brought it to Egypt.⁸⁰ Nevertheless, the hypothesis that the Egyptian and Nubian religions shared specific aspects, which may have led to a syncretism in New Kingdom times, cannot be completely ruled out.⁸¹ Be that as it may, the ram is usually considered a fertility and, thus, regeneration and rebirth, symbol.⁸² The fact that this characteristic may also have been held by the ram in Kerma/Kush finds support in the aforementioned presence of the caprine skeletons with the ostrich feathers decoration on top of their heads in the tombs of Kerma, spaces where symbols related to fertility and rebirth can clearly be expected to occur. Traces of the presence of caprines were also recorded in the inner and most sacred room of the Western Deffufa, KI, the main temple of the city, in assemblages dating to the last Classic Kerma phase of occupation.⁸³ According to the initial interpretation offered by the Swiss archaeologists, these traces may be related to presence in the room of the animals who were to be sacrificed.⁸⁴ Nevertheless, the fact that their presence in this very sacred space was apparently prolonged may instead point to them having been kept alive there, perhaps as hypostasis of the main god of the city. Noteworthy, there is a well in this area too, an architectural feature clearly related to the symbolism of fertility, that provided water directly to the inner part of the Western Deffufa KI, where the alive caprine animals were kept.⁸⁵ The same symbolic meaning may have been awarded to the ram's head-shaped spout decorating a Classic Kerma ceramic pitcher which was used for pouring liquids.⁸⁶ As far as the aforementioned possible solar significance of the ram is concerned, it should be stressed that a stair connected the sancta sanctorum of the Western Deffufa with the terrace of the temple, which may have been crucial for the ritual activities that took place there (see above). This suggests if not solar, then at least astral connotations for the main god of the city.

Despite the fact that only a single representation of a ram headed lion has survived from Kerma, this example may indeed represent a highly successful iconographic and ideological experiment, because the criosphinx, which was

⁸⁰ Wenig 1978, 38; Kendall 1997, 76-78; Wildung ed. 1997, 102; Kuckertz and Lohwasser 2016, 27.

⁸¹ Bonnet ed. 1990, 91.

⁸² See also Almansa-Villatoro 2018, 178-179.

⁸³ Bonnet 2004, 49, 158.

⁸⁴ *Id.* ed. 1990, 64.

⁸⁵ *Ivi*, 77; *id.* 2004, 63, 122-124.

⁸⁶ Wenig 1978, 38, 157-158, no. 65; Wildung ed. 1997, 96, n. 96.

usually associated with the Egyptian god Amon, went on to become a very common composite mythical animal in the Nile Valley at a later stage. Apparently, it also remained popular in Kerma itself, where the local variant of Amon, *Imn p3 nbs* or «Amon of the nebes tree», was often represented as a criosphinx under a tree, as seen on the reliefs from the temples of Jebel Barkal and Sanam of the time of Taharka.⁸⁷

The winged giraffe

A further composite creature occurring in Kerma art is the winged giraffe, which is carved on both ivory incrustations and mica ornaments. It is usually represented standing on its paws with open wings which creates an arch covering the long, curved neck, the head touching the base line, perhaps representing the creature when drinking (Figs. 2 d & 5 a).

As in the case of the hippopotamus, the giraffe is also a very common subject in the art of Kerma, as it is widely represented in the paintings decorating chapels KII and KXI⁸⁸ as well as the associated with anthropomorphic figures in the scenes of an as yet unknown meaning on a decorated ostrich eggshell from a house in the city of Kerma dating to the Middle Kerma period.⁸⁹ Noteworthy is also the fact that the only giraffe bone found so far at Kerma was collected from a foundation deposit of a religious building in the religious quarter near KI,⁹⁰ which may confirm that a symbolic and perhaps even sacred meaning was awarded to this animal. Moreover, bracelets made of giraffe hair were found in association with sacrificed individuals in tumulus KIII, and giraffe hair may also have been used for filtering traditional beer,⁹¹ although this may not be related to a specific religious meaning. Of course, representations of giraffes also occur on ivory and mica incrustations.⁹² Nevertheless, it cannot be excluded that in this case the thick tail they have could be interpreted as a representation of the closed wings (Fig. 5 b). Therefore, we may have further evidence here for winged giraffes.

⁸⁷ Kuckertz and Lohwasser 2016, 51, Abb. 18-19; Bonnet et al. 2021, 25, Fig. 15 A-B.

⁸⁸ Bonnet 2000, 76-86, 99, 132; Chaix 2000, 165; see also Reisner 1923a, 124.

⁸⁹ Bonnet 1993, 8, Fig. 11.

⁹⁰ *Id.* ed. 1990, 57; Chaix 2000, 165; Bonnet 2004, 90, 144.

⁹¹ Bonnet 2000, 96; see also Reisner 1923b, 313, Pl. 60, 2, 3.

⁹² Reisner 1923b, 267-268, 270, Pl. 54, 1, 273, 277-278, Pl. 58, 1.



Fig. 5: a) Mica decoration representing a winged giraffe (Reisner 1923, P. 60, 2, 3); b) Mica decoration representing a giraffe with thick tail, perhaps showing the closed wing (Reisner 1923, Pl. 58, 1, 1); c) Mica decoration representing a two-headed bird (Reisner 1923, Pl. 59, 2); d) Mica decoration representing a multi headed lion (Reisner 1923, Pl. 56, 4, without scale).

As far as the second component of this imaginary animal is concerned, the wings are of course related to birds. Several types of birds, such as birds of prey (perhaps falcons and/or eagles), vultures, bustards, secretary birds, and ostriches occur in the art of Kerma, particularly among the subjects on the ivory incrustations decorating the beds and in the mica decorations of caps and perhaps other garments.⁹³ Amulets representing falcons and dating to Classic Kerma times are also known.⁹⁴ It should be highlighted that the only deity of the Classic Kerma pantheon whose name we know is also related to the falcon: Horus.⁹⁵ Indeed, the fact that Horus was worshipped at Kerma-Kush in Classic Kerma times appears clear by the mention of his name in an inscription issued by a ruler of Kush, who was said to have been “beloved of Horus”, at Jebel Umm Nabari in the Eastern Desert.⁹⁶ Moreover, we know that Sepedhor, an official of Egyptian origin serving the king of Kush in the Second Intermediate Period, built or perhaps restored the temple of Horus in the

⁹³ Reisner 1923b, 268, 273.

⁹⁴ *Ivi*, 51, Pl. 37, 2, 52, Pl. 44, 2; Bonnet ed. 1990, 187, no. 164; D’Itria forthcoming.

⁹⁵ Bonnet ed. 1990, 89.

