

1

2023

CHRONOLOG

ARCHAEOLOGY, ASSYRIOLOGY, & EGYPTOLOGY



Chronolog Journal

Chronolog is hosted at the University of Copenhagen, Department of Cross-Cultural and Regional Studies (Near Eastern Archaeology, Egyptology and Assyriology) with the aim of providing students and recent graduates from the institute with possibilities of publishing their first article(s).

Editor-in-chief

Ingolf Thuesen, Assoc. Prof., UCPH

Editors

Anna Poulsen, MA in Near Eastern Archaeology

Anne Drewsen, MA in Near Eastern Archaeology

Maria Diget Sletterød, BA, Near Eastern Archaeology

Mathilde Sehested Thormann, MA-student, Near Eastern Archaeology

Student Advisory Board

Maria Mayland Nielsen

Nicoline Søndergaard Andersen

Sofie Vingborg Andersen

Senior Advisory Board

Susanne Kerner

Nicole Brisch

Lisa Yeomans

Translation of the abstracts provided by:

Samira Ebadi Tabrizi, MA student, University of Copenhagen

Mahmoud Alsayed Ahmed, MA-student, University of Copenhagen

Rasmus Mortensen, MA-student, University of Copenhagen

Our activities are kindly supported by:

The Danish Institute in Damascus

ToRS Trivselspakke

HUMraadet

CCRS Institute, UCPH

Chronolog Journal, Issue 1, 2023

Chronolog is published Open Source via tidsskrift.dk, a service provided by the Royal Library of Denmark.

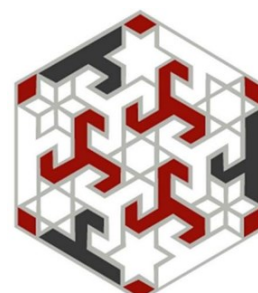
Cover: Photo by Kristian Larsen, used with kind permission. Design by Anna S. Poulsen

Typesetting:

Cover: Bodoni & Bodoni 72smallcap

Journal: Calibri, 11

Layout by Anna S. Poulsen and Anne Drewsen



المعهد الدنماركي بدمشق
DET DANSKE INSTITUT I DAMASKUS

Contents

Letter from the editor-in-chief	4
Letter from the Editorial Board.....	5
A Figurine in the Hand is Worth Two behind Glass	6
<i>Kristian Alex Larsen</i>	
Understanding the Conduct During Festivals of Drunkenness.....	22
<i>Maria Mayland Nielsen</i>	
Utility of the Sex Assessment Method, DSP, on a Nubian Skeletal Sample.....	38
<i>Mathilde Sehested Thormann</i>	
Book Review: Inside an Ancient Assyrian Palace: Looking at Austen Henry Layard's Reconstruction.....	50
<i>Anna Silberg Poulsen</i>	
Writing a PhD in Germany.....	52
<i>Mette Bangsborg Thuesen</i>	
Spotlights.....	55
Newly graduated.....	56
Funding possibilities.....	59
Conferences.....	60
Pottery Network.....	61
General Information.....	62
Until next time.....	63
Call for papers for Issue 2, 2024	



Letter from the editor-in-chief

A university is a huge factory for producing knowledge that can improve life conditions for future generations. Knowledge is produced from learning, experience, research and accidental discoveries. However, first when newly obtained results and understanding are shared with contemporary society knowledge gets substance and makes a difference. Without sharing knowledge we may argue that it is not knowledge but only personal or individual experience.

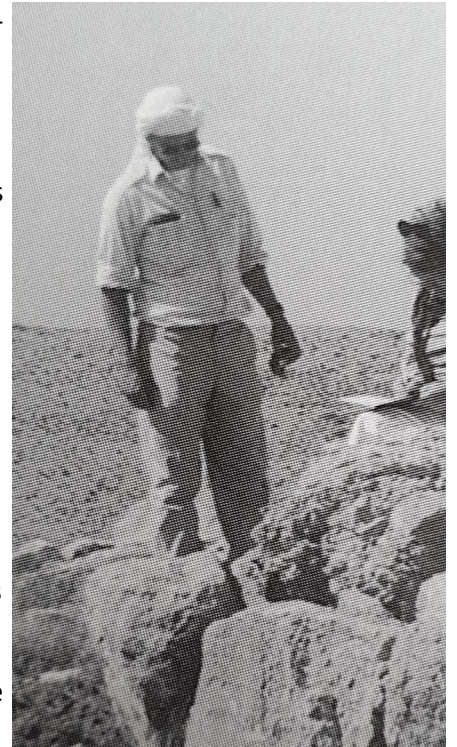
One of the major task for a university is to educate future scholars. We teach students to do research, to ask questions, to become curious. But do we teach our students to share? When I was a student of archaeology, our professors were strong individuals often resulting in meaningless and ridiculous academic and personal fights harming the advances in gaining new knowledge more than facilitating it. Today we are more aware of research being an activity within a social context and even more, gaining from its awareness of being an important contribution to contemporary society. Being part of contemporary society as a scholar is to share our thinking and results.

Chronolog is about training and sharing. It is intended to close the gap between the student's learning and their following career in academia or in society. *Chronolog* is a facility for the students that may smoothen their career path removing or reducing the obstacle between learning and producing and disseminating knowledge.

The idea of *Chronolog* has been conceived by students without borders. It is based on visions generated by this group of students and they succeeded in obtaining support from the university for which we are the university very grateful. *Chronolog* is a new platform for students of Ancient Near Eastern Studies that builds a new generations of scholars who understands the importance of sharing within academia and within society.

Damascus March 12, 2023

Ingolf Thuesen



Ingolf Thuesen

Associate Professor, CCRS,
University of Copenhagen
Chairman, the Danish Institute
in Damascus

From the editors

Welcome to a very new and exciting adventure!

Dear reader,

We are proud to present the first issue of Chronolog Journal!

Chronolog Journal was founded by two students from the University of Copenhagen enrolled in the Ancient Near East studies, which covers the culture and archaeology of Southwest Asia and Northeast Africa, at the Department of Cross-Cultural and Regional Studies (CCRS). The two students believed that the students at the institute should have the possibility to publish their first scientific article in a journal which was geared towards students. The founders decided that all articles needed to be peer-reviewed to support the students in writing academic articles, while also introducing them to the publication process. It was equally important that the articles would be accessible to a broad audience through Open-Access, so the articles produced by the students can reach as widely as possible, including potential collaboration partners. The group quickly grew to form the editorial board of four students, two of which are still on the board.

From the beginning, the journal focused on students from CCRS, but since we also wanted an international approach, we have broadened the focus to also include recent graduates and students who have a close working relationship with UCPH, such as exchange students, students participating in the Berlin-Copenhagen Seminar, or presenting at the Egyptological-Assyriological Conference in Copenhagen (EACC, formerly EEC). Although Chronolog will normally be published on an annual basis, we will in special cases publish issues in relation to larger conferences or centred around specific themes.

This issue of Chronolog Journal is created by the current team of editors, all graduates from CCRS, supported by our Editor-in-Chief, our Senior Advisory board, but most importantly our Student Advisory board, who ensure that the journal meets the needs of the students. The connection to the students is the most important relation we have, and therefore, the editor team will change on a running basis to allow students to take their place in the team.

In 2021 and 2022, despite lockdowns due to Covid, Chronolog held 5 workshops to support the students in the endeavour to write their articles. These workshops included the nitty-gritty of writing an article, how to deal with the copy-right issues for illustrations, and how to make a scientific poster. Our plan is to repeat these regularly and to also add a very important subject: How to apply for funding for research stays abroad. Together the workshops will provide a good introduction to both writing an article for Chronolog Journal as well as life as a scientific researcher.

We hope you will enjoy reading it, and if you have suggestions or ideas, please do not hesitate to contact us.

The editors of Chronolog

Anna Poulsen, Maria Diget Sletterød, Anne Drewsen, and Mathilde Sehested Thormann



The editors

From left:

Maria Diget Sletterød,
Anna S. Poulsen,
Anne Drewsen, and Mathilde
Sehested Thormann

Photo © Anna S. Poulsen

A Figurine in the Hand is Worth Two behind Glass

Thinking through the materiality of Luristani imagery

Kristian Alex Larsen

Abstract

Four brown-black hand-sized clay figurines from Kazabad, Iran call for attention because of their imagery, colour and surface and because they do not seem to have any close morphological parallels. As they were obtained from locals during an archaeological expedition in 1963-64, they are not associated with a stratigraphic context. However, by using the “New Materialist” approach “agential realism” of Karen Barad, alternative opportunities of interpretation come out. By following small details using all relevant senses, significant similarities and differences are revealed. Instead of letting a basic theory direct the analysis, Karen Barad advises to think through different connections and scales. This leads to narratives and possible relations, which can be tested as hypotheses. The analyses suggest that the design and handling of the figurines followed certain practices, and that they may connect to a Mesopotamian as well as an Indo-Iranian past. Agential realism gives justice to concrete findings rather than subsuming them under categories, and it allows the marvel of engaging with the past through tangible things.

چکیده

چهار تندیس سفالی قهوه‌ای-سیاه از کزآباد ایران، که به اندازه‌ی یک دست هستند، به دلیل ظاهر، رنگ و نمایشان و هم‌چنین به این علت که به نظر می‌رسد هم‌ترازهای ریخت‌شناسانه^۱ی نزدیکی ندارند، باعث جلب توجه می‌شوند. از آنجایی که آن‌ها توسط مردم محلی طی یک کاوش باستان‌شناسی در سال‌های ۱۹۶۳-۶۴ به دست آورده شده بودند، ارتباطی به زمینه‌ی چین‌شناسی^۲ ندارند. اما با استفاده از رویکرد «نو ماتریالیسم»^۳ مربوط به «واقع‌گرایی عاملی»^۳ کارن باراد، فرصت‌های جایگزین تفسیر پدیدار می‌شوند. با دنبال کردن جزئیات کوچک به وسیله‌ی به کار بردن همه‌ی مفاهیم مرتبط، شباهت‌ها و تفاوت‌های چشمگیری نمایان می‌شوند. کارن باراد به ما توصیه می‌کند به جای این‌که اجازه دهیم نظریه‌ای بنیادی تحلیل را سوق دهد، از طریق پیوندها و معیارهای مختلف بیاندیشیم. این امر به روایات و روابط احتمالی منجر می‌شود که می‌توان آن‌ها را به عنوان فرضیه محک زد. این تحلیل‌ها نشان می‌دهند که طراحی و نگهداری این تندیس‌ها از شیوه‌های خاصی پیروی می‌کردند و امکان ارتباط داشتن آن‌ها با گذشته‌ای بین‌النهرینی و هند و ایرانی وجود دارد. واقع‌گرایی عاملی در عوض زیرمجموعه قرار دادن یافته‌های عینی، با آن‌ها منصفانه برخورد می‌کند و از طریق اجسام ملموس، امکان درگیر شدن با شگفتی گذشته را فراهم می‌کند.

Kristian Alex Larsen

MA in Near Eastern
Archaeology, UCPH and MA
in Political Science, Aarhus
University.

Contact: kristian@5marts.dk

Research interests: Bronze
and Iron Age cultures in the
Taurus and Zagros moun-
tains, New-materialism

Abstract translated by
Samira Ebadi Tabrizi, MA-
student, University of Co-
penhagen

^۱ Morphological
^۲ چین‌شناسی شاخه‌ای از دانش زمین‌شناسی است که چگونگی پیدایش، ترتیب توالی، ساختمان، سنگواره‌ها و سنگ‌شناسی، قدمت سنگ‌ها و
چینه‌های پوسته‌ی زمین را بررسی می‌کند. (م)
^۳ Agential Realism

Introduction

An archaeological expedition by the Danish National Museum to the Huleilan and Tar-khan regions of Luristan, Iran in 1963-64 produced new insights about the prehistory of Luristan, and brought back a sizeable number of broken ceramics and small findings of clay, stone and metal fig 1. Many of the artefacts including the figurines, all stored at the National Museum of Denmark (Larsen 2022). A number of shorter reports and summarising articles (e.g. Thrane 1964, 1999, 2015) about the excavation have been published, while two larger publications document the excavations at the site of Tepe Guran (Mortensen 2014; Thrane 2001).



Figure 1: The location of Kazabad in the Zagros Mountains, map made with data from OpenStreetMap.

In this article, I focus on a sub-assemblage of four clay figurines of comparable length (73-123 mm) which distinguish themselves by their figurations and their dark/black patina, Fig 2. Even though, they have not been found in a stratigraphic context and do not have close parallels elsewhere, my contention is that it is possible to arrive at meaningful understandings of them, by being attentive to their small details. In the archaeological literature, figurines and imagery are typically understood in terms of what they are "standing for", which may have two meanings – either 'what they imitate' - or 'what they mediate' (Meskell 2017, 17-20) emphasising typologies and context. The first ques-



Figure 2: The four figurines, not to scale a. Figure 1 with folded hands (ID 46981), b. Figure 2 with a face in the stomach (ID 46983), c. Figurine 3, dog (ID 46978). d. figurine 4, seal (ID 46979). Photo © Kristian Alex Larsen

tion may be logical and necessary, as the mind almost automatically wants to recognise patterns and because images usually are intended to look like something for a reason, whereas the second meaning is about symbolic qualities. Both questions presume a Cartesian subject/object dualism in the sense that the image is interpreted by matching it with preconceived ideas about classes of objects and symbols. By putting the image into a theoretical box, valuable information is lost because an image is always concretely situated (Langin-Hooper 2014, vii). Moreover, understanding may become biased when selected elements are posited as most important. Therefore, instead of a perception of images as representatives of something, I suggest adopting a "standing *in*" perspective, which opens for interpretations in which images are considered entities in their own right, that make a difference in their complex interrelationships with humans and non-humans.

Looking for differences and similarities through the multiple scaled connections of the figurines

Agential realism is a "New Materialist" approach which advocates that things are doing an active difference to the humans, animals and other things with which they are connected (Barad 2007, 176-178). They are not considered independent but "intra-acting" phenomena (Barad 2007, 139) as they are constituted in their relations. When focusing on a certain phenomenon, the researcher together with the methods and instruments employed also becomes intra-connected with the phenomenon. This means that the results of research are inevitably influenced by the research intervention itself. In terms of agential realism, any research intervention thus forms an "agential cut" (Juelskjaer 2012, 20), which co-creates the research topic by including some elements and leaving others out. This action does not only have an epistemological and ontological character

but is also an ethical act, because this cut may exploit the phenomenon in order to support some kind of interest, or it may intend to do justice to the phenomenon and the connections it forms part of (Barad 2007, 154-155). Therefore, agential realism asks for a high level of attention to as many details as possible and at the same time acknowledges the unavoidable influence of the researcher (Barad 2007, 135). Understandings are suggested by identifying differences and similarities through the multiple scaled connections of the phenomenon. Barad calls this approach “diffractive” and contrasts it with a more conventional “reflective” approach in which phenomena are understood in the reflective mirror of a theory. Her critique of “reflection” is that it tends to reproduce what is assumed, whereas “diffraction” intends to think through different observations and insights. This approach asks the researcher to engage with things to explore them and constantly question reflective assumptions, very much in line with other phenomenologists like Tilley, Thomas and Ingold (Harris and Cipolla 2017, 87-107).