⁹⁶ Cooper 2018, 144, 148, 157; see also D’Itria forthcoming.

fortress of Buhen under the patronage of the king of Kush.⁹⁷ Of course, it remains uncertain as to whether the Egyptian Horus was somehow assimilated to a local deity that was also associated with the falcon or a bird of prey, which may have already existed in Middle Kerma times, as suggested by the occurrence of falcon amulets dating to that phase.⁹⁸ Be that as it may, like in Egypt, a specific link may have existed in Kerma between the falcon Horus and the ruler, when considering the aforementioned inscriptions.

In Egypt, there is a clear association between Horus and the sun. The same link between winged creatures and the solar deity may also have been true at Kerma, especially if we recall the representations of winged solar discs, that are clearly inspired by Egyptian examples, depicted on the lintel of royal funerary chapel KII and the paintings in the funerary chamber of tumulus KIII (see above). With regards to the solar connotation, we have already seen how this may have been an important feature of the religion at Kerma/Kush, yet it perhaps finds further confirmation in some of the architectural features of the main religious buildings at Kerma. Indeed, similar to the case of KI, a stair leading to the terrace was also found in KII, XXI, and other sacred building, suggesting that a ritual related to astral if not solar god(s) was taking place there (see above). As far as the specific association between the wings of a possible solar deity and the giraffe at Kerma is concerned, we should be mindful of the fact that the giraffe was also considered a heliophorous animal, occupying a space between the earth and the sky in Predynastic rock art.⁹⁹ The wings may also suggest that the giraffe possessed solar connotations at Kerma too, although, of course, this remains uncertain.

The specific representation of the winged giraffe has been recorded so far only at Kerma. Therefore, it may represent a local invention, perhaps somehow inspired by the winged composite creatures that also occur on Egyptian birth tusks.¹⁰⁰

Two-headed birds

Further composite creatures occurring in Kerma art for which an ideological and religious meaning may be suggested are the two-headed birds,

⁹⁷ Manzo 2008, 175; Cooper 2018, 144.

⁹⁸ D'Itria forthcoming.

⁹⁹ Huyge 2002, 199-200.

¹⁰⁰ Bonnet ed. 1990, 214, no. 266; Curran 1990.

sometimes represented in the mica decorations of caps and perhaps other garments (Fig. 5 c).¹⁰¹ While in some instances these are clearly birds of prey, they have sometimes been identified with bustards.

As far as I am aware, no parallels for these two-headed birds can be found in the Nile valley. Therefore, like the case of the winged giraffe, we may have an example here of a local invention.¹⁰² Of course, bulls with heads on both ends of the body, are known in the art of Egypt since Predynastic times and they occur on birth tusks dating to the Middle Kingdom, as well as being found on an early Middle Kingdom axe and on amulets of a later date.¹⁰³ Moreover, double ended sphinxes also decorate some Middle Kingdom birth tusks as they also do on later Egyptian funerary representations.¹⁰⁴ Therefore, images that are somehow related to the general idea of the symmetry characterizing the double-headed birds of the Kerma mica decorations are known in Egypt, even though they are not exact parallels for the Kerma two-headed birds. Nevertheless, close comparisons can be found in the Near East, where representations of two-headed birds occur from the late 4th millennium BC onwards in Mesopotamian seals, but also in iconographic expressions of a later date.¹⁰⁵ The double headed eagle is indeed a well-known motif on Anatolian seals dating to the 19th and 18th centuries BC, as well as on Syrian seals and sculpture of the same date,¹⁰⁶ and on seals from Palestine.¹⁰⁷ In consideration of the similar date between some Near Eastern and Kerma representations of two-headed birds and of the links between the rulers of Kerma-Kush and the Lower Egyptian Hyksos, the possibility of connections with the Near East cannot be completely ruled out and will be discussed in the final remarks of this paper.

While the meaning of the two-headed birds motif at Kerma remains obscure, it is possible that it held triumphal and solar connotations as was discussed above with regards to the falcon and the wings associated with the solar disc.

¹⁰¹ See also Quirke 2016, 513.

¹⁰² Wenig 1978, 152.

¹⁰³ Quirke 2016, 187, 227, 289, 314, 323, 326, 398, 506, Fig. 5.119, 539, and again Reisner 1923b, 275.

¹⁰⁴ Quirke 2016, 29, 105, 187, 224, 227, 257-258, 314, 322-323, 326, 398, 508, 544.

¹⁰⁵ See also Reisner 1923b, 275.

¹⁰⁶ See Pinnock 1992, 114, 116, Fig. 1, Fig. 2 a; Kzso 2014-2015, 227-228.

¹⁰⁷ Teissier 1996, 15-22, no. 135.

Multi-headed lions

The last (possible) composite creature in Kerma art to be discussed here is comprised of pairs of symmetrically arranged lion's heads of lions facing left and right, respectively, and emerging from a common trunk. These are found as mica decorations on caps and perhaps other garments (Fig. 5 d). They have incised eyes and open mouths. Indeed, in this case it is not clear if a depiction of a real creature is intended or whether this is just an animalistic decorative pattern. Similarly, the central trunk may perhaps be a tree or even an architectural element.¹⁰⁸

No known parallels are available for these representations. The lion heads are certainly related to the importance of this animal in the culture and possibly the religion of Kerma, which we have already discussed above when dealing with the iconography of the ram-headed lion. The issue of the symmetrical representation of animal heads and its possible inspirations were also covered earlier in the discussion of the two-headed birds. Nevertheless, while the two-headed birds possibly find parallels in the cultures of the Near East, no parallels can be found for the representation of lion heads emerging from a single trunk. This may therefore be a purely local motif.¹⁰⁹ Noteworthy, similar multi-headed symmetrically arranged compositions may also have been made with other animals,¹¹⁰ but unfortunately these cannot be identified due to their poor state of conservation.

Final remarks

At this point I believe that some features of the Kerma religion and ideology can be proposed on the basis of the evidence provided by the representations of imaginary creatures. It should come as no surprise that concepts related to protection, fertility, and astral/solar connotations have emerged from our discussion here, as these features occur in almost all religions. However, I think it is more interesting to focus not only on how these concepts were specifically expressed in the context of Kerma/Kush and how the imaginary creatures contributed to this, but also on the dynamics which may have led to the development of these motifs.

¹⁰⁸ Bonnet ed. 1990, 220; see also Quirke 2016, 513.

¹⁰⁹ Bonnet ed. 1990, 220.

¹¹⁰ See Reisner 1923b, 277, Pl. 58, 2, No. 5.

The variety and specific features of the Kerma imaginary creatures discussed suggest that they originated from several different processes. In the case of the anthropomorphic hippopotamus, this may be a local expression of a widely diffused motif, which very likely originated in Egypt and, at least from a certain point onwards, was related to the goddesses Taweret and Ipet, moreover this motif was also adopted in the Near East and Crete in the Middle Bronze age (see above). In general, the central role different cultures and awarded to concepts such as fertility, reproduction, and protection, as can be seen associated with this specific composite imaginary creature, may have made it easier to adopt and adapt female deities from other cultural contexts into new ones.¹¹¹ This may have also favoured the sharing of traits, motifs, and symbolic elements related to these deities. Howley has also recently suggested that the emergence of the anthropomorphic hippopotamus figure and the incorporation of traits related to similar Egyptian deities into this figure at Kerma may have been favoured by the centrality of the hippopotamus in the local fauna and perhaps by the presence of an earlier Nubian hippopotamus cult.¹¹²

In the case of the two-headed bird, although the hypothesis of a local and independent local origin cannot be dismissed, it may also have been a local expression of a Near Eastern type, that arrived via Egypt, but which was nevertheless never adopted in Egypt itself. Similarly, at Kerma it remained limited to a few examples dating to Classic Kerma times. Nevertheless, we should be mindful of the possibility that this may not be an isolated case of adoption of Near Eastern iconographic traits, as a possible Near Eastern origin can also be proposed for the caprids with the tree of life motif that is also found on some Kerma ivory incrustations.¹¹³ The hypothesis that some Near Eastern traits may mark Classic Kerma culture is perhaps also supported by other evidence, such as the specific technique used for making the ivory incrustations,¹¹⁴ but further investigations are needed to confirm this. Noteworthy too is the recent suggestion that a Semitic loanword may lie behind the origin of the name of or, more likely, an epithet given to the ruler of Kush in a Second Intermediate Period hieroglyphic text.¹¹⁵

¹¹¹ Howley 2017, 222.

¹¹² *Ivi*, 221.

¹¹³ Bonnet ed. 1990, 217; Curran 1990; Bonnet 2004, 157; Quirke 2016, 512.

¹¹⁴ Curran 1990; Bonnet 2000, 99.

¹¹⁵ Cooper 2018, 152-153.

But not all the imaginary creatures recorded at Kerma have an ultimately foreign origin: the winged giraffe, for example, is certainly a local creation, which remained limited to the context of Kerma/Kush. This specific design sees the giraffe, whose importance in the art of Kerma is well known (see above), combined with a pair of wings. As pointed out above, this motif fits into a very old tradition, perhaps related to the presence of giraffes in the rock art across the whole of northeastern Africa and the Sahara. It is of course also related to the composite winged animals that are well known in the artistic repertoire of the Nile valley from the end of the 4th millennium BC up until Graeco-Roman times, similar to the case of the griffin,¹¹⁶ which was also used to decorate Middle Kingdom birth tusks and Middle Kingdom tombs.¹¹⁷ Indeed, during the first half of the 2nd millennium BC, winged mythical animals appear more widely also in the Near East. At that time winged sphinxes also occur there, figures which were nevertheless only rarely adopted in Egypt.¹¹⁸ During Classic Kerma times at Kerma we do not find the more broadly distributed winged griffins and sphinxes, but instead some local winged composite creatures, such as the winged giraffe and the anthropomorphic hippopotamus, which was given its wings at roughly the same time. Indeed, as discussed above, wings may have been important to Nubians in Classic Kerma times.¹¹⁹ The use of this motif may be linked to local features, like the sky-solar connotations that mark the religion of Kerma/Kush, as we have already seen in the earlier discussion of some of the architectural features of the Kerma sacred buildings and the adoption of the winged sun disc symbol in funerary and sacred contexts (see above). The fact that these religious developments were also associated with the concepts of kingship and royalty can be derived from the presence of the epithet *s3 R^c* referring to the king of Kush on a seal impression from Elephantine.¹²⁰ Moreover, it cannot be excluded that the popularity of wings and winged composite creatures at Kerma was also linked to the adoption -and possible adaptation- of the Egyptian god Horus in Kush. As mentioned above, the temple of Horus at Buhen was restored under the patronage of the king of Kush, and again Horus finds a direct connection to the king of Kush in the inscription of Jebel Umm Nabari.

¹¹⁶ Bisi 1965, 21-23.

¹¹⁷ Quirke 2016, 353-356; see also Bisi 1965, 25-26.

¹¹⁸ Dessenne 1957, 27-28, 38.

¹¹⁹ See also Howley 2017, 221.

¹²⁰ Cooper 2018, 148-149.

In the case of the lion-headed ram, which, like the winged giraffe, may have been a local creation, we again find symbolism connected to fertility and perhaps even solar and sky attributes (see above). Later on, in New Kingdom times, this specific motif was successfully adopted in Egypt and became a symbol of Amon, who at that time was the main deity of the Egyptian pantheon. However, this possible adoption of religious traits originating in the regions south of Egypt into Egyptian religion should not be considered a unique and isolated case, as Egyptian deities in the First Cataract region had already shown a strong Nubian imprint, if not origin, in earlier times.¹²¹ Nevertheless, the criosphinx of Amon may certainly represent the most striking example for the successful adoption of Nubian iconography for an Egyptian deity.

Therefore, the anthropomorphic hippopotamus and the two-headed birds, as well as the local elaboration of the original winged imaginary creatures and the ram-headed lion show that Kerma/Kush participated in and actively contributed to an «international style» that marked the first half of the 2nd millennium BC. This style is evident not only in Egypt but also involved the Near East and the eastern Mediterranean in general. A crucial issue, however, is the need to understand in which way these patterns and iconographic elements were shared. Indeed, the media through which some Egyptian and Near Eastern motifs may have reached Kerma are likely to have been numerous. They may have been transmitted through imported decorated objects, such as the birth tusks, on which, for example, Taweret or the hippopotamus-lion and winged imaginary creatures were often represented (see above). Some birth tusks were found at Kerma in assemblages dating to the Classic Kerma phase, even though a local production for at least some of these has recently been suggested.¹²² A birth tusk possibly produced in Kerma was also found in a Lower Nubian assemblage at Argin,¹²³ in a region which was controlled by Kush in Classic Kerma times. Whether some of them were locally made or not, the circulation of birth tusks, which were found not only in Egypt and in Nubia, but also in Near Eastern sites,¹²⁴ may have been crucial for the transmission of motifs and perhaps even ideas and beliefs related to the concepts of protection and fertility. Moreover, we cannot exclude that the circulation

¹²¹ Almansa-Villatoro 2018, 175-180.

¹²² Quirke 2016, 180-181, 232, 375, 512.

¹²³ *Ivi*, 182, 375.