To conceive how an image is doing an active difference, one can ask what the image “wants” (Mitchell 2005, 49). Sometimes, this may be obvious like idols craving worship (Porada 1995, 74), or more subtle as when imperfect symmetries create a feeling of uneasiness (Mitchell 2005, 11-16). Symmetries and other patterns often indicate an intention of associating an image with conservative order (Alvarez-Mon 2010, 97). An image of a person can be understood as a symmetrical double, and in Mesopotamia statues of kings were treated as living doubles. Sustaining the image with food, clothes and songs would have direct effect on the king himself as would also destructive acts (Bahrani 2003, 170-172). Anthropologists like Descola point out that the world of many peoples has been alive with beings that combine features of things, animals and humans (Jones and Diaz-Guardamino 2018). To open up the information connected with any kind of engagement, it is necessary to employ all the senses. Vision must take into account the three-dimensional depth of the item, the nature of the surface, features almost erased by time and wear and slight differences in colour (Papadopoulos 2019, 625-626). Touch gives information about the texture and the relative weight and temperature (Jones and Diaz-Guardamino, 2018), as well as how the item may have been held (Bailey 2014, 33-34). Sound may reveal information about the material, its density, if it is hollow etc. (Ingold 2002, 268). Even smell may reveal information (Hamilakis 2017, 177). Combining different senses (Hamilakis 2017, 177-180) may evoke how an artefact, may have been shimmering in the sunlight while dangling and tinkling on a warm trotting horse.

Summarising these considerations, I quote Tim Ingold who advises to “*think from materials not about them*” (Ingold 2012, 437-438). To do this in my research, I operationalised the sensory approach into practical steps, as open questions to be posed to each item. This ensures that the engagement with the items is open and systematic, and that my understandings have a firm standing, as description is in itself a sort of interpretation (Papadopoulos 2019, 627). The aim is not to establish final theories about Luristani figurines but to see how a certain artefact may effect something like for instance emo-

tions and memories.

The figurines

According to a label in the box where the four figurines, were stored, they are associated with the site of Kazabad, figure 2, but there is no mention about provenience in the unpublished excavation reports. The find is attributed to the director of the expedition Jørgen Meldgaard (1927-2007) who chose to put them aside as he considered them “curiosities” and was more focused on bronzes (Henrik Thrane in private communication 14. January 2023). Since the team did not excavate in Kazabad, the figurines must have been obtained from local people. Illicit excavations were extensive at the time because of the “Luristan Bronzes” which were in high demand on the international antiquity markets (e.g. Thrane 1970, 28). The figurines have probably been unearthed during such an illicit excavation. Kazabad is a large site of three mounds in Huleilan, excavated recently by Mazaheri (Mazaheri 2016, 108-123). It was first excavated by Stein in 1936 (Stein 1940, 328) and later surveyed by Mortensen in 1973 (Mortensen, 1975, 43-44). Stein found a tiny human bronze and a broken animal clay figurine (Stein 1940, Plate X) and I have found no other mentioning of figurines from Kazabad.

The four figurines presented in this study are all eye-catching and distinguished by their dark surface and fine details, and so homogeneous that they look like a set. They “want” to be held because they all fit well in a hand and because of their welcoming temperature, rounded surfaces, expressive faces and lacking stands. The richness of detail makes the figurines seem to have an individual identity and indicate that some effort has gone into their manufacture. When compared with another sub-assembly of four light-coloured figurines, figure 3, they stand out as more naturalistic, detailed, and expressive and more marked by human handling. Besides their different figurations, they are differentiated by the violence done to the surface of figurines 1, fig. 4, and 4, fig. 9 I suggest, their dark colour is due to long-term repetitive handling, which deposited sebum from hands on the figurine, affecting the material and giving it a patina that at certain spots has even become glossy (Talma 2018; Manfredda et.al. 2021). The colour can of course be due to intended colouration, but I consider sebum a more likely source because the glossy areas have developed where skin contact would be expected, and especially because of the glossy area on the genitals of figurine 3, where contact must have been intended. Moreover, the dark colour is unevenly distributed revealing lighter brown in depressions. No scientific dating has been applied to the figurines, but based on my analyses of the figurines, I suggest they belong to the Late Bronze Age/Iron Age. The period from 1500–500 BCE in Luristan was characterised by two main dynamics: firstly, the competition between the three empires of Elam, Babylonia and Assyria and their exploitation of the resources in Zagros and beyond via the high-ways through the Zagros mountains, and secondly the influx of Indo-Iranian people from Central Asia into the Iranian plateau and the Zagros mountains eventually becoming dominant in numbers and power. In the following, I describe the figurines, provide possible parallels and suggest understandings by thinking through the imagery,



Figure 3: The sub-assembly of four light-coloured figurines.

Photo @ Kristian Alex Larsen.

material traits and historical context. These understandings are not intended to be final theories about their meaning, but rather hypotheses on how the figurines intra-acted with humans and non-humans.

Figurine 1 (ID 46981)

The figurine, fig. 4 measures 73 mm from top to bottom, 43 mm from shoulder to shoulder, maximum 17 mm in profile and weighs 53 grams. The colour has alternating nuances of light and darker brown and some black glossy areas. The original light colour appears in depressions, whereas the glossy areas are found on some protruding areas which are more exposed to touch. The figurine depicts a human body without legs with many fine details. Hands are folded in front of the chest, and deeply incised vertical lines under the forearms seem to indicate cords or chains hanging over the shoulders continuing below the belt line on the front, as well as on the back where the lines cross and stop at the belt. Many rough parallel scratches suggest textile fabrics. Arm rings are indicated by three shallow grooves and a neck ring is indicated by an incised line. Edges under and especially above where the arms meet the body, appear as lighter in colour and seem to have been rescratched, perhaps in modern times? The sex is probably male because of the broad shoulders, the flat chest, and the bald head. Thin lines may indicate the rim of a beard, but hair straws are not visible. Violence against the figurine is evidenced by the damaged mouth, the marked gouges on the front and back, and the head which has been reattached. The figurine is flattened in profile, leaning slightly backwards and is generally symmetrical.

Comparanda from other expeditions in Luristan do not reveal close parallels. Closest is perhaps an Iron Age bronze clothing-pin finial from *Surkh-Dum* (Schmidt 1989, CS 665) showing a bearded man with folded hands, arm ring and belt. In *Chigha Sabz* an early 2nd Mill. terracotta plaque is showing a woman with folded hands (Schmidt 1989, CS

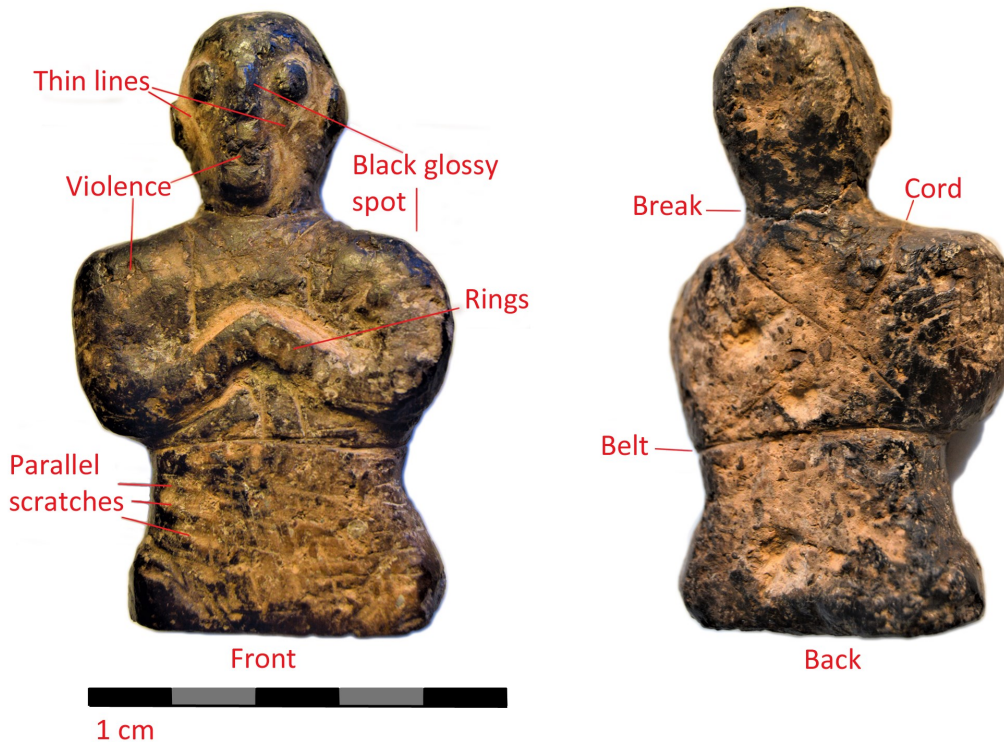


Figure 4: Figurine 1, Human figurine with folded hands, front and back.
Photo © Kristian Alex Larsen

Comparanda from other expeditions in Luristan do not reveal close parallels. Closest is perhaps an Iron Age bronze clothing-pin finial from *Surkh-Dum* (Schmidt 1989, CS 665) showing a bearded man with folded hands, arm ring and belt. In *Chigha Sabz* an early 2nd Mill. terracotta plaque is showing a woman with folded hands (Schmidt 1989, CS 239), and two light-colored clay figurines from Late Iron Age show bearded smiling men with hat, necklace and folded hands (Schmidt et.al 1989, plate 147). In *Nush-i Jan*, a terracotta plaque showing a woman holding breasts is the closest parallel (Curtis 1984, no. 313). In *Sangtarashan* two 3-4 cm metal figurines, which seem to be dark and glossy, from the Late Iron Age reveal many details but with a different design the heads being relatively large, the hands not folded and the trunk cylindrical (Malekzadeh 2018, nos 547, 558). Found outside Luristan, an *Elamite* bronze figurine (8-7th cent.) showing a man and his dog, reveals the same kind of clothing as figurine 1 (Álvarez-Mon 2020, 433-434). A group of large figurines including bearded men with folded hands were found in *Shahdad* in Eastern Iran and dated to the 3rd Millennium (Hakemi 1993). Folded hands are common in Mesopotamia as on the statue of Ishtup-Ilum of *Mari* and the Tell Asmar sculpture hoard both from the 3rd Mill., the latter including one which is clean-shaven, and furthermore a terracotta plaque from *Tello* early 2nd Mill. with Elamite hair-style (Barrelet no 314). In conclusion, figurine 1 reiterates a theme which has been used in Iran and Mesopotamia for a long time.

Conservative order is emphasised by the symmetrical outline and static upright posture. Garb and adornment signalise high status. The head does not lack any natural attributes - except for hair. To be clean-shaven would in Mesopotamia be an indication of an official role like a priest (Emberling, webpage) or age, and folded hands may signify prayer or greeting (Hakemi 1993). The lines over the cheeks could indicate a mouth cover as those Zoroastrian priests wore. While this idea links the figurine to the Indo-Iranian presence in the 1st mill., it also suggests that people may have used the figurine to reenact religious rituals (Bailey 2005, chapter 4). The marked division of the body in three by neck-ring and belt is a feature recurring in other human images of the assemblage: figurine 2, a human image on a mace-head, fig. 5, and a metal sheet figurine, fig.6. I suggest this may have symbolic connotations, in this case head for authority/spirituality, torso/arms for providing, and lower body for more profane matters. Circulative exchanges between the official person and gods and community come in focus by the hands that may give and take – willingly or unwillingly as the hands are locked together. Therefore, the figurine may be asking for respect and deference, and the one who held it may have pleaded for mercy or favours. Such demands on the figurine may have been supported by the violence done against it. Beheading is not unusual in the life of a figurine; the destruction of the mouth is more remarkable. Did that happen in order to silence it? The figurine could have been a protective figure or a hate figure – or the first becoming the latter? The natural rendition may as a “double” embody a certain person with ever open eyes and ears and an authoritative or perhaps noxious mouth. Picking up the figurine and embracing it in the hand, may have connected the person holding it and the person depicted, with memories of past engagements. Mutilating it, has severed ties or may even have been a rebellious act.



Figure 5: Mace-head. Photo © Kristian Alex Larsen

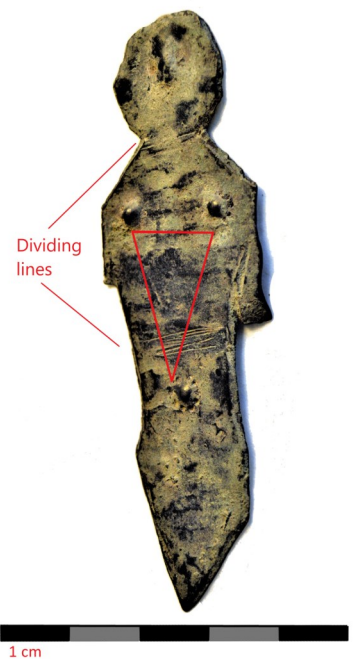


Figure 6: Metal sheet figurine. Photo © Kristian Alex Larsen

Figurine 2 (ID 46983)

Another anthropomorphic figurine, fig. 7, measures 82 mm from top to bottom, maximum 35 mm in width and 25 mm in profile and weighs 49 grams. The clay is dark brown and black and compared with figurine 1, more surface is glossy especially at the head and only few spots of lighter colours beneath are revealed. Two features stand out: an ill-shapen flat face in the stomach and the projecting naturalistic head. The latter has small, deep staring eyes, a prominent nose with a long bridge, an open mouth slightly bent as in the middle of a conversation and a marked upper-lip and chin. The small, round and deep ear-holes have surroundings looking like hair buns continuing over the forehead and bulging up at the back-head; hair is indicated by striations. The large oval in the stomach is filled out with a face with two small holes for eyes, a broad nose protruding over a long horizontal line, and under this, two descending oblique lines. On the back is another oval which is empty and convex. Legs and arms are lacking, and lines demarcate the neck and the waist. Three 10 mm wide circles with a button inside are impressed at the shoulders and in the middle at the waist forming a triangle. The body of the figurine is flattened in profile and frontally symmetrical, except for a slight bending of the head to the right. I am not aware of any clay parallels.