¹²⁴ *Ivi*, 180, 232.

of seals and sealings may also have been relevant to the spread of specific motifs, just as was the case in the transmission of specific composite creatures between the Near East and Egypt at the end of the 4th millennium BC.¹²⁵ For example, the motif of the caprids symmetrically represented on the two sides of a tree, as found in the ivory incrustations from Kerma (see above), is also present on some Near Eastern seals.¹²⁶ A seal of the “green jasper workshop” class features the representation of a double-headed eagle,¹²⁷ which recalls the Kerma mica decorations representing two-headed birds. Noteworthy, seal stamps bearing the impressions of Near Eastern seals, along with Near Eastern type seals of this class and others were found at Tell el-Daba, the site corresponding to the capital city of the Hyksos rulers, with which the rulers of Kush certainly had contact and exchange.¹²⁸ In particular, some have suggested that the “green jasper workshop” seals were produced at Byblos, a node on the long-distance exchange network with which Egypt -and in particular Tell el-Daba- certainly had very intense interaction, even though an entirely different centre of production or even a multi-centred system of production cannot be excluded for this specific class of objects.¹²⁹ We can therefore wonder whether the double-headed eagle motif, originated in the Anatolian area, found its way to Kerma via Byblos. Indeed, this city was a crucial coastal node of the long-distance exchange networks between Egypt and Near East during the Middle Bronze age, and it is not inconceivable that from Byblos it may have reached Egypt, from where, despite not being adopted by the Egyptians, it then may have arrived at Kerma. Of course, along with the birth tusks, seals and sealings, other media may have played a role in the transmission of these motifs. These media may have included perishable materials such as textiles, or reusable artefacts, (e.g., metal objects),¹³⁰ but, of course, their contribution to these dynamics remains obscure.

Dealing with the social aspects of these exchanges and interaction, it should be emphasised that the seals (and sealings) are closely connected to the elite, who were involved in the administrative processes within which seals were a crucial tool. For this reason, the decorative motifs on the seals,

¹²⁵ Wengrow 2014, 62.

¹²⁶ See e.g., Teissier 1996, n. 28.

¹²⁷ Collon 2001, 19, Fig. 2,2.

¹²⁸ Kopetzky and Bietak 2016.

¹²⁹ Collon 2001, 18; Kopetzky and Bietak 2016, 361, 372.

¹³⁰ Wengrow 2014, 105.

and consequently on the sealings, were considered a direct expression of ideas and concepts emanating from the elite.¹³¹ Interestingly, this has also recently been suggested for the birth tusks, often decorated with patterns including composite and mythical creatures. For a long time, birth tusks were considered an expression of popular domestic magical practices but on the contrary, Quirke has shown that they are related to the Egyptian palace(s) and/or regional administrative centres and therefore with the elite.¹³² Although referring to the Near Eastern and Egyptian contexts, these general remarks seem to be applicable to Kerma where the representations of imaginary animals almost exclusively occur in contexts related to the elite. In particular, in the case of the representations of the anthropomorphic hippopotamus, Minor highlights that they may have had some importance in the funerary assemblages of high-status women, who wear similar skirts to the one found on some representations of this composite creature.¹³³ The same situation is also emerging from the study of the distribution of the amulet-beads representing the anthropomorphic hippopotamus.¹³⁴ The only exception to this apparently constant link with the elite may be the potter's comb decorated with the figure of a cow-headed goddesses from a domestic assemblage at Kerma. Nevertheless, it has been suggested that this unique and unusual object may be explained by the presence of an Egyptian resident at Kerma or of a Kerma expatriate who has returned from Egypt.¹³⁵ Regarding the rest of the motifs, the fact that the representations of composite animals seem to be restricted to the main ceremonial and political centre of the Kingdom of Kush, i.e., Kerma, and the fact that most of the objects we have been discussing here were collected from royal or elite monuments or tombs confirms a direct link between these composite figures and the aristocrats ruling the kingdom and especially the royal court.

As far as the general dynamics favouring the elaboration, adoption, and adaptation of imaginary creatures at Kerma/Kush, in his 2014 seminal contribution, *The Origins of Monsters*, David Wengrow suggested that the introduction of composite mythical creatures into the early Bronze Age art of the ancient Near East (including Egypt) was associated with «the onset of urban life

¹³¹ Wengrow 2014, 81.

¹³² Quirke 2016, 6, 214-215, 228, 306.

¹³³ Minor 2018, 259-260.

¹³⁴ D'Itria forthcoming.

¹³⁵ Török 2008, 26-27.

and state formation» and resulted «from complex conjunctures of social, technological, and moral processes», and that the occurrence of the same or related composite creatures in several contexts was due to the emergence of long distance exchange networks characterizing those phases.¹³⁶ Referring to the glazed quartz statues of the KII-KIII funerary complex, Charles Bonnet stressed that these bestiary images, only emerged in the late phase of the history of Kerma/Kush.¹³⁷ However, this remark can be extended to all the animal representations at Kerma, also including the composite creatures we have discussed here. We can, therefore, wonder whether similar dynamics to those outlined by Wengrow may also have taken place in Upper Nubia in the first half of the 2nd millennium BC, in Classic Kerma times, which appears to have been a very dynamic period, both in artistic and ideological terms. Indeed, at that time the kingdom of Kush was emerging as a crucial player in the Nile valley and through the diplomatic relations with the Hyksos rulers of Lower Egypt it was involved in broad networks of interaction extending to the Near East.¹³⁸ Bonnet pointed out that the emergence of new chapels and shrines in the sacred quarter surrounding temple KI may suggest the enlargement of the pantheon at Kerma in Classic Kerma times.¹³⁹ This may be related to the composite nature of the society of Kush in Classic Kerma times, which was characterized by the presence of different groups at Kerma,¹⁴⁰ in turn reflecting the increasing extension of the sphere of political and economic influence of the kings of Kush. All this is certainly shown by the increasing monumentality of the temples and the tombs of the kings and aristocrats ruling over the fledging power of Kush, but also in the contemporary refined handcrafted creations, such as those decorated by the representations of animals and composite creatures.

The monumental buildings and the elaborate objects associated with them were intended to be used and displayed by the elite, while the exotic traits they sometimes show, as in the case of some of the representations of imaginary creatures, further stress the ability of the elite to engage and encompass with the foreigners. This must have served to affirm its status in a broad

¹³⁶ Wengrow 2014, 2, 16, 92.

¹³⁷ Bonnet 2000, 138.

¹³⁸ Török 2009, 104-108.

¹³⁹ Bonnet 2004, 113; see also Török 2009, 155.

¹⁴⁰ Bonnet 2004, 139, 150; Török 2008, 21, 2009, 149.

network including the Nile Valley and the Eastern Mediterranean.¹⁴¹ The use of specific exotic elements and composite creatures favoured on the one hand the sharing of concepts with the foreigners present in the capital city of Kush -envoys, merchants, etc.- who would have seen these representations, on the other hand favoured the integration of the elite of Kush with the other elites of the time and mutual recognition.¹⁴² However, it is necessary to underline that at that time, Kushite royalty may have adopted an expression of kingship that was concordant with Egyptian norms.¹⁴³ The use of the Egyptian script (see above) and iconography, as in the case of the well-known stela from Buhen possibly representing the king of Kush with the white crown,¹⁴⁴ were designed to express a mutually understood rhetoric of power, in which the rulers of Kerma/Kush could project their own rulership to Egyptian audiences. These dynamics may have been more evident in the Lower Nubian area, where groups who were used to Egyptian expressions of kingship were becoming part of the Kushite state in Classic Kerma times. Otherwise, in the Kerma region royalty continued to be expressed in a more original and local way, of which the case of the distinctive and increasingly complex funerary rituals are exemplary,¹⁴⁵ as is the development of new artistic and architectural solutions, which, nevertheless, had some northern exotic elements embedded in. On the internal side, these exotic elements could have made access to the new iconographic language and related ideological concepts much easier for the various groups entering the sphere of influence of the fledging power of Kush, which also aimed at their incorporation into it. It has already been pointed out that similar dynamics may also be evident in the original and composite architectural monumental style of Classic Kerma times, which integrated local and exogenous elements. In the case of the Classic Kerma monumental religious buildings, for example, the use of some Egyptian elements in combination with others of diverse origins could be linked to the desire to develop new architectural expressions of a power, which was at that time expanding and incorporating the Egyptian communities in Lower Nubia.¹⁴⁶ It cannot be excluded that similar dynamics may have led to the

¹⁴¹ See also Cooper 2018, 150.

¹⁴² *Sensu* Wengrow 2014, 95.

¹⁴³ Cooper 2018, 143.

¹⁴⁴ Kendall 1997, 32-33; Manzo 2016, 21-22.

¹⁴⁵ Cooper 2018, 159.

¹⁴⁶ Manzo 2008, 183-184, 2017, 127-128.

incorporation of exotic elements originating from other African regions that were involved in the expanding networks centred on Kerma/Kush, but this must largely remain hypothetical due to our still scanty knowledge of the archaeology of those inner areas.

The monumental temples and tombs were likely used as the setting for ceremonies aimed at legitimizing the rulers and the elite and therefore at affirming their status. A new ideological system for the new power may have emerged, and the related artistic dynamism is shown by the development of the new iconographic language of which the imaginary creatures were an important part. These ceremonies did not only aim at engaging with foreigners and incorporating these new subjects and allies, but also at legitimizing the elite, stabilizing its power and reproducing social structures through different degrees of access to the ceremonies and to the structures where these were taking place¹⁴⁷ and of course to the decorative programs of the monuments and the mobile objects used in the ceremonies.¹⁴⁸ The animalistic art at Kerma, including the representations of imaginary creatures and the other symbols which were used, such as the winged sun disk, were also part of this ideological narrative.¹⁴⁹

As is also suggested by their standardization and repetitiveness, the imaginary creatures formed a coherent «system of decorum», to adopt an expression of John Baines.¹⁵⁰ The fact that this system was characterized by specific and well-defined rules finds support in some of Reisner's remarks.¹⁵¹ He noted that in the decoration of the funerary beds the rows of anthropomorphic hippopotamuses, when they are present, take their position on the middle row, like the flying vultures or ostriches with outstretched wings, which are found when the anthropomorphic hippopotamuses do not occur, while the lower row always features terrestrial animals or even birds, but these are never depicted as flying. The caps, garments, and the funerary beds, which are often decorated with animalistic decorative programs, were both likely used in ceremonial occasions, certainly during funerals (see above). Therefore, they were most likely displayed to the people attending. Sometimes archaeology provides insights into the way this may have taken place, as it was

¹⁴⁷ Manzo 2008, 178-180, 182.

¹⁴⁸ Baines 1990, 19-20.

¹⁴⁹ See also Manzo 2011, 215-216.

¹⁵⁰ Baines 1990, 20.

¹⁵¹ Reisner 1923b, 266-268.

possible for Bonnet to convincingly suggest on the basis of archaeological evidence that the body of the dead ruler, and perhaps also those of the other members of the elite, may have been displayed on the decorated beds,¹⁵² most likely along with their paraphernalia and insignia. The glazed quartz statue of the ram-headed lion described above was part of a group that also includes the statues of a crocodile and other animals (see above) guarding a processional way between chapel KII and tumulus KIII. They were therefore part of the monumental setting of the royal funerary rituals, which may have included processional ceremonies attended by large groups of people. In this way, the animalistic art of Kerma contributed to the sharing of ideological concepts being developed by the elite with the aim of building group identity based on these concepts along with reproducing social structures.¹⁵³ The use of composite creatures in this animalistic repertoire may have been a deliberate choice. Due to their exceptionality, these creatures were very efficient from a cognitive point of view for the expression and transmission of ideological messages.¹⁵⁴

The fact that the motifs on these decorative elements were not only a matter of personal taste but were used to express ideas and concepts the elite considered important is clearly emerging from the selectivity seen in the adoption of specific foreign motifs that were then adapted and incorporated into local designs. As Cooper has already observed,¹⁵⁵ the artistic motifs of Egyptian origin were not incorporated into the Kerma repertoire without thought, but were deliberately chosen to suit local conditions, ideological messages, and the specific aspirations of the elite. This is clearly evident in the case of the repertoire of the Egyptian birth tusks, on which Taweret or the hippopotamus-lion is often represented. This type may have been adopted and adapted to that of the anthropomorphic hippopotamus in the context of Kerma. In contrast, other creatures usually represented along with Taweret and often “travelling” with her, like Aha, the winged griffins and sphinxes,¹⁵⁶ were not adopted in Kerma. Indeed, as Quirke has rightly observed,¹⁵⁷ absences of motifs should also be considered when defining the principles and intentions

¹⁵² Bonnet 2000, 59-60, 65, 107, 111.

¹⁵³ Manzo 2017, 127-128.

¹⁵⁴ Wengrow 2014, 23-24.

¹⁵⁵ Cooper 2018, 150.

¹⁵⁶ Wengrow 2014, 64.