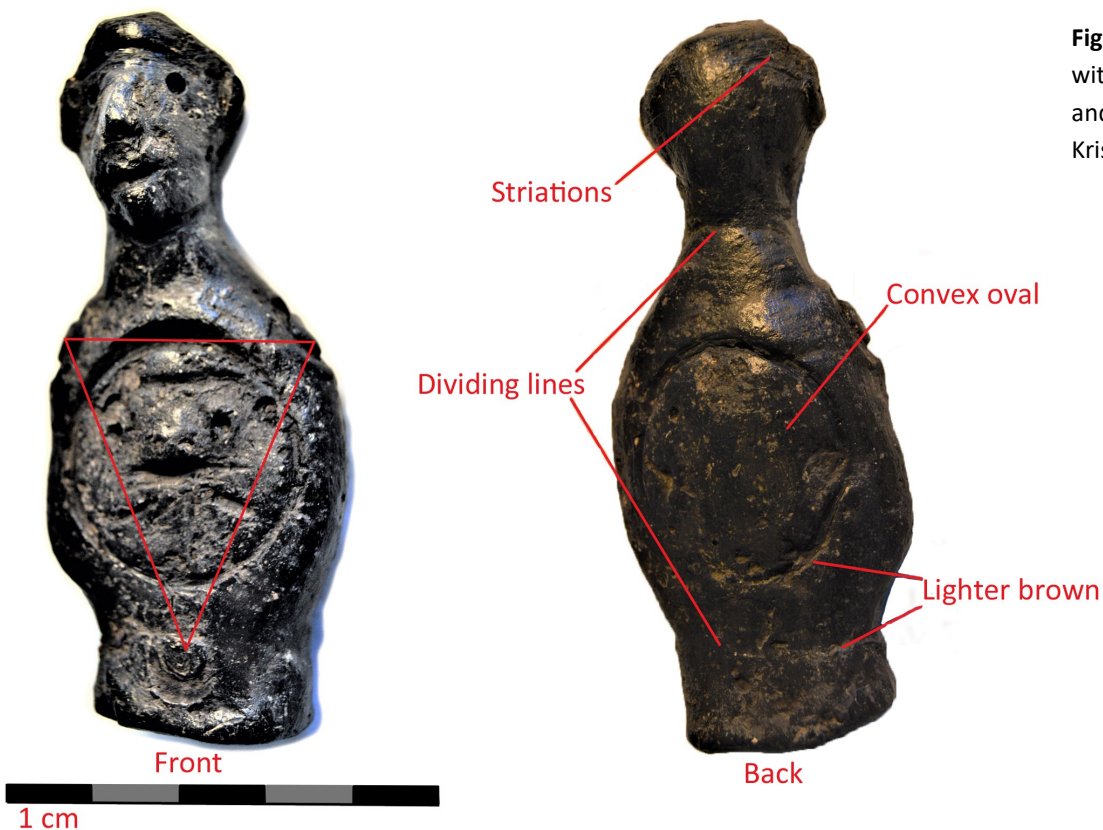


Figure 7: Figurine 2, Human with face in stomach, front and back. Photo © Kristian Alex Larsen

Like figurine 1, this figurine also manifests doubleness, but in a more literal sense. The extra face looking out from the stomach may be a fetus, an extra personality or perhaps a demon. The 'buttons' may be female gender marks, the 'breasts' then pushed to the sides by the prominent 'stomach', but since they are positioned at the shoulders, arm-stumps are perhaps signified. The metal sheet figurine mentioned above, fig. 7 also has a comparable triangle of buttons, two arm-stumps as well two lines demarcating neck and waist. Since the lower button in figurine 2 is cross-cut by the waist-line, it may be understood as a protruding navel, which makes sense if 'pregnancy' is the case. Some Luristan bronze standards also have a head on top and one or more faces below. Ghirshman suggested this is reminiscent of the ancient myth of the god Zurvan, who had two sons in his womb (Ghirshman 1958). When figurine 2 is turned 180 degrees, an additional pair of eyes seems to look out from the stomach. The Zurvan myth is not attested before 4th century CE, but that does not exclude its existence long before. In the Zoroastrian "Yasna", a being called Zruuan is mentioned in association with Ōwāša (firmament) and Vayu (the realms of light and darkness) together framing cosmos (de Jong 2000). That could explain the vaulted back of the figurine as symbolising the sky. In contrast to the projecting face of the head, the flat stomach-face seems both eerie and sweet. The contrast emphasises otherness or tension and expresses perhaps a fear of chaos. This fear is perhaps contained by the division of the body in three by neck and belt, that may have symbolic connotations parallel to figurine 1: head for communication and determination, stomach for embracing and navel for providing. The figurine does not have marks of mutilation not even a neck-break, implying perhaps relations more cordial or venerating than those connected with figurine 1, which would also be expectable if the figurine embodies a god.

Figurine 3 (ID 46978)

This figurine, fig.7 and 8, measures 95 mm from snout to tail, 35 mm wide over the shoulders, 55 mm in height at the head and weighs 107 grams. The colour has alternating brown nuances and even black and glossy areas, a lighter colour beneath is revealed by exfoliations. The figurine may resemble a bull but probably more a dog because of the right ear, which protrudes horizontally and hangs down a bit at the end. It has a snout with an opening for a mouth and two dots for nostrils, eyes are regular circles impressed with a tool. Legs are short and broad, paws clearly marked on the right slightly lifted foreleg, and genitals protrude beneath the stomach. There are indications of different kinds of impact and handling. The left foreleg has been broken, a part of the left ear is missing and another break shows it had a thick and upstanding tail. Black glossy discolouring is especially visible on the genitalia (the seemingly blue colour on the photos is due to the reflection). Peculiar are two similar 3 mm holes: 17 mm deep in the back and 30 mm deep at anus, both exactly placed on the central axis. Dogs have been common in ancient West-Iranian imagery since the neolithic and onwards (Curtis 1984, 36). Schmidt (1989) presents several examples from Luristan e.g. no CS 561. Usually, these are simple like a Late Iron Age dog from Nush-i Jan (Curtis 1984, no 316) and quite similar to e.g. Early Chalcolithic figurines from Chogha Gavaneh (Forouzan 2012).



Figure 7: Figurine 3: Dog, semi profile, top view. Photo © Kristian Alex Larsen

Compared to these, figurine 3 is more detailed and rendered realistically, but not as skillfully as in the Elamite bronze figurine of a man and his dog mentioned above, where the man lovingly embraces his dog (Álvarez-Mon 2020, 433-434).

The first impression of figurine 3 is charm and attractiveness. A slight asymmetry from the front and the unevenness of the surface adds to the realism and makes it look alive. Playful growling is suggested by the staring eyes and the slightly open mouth. Porada (1995, 69) mentions that Neo-Assyrians made dog figurines for ritual destruction to avoid bad omens expressed by stray dogs. But this dog was finely made and may have had a long life. If it belonged to Indo-Iranians, it might have been esteemed as a companion species with human traits (Omidshar 2011). In both cases, people took into consideration the agency of dogs, found ways to avoid or welcome it and connected them with healing. A special trait in dogs is that they seek humans and dogs at the same time as though they belong to both species. A dog changes its humans by being with them and nudging them to adopt some of its desires and instincts. These traits may have been evoked by the persons engaging with the figurine. The particularly marked gloss on the genitalia shows it is not an accidental speckle, but points to something of significance – probably sex or fertility. This special mark probably also indicate that the figurine was not a toy for children. ‘Stabbing’ marks like those on figurine 1 are not found, but the broken extremities may have been mutilations if not due to their position; however, the front leg would not have been easy to break. Perhaps body parts were offered

as sacrifice? The deep holes in the back and behind could have been used for attachments that would turn the dog into a part of a complex figuration.



Figure. 8. The figurine fits well in a hand. Photo © Kristian Alex Larsen

Figurine 4 (ID 46979)

The last figurine in the assemblage, fig. 9, measures 123 mm from snout to feet and is 46 mm wide at the shoulder, 49 mm in height at the head and weighs 185 grams. It has alternating nuances of darker and lighter brown and glossy black, the original light colour appearing in cavities. It also has many fine details, but what stands out is the motif itself. It looks very much like a seal reclining in water with the flippers in relaxed position. A long groove depicts the mouth and two short, deep grooves the nostrils. Eyes protrude slightly and small ear flaps hang down. The feet are short and broad. Fur is indicated by striations and fat wrinkles by grooves. The back-side is flattened, with a fat roll under the neck and no tail. Many random cavities and abrasions are present on the surface and a large crack is running down from the top of the head. The figurine has a natural symmetry, though the head is leaning slightly to the right. I am not aware of any parallels.

It is certainly surprising to find a depiction of a seal in Luristan, but in fact, the seal is not that far away from Luristan, as the Caspian Sea used to have a large population of seals. The figurine is much more similar to a seal than to an otter or a dugong, as the otter has a long thick tail and long 'fingers', whereas the dugong has a relatively small head, a very different mouth, no ears, a tail like a dolphin and do not lean back. Nor do

seals have ears, but perhaps it is not decisive to make a correct species match. The seal and the otter are both caniform, so the zoologically incorrect ear flaps perhaps relate to dogs, good hearing and guardianship. Majestic mastery over the waters is demonstrated by the reclining position of the voluminous and powerful animal. Water in Luristan is sparse in summer, frozen in winter and the rivers are dangerous in spring, so companionship with a 'water-dog' could have been an appealing prospect, as also the pacification of a predatory water-spirit would be. Contrary to figurine 3, this one has been extensively mutilated. Since Indo-Iranians lived around the Caspian Sea in the 2nd Mill, the figurine may also have evoked common memories and legends. The large crack in the head probably appeared during firing, but could also be about clubbing, recalling hunting-tales.

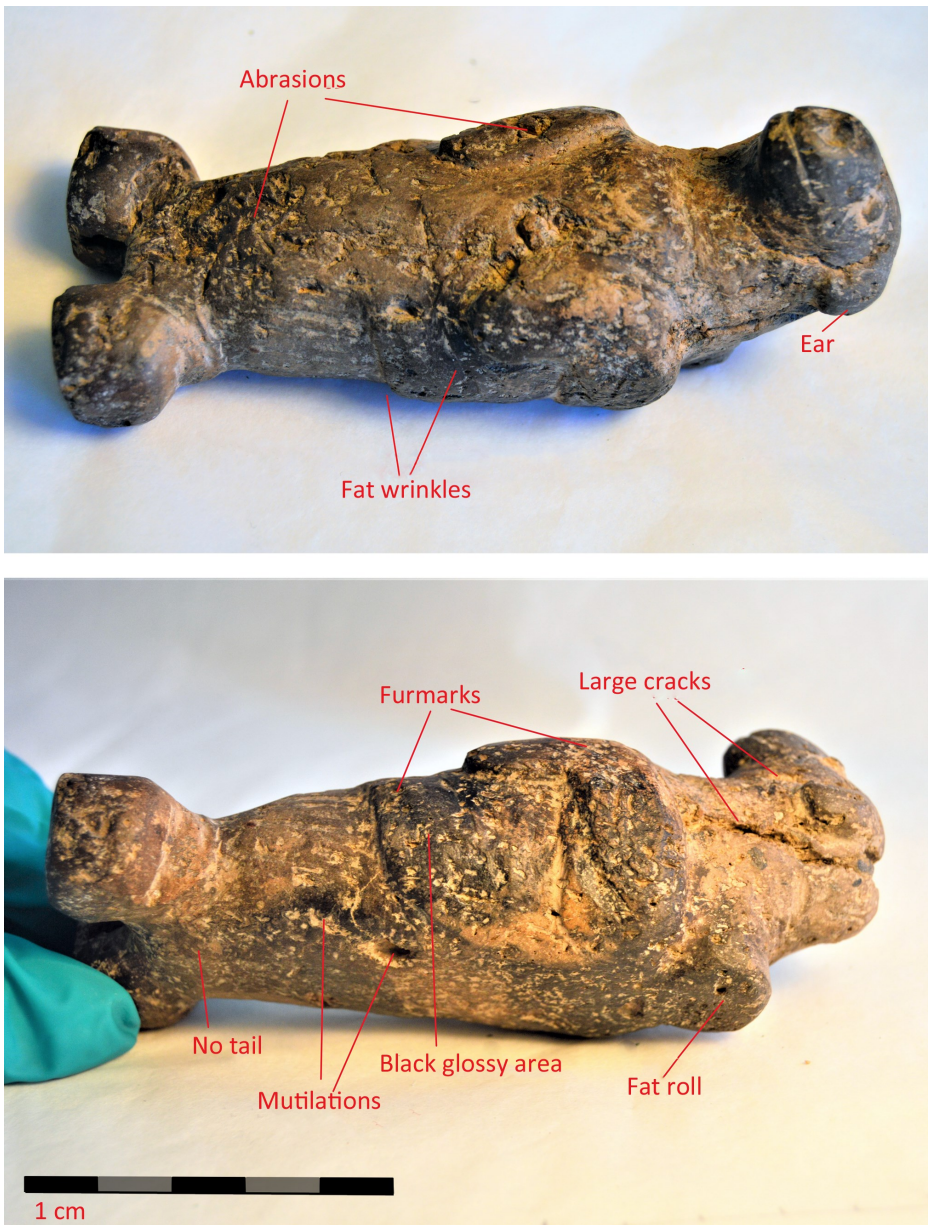


Figure 9: Figurine 4, Seal, front and back. Photo © Kristian Alex Larsen

Conclusion

Attention to the small details in the figurines has led to hypotheses and narratives, which open up perspectives and suggests lines to follow in further research. The figurines were dynamic entities which moved about, gradually changing as they darkened and were pierced and broken. Marks of intra-action has co-defined the figurines in a dialectical process with their human and non-human relations; they knotted the past and the future together with presence. Certain general design ideas seem clear, like the detailed rendition of all the faces and the tripartite division of the human figurines. I suggest the tripartition may be understood as a recognition or even a praise of the complementarities of social life, whereas symmetries celebrated static uniformity. The fact that they all come from Kazabad, may suggest that their peculiarities were a specific local practice, as no exact parallels elsewhere is found (yet). Therefore, it is not possible to give a well-supported relative dating but the period between 1500-500 BCE seems likely especially because of the possible Indo-Iranian connections. Absolute dating methods like luminescence-dating and carbon-dating, if the dark surface is a result of human touch, would be valuable.

Even more important than style is how all sensory features come together in the individual artefact in order to express something. Agential realism gives justice to concrete findings rather than subsuming them under categories, and it allows the marvel of engaging with the past through tangible things. Like any other phenomenological approach, agential realism may be criticised for being overly subjective; however, no analysis whatsoever can escape being subjective in the sense that any basic element is already endowed with meaning by the interpreter (Hodder 2003, 51), and any engagement and perception will also always co-constitute the phenomenon as an agential cut. Moreover, relevant archaeological and historical knowledge must surely be involved whenever possible as the artefact is connected on small as well as large scales. Most important, the research process has to be transparent and open to observations, tests and interpretations by other researchers.