¹⁵⁷ Quirke 2016, 407.

underlying a corpus. A similar selectivity is perhaps also evident in the decorative choices of the royal funerary chapels, which, although certainly related to some Egyptian traits, may reflect the specific will and choices of the ruler of Kerma/Kush and his court.¹⁵⁸ In the meantime, other local composite creatures, such as the winged giraffe and the ram-headed lion, were perhaps developed because they were considered more appropriate for expressing ideological concepts that were relevant to the rulers of Kush, maybe due to the locally rooted ideological relevance of the giraffe and of the ram. From this perspective, the specific will to develop an iconographic (and ideological) identity which was not only inclusive, but also perceived as clearly distinct from the others, especially the Egyptian identity, should be also taken into consideration. When considering the symbolic and perhaps even identitarian values of the weapons in the context of Kerma, a similar attempt at forging a distinctive identity may have emerged in Classic Kerma times when a new type of sword emerged, one that was clearly distinct from the Egyptian type that had been adopted earlier.¹⁵⁹

All this seems to suggest that in Classic Kerma times, a period when Kerma achieved an unprecedented level of international status and saw the extension of its political and economic sphere of influence, the elite of Kerma/Kush made an effort to develop new iconographic (and monumental) expressions of its sovereignty and its ideological cornerstones, which also functioned as tools to affirm and strengthen its rule. It should be noted that these material expressions only occur at Kerma, and that the complex and articulated underlying ideological processes remained exclusively bound to the capital city of Kush, perhaps due to the specific nature of the organization of the Kerma/Kush state and the function religion had within it. The distinctiveness of the capital city is also made evident by the fact that in Classic Kerma times its assemblage of amulets is clearly distinct, richer and more varied than that of the other Kerma centres.¹⁶⁰ In contrast, the attempt at approximating Egyptian norms as far as the relations between ruler and deities like Horus and Ra are concerned (see above) seems to specifically characterize Lower Nubia. It has also been suggested that the Lower Nubian experiments may have been «a semi-autonomous venture of the Kerma-affiliated Egyptian elite at Buhen

¹⁵⁸ Bonnet 2000, 100.

¹⁵⁹ Manzo 2016, 15-16, 23.

¹⁶⁰ D'Itria forthcoming.

to project the hegemony of their Kushite patron».¹⁶¹ This can certainly be true, and of course there is no evidence at Kerma, the capital city of Kush, for an attempt at a complete emulation of the Egyptian ideological and religious models. Noteworthy also are the results from a study by D'Itria, who, after despite what is an admittedly preliminary survey, has argued that the amulets from Lower Nubia may be more related to the Egyptian horizon than to its equivalent at Kerma.¹⁶² Indeed, when considering the lack of similar material traces in Lower Nubia to those that are likely related to the religious beliefs known in Kerma, Török stated that Kerma/Kush religion «was a religiosity of many regions, inclusive and without a professional priestly class in regions far away from the capital city».¹⁶³

Therefore, with the presence of commonalities in the ideology of political authority and the way the rulers legitimized their rule or exercised kingship still being debated,¹⁶⁴ we can wonder whether religion ultimately played a marginal role in the state of Kerma/Kush, which is apparently in contrast with what has been suggested above, with regards to the importance of ceremonies, monuments, and objects related to religion for identity building, legitimizing authority and social reproduction. A different explanation can thus be envisaged, and one that may be related to the specific features of the state of Kush, the investigation of which is, nevertheless, still in progress. Indeed, it is very likely that the state of Kush was different to the other Middle Bronze age states, and was possibly characterized by its own specific features, possibly also related to a pastoral economic base and the diversity in its regions.¹⁶⁵ Indeed, this general setting may have allowed the presence of distinct ideological solutions and models to emerge in the different regions under the control of Kush. Of course, some kind of unifying events may have taken place in Kerma, the main ceremonial centre of the kingdom of Kush, where perhaps the different regional traditions were somehow incorporated into a more unitarian system. Such a possibility may explain both the variety of the sacred religious buildings characterizing Kerma as well as the variety of the animalistic art and the imaginary creatures themselves (see above). It is feasible that the people from different regions were attending and/or participating in the

¹⁶¹ Cooper 2018, 157, see also 159.

¹⁶² D'Itria forthcoming.

¹⁶³ Török 2008, 27.

¹⁶⁴ Emberling 2014, 149.

¹⁶⁵ Emberling 2014, 147-150.

ceremonies expressing this narrative. It is highly likely that mainly the regional elites were involved in these ceremonies, although of course this remains hypothetical. Nevertheless, it is tempting to relate the presence of delegations from different regions in the capital of Kush to the representations of boats with apparently ethnically variegated crews in chapel KXI.¹⁶⁶ Furthermore, the stela of the official Ka, who was consecrated at Buhen, includes an obscure reference to an act taking place far away from Buhen which required the official to “[wash his] (two) feet in the water of Kush following the ruler *ndh*”.¹⁶⁷ This reference may be interpreted as the participation of a member of the Lower Nubian elite in a royal ritual ceremony perhaps taking place in Kerma.

Of course, due to the lack of written texts, several questions remain unanswered. It is nevertheless hoped that in the future new data from sites in the diverse areas which entered the sphere of influence of the kingdom Kush will provide new insights into its religion, the specific features of its state, and its development. The publication of the materials from the Kerma sites investigated in the Dongola reach, in the Fourth Cataract area and beyond may certainly contribute towards the balancing a perspective biased by the preponderant amount of information relating to Lower Nubia. The re-assessment of the Lower Nubian collections from a comparative perspective with the capital city could also prove useful. Returning to the materials from Kerma itself, after discussing the meaning of the single components of the narrative, the challenge may be to try to gain some insights into the syntax of the compositions, in which the different elements were combined, and its meaning. In the case of the chapel KXI, this perspective was already taken by Charles Bonnet, who emphasized the need to understand the syntax of the entire decorative program, not merely the meaning of each single element within it.¹⁶⁸ Similar attempts have recently been made in the case of the Egyptian birth tusks, a class of materials with representations reminding for complexity the ones of the Kerma funerary beds and caps.¹⁶⁹ In the case of the ivory incrustations of the funerary beds at Kerma, after Reisner’s observations (see above) a lot remains to be done to try to identify and interpret recurrent associations of single elements. This may be a further challenge for the future, also when considering

¹⁶⁶ Bonnet 2000, 89-91, 96.

¹⁶⁷ Säve-Söderbergh 1976, 53.

¹⁶⁸ Bonnet 2000, 100.

¹⁶⁹ Quirke 2016, 407-409.

the potential of the contextual analysis, hitherto only practiced to a limited extent,¹⁷⁰ which may provide new stimulating interpretative insights for the identified patterns. Indeed, this may represent the next step for developing an iconological approach to the investigation of the Kerma/Kush ideology and religion.

Bibliography

- M. V. Almansa-Villatoro, 2018. Reconstructing the Pre-Meroitic Indigenous Pantheon of Kush, *Journal of Ancient Near Eastern Religions* 18, 167-189.
- J. Baines, 1990. Restricted Knowledge, Hierarchy, and Decorum: Modern Perceptions and Ancient Institutions, *Journal of the American Research Center in Egypt* 27, 1- 23.
- R. D. Barnett, 1956. Fine Ivory Carving, in C. Singer, E. J. Holmyard, A. R. Hall (eds.), *A History of technology 1. From Early Times to Fall of ancient Empires*, 663-683. Oxford-London.
- J. Berlandini, 1983. La déesse bucéphale: une iconographie particulière de l'Hator memphite, *Bulletin de l'Institut Français d'Archéologie Orientale* 83, 33-50.
- A. M. Bisi, 1965. *Il grifone. Storia di un motivo iconografico nell'antico oriente mediterraneo*. Roma.
- C. Bonnet, 1993. Les fouilles archéologiques de Kerma (Soudan). Rapport préliminaire des campagnes 1991-1992 et 1993-1993, *Genava* n.s. 41, 1-18.
- C. Bonnet, 2000. *Édifices et rites funéraires à Kerma*. Paris.
- C. Bonnet, 2004. *Le temple principal de la ville de Kerma et son quartier religieux*. Paris.
- C. Bonnet, D. Valbelle, S. Marchi, 2021. *Le Jujubier. Ville sacrée des pharaons noirs*. Paris.
- C. Bonnet (ed.), 1990. *Kerma royaume de Nubie*. Genève.
- L. Chaix, 2000. La faune des peintures murales du temple KXI, in C. Bonnet (ed.), *Édifices et rites funéraires à Kerma*, 163-174. Paris.

¹⁷⁰ See e.g., Minor 2018, 254-255, 256-260.

- D. Collon, 2001. The Green Jasper Seal Workshop Revisited, *Archaeology & History in Lebanon* 13, 16-24.
- J. Cooper, 2018. Kushites Expressing 'Egyptian' Kingship, *Ägypten und Levante* 28, 143-168.
- B. Curran, 1990. Les incrustations en ivoire, in C. Bonnet (ed.), *Kerma, royaume de Nubie, l'antiquité africaine au temps des pharaons. Catalogue de l'exposition. Musée d'Art et d'Histoire, juine-novembre 1990*, 143. Geneva.
- V. W. Davies, 2014. Recording Egyptian Inscriptions in the Desert and Elsewhere, *Sudan & Nubia* 18, 30-44.
- A. Dessenne, 1957. *Le Sphinx. Étude iconographique I. Des origines à la fin du second millénaire*. Paris.
- E. D'Itria, forthcoming. Kerma amulets: iconography and manufacture techniques, *Kush* 20..
- G. Emberling, 2014. Pastoral States: Towards a Comparative Archaeology of Early Kush, *Origini. Preistoria e protostoria delle civiltà antiche* 36, 125-156.
- K. Howley, 2017. II Egypt and Nubia, in P. P. Creasman, R.H. Wilkinosn (eds.), *Pharaoh's Land and Beyond. Ancient Egypt and Its Neighbors*, 219-227. Oxford.
- D. Huyge, 2002. Cosmology, Ideology and Personal Religious Practice in Ancient Egyptian Rock Art, in R. Friedman (ed.), *Egypt and Nubia. Gifts of the Desert*, 192-206. London.
- T. Kendall, 1997. *Kerma and the Kingdom of Kush 2500-1500 BC. The Archaeological Discovery of an Ancient Nubian Empire*. Washington.
- K. Kopetzky, M. Bietak, 2016. A Seal Impression of the Green Jasper Workshop from Tell el-Dab'a, *Ägypten und Levante* 26, 357-375.
- J. Kuckertz, A. Lohwasser, 2016. *Einführung in die Religion von Kusch*. Dettelbach.
- A. F. Kzzo, 2014-2015. Cylinder seals from middle bronze age in Ebla. main classes of styles, *Les Annales Archéologiques Arabes Syriennes* 57-58, 225-234.
- S. McIntosh, 1999. *Beyond Chiefdoms: Pathways to complexity in Africa*. Cambridge.

- A. Manzo, 2008. Tempio e società a Kerma, Alta Nubia (2400-1400 a.C.), in S. Pernigotti, M. Zecchi (eds.), *Sacerdozio e società civile nell'antico Egitto. Atti del terzo colloquio, Bologna 30/31 maggio 2007*, 167-186. Imola.
- A. Manzo, 2011. Iconografia, religione e ideologia a Kerma, Alta Nubia, 2000-1400 a.C., in P. Buzi, D. Picchi, M. Zecchi (eds.), *Ægyptiaca et Coptica. Studi in onore di Sergio Pernigotti*, 209-224. Oxford.
- A. Manzo, 2016. Weapons, Ideology and Identity at Kerma (Upper Nubia, 2500–1500 BC), *Annali, Sezione orientale* 76, 3-29.
- A. Manzo, 2017. Architecture, Power, and Communication: Case Studies from Ancient Nubia, *African Archaeological Review* 34, 121-143.
- E. Minor, 2014. The Use of Egyptian and Egyptianizing Material Culture in Classic Kerma Burials: Winged Sun Discs, in M. Casanova, M. Feldman (eds.), *Les produits de luxe au Proche-Orient ancien, aux âges du Bronze et du Fer*, 225-234. Nanterre.
- E. J. Minor, 2018. Decolonizing Reisner: a case study of a Classic Kerma female burial for reinterpreting early Nubian archaeological collections through digital archival resources, in M. Honegger (ed.), *Nubian Archaeology in the XXIst Century. Proceedings of the Thirteenth International Conference for Nubian Studies, Neuchâtel, 1st-6th September 2014*, 251-262. Leuven-Paris-Bristol.
- A. Muzzolini, 1994. Les béliers sacrés dans l'art rupestre saharien, in C. Berger, G. Clerc, N. Grimal (eds.), *Hommages à Jean Leclant. Vol. 4. Varia*, 247-271. Le Caire.
- F. Pinnock, 1992. Una riconsiderazione della stele di Hama 6B599, *Contributi e Materiali di Archeologia Orientale* 4, 101-121.
- S. Quirke, 2016. *Birth Tusks: the Armoury of Health in Context - Egypt 1800 BC*. London.
- G. A. Reisner, 1923a. *Excavations at Kerma, Parts I-III*, Harvard African Studies 5. Cambridge, Massachusetts.
- G. A. Reisner, 1923b. *Excavations at Kerma, Parts IV-V*, Harvard African Studies 6. Cambridge, Massachusetts.
- T. Säve-Söderbergh, 1976. A Buhen Stela from the Second Intermediate Period (Khartoum no. 18), *Journal of Egyptian Archaeology* 35, 50-58.