Acknowledgement

I express my sincere thanks to Professor Henrik Thrane for giving me invaluable information on the excavations in Luristan, to Keeper Stine Schierup from the National Museum of Denmark for kindly giving me access to the figurines, to Dr. Sajjad Alibaigi and Dr. Zahra Hashemi for giving me helpful advice on parallels, to MA Anna S. Poulsen for their great suggestions and assistance and to my reviewers for their constructive critique.

Bibliography

- Álvarez-Mon, Javier. 2010. *The Arjān Tomb: At the Crossroads of the Elamite and the Persian Empires*. Acta Iranica 49. Leuven: Peeters.
- Álvarez-Mon, Javier. 2020. *The Art of Elam ca. 4200–525 Bc*. Routledge.
- Bahrani, Zainab. 2003. *The Graven Image: Representation in Babylonia and Assyria*. University of Pennsylvania Press.
- Barrelet, M. T. 1968. Figurines et reliefs en terre cuite de la Mésopotamie antique/1 Potiers, termes de métier, procédés de fabrication et production. *Figurines et reliefs en terre cuite de la Mésopotamie antique*, 85.
- Bailey, Doug. 2005. *Prehistoric Figurines: Representation and Corporeality in the Neolithic*. London ; New York: Routledge.
- Bailey, Doug. 2014. 'Touch and the Cheirotic Apprehension of Prehistoric Figurines'. *Sculpture and Touch*, 27–43.
- Barad, Karen Michelle. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press.
- Curtis, John. 1984. Nush'i Jan III: the small finds. vii, 71 pp., 23 figs., 14 plates. London: British Institute of Persian Studies, *Bulletin of the School of Oriental and African Studies*, 49(3), 587-588.
- Emberling, Geoff. <http://teachmiddleeast.lib.uchicago.edu/historical-perspectives/the-question-of-identity/before-islam-overview/image-resource-bank/image-02.html> Visited: 24/2-2023
- Forouzan, F., Glover, J. B., Williams, F., & Deocampo, D. 2012. Portable XRF analysis of zoomorphic figurines, "tokens," and sling bullets from Chogha Gavaneh, Iran, in *Journal of Archaeological Science*, 39(12), 3534-3541.
- Ghirshman, R. 1958. Notes Iraniennes VIII. Le Dieu Zurvan sur les Bronzes du Luristan in *Artibus Asiae*, 21(1), 37-42.
- Hakemi, A. 1993. Some statues discovered in the excavations at Shahdad. In *Annales Academiae Scientiarum Fennicae. Series B*, Vol. 271, 217-224.
- Hamilakis, Yannis. 2017. 'Sensorial Assemblages: Affect, Memory and Temporality in Assemblage Thinking'. *Cambridge Archaeological Journal* 27 (1): 169–82.
- Hodder, Ian. 2003. 'Reading the Past: Current Approaches to Interpretation in Archaeology.' *Cambridge University Press* 53 (4).
- Ingold, Tim. 2002. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. routledge.
- Ingold, Tim. 2012. 'Toward an Ecology of Materials'. *Annual Review of Anthropology* 41 (1): 427–42.
- Jones, Andrew M., and Marta Díaz-Guardamino. 2018. "Enigmatic Images from Remote Prehistory": Rock Art and Ontology from a European Perspective.' *The Oxford Handbook of the Archaeology and Anthropology of Rock Art*, 481–502.
- Juelskjaer, Malou. 2012. 'Intra-Active Entanglements: An Interview with Karen Barad'. *Women, Gender and Research* 21 (June): 10–23.
- de Jong, Albert. 2000. 'Zurvan – Encyclopaedia Iranica'. 2000. <https://iranicaonline.org/articles/zurvan-deity>, Visited: 24/2-2023
- Langin-Hooper, S. 2014. *Figuring Out the Figurines of the Ancient Near East* (Vol. 1). Lulu.com.
- Larsen, Kristian Alex. 2022. *Vivid images of Luristan*. Master's Thesis. University of Copenhagen.
- Malekzadeh, M., Hasanpour, A., & Hashemi, Z. 2018. Bronzes of Luristan in a Non-Funerary Con-

text: Sangtarashan, an Iron Age Site in Luristan (Iran). *Prehistoric and Historical Landscapes & Settlement Patterns*, 577-588.

Manfreda, Nicole, Paola Buscaglia, Paolo Gallo, Matilde Borla, Sara Aicardi, Giovanna Poggi, Piero Baglioni, Marco Nervo, Dominique Scalarone, and Alessandro Borghi. 2021. 'An Ancient Egyptian Multilayered Polychrome Wooden Sculpture Belonging to the Museo Egizio of Torino: Characterization of Painting Materials and Design of Cleaning Processes by Means of Highly Retentive Hydrogels'. *Coatings* 11 (11): 1335.

Matthews, R., & Nashli, H. F. 2022. *The Archaeology of Iran from the Palaeolithic to the Achaemenid Empire*. Taylor & Francis.

Mazaheri, Khodakeram. 2016. Examination of Painted Pottery Tradition of Godin III in the Ho-lailan Valley Based on Discovered Findings from Kazabad A in *Ilam Culture*, Volume 17, Issue 50.51, September 2016

Meskel, Lynn. 2017. *The Archaeology of Figurines and the Human Body in Prehistory*. Edited by Timothy Insoll. Vol. 1. Oxford University Press.

Mitchell, W. J. T. 2005. *What Do Pictures Want? : The Lives and Loves of Images*. Chicago, Ill., London: University of Chicago Press.

Mortensen, Peder. 2014. *Excavations at Tepe Guran: The Neolithic Period*. Acta Iranica 55. Leuven: Peeters.

Omidasalar, Mahmoud, and Teresa Omidasalar. 2011. 'DOG – Encyclopaedia Iranica'. 2011. <https://iranicaonline.org/articles/dog#pt2>. Visited: 24/2-2023

Papadopoulos, Costas, Yannis Hamilakis, Nina Kyparissi-Apostolika, and Marta Díaz-Guardamino. 2019. 'Digital Sensoriality: The Neolithic Figurines from Koutroulou Magoula, Greece'. *Cambridge Archaeological Journal* 29 (4): 625–52.

Porada, Edith. 1995. *Man and Images in the Ancient Near East*. Moyer Bell.

Schmidt, Erich Friedrich, Maurits N. van Loon, and Hans H. Curvers. 1989. *The Holmes Expeditions to Luristan*. The University of Chicago Oriental Institute Publications 108, plates.

Stein, Sir Aurel. 1940. *Old Routes Of Western Iran*

Talma, Marianne. 2018. 'An Experimental Diachronic Exploration of Patination Methodology of Dark Patinated (Arsenical) Copper Alloys on Case Studies from the Eastern Mediterranean Bronze Age and Early Iron Age'. *EXARC Journal*, no. EXARC Journal Issue 2018/1.

Thrane, Henrik. 1964. 'Archaeological investigations in Western Luristan. Preliminary Report of the 2nd Danish Archaeological Expedition to Iran'. In *Acta Archaeologica* 35, 153-169.

Thrane, H. 1970. Tepe Guran and the Luristan Bronzes. *Archaeology*, 23(1), 26-35.

Thrane, H. 1999. 'Pots and peoples - once again. The goblets from the Bronze Age settlement at Tepe Guran, Luristan'. *Iranica antiqua* 34, 21–40.

Thrane, Henrik, Juliet Clutton-Brock, Verner Alexandersen, and Jørgen Balslev Jørgensen. 2001. *Excavations at Tepe Guran in Luristan: The Bronze Age and Iron Age Period*. Jutland Archaeological Society Publications 38. Aarhus.

Thrane, Henrik. 2015. 'En Dal i Zagrosbjergene – En Dansk Ekspedition Til Luristan'. In *Fortiden i Nutiden*, Bodil Bundgaard Rasmussen, 95–112. Nationalmuseet.

Understanding the Conduct During Festivals of Drunkenness

How the Egyptian worldview justified breaking with social conduct norms during religious festivals

Maria Mayland Nielsen

Maria Mayland Nielsen
BA-student , Egyptology,
UCPH
Contact:
airamaria@hotmail.com

Abstract

When studying the proper conduct dictated by ancient Egyptian instructional texts, specifically the Papyrus Insinger teachings, the conduct that is encouraged is starkly different from what was practiced during festivals to the Solar Eye Goddess. This article seeks to compare depictions of the Festivals of Drunkenness with Wisdom Literature which dictate good etiquette. Special focus will be on the how differently the festivals and the instructional texts endorse alcohol consumption, boisterous behaviour, and promiscuity. Finally, an explanation for the differences will be suggested: The reason the Egyptians were willing to defy cultural moral norms on such occasions were ideological – in order to keep the capricious and powerful Solar Eye Goddess at peace, as many people as possible should partake in her favourite activities during her celebration. If she was somehow not satisfied during her festival, it could lead the world into numerous kinds of disasters. Therefore, by taking part in these, otherwise discouraged, acts, every Egyptian was helping keep the world stable.

Research interests: Religious festivals of Ancient Egypt, archaeological and facial reconstruction, recreational activities in Ancient Egypt

فهم السلوك أثناء احتفالات الثمالة

كيف بررت النظرة المصرية للعالم الخروج عن أعراف السلوك الاجتماعي أثناء الاحتفالات الدينية

خلاصة:

عند دراسة السلوك الصحيح الذي تمليه النصوص التعليمية المصرية القديمة ، وعلى وجه الخصوص تعاليم بردية إنسنجر ، فإن السلوك الذي يتم تشجيعه يختلف اختلافاً صارخاً عن ذلك الذي كان يمارس خلال الاحتفالات بألهة عين الشمس. تسعى هذه المقالة إلى مقارنة صور احتفالات الثمالة بأدب الحكمة الذي بدوره يملئ آداب السلوك الجيدة، حيث سيتم التركيز بشكل خاص على مدى اختلاف الاحتفالات عن النصوص التعليمية في تأييد استهلاك الكحول والسلوك الصاخب والاختلاط الجنسي. أخيراً ، سيتم اقتراح تفسير للاختلافات: السبب الذي جعل المصريين على استعداد لتحدي الأعراف الأخلاقية الثقافية في مثل هذه المناسبات كان أيديولوجياً، وذلك من أجل إبقاء إلهة عين الشمس المتقلبة والقوية في سلام ، يجب أن يشارك أكبر عدد ممكن من الناس في أنشطتها المفضلة خلال الاحتفال بها. وإذا لم تكن راضية بطريقة ما خلال احتفاليتها، فقد يؤدي ذلك بالعالم إلى أنواع عديدة من الكوارث. لذلك ، ومن خلال المشاركة في هذه الأعمال المثبطة للزئيمة ، كان كل مصري يساعد في الحفاظ على استقرار العالم.

Translation by Mahmoud
Alsayed Ahmed, MA-
student, University of Co-
penhagen

Introduction

In Egypt, several Goddesses shared similar characteristics and were often interchangeable with each other; They were motherly or feminine ideals, often with feline attributes, a dualistic personality, and the daughter of the Sun-God. These Goddesses can be viewed as local versions of the same Goddess. This Goddess' popularity caused massive festivals to arise in her honour, most of them evident from the New Kingdom onwards. Depictions of these religious festivals show they involved drinking, singing, dancing and overt sexuality. However, concurrent with these festivals, scribes penned down texts, now called Wisdom Literature, wherein almost identical behaviour were discouraged and frowned upon.

In this article, a brief research history on the development of the festivals will first be established. Then, the article will look at some of the sources that describe the festival conduct and contrast them with Wisdom Literature. Afterwards, I will try to explain the disparities by examining the mythological context of the festivals, and what purpose the festivals had for keeping the universe in peace – and how this made it acceptable to behave differently during the festivals than otherwise encouraged.

Sources and methodology

In this article all the different identities of the Goddess will be referred to as the Solar Eye Goddess, and her specific names will only be used in contexts where they are relevant. The term 'Solar Eye Goddess' will be used for any of the Goddesses celebrated in the festivals or their related myths. This is because their shared themes and roles suggests they were local versions of the same Goddess. This way we can better look at the festival mentality as a phenomenon, though there is much potential for studying why her alter egos show up in different contexts.

For similar reasons, festivals with relevant themes and mythological contexts are grouped together under the umbrella term Festival of Drunkenness. The scope of this article will not allow much deeper discussion about the age, size or timing of each festival than detailed in the brief research history below, though much more could be said about it and its development.

The article will mainly be looking at the following texts:

Herodotus' Histories Book 2, as translated by Godley (1920).

Hymn from Medamud translated by Darnell (1995).

Hymn from Philae translated by Quack (2009, 353).

Hymn to Nehemani/Ait translated by Jasnow and Zauzich (2017).

A love song translated by Simpson (2003, 327).

A Demotic Poem about the Festival of Drunkenness for Bastet, as translated by Quack (in Ryholt and Quack 1996, 21).

The Wisdom Literature text Papyrus Insinger, as translated by Lichtheim (2006, 167 (For another translation of Papyrus Insinger, see also: Lexa (1926))).

The Destruction of Mankind, as translated by Simpson (2003, 290), which is a part of the larger story The Book of The Heavenly Cow found in tombs of post-Amarna kings (For another translation of the Destruction of Mankind, see also: Hornung (1997, 37).

The Distant Goddess from Quack (2009).

For these texts, I rely on the translations of others, and therefore my understanding of the texts can be coloured by their translation choices. How to specifically parse through and translate the sources are another field which could be discussed at length, as varying results have big impact on our understanding of the texts.

The above texts have been chosen, as they are from either the Ptolemaic and Late periods, or the New Kingdom, where we have evidence of the festivals taking place. First or second-hand festival sources will be used to describe the behavior at the festivals, as well as Herodotus' coeval comments about it. However, Herodotus' accounts should not be treated as first hand witness accounts of the festivals. It is disputed whether he travelled to Egypt and saw the Bastet festival he describes himself, or if he relayed its description as a first-hand account. There are several problems with the accuracy of Herodotus; he often included folklore among his historical accounts and made his own opinions on different topics very clear. 'Histories' is written with Herodotus as the observer, but he also often points out how certain information is told to him from other sources. His accounts of the festival to Bastet cannot alone testify to the behaviour at the festivals, but it is included for its similarity to Egyptian depictions.

The analysis will be in three parts: First we will look at the texts that describe behaviour at the festivals, through festival hymns as well as Herodotus' account. In the second part, this behaviour will be compared with the conduct which the Wisdom Literature encourage, modelled after the Egyptian social values and their idea of good etiquette. And lastly, two myths about the Goddess will help explain the need for the events, and why we may see discrepancies in the Egyptian idea of good conduct, and that which was displayed at her festivals. The article will mainly be looking at two myths: The Destruction of Mankind, as well as Return of the Distant Goddess.