- B. Teissier, 1996. *Egyptian Iconography on Syro-Palestinian Cylinder Seals of the Middle Bronze Age*. Fribourg-Göttingen.
- L. Török, 2008. The Depiction of the World in a Classic Kerma Mortuary Chapel", in Á. Sazabó, P. Vargyas, *Cultus Deorum: Studia Religionum Ad Historiam. De Oriente Antiquo et Religione Danuvii Praehistorica. In Memoriam István Tóth*, 13-27. Pécs.
- L. Török, 2009. *Between Two Worlds. The Frontier Region Between Ancient Nubia and Egypt 3700 BC-500 AD*. Leiden-Boston.
- D. A. Welsby, J. R. Anderson (eds.), 2004. *Sudan Ancient Treasures*. London.
- D. Wengrow, 2014. *The Origins of Monsters. Image and Cognition in the First Age of Mechanical Reproduction*. Princeton-Oxford.
- S. Wenig, 1978. *Africa in Antiquity II. The Arts of Ancient Nubia and the Sudan*. New York.
- D. Wildung (ed.), 1997. *Sudan. Ancient Kingdoms of the Nile*. Paris-New York.

Appendix

Programme of the 3rd International Symposium on Animals in Ancient Egypt, the Middle Nile and their Hinterlands

Keynote lectures



- Wrapping it Up: Ancient Egyptian Animal Mummy Studies in 2022. Salima Ikram.
- Mythical Animals in Kush. Remarks on the Composite Creatures in Kerma Art. Andrea Manzo.
- “When everything is human, the human is an entirely different thing...” Animal Powers in the Ancient Egyptian Demonic Imagery. Rita Lucarelli.
- Sacred Animals in Domitian’s Iseum in Benevento. Rosanna Pirelli.

Session Museology/scientific analysis and archaeozoology (Chairmen: Salima Ikram, Maria Diletta Pubblico)

- Palaeopathology of Captive Baboons from Wadi Gabbanat el-Qurud, Upper Egypt. Stéphanie Porcier, Wim Van Neer, Stéphane Pasquali.
- Animal Mummies. First Insights into the British Museum’s Collection. Marie Vandenberg, Daniel Antoine, Salima Ikram.
- Animal Remains from the Egyptian Collection of the Civic Archaeological Museum of Milan. Sabrina Ceruti, Cinzia Oliva.
- Preliminary Investigations of Crocodile Mummy from the National Preserve “Kyiv-Pechersk Lavra” (Ukraine). Yevheniia Yanish, Dario Piombino-Mascali, Wilfried Rosendahl, Mykola Tarasenko.
- The Crocodile of “Castel Nuovo” in Naples (Italy): Religion, Taxidermy and Conservation. Emanuele Casafredda.
- Dressing animal mummies: the collection of Museo Egizio, Turin. Cinzia Oliva, Matilde Borla, Sara Aicardi.
- An Innovative Approach to Study Votive Animal Mummies. The SEAMS - a Study of Egyptian Animal Mummy Styles - Project. Maria Diletta Pubblico.
- Ceramic, Wood, Stone and Bronze: Animal mummy Containers in the Museo Egizio, Turin. Johannes Auenmüller, Federica Facchetti.
- Exploring the Morphological Diversity of Mummified Canids in Ancient Egypt Through 3D Modelling of Skulls. Colline Brassard, Stéphanie Porcier, Hassen Jerbi.

- Potted Dog: a Special Burial from Gebelein. Salima Ikram, Sara Aicardi, Matilde Borla, Federica Facchetti.

Session Animals in art, craft and texts (Chairmen: Cinzia Oliva, Maria Diletta Pubblico)

- The Valuable Role of Animals in Kerma Culture. Elena D'Itria.
- In the Presence of Giants: Giraffe-pots in Meroitic Sudan. Loretta Kilroe.
- Zooarchaeology in Old Kingdom Egypt: a Comparison between Animal Iconography and Faunal Remains. Ramona D'Alfonso.
- "I caused to live the hill of the *nega*-bulls". Ancient Egyptian Zootponymy During the 3rd Millennium BC. Andrés Diego Espinel.
- Wandering Falcons: on the Referent and Meanings of Nemty's Hieroglyphs (/ , G7A/G7B). Francisco L. Borrego Gallardo.
- How Now Modified Cow? Horn Deformation in the New Kingdom. Laura Harris.
- A Re-discovery of the Monkey-like Figurines of Deir el-Medina. Audrey Crabbé.
- Shabtis for the Apis-bull. Federico Poole.
- Animals of Ancient Kheny: the Rupestrian Collection. Maria Nilsson, John Ward and John Wyatt.
- Cartonage from the Dakhleh Oasis Featuring the 'Jackal Motif': Aspects of Regionalism and Craftsmanship in Egypt's Western Desert. Carlo Rindi Nuzzolo.

Session Animal impact on human society and economy (Chairman: Ilaria Incordino)

- Food for Thought? Considering the Presence of Zoomorphic Figurines in Predynastic Egyptian Burials. Elizabeth Brice.
- Animals in the Diet During Late Period: the Example of Plinthine (Lower Egypt). Nicolas Morand, Martine Leguilloux, Mennat Allah El Dorry, Charlène Bouchaud, Mikaël Pesenti, Séverine Marchi, Rim Saleh.
- Fishy Business: Fishing and Government Control in Ptolemaic Egypt. Lisa Vanoppré.
- Butchers and Bureaucrats: The Role of Meat in the Economy and the Fiscal System of Graeco-Roman Egypt. Nico Dogaer.

- The Identities of the Ancient Berenike Society Through the Relations to Animals. Marta Osypińska, Piotr Osypiński.
- Marine Resources Exploitation in Hellenistic Berenike (Red Sea, Egypt). Alfredo Carannante, Marek Adam Woźniak, Iwona Zych.

Session Archaeology and current fieldwork (Chairman: Elena D'Itria)

- The Animal Necropolis of Syene/ "Old Aswan" and the Material Culture. Wolfgang Müller, Mariola Hepa.
- Animal Cult in Ancient Asyut. Jochem Kahl, Chiori Kitagawa.
- The Dogs of Anubis - the Good, the Bad and the Ugly? - Zooarchaeology at el-Sheikh Fadl (Middle Egypt). Herbert Böhm.
- Collars on Cats and Dogs in Life and in the Afterlife: Fashion and Function in Early Roman Egypt. Iwona Zych, Marina Maria Serena Nuovo.
- Animals in the Decorative Repertoire of Byzantine Pottery from the Monastery of Manqabad (Asyut, Egypt). Ilaria Incordino.



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