The Emergence of the Festivals

Many of the names of the Goddess can be traced all the way back to the Old Kingdom, where Hathor is first seen described as the Sun's Eye in the Pyramid texts (Richter 2010, 157). However, at what time the Festivals of Drunkenness arose has been discussed heavily. Jensen (Jensen 2017, 300) uses the presence of feline and bovine imagery, as well as large-scale beer production, among other indirect signs, to tentatively trace some form of inebriety festival all the way back to predynastic times. However, for the purposes of this article, it might be too tenuous to trace these festivals back over a millennia before direct evidence of them appear.

The first concrete evidence for a festival to the Solar Eye Goddess is attested in the Middle Kingdom. Horváth (2015, 125) examines the fragmented festival calendar from

Lahun temple, which lists a few events in Hathor's name, though no description of the events is provided. Since Lahun is not otherwise known as a cult centre for Hathor, Horváth postulates the celebrations could have been related to a procession where a visiting Goddess' statue arrives from another temple. Little can otherwise be said of how much the celebrations at Lahun resembled later festivals. Similarly, no known versions of the above-mentioned myths are known from the Middle Kingdom, and scholars disagree whether they had appeared yet in any form. However, from this period, references are made to a rebellion against the Sun-God (Horváth 2015, 134), which might indeed suggest that the myths, or at least elements of them, were already in circulation.

In the New Kingdom, evidence for the Festival of Drunkenness is more direct: at Mut's *Isheru* temple at Karnak, a Porch of Drunkenness constructed by Hatshepsut, which might have been where festival parties took place, was excavated by Bryan and her team (Bryan 2005, 181). It is believed the myth of the Destruction of Mankind developed around this same time. Some linguistic studies of the first known example of the myth, found in Tutankhamun's tomb, has placed it pre-Amarna. Lichtheim has argued that it must have its origins in the Middle Kingdom, as the passage containing the myth is written in Middle Egyptian, distinct from surrounding text, which was written in later Egyptian (Lichtheim 2006, 196 – 97). That means the myth might have been copied from lost Middle Kingdom texts into the Book of the Heavenly Cow in the New Kingdom. However, Spalinger disagrees and argues the myth cannot be dated before the 18th dynasty, shortly after the end of the 2nd intermediate period (Spalinger 2000, 260). Both ideas place the composition of the text before or just around the time when Hatshepsut built the Porch of Drunkenness.

On a temple gateway in Medamud, one can find the Hymn to the Returning Goddess, which is possibly the oldest known reference to the myth of the Distant Goddess (Quack 2009, 357). According to Darnell, the hymn and its festival might have evolved from similar celebrations to Monthu, which were described in Papyrus Boulaq 18 (Darnell 1995, 47) from the 13th dynasty, so Darnell also traces the origins of this myth back to the Middle Kingdom. The Return of the Distant Goddess is otherwise only known from full or partial versions in Ptolemaic temples and papyri.

By the Late and Ptolemaic periods, both myths relating to the festivals had appeared, as well as direct evidence for the festivals and the conduct seen in them. As this is the time with most concrete evidence for the festivals, and this article will therefore focus on sources from this period.

Festivals to the Solar Eye Goddess

To understand the ideology of the Festival of Drunkenness, it is necessary to understand the function of the Solar Eye Goddess and her identities, whom the festivals were held in honor of. The Goddesses' who were celebrated had specific functions in the Egyptian world view, which was reflected in their mythology and the stories about

them. Understanding the link between the festivals' purpose and the mythological stories connected to them are essential to understand the behavior at the events.

The Solar Eye Goddess

This article uses 'Solar Eye Goddess' to refer to any Goddess who is identified as the Sun's eye, possess feline attributes and a dual nature of opposing characteristics, like calmness and wrath, and who embodies feminine and motherly ideals. Her two personalities are different faces and names of the same Goddess. These paired Goddesses are often the daughter of the Sun-God, as well as his physical eye, the visible sun-disk. The most famous example of such a Solar Eye Goddess pair is Sekhmet and Hathor, though literature relating to Bastet, Nehemani and Ait as other Solar Eye Goddesses also will be discussed.

Looking at these Goddess pairs, often one or both had feline attributes, some being calm cats, others powerful lionesses. There are many reasons why felines were associated with the Goddess: cats also possess a dualistic nature, as they can be soft and warm one instant, yet effective predators the next. Their loud mating habits, as well as their ability to have huge litters of kittens, made them ideal representations of the Goddesses' sexual and motherly roles. Jackson (2018, 16) also proposed that felines were great representations of the sun's eye due to a peculiar trait: at night, whilst the sun was travelling through the underworld, their eyes glowed when reflecting torch light, almost identical to two sun disks, fig. 1. A passage from the Metternich stela might refer to this feline trait in its praise of cats:

"O Cat, your eyes are the eyes of the Lord of the glorious eye, by whose eye the Two Lands are lighted." (Jackson 2018, 23)

The myths related to this Goddess will be discussed in depth below, but certain themes show up when she appears: she is the Goddess of joy, sexuality, and motherhood so long as she is pleased, but she may set off into a rampage if she, or her father, has been slighted. Only by being appeased, either through dancing and singing for her enjoyment, or by tricking her into a state of inebriety, will she turn back into the calm beloved Goddess again.

Her serene forms, especially as Hathor, are popular figures in love literature. In this New Kingdom love song, the Goddess is referenced:

*"I shall kiss him in the presence of his family
And not be embarrassed by the people.
I shall rejoice because they are aware
That he has been intimate with me.
I shall celebrate festivals for my Goddess"* (Simpson 2003, 327)

Here a woman sings of being in love, and about not being embarrassed to be close with her partner, especially at the festival. In these songs, Hathor is often called the Golden Goddess, and she is the deity a love-struck person could ask for help, as she would intertwine the fate of two lovers.

A Demotic Poem About the Festival of Drunkenness for Bastet

This is a poem written on papyrus where a man sings praises to the Goddess and his audience replies. It showcases some of the behaviour expected from participants of a Festival of Drunkenness. In one part, the singer exclaims:

*“Let us drink,
let us eat of the delicious(?) produce.
Let us exclaim in cheers, even more cheers!
May Bastet come to our party
and may we become intoxicated at her
drunkenness party.”* (Quack 1996, 21)(translated by the author)

Here, the performer and festival goers indulge on food and get drunk in the Goddess' honour, and they yell out in excitement, in the hopes she might be present at the celebration. The audience respond to the singer:

“They exclaimed sounds of euphoria, (...) while they said: “Bastet has arrived in her calm appearance form. Vi have reached this (...) in drunkenness.” (Quack 1996, 21) (translated by the author)

Here, the participants rejoice the arrival of the calm Bastet, whom they have reached through their intoxication. The poem shows the different ways the participants were encouraged to drink, eat, make noise, and celebrate for Bastet's Festival of Drunkenness. Due to how often a person's petition to a God is done whilst inebriated in texts, some suggest that alcoholic beverages were consumed to encourage visions of the Gods (Szpakowska 2003, 236).

Hymns of Ait and Nehemani

Several texts in honour of the minor Goddesses Ait and Nehemani also show how these festivals encouraged overindulging in drinking, eating, dancing and sexual exploits (Jasnow 2017, 156). The followers of Ait and Nehemani felt ecstatic in their hymns:

“The ones who drink and the ones who eat (are) the ones who are on the path (of god). (...) (But) the ones who have said: “They have not drunk,” the ones who have said: “They have not eaten,” their fate (and) their fortune (lead) towards anger and death. They will cause silver to come into being. (But) they will destroy the treasury.” (Jasnow 2017, 157)

In this hymn, it becomes apparent that the matter of celebratory indulgence may be done for more than simple enjoyment, for calamities are ensured to anyone who refuses to partake in the celebrations. In this hymn, indulgence is the 'path of God', whilst modesty causes calamities.

Hymns from Medamud and Philae

A hymn found at the temple of Medamud was likely performed to welcome home the Goddess from Nubia, in remembrance of the Myth of the Distant Goddess, where the Goddess had stormed off to Nubia after a dispute with her father and was coaxed home by other Gods. On her travels home through Egypt, she is celebrated at every town. This specific hymn is from those celebrations at Medamud. The hymn describes the celebrations as well as some of the animals and people that escort her home:

“Come, oh Golden One, who eats of praise, because the food of her desire is dancing, who shines on the festival at the time of lighting (the lamps), who is content with the dancing at night. ‘Come! The procession is in the place of inebriation, that hall of travelling through the marshes. Its performance is set, its order is in effect, without anything lacking in it. (Darnell 1995, 49)

(...)

There dance ecstatically for you the Mentyew-Libyans in their (peculiar) clothing, and the Nubians with their mace(s); The nomads throw themselves down to you in front of you, and the bearded ones declaim for you.” (Darnell 1995, 64)

The Goddess is celebrated everywhere she appears on her way home. Musicians and dancers make noise and perform for her, and people join the celebrations in ecstasy. The ‘Hall of Travelling Through Marshes’, an expression Bryan has suggested is a euphemism for intercourse, and the ‘Place of Inebriation’ mentioned here, may be akin to the Porch of Drunkenness found by Bryan and her team. Here the rowdy celebrations could take place, the participants could drink, dance, sing, and find intimate partners, all to the enjoyment of the Goddess.

Another hymn from the same time comes from Philae. According to Quack, these two hymns might be the oldest references we have to the myth of the Distant Goddess, though they aren’t exceedingly older than other references (Quack 2009, 357). Excerpts of this version align well with the hymn above:

*“Hathor, Great Lady of the place of appeal!
Your father Re is rejoicing at your rising,
Your brother Shu is giving homage before you.
Thot, the knowing one of the two lands, is calling to you, oh powerful one.
The great ennead is in rejoicing and festival cries.*

(...)

*Virgins open for you the processions in giving their fate.
You are the lady of favour, the dame of dancing.
Great of love, lady of beautiful women.
You are the lady of drunkenness, numerous of feasts.
Lady of myrrh, lady of knotting wreathes.
Lady of cries, lady of rejoicing.
The sistrum is played for her majesty,*

(...)

You are the lady of dancing, lady of singing and lute-playing.

Radiant of face every day, who does not know wrath.” (Quack 2009, 353)

In this hymn, the returning Goddess as Hathor is celebrated by many types of people and animals, and the male Gods Ra, Shu and Toth, who had succeeded in calming her down and returning her, are in praise of her. Her ‘rising’ here may be quite literal: Quack (2009, 356) suggests that the celebrations of this myth took place around the changing of the year, as the Nile inundation creeps across Egypt, restarting their cycle of harvest, an event that coincides with the sun slowly moving northward, and the rise of the Sirius star, often associated with Hathor, above the horizon. This way the festival also becomes part of keeping the pre-historic cycle of the world going another year.

Herodotus’ Histories Book Two

For a long time, the only known evidence of these festivals came to us through a passage in Herodotus’ writing about Egypt in his Histories books. Here, he describes a festival to Bastet at her cult centre in Bubastis:

“When the people are on their way to Bubastis, they go by river (...) Some of the women make a noise with rattles, others play flutes all the way, while the rest of the women, and the men, sing and clap their hands. As they travel by river to Bubastis, whenever they come near any other town they bring their boat near the bank; then some of the women do as I have said, while some shout mockery of the women of the town; others dance, and others stand up and lift their skirts. (...) But when they have reached Bubastis, they make a festival with great sacrifices, and more wine is drunk at this feast than in the whole year besides.” (Godley 2014, 347)

For the festival, the whole area around Bubastis, and even most of Egypt, is encouraged to sail to the city and partake in Bastet’s celebration. On the way there, at any harbour they come across, they lift their garments and expose themselves to those on land, yelling obnoxiously to each other, to shame those who do not intend to partake. This display seems to have made an impression on Herodotus, whether he saw it himself or had been told about it from someone else.

Behaviour at the Festivals

There are a few common themes in the texts above, most obviously the focus on large consumption of alcoholic beverages, hence the modern name of the festivals.

Other common behaviour is dancing, singing, and noisemaking for the Goddess.

Hathor’s favourite instrument, the sistrum, is shaken in Herodotus’ account and is played by festival participants in the hymns. Though the music could be beautifully arranged, it seems the point of the rejoicing and shaking of rattles was to make as much noise as possible. Another part of the Medamud hymn reads:

“The drunken revellers drum for you in the cool of the night.

The awakened ones heap blessings onto you.”

That is, the Goddess' followers drum loudly late at night or early morning to awaken the possibly hung-over populace, so all could join the praise of the Goddess. This loudness was accompanied by dancing, like the foreigners or animals who followed the Goddess home in the Medamud hymn, and possibly of no style or coordination at all, adding to the rowdy festival atmosphere.

Another common theme was promiscuous behaviour, as seen in the poem of the woman, unembarrassed to show her beloved's family that they are intimate, or the women on the boats who expose themselves and yell obscenities in Herodotus' depiction. The inebriated participants were 'roaming the marshes' and finding partners for the festival evening. Some scholars even believe this is to be taken even further; Quack writes "Her homecoming to Egypt is always occasion for indulgent parties, which can border on orgies." (1996, 22)(translated from Danish by the author). That is, the sexual behaviour might have been public displays even akin to orgies, though this is a disputed proposal (For a more in-depth discussion on the problems with understanding sexuality in ancient Egypt, see: DuQuesne 2005).

Other behaviour seems to have been common at the events as well. Indulging on foods is mentioned in several texts above. It has also been suggested inhaling fumes of the blue lotus was used alongside inebriation to connect with the Gods (Szpakowska 2003, 226). Risk-taking might also have been common, as there is festival-associated graffiti at Abusir that suggest the festival participants braved the desert to welcome home the Goddess from her journey (Jackson 2018, 187).

Wisdom Literature of Ptolemaic time

The Wisdom Literature genre of texts dictate proper conduct in ancient Egyptian societies, comparable to modern etiquette books, and they may have been abided by just as liberally as ours are today. Even though they are probably ideals rather than the common practice, they still tell us a lot about the values and morals of those who composed them. They are written as a mentor's hand-me-down knowledge to a younger, more naive son or student (Snell 2020, 286).

Papyrus Insinger

Papyrus Insinger is a single demotic text which is missing the first eight columns. It's written in a style fitting the 1st century CE, though its composition might date to the latter part of the Ptolemaic period, since variants are known to have been copied elsewhere. This version is rearranged by its author, the teachings put into thematic groupings, and most of the groupings end by pointing out that even if one follows all the instructions, bad times can still fall upon you. For in the end, the Gods control cosmic order and design peoples' fates. The first set of teachings on the papyrus focus on gluttony and overindulging, and explains:

*"There is he who is weary from yesterday yet has a craving for wine.
[There is] he who dislikes intercourse yet spends his surplus on women.
(...)*

[The] evil that befalls the fool, his belly and his phallus bring it.

(...)

He who drinks too much wine lies down in a stupor.

All kinds of ailments are in the limbs because of overeating.

He who is moderate in his manner of life, his flesh is not disturbed.

Illness does not burn him who is moderate in food.”

“The Fool” is the person who does not follow the teachings and suffers the consequences; He cannot control himself, and because of his gluttony, his craving for wine, and lust for women, he will suffer. His urges, literally “his belly and his phallus”, are to blame for this misfortune. This is directly opposite the condemnations seen in the hymn to Ait, where those who drink and eat are “on the path of God”, and those who do not “lead towards anger and death”.

Further condemnation of lust is seen later in the text, especially if it is toward a married person:

“He who is abstemious with his belly and guarded with his phallus is not blamed at all.

(...)

Wrongdoing [occurs] to the heart of the fool through his love of women.

He does not think of the morrow for the sake of wronging the wife of another.

The fool who looks at a woman is like a fly on blood.

His – – – attains the bedroom, unless the hand of another attains him.

the [fool] brings disturbance to – – – because of his phallus.

His love of fornication does harm to his livelihood.”

Here, the author explains how much damage a man can do to his life, as well as those around him, when he starts sleeping around, where “his love of fornication does harm to his livelihood”.

In the teachings, the reader is also warned of the troubles one may suffer if they are loud and obnoxious, shouting, or even dancing:

“Wine, women, and food give gladness to the heart.

He who uses them without loud shouting is not reproached in the street.

(...)

If there is no calm in a feast its master cannot enjoy himself.

If there is no calm in a temple its gods are the ones who abandon it.

(...)

Do not dance in the crowd, do not make in the multitude.”

The author warns the reader not to be obnoxious, and the temples especially are to be kept sombre, or their Gods may abandon them. This is starkly different from the noisy

and joyful celebrations that are supposed to soothe the Solar Eye Goddess.

In this instruction, drinks, food, and lust is allowed in moderation. However, this should happen in quiet settings, for once you are found drunk on the street, have embarrassed yourself by overeating, or have been caught sleeping with many people, you will suffer misfortune.

Ideology of the Solar Eye Goddess

To understand this apparent clash between the ideal behaviour seen in Wisdom Literature and the conduct of festival participants, we will look at the ideological and mythological origins of the Goddess, and how these myths fostered certain ideas connected to the festivals.

Destruction of Mankind

The Destruction of Mankind is the tale of Hathor, who, in her form as Sekhmet, almost destroys humanity, but is stopped by being tricked into inebriety by her father. The tale is set in the mythical time when Ra ruled Egypt. He has grown old and weak, and humans have therefore plotted against him. Finding this out, Ra then summons his allied Gods to have their counselling on how he should proceed. He is angry, and debates whether he should simply kill all humans. However, Nun, the God of the primordial ocean from which Ra came, advises him to send his eye, from whose tears humans had first been born, instead:

Then said Re to Nun, "(...) I am seeking (a solution). I cannot slay them until I have heard what you might have to say about this." The Majesty of Nun replied, "O my son Re, (...) The fear of you is great; your Eye shall proceed against those who conspire against you."

However, Ra discovers that the rebels have fled to the desert. His eye takes the form of Hathor, who descends to smite them. After a short while she returns, and her father welcomes her. However, Hathor, who had started to enjoy the killing, becomes enraged when she is told to stop, and turns into Sekhmet to continue her slaughtering:

This goddess replied, "As you live for me, I have overpowered mankind, and it was agreeable to my heart." The Majesty of Re said, "I shall gain power over them as king. Hold off decimating them!" And so Sakhmet came into being. The nightly beer-mash for wading in their blood starting from Heracleopolis.

Worried she will kill all of humanity, Ra formulates a plan, where ochre and beer are combined by humans into 7000 jars of blood-red beer. This is then poured over the marshes near the resting Goddess, creating a false inundation of blood in wait for her continued rampage the next day. As she awakens, Sekhmet sees the beer:

This goddess set out in the morning, and she found these (fields) inundated. Her face became delighted thereat. So she proceeded to drink, and it was just fine in her estimation. She returned so drunk that she had been unable to recognize mankind.

This part of the Book of the Heavenly Cow ends as Ra establishes a celebration in remembrance of how he prevented mankind from being slaughtered. He dictates beer shall be prepared in the temples during the festivals:

The Majesty of Re then told this goddess that intoxicating draughts shall be prepared for her on the seasonal feasts of the year; maidservants shall be held responsible for this. And so the preparation of intoxicating draughts became the assignment of maidservants on the Feast of Hathor on the part of all people since the first day. The Majesty of Re said to this goddess, "Has the heat of sickness become painful?" And so respect is bound to originate through pain.

Not only is this the mythological reason for the festivals, but it also explains why the festivals are essential: if they were not celebrated, if the Goddess' rage was not distilled, she might rampage against humanity once more. This was not an empty threat for the Egyptians, many of whom had seen natural disasters and diseases, which they thought came directly at her wish. However, if they all soothed her rage by entertaining her and held many feasts for her, sometimes getting the whole nation drunk, she would be both joyful and at peace.

The Return of the Distant Goddess

The Return of the Distant Goddess is another myth of the Solar Eye Goddess. Evidence of this story can be found in many temples from Ptolemaic times, as well as on papyrus and ostraca. Since the story concerns the Goddess visiting several cities as they celebrate her, every temple had a local variation of the myth, and details changed depending on the version.

The story opens with the Goddess taking off to Nubia in anger after a dispute with her father. Egypt and the Sun-God is weak without his daughter's protection, and the land grows stale without the power of the sun-disk. Depending on the version of the myth, Ra sends one or more Gods to fetch her. In this version it is the son of Thoth, in the form of a hybrid of wolf-guenuon. When he finds the Goddess, her form terrifies him:

She took on the form of a raging lioness (...) She stroked with her paw, and the mountain set off dust. She wagged her tail, and the sand formed dust devils. She bared her teeth, and fire blazed out of the mountain. (...) The wolf-guenuon was in very great fear. (Quack 2009, 344)

To persuade the Goddess home, the male Gods tell fables from Egypt, morality stories she might have enjoyed growing up. Once the Goddess has been calmed down and convinced of going home, the Gods all take different forms. Quack notes that these forms could very well be purposeful; when she reaches El-Kab, where the vulture Goddess Nekhbet is revered, the Solar Eye Goddess takes the form of a vulture. When in Thebes, where Mut is revered, she transforms into a gazelle, an animal sometimes associated with Mut (Quack 2009, 343). This might be a way for the different cities to link their different Solar Eye Goddesses together and unite all towns in a national celebration. By the end, she can re-join her father as his eye in Heliopolis.

Festivals of Peace

The myths clearly show how the Goddess' rage, and her subsequent rampage or disappearance, could cause disasters and droughts, leading Egypt to the brink of collapse. To avoid these disasters, the Egyptians must calm and entertain the Goddess by performing her favourite pastimes: Dancing, singing loudly, telling stories, having intercourse, and drinking. The drinking was not only something she enjoyed, but also what stopped her rampage and turned her peaceful as she returned to her father.

As the festivals were developing from smaller events like the ones at Lahun, the myths might have sprung up as reasons for why the festivals were essential; they appeased the Goddess, and stopped her from causing calamities for humanity, both as plagues and disease, natural disaster or loss in battles. Should the goddess not be satisfied at her festival, her rage could be unleashed on the population, much like it was on the rebels against Ra, or the Nubians of the second myth. At the same time, the festivals happened at a time of year where the inundation was coming in, the start of a new year cycle, and to make sure it would be a good one, every town had a duty to welcome home their wandering Goddess. Much was at stake for the cosmos during the festivals, and as the Goddess was not easy to please, it was necessary to act outside of normalcy during her celebrations. During the festival the nation would encourage each other to participate to appease the Goddess, and in the early morning, they would then be awakened by drums, so they could welcome her home. The participants might even go out to the desert where she would return and carve greetings for her. Or they might sail upstream, shaming those on land for not attending, and lifting their garments to cause laughter, just as Hathor is said to have done in the story of the Contending of Horus and Seth, where she makes her depressed father laugh at her silly behaviour as she dances naked (Beatty 1931, 16).

The Literate Population and the Festival Participants

In this article I have worked mainly out of the assumption that the readership of the Wisdom literature, and in particular Papyrus Insinger, also took some part in the boisterous behaviour at the festivals. This is not meant to say that the literate population was the exact same people who were described on the boats in Herodotus' account, or in the Egyptian texts produced for the festivals. In fact, several places the participants are specifically noted as being from other groups; the Medamud hymn stresses the different nationalities that are celebrating the Goddess, and the Philae hymn mentions virgins as the ones to lead processions. However, I would still argue that these groups would normally adhere to social norms, though possibly less restricted than the Wisdom literature dictated. At the same time, these are not the only groups to partake, as seen in the demotic poem to Bastet, where it is the narrator and his fellow party goers that encourage each other to drink and cheer in her honour. In fact, all parts of the Egyptian society took part, as even Hatshepsut had a place built specifically for it to take place.

The different social groups undeniably celebrated the festivals differently and according to their means, but there were certain things a participant was expected to do during the festival. Whether those with more of a reputation to uphold could act just as unseemly as some of the depictions or not, there was still an undeniable shift in what behaviour was acceptable in the duration of the festival: it was encouraged and even expected that a participant did their utmost to appease the Goddess at her party, and it was achieved by drinking, dancing, singing, being noisy and being overtly sexual. The Wisdom literature tells us that this was not normally the case, that the Egyptian image of a composed, high-status and literate individual would normally not involve those activities. In fact, I would argue anyone in Egyptian society would have been raised to have the same attitude towards such behaviour, even without the ability to read: the Wisdom Literature was based on the Egyptian social conscious, where such behaviour was frowned upon. Therefore, I think only by understanding the implications of the festivals, what their purpose was for the cycle of the world, can this difference in attitude be explained.

Conclusion

The Egyptians could at the same time dissuade each other from certain behaviors in most circumstances, whilst also seemingly be fine with indulging in them during the Festival of Drunkenness, because the success of the festival was of huge importance to the wellbeing of the world. The conduct taught by Papyrus Insinger developed from the Egyptian social consciousness; what would and would not cause the literate Egyptian to raise an eyebrow. It taught the reader to be remembered as a composed and pleasant individual, rather than as an incoherent and scandalous person. In contrast, the festivals had a cosmic purpose, to keep the balance of the world, and keep the Goddess appeased, for otherwise, they could risk the collapse of order. The behavior described at these festivals were unusual for any other time, at least if you wanted to uphold a good reputation. But for the duration of the festivals, the whole nation was encouraged to indulge in them, so far as even royalty erected pavilions for the parties to take place in. The purpose of the festivals made the behavior a religious declaration for the wellbeing of Egypt.

The behaviour of these festivals could literally save humanity from the Goddess' wrath, whether that manifested in losing battles, political turmoil, epidemics, or other natural disasters. So long as the Egyptians exercised her favourite activities, they could keep her wrath at bay. At the same time, if they succeeded in appeasing her, she would bring them protection and a good fortune.

Bibliography

- Beatty, Alfred Chester and Gardiner, Allan H. 1931. *The Library of A. Chester Beatty. Description of a Hieratic Papyrus with a Mythological Story, Love-Songs. and other Miscellaneous Texts*. London: Oxford University Press and Pub. by E. Walker.
- Bryan, Betsy M. 2005. "THE TEMPLE OF MUT - New Evidence on Hatshepsut's Building Activity", in *Hatshepsut from Queen to Pharaoh* edited by Roehrig. New York: The Metropolitan Museum of Art.
- Bunson, Margaret. 2012. *Encyclopedia of Ancient Egypt*. New York: Infobase Learning
- Darnell, John Coleman. 1995. "Hathor Returns to Medamûd". *Studien Zur Altägyptischen Kultur*, vol. 22. Hamburg: Helmut Buske Verlag.
- DuQuesne, Terence. 2005. "The Spiritual and the Sexual in Ancient Egypt". *Alessandra Nibi, Discussions in Egyptology* 61. Oxford: Oxbow Books.
- Godley, A. D. 1920. *Herodotus - The Persian Wars: Book 1-2*, revised edition. MA: Harvard University Press.
- Hornung, Erik. 1997. *Der ägyptische Mythos von der Himmelskuh: eine Ätiologie des Unvollkommenen*. Freiburg: Universitätsverlag.
- Jackson, Lesley. 2018. *Sekhmet & Bastet: The Feline Powers of Egypt*. London: Avalonia.
- Jasnow, Richard and Zauzich, Karl-Theodor. 2017. "Another Praise of the Goddess Ait (O. Sommerhausen 1)". In *Illuminating Osiris - Egyptological Studies in Honor of Mark Smith* edited by Richard Jasnow and Ghislaine Widmer. Atlanta: Lockwood Press.
- Jensen, Victoria. 2015. "Predynastic precursors to the Festival of Drunkenness: beer, climate change, cow-goddesses, and the ideology of kingship". In *Proceedings of the XI International Congress of Egyptologists* edited by Gloria Rosati and Christina M. Guidotti. Oxford: Archaeopress Publishing.
- Lexa, François (Frantisek). 1926. *Papyrus Insinger: I-II*. Paris: Librairie Orientaliste Paul Geuthner France.
- Lichtheim, Miriam. 2006. *Ancient Egyptian Literature, Volume II: The New Kingdom*. University of California Press.
- Lichtheim, Miriam. 2006. *Ancient Egyptian Literature, Volume III: The Late Period*. University of California Press.
- Horváth, Zoltán. 2015. "Hathor and her Festivals at Lahun". In *The World of Middle Kingdom Egypt (2000-1550 BC): Contributions on Archaeology, Art, Religion and Other Written Sources - Volume I*, edited by Wolfram Grajetzki and Gianluca Miniaci. London: Golden House Publications.
- Quack, Joachim Friedrich. 2009. "The animals of the desert and the return of the goddess". In *Desert animals in the eastern Sahara: status, economic significance, and cultural reflection in antiquity, Proceedings of an interdisciplinary ACACIA workshop held at the University of Cologne, December 14-15, 2007*, edited by Heiko Riemer. Köln: Heinrich-Barth-Institut.
- Richter, Barbara A. 2010. "On the Heels of the Wandering Goddess: The Myth and the Festival at the Temples of the Wadi el-Hallel and Dendera". In *8. Ägyptologische Tempeltagung: Intercon-*

nections between temples, edited by Monika Dolińska and Horst Beinlich. Wiesbaden: Harrassowitz Verlag.

Ryholt, Kim and Quack, Joachim F. 1996. "Fortællinger fra Carsten Niebuhr Instituttets samling af demotisk litteratur". *Papyrus – Ægyptologisk tidsskrift*, no. 1, June year 16. København: Dansk Ægyptologisk Selskab.

Simpson, William Kelly and Ritner, Robert K. 2003. *The literature of ancient Egypt an anthology of stories, instructions, stelae, autobiographies, and poetry*. New Haven, Connecticut: Yale University Press.

Snell, Daniel C. 2020. *A Companion to the Ancient Near East*. Second edition. Hoboken, New Jersey: Wiley-Blackwell.

Spalinger, Anthon. 2000. "The Destruction of Mankind: A Transitional Literary Text". *Studien Zur Altägyptischen Kultur*, vol. 28. Hamburg: Helmut Buske Verlag.

Szpakowska, Kasia. 2003. "Altered states: An inquiry into the possible use of narcotics or alcohol to induce dreams in Pharaonic Egypt". In *A Delta-man in Yebu: Occasional Volume of the Egyptologists' Electronic Forum No. 1*, edited by A. K. Eyma and C. J. Bennett. California: Universal-Publishers.

Utility of the Sex Assessment Method, DSP, on a Nubian Skeletal Sample

Mathilde Sehested Thormann

Abstract

In this study, the validity of a new method for sex determination, Diagnose Sexuelle Probabiliste (DSP), was tested using ten coxal measurements obtained from 43 ancient Nubian individuals. Using statistical analyses, differences in means between females and males and the discriminant power of each metric variable were tested. The inter-observer agreement between the sex determinations by the author and the DSP2 program was also tested. The sex of 34 individuals was determined using the DSP2 program with a sexing accuracy of 100% according to the sex estimation of the author. Metric variables with significant difference in means between sexes displayed sexing accuracies between 89,7-97,1%, while, metric variables with no significant difference in means between sexes displayed sexing accuracies between 72,2-78,3%. The inter-observer agreement between the results of the author and the DSP2 program were of very good strength. Conclusively, the DSP method is highly recommended to be used in the sex estimation of skeletal remains and is assessed to be an accurate method to be used on ancient Nubian skeletal material as well.

Mathilde Sehested Thormann

MA-student in Near Eastern Archaeology, UCPH

Contact:
Mathilde.thormann
@sund.ku.dk

Research interests: Human remains, osteoarchaeology, dental anthropology, health/disease, biomolecular archae-

صلاحية المنهج (دسب) لتقييم الجنس لبقايا عظام نوبية

في هذه الدراسة أُختبرت صلاحية المنهج الجديد (Diagnose Sexuelle Probabiliste), (دسب) لتحديد نوع الجنس باستخدام مقاييس عظام حرقفية (ten coxal measurements) أُخذت من 43 فردا نوبيا أثريا. من خلال تحليل إحصائي تم اختبار الاختلافات بين مقاييس الإناث ومقاييس الذكور والجدالة المميزة لكل المتغيرات المترية كما تم اختبار ما يسمى بـ (the inter-observer agreement) الذي هو مدى التوافق بين نتائج هذه الدراسة ونتائج البرنامج (دسب2) فيما يتعلق بتحديد الجنس. تم تحديد جنس 34 فردا من بقايا العظام باستخدام البرنامج (دسب2) وذلك بتوافق مع تقييمات الكاتب في نسبة 100% من الحالات. بينت متغيرات مترية لها اختلافات ذات أهمية بين الجنسين دقة تتراوح ما بين 89,7 – 97,1% في تحديد الجنس، بينما بينت متغيرات مترية ليست لها اختلافات ذات أهمية بين الجنسين دقة تتراوح ما بين 72,2 – 78,3% في تحديد الجنس. لقد كان التوافق (the inter-observer agreement) ما بين نتائج الكاتب ونتائج (دسب2) واضحا جدا. ختاماً نستطيع أن نستنتج أن استخدام المنهج (دسب) موصى به إلى حد كبير لتقييم نوع الجنس لبقايا عظمية كما أنه قُيم كمنهج دقيق يمكن استخدامه لبقايا عظام نوبية أثرية.

Abstract translated by Rasmus Mortensen, MA-student, University of Copenhagen

Introduction

Traditionally, the first step in an osteological analysis is the determination of sex and age-at-death of an individual, gathering key variables for the creation of a demographic profile if the individual is part of a skeletal population. Sexual dimorphism is often more pronounced in the pelvis, which is regarded the most reliable part of the skeleton for sex determination with a sexing accuracy of 98% as reported by Mays and Cox (2000; Brůžek and Murail 2006). Here, the male pelvis is generally narrower and more robust as opposed to the wider and more gracile female pelvis, which reflects the gestation and parturition abilities of females. When reading about the sexual dimorphic traits and features of the os coxae, such as the subpubic angle, greater sciatic notch, ventral arc, subpubic concavity, and preauricular sulcus, one would think that the determination of sex is a rather brief and easy process, where the sex is immediately given away by the pelvic morphology. Unfortunately, to the frustration of many bioarchaeologists and especially less experienced analysts, this is not always the case. Challenging our sometimes-unintended binary perception of the world, individuals do not always display unambiguous female or male traits, and sometimes an individual may display both female and male morphological traits and features. Additionally, fragmented material can complicate the process. In order to overcome such obstacles when determining the sex, new methods and techniques drawing on statistics have been developed over the past two decades and have been proposed to ensure a more accurate and reliable determination of sex. One of such methods and techniques is the focus of this study, in which the applicability of a new technique for sex determination, DSP, will be tested and evaluated using skeletal material from a Nubian collection. This paper is an adapted version of an unpublished exam project in the independent self-study course Archaeological Analysis at the University of Copenhagen (Thormann 2022).

The Scandinavian Joint Expedition to Sudanese Nubia

The bioarchaeological interest in Nubia has since its beginning been rooted in the geographical location, where the Sudanese Nile Valley was seen as a natural gateway between southern and northern Africa. The trade routes established in the pre-dynastic period facilitated contact between Mediterranean and Sub-Saharan cultures, and the movement between populations of different genetic backgrounds was of key interest to the early anthropological studies of ancient Nubia (Binder 2019). With the construction of the Aswan High Dam between 1960-1971, the Nile Valley was flooded to a great extent, creating the water reservoir, Lake Nasser, between Aswan and the Second Cataract. With no financial resources required for archaeological salvation projects along the Nile Valley, where archaeological sites and monuments located in the reservoir area would be submerged, Egypt and Sudan reached out to UNESCO, asking for international help. Teams from 21 countries helped excavate more than a third of around 1000 recorded sites. Here, large-scale multi-period collections of human remains, which would later serve as main sources for bioarchaeological information of ancient Nubian populations, were uncovered. One of these collections were uncovered by Denmark, Finland, Norway, and Sweden, who financed the Scandinavian Joint Expedition to Sudanese Nu-

bia. The excavations of the expedition were concentrated to the east banks of the Nile Valley, stretching from the Egyptian border and 60 km south, covering districts including Faras, Serra, Debeira, Ashkeit, Sahaba, Wadi Halfa, Abka, and Gamai. For his doctoral thesis, O. Vagn Nielsen conducted thorough examinations of the material and studied metrical and non-metrical anatomical variations between samples of different periods (Vagn Nielsen 1970). Today, the collection is curated at the Laboratory of Biological Anthropology at the University of Copenhagen.

The Nubian skeletal material

For this project, the skeletal collection from the Scandinavian Joint Expedition to Sudanese Nubia was used with the courtesy of the Laboratory of Biological Anthropology at the University of Copenhagen. The complete collection excavated during the Scandinavian Joint Expedition comprises 1546 individuals from seven chronological periods spanning from 3000 BCE to around 1100-1200 CE. In chronological order, these are the so-called A-group, C-group, Pharaonic, Meroitic, X-group, Christian, and Muhammadan (Islamic) periods, with the majority (n=653, 42,2%) of the individuals belonging to the C-group (Vagn Nielsen 1970). For this project, a total of 43 individuals with preserved os coxae were analyzed and measured. Four of these individuals were excavated in undated contexts, and the remaining 39 individuals dated to the C-group (n=4), Meroitic (n=18), Pharaonic (n=16), and X-group (n=1) periods.

Methods: Diagnose Sexuelle Probabiliste (DSP)

In 2005, Murail et al. developed the Diagnose Sexuelle Probabiliste (DSP) method, based on the pattern of sexual dimorphism observed world-wide in the os coxae of males and females. Using 17 metric variables of the os coxae, the examination of 2.040 individuals of known sex from 12 metapopulation samples formed the basis of the development of the method. By identifying a *“common sexual dimorphism pattern among modern human populations with the help of discriminant analyses”*, ten out of the 17 initial metric variables were selected, based on their discriminant power and their preservation rate, ensuring the applicability of the DSP method on skeletal populations from all over the world (Tab. 1, Fig. 1) (Murail et al. 2005, 169). The first eight variables in the table were selected because of their discriminant power and are ranked accordingly with PUM being the most discriminant variable and SA being the least discriminant variable. The last two variables, SIS and VEAC, were selected because of their preservation rate in archaeological contexts and should only be used as part of the DSP method if only three or less of the other variables (PUM, SPU, DCOX, IIMT, ISMM, SCOX, SS, and SA) are available for proper measurement. In 2017, an article introducing a new software program facilitating the DSP method, DSP2, was published, using the same previous sample and two new samples to test the software (Brůžek et al. 2017). Results showed that the application of DSP2 could determine 90.98% of the total number of individuals with a 99,65% accuracy, if the eight variables of high discriminant power (PUM, SPU, DCOX, IIMT, ISMM, SCOX, SS, and SA) were used. Even the usage of the four most discriminating variables could determine 87,17%

of the total number of individuals with a 99,53% accuracy. The usages of the four least discriminating variables could only determine 41,49% of the individuals, however with an accuracy of 98,67%.

In this project, the individuals from the Nubian sample were first examined and their sex determined by the author. All bones were used in the determination of sex, but features of the os coxae, which were assessed based on the methods of Buikstra and Ubelaker (1994), were the overruling factors in the final sex determination. Second, the ten os coxae measurements previously presented were obtained for each individual with a sliding caliper, pelvimeter or an osteometric board and entered into the DSP2

Abbreviation	Name of measurement	Reference
PUM (M14)	Acetabulo-symphyseal pubic length	Bräuer 1998
SPU	Cotylo-pubic breadth	Gaillard 1960
DCOX (M1)	Maximum pelvic height	Bräuer 1998
IIMT (M15.1)	Depth of the great sciatic notch	Bräuer 1998
ISMM	Post-acetabular ischium length	Schulter-Ellis et al. 1983
SCOX (M12)	Iliac breadth	Bräuer 1998
SS	Spino-sciatic length	Gaillard 1960
SA	Spino-auricular length	Gaillard 1960
SIS (M14.1)	Cotylo-sciatic breadth	Bräuer 1998
VEAC (M22)	Vertical acetabular diameter	Bräuer 1998

Table 1: List of the ten coxal measurements used in the DSP method with description and original reference.

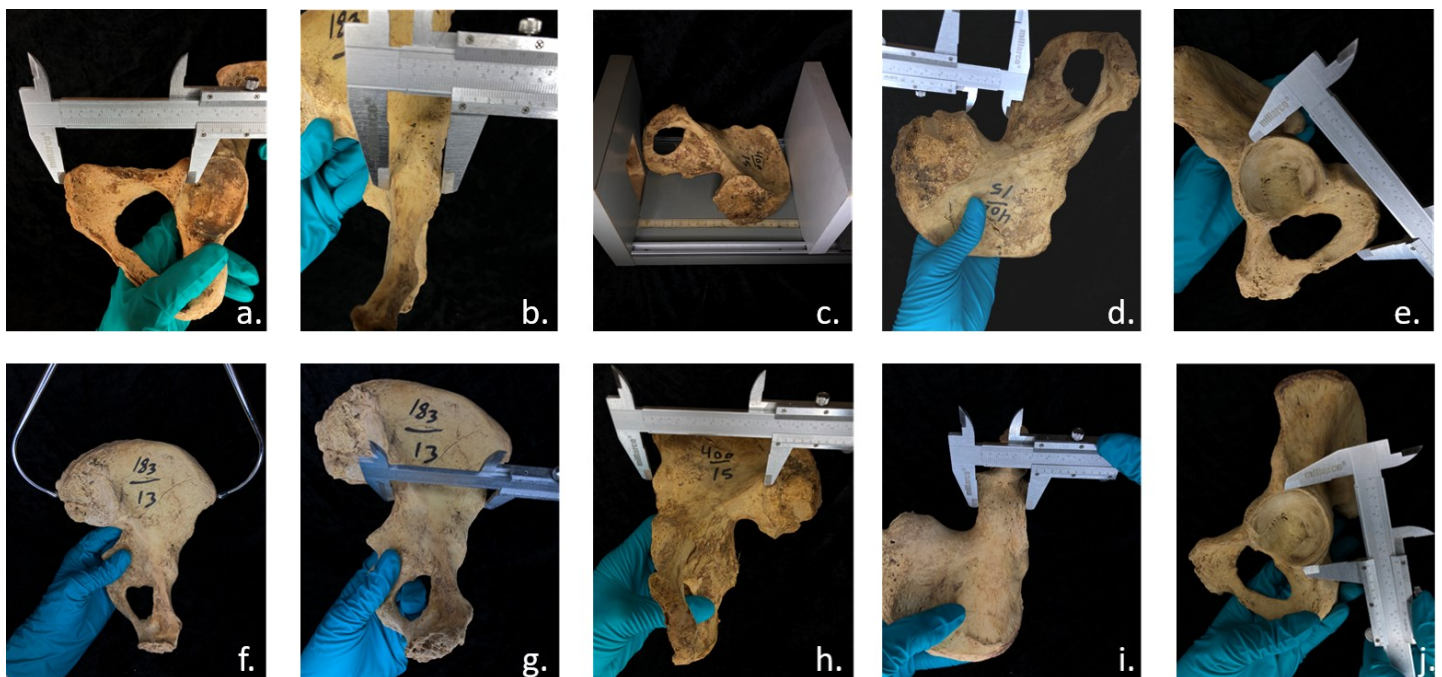


Figure 1: Ten coxal measurements used in the DSP method. From top left: a. PUM, b. SPU, c. DCOX, d. IIMT, e. ISMM, f. SCOX, g. SS, h. SA, i. SIS, and j. VEAC. Photos © Mathilde Sehested Thormann, from Thormann 2022.

program. Having run the datasets of the os coxae metric variables through the DSP2 program, the program will determine the sex of the individuals based on Fisher's linear discriminant analysis. Additionally, the program would calculate the posterior probability of the individual being male (PM=1, PF=0) or female (PF=1, PM=0), based on the prior probability that a metric observation would indicate either male or female (0,5). Sex could not be determined reliably if the posterior probability was below the threshold of 0,95, indicating "N/A" as a result instead of either "Male" or "Female".

For data analysis, the parametric independent samples t-test and binary logistic regression as well as the non-parametric Cohen's Kappa test were conducted. The independent samples t-test was used to detect potential statistically significant differences in means and variances between the sexes for each metric variable, and the binary logistic regression was used to test if sex can be determined based on the measurement of each metric variable, thus testing the discriminant power of each metric variables using predictions. The Cohen's Kappa test was used to measure the inter-observer agreement between the sex determinations by the author and the DSP2 program. All statistical analyses were conducted using the SPSS (v. 28) program.

Results

Out of 43 individuals, the sex of 34 individuals could be determined and was determined correctly in accordance with the subjective sex estimation of the author. The sex of nine individuals could not be determined and were labeled as N/A, because the posterior probability was less than 0,95. In average, females were sexed with 99,81% accuracy, while males were sexed with 99,18% accuracy (Tab. 2).

Independent samples t-test

The differences in the distribution of PUM, SPU, DCOX, IIMT, ISMM, SCOX, SS, and SA between males and females are illustrated as boxplots (Fig. 2a-j). Considering the different distribution patterns of the os coxae measurements, there is a clear difference between the distribution of some measurements observed between males and females (SPU, DCOX, IIMT, ISMM, and VEAC), where other measurements display no clear difference in distribution (PUM, SCOX, SS, SA, and SIS). These observations of clear differences between the distribution of some measurements observed between males and females versus other measurements were tested to see if they were significant, using an independent samples t-test. Results showed that SPU and VEAC display p-values under 0,05 in the Levene's Test for Equality of Variances, which means that equal variances in SPU and VEAC are assumed, whereas the remaining metric variables displayed p-values over 0,05, which means that equal variances are not assumed. Looking at the results from the t-test of equality of means, where the p-value is read based on the results from Levene's Test for Equality of Variances, several of the variables displayed p-values under 0,05, including SPU, DCOX, IIMT, ISMM, and VEAC. In this case, it is not assumed that males and females have equal means. The same cannot be said about PUM, SCOX, SS, SA, and SIS, where a p-valued over 0,05 suggests that males and females have equal means (Tab. 3). The t-test for equality of means

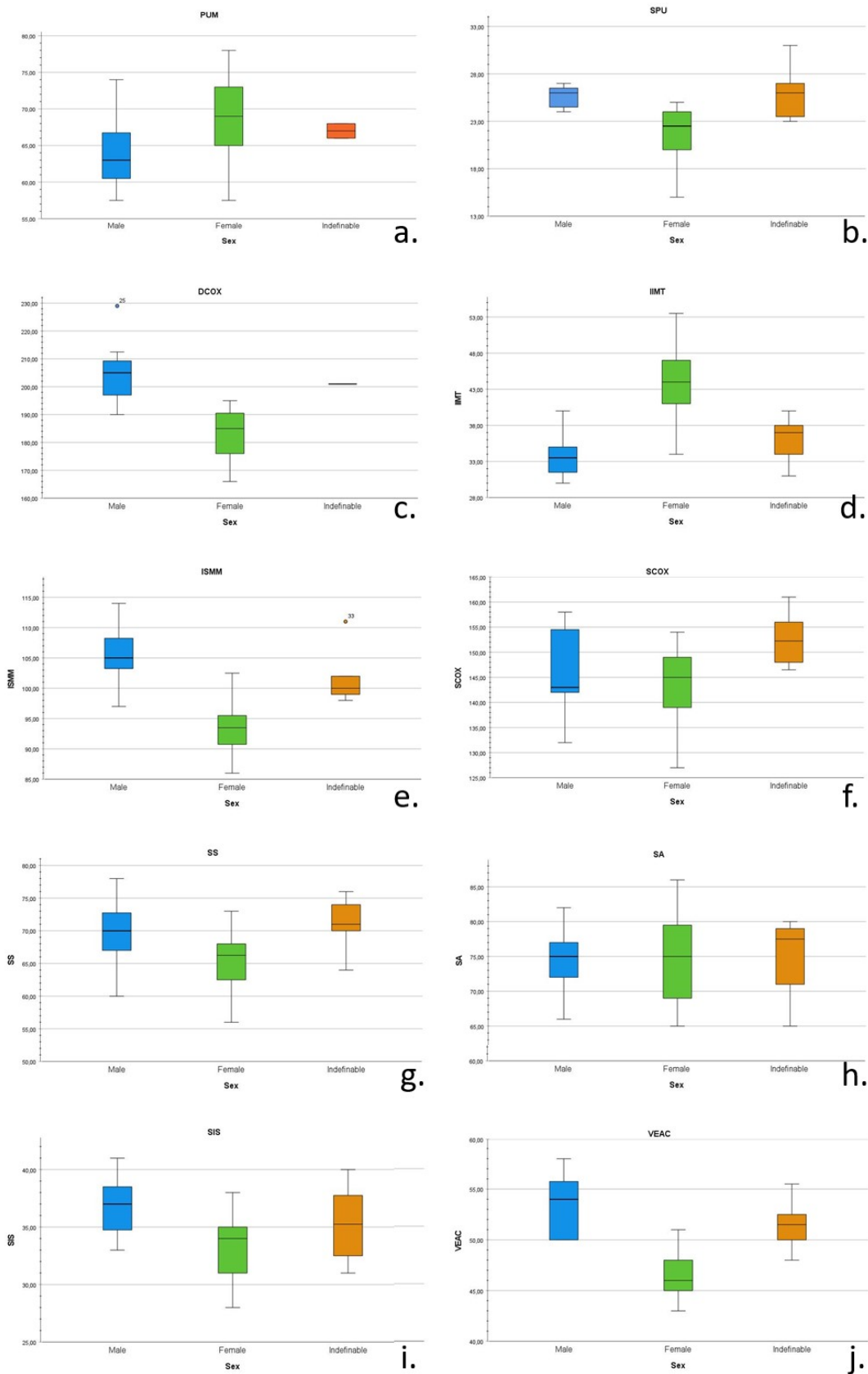


Figure 2: Boxplots displaying the distribution of the coxal measurements observed in males and females of the Nubian sample. From top left: a. PUM, b. SPU, c. DCOX, d. IIMT, e. ISMM, f. SCOX, g. SS, h. SA, i. SIS, and j. VEAC. From Thormann 2022.

SITE GRAVE	PERIOD	Sex (Thormann 2022)	Sex (Vagn Nielsen 1970)	PUM	SPU	DCOX	IIMT	ISMM	SCOX	SS	SA	SIS	VEAC	P _F	P _M	DSP2 Result
183 13	undat.	Female	Female	64,50	21,00	170,00	44,00	91,00	132,00	64,00	74,50	34,00	47,00	1	0	Female
400 11B	Pharaonic	Female	Female	73,00	25,00	189,00	44,50	93,00	141,50	63,00	78,00	33,50	46,00	1	0	Female
246 20	C-group	Female	Female	-	25,00	195,00	38,00	102,50	154,00	68,00	84,00	34,00	51,00	0.986	0.014	Female
246 26	C-group	Female	Female	-	-	-	41,00	-	149,00	66,00	69,00	-	46,00	0.989	0.011	Female
183 8	undat.	Male	Male	-	-	-	37,00	-	156,00	67,00	77,50	-	-	0.746	0.254	N/A
185 637	Pharaonic	Female	Male	70,00	21,00	-	34,00	98,00	-	67,00	71,00	32,50	47,50	0.999	0.001	Female
220 35:03	C-group	Female	Female	-	-	178,00	42,00	92,00	141,00	64,00	77,00	35,50	46,50	1	0	Female
246 17	C-group	Female	N/A	-	23,50	-	33,00	-	148,00	70,00	79,00	34,50	52,00	0.775	0.225	N/A
401 5	undat.	Female	Male	65,00	24,00	185,00	39,00	95,00	145,00	71,00	83,00	38,00	47,00	0.997	0.003	Female
185 646	Pharaonic	Male	Male	-	-	-	35,00	-	-	64,00	65,00	31,00	48,00	0.864	0.136	N/A
185 672	Pharaonic	Female	Female	-	-	-	34,00	-	148,00	68,00	69,00	34,00	44,00	0.983	0.017	Female
185 675	Pharaonic	Male	Male	-	-	-	37,00	-	153,50	76,00	80,00	34,00	50,00	0.753	0.247	N/A
185 687	Pharaonic	Male	Male	-	-	-	30,00	-	-	72,50	74,00	37,00	53,00	0.049	0.951	Male
185 687N	Pharaonic	Female	N/A	66,00	23,00	176,00	48,00	90,50	-	68,00	74,00	37,00	45,00	1	0	Female
185 692	Pharaonic	Female	N/A	-	23,00	-	-	98,00	-	71,00	70,00	31,00	50,00	0.927	0.073	N/A
400 17b	Pharaonic	Female	Female	-	24,00	185,00	-	95,00	-	68,00	84,00	35,00	48,00	1	0	Female
400 15	Pharaonic	Male	Male	59,00	24,50	195,00	33,00	103,00	142,00	69,00	79,00	38,00	55,00	0.001	0.999	Male
400 17a	Pharaonic	Male	Male	-	26,00	-	-	102,00	-	71,50	79,00	36,00	52,00	0.948	0.052	N/A
400 16	Pharaonic	Female	N/A	-	22,00	193,00	46,00	94,00	-	73,00	86,00	37,00	46,00	1	0	Female
400 12	Pharaonic	Female	Female	-	25,00	-	53,50	93,00	150,00	68,00	78,00	67,00	46,00	1	0	Female
400 11	Pharaonic	Male	Male	66,00	31,00	-	39,00	100,00	151,00	70,00	71,00	36,50	53,00	0.062	0.938	N/A
400 18b	Pharaonic	Female	Female	72,50	24,00	190,00	47,50	95,00	153,00	98,50	79,50	34,50	46,00	1	0	Female
400 18a	Pharaonic	Female	Female	75,00	23,00	-	47,00	94,00	152,00	68,00	83,00	34,00	48,00	1	0	Female
250 30	Meroitic	Male	Male	63,00	26,00	199,00	40,00	105,00	143,00	69,00	76,00	33,00	50,00	0.005	0.995	Male
250 31	Meroitic	Male	Male	74,00	24,50	229,00	34,00	114,00	158,00	78,00	76,00	41,00	58,00	0.001	0.999	Male
250 28 (1 of 2)	Meroitic	Female	Female	65,00	18,00	176,00	36,00	93,00	145,00	62,50	71,50	28,00	48,00	1	0	Female
250 28 (2 of 2)	Meroitic	Female	Female	78,00	24,00	193,00	43,00	96,00	-	67,00	83,00	33,00	49,00	1	0	Female
250 33 (1 of 3)	Meroitic	Female	Female	68,00	21,00	177,50	43,00	87,00	-	64,00	76,00	31,00	43,50	1	0	Female
250 33 (2 of 3)	Meroitic	Male	Male	68,00	27,00	201,00	31,00	99,00	146,50	74,00	77,50	39,00	51,00	0.072	0.928	N/A
250 33 (3 of 3)	Meroitic	Male	Male	62,00	27,00	206,00	35,00	103,50	-	73,00	72,00	39,00	50,00	0	1	Male
250 29 (1 of 3)	Meroitic	Female	Female	-	19,00	177,00	48,00	86,00	139,00	58,00	66,00	30,00	45,00	1	0	Female
250 29 (2 of 3)	Meroitic	Female	Female	66,50	20,00	191,00	43,00	95,00	141,00	66,50	75,00	31,00	46,00	1	0	Female
250 29 (3 of 3)	Meroitic	Male	Male	-	-	-	40,00	111,00	161,00	74,00	80,00	40,00	55,50	0.112	0.888	N/A
250 21	Meroitic	Female	Female	76,00	25,00	194,00	48,00	96,00	-	72,00	79,00	35,00	46,00	1	0	Female
250 19 (1 of 3)	Meroitic	Male	Female	57,50	24,00	190,00	30,00	97,00	132,00	60,00	66,00	33,00	56,50	0.002	0.998	Male
250 19 (2 of 3)	Meroitic	Male	Male	65,00	26,00	212,50	33,00	106,50	-	65,00	72,00	37,00	50,00	0	1	Male
250 19 (3 of 3)	Meroitic	Male	Male	68,50	27,00	205,00	35,00	110,00	154,50	71,00	82,00	36,50	55,00	0.008	0.992	Male
250 17 (1 of 2)	Meroitic	Female	Female	69,00	15,00	175,00	45,00	90,00	128,50	59,00	69,00	28,00	44,00	1	0	Female
250 17 (2 of 2)	Meroitic	Female	Female	62,00	18,00	176,00	44,00	88,00	127,00	60,00	68,00	28,00	44,00	1	0	Female
250 43	Meroitic	Female	Female	72,50	20,00	187,00	45,50	96,00	149,00	64,00	73,00	32,00	47,00	1	0	Female
250 38	Meroitic	Female	Female	-	-	-	36,50	91,00	-	56,50	68,00	28,00	48,00	0.996	0.004	Female
401 1:I	X-group	Female	Female	57,50	18,00	166,00	48,00	86,50	127,00	56,00	65,00	34,00	43,00	1	0	Female
401 1:II	undat.	Female	N/A	75,00	23,00	188,00	47,00	98,00	145,00	62,00	75,00	33,00	48,00	1	0	Female

Table 2: Data recorded for each individual and results from the DSP2 analysis. PF and PM are the posterior probability of an individual being either sexed as female (F) or male (M) based on the combination of coxal measurements. Data left blank means that a variable was unable to be measured due to fragmentation of os coxa. Data in bold are scored either higher or lower than the DSP2 range variation.

supported the inferences of difference in the SPU, DCOX, IIMT, ISMM, and VEAC metric variables among males and females. To no surprise, the variables with significant difference in means between males and females are the ones with higher discriminant power according to the DSP ranking, whereas the variables with no significant difference in means between males and females are the ones with lower discriminant power according to the DSP ranking. Surprisingly though, is the fact that PUM, which is supposed to be the most discriminant variable, did not display a significant difference in means between males and females, and likewise that VEAC, which is not a discriminating variable but only included because of its preservation rate, did display a significant difference in means (Tab. 3).

Variable	Levene's Test for equality of variances	t-test for equality of means
PUM	0,849	0,059
SPU	0,027	<0,001
DCOX	0,559	<0,001
IIMT	0,168	<0,001
ISMM	0,422	<0,001
SCOX	0,642	0,486
SS	0,725	0,261
SA	0,221	0,731
SIS	0,497	0,355
VEAC	0,013	<0,001

Table 3: Results from the independent samples t-test. P-values in bold are below the level of significance (0,05) and suggests that equal variances or means between sexes are not assumed.

Binary logistic regression

When conducting a binary logistic regression, b-coefficients are automatically calculated and can be used to calculate the probability of an individual being either female or male based on the measurement of a given variable. If the probability is calculated to be below 0,50 (50%), the baseline model simply predicts that every individual is male based on the measurement, and on the other hand, if the probability was calculated to be above 0,50 (50%), the baseline model simply predicts that every individual is female based on the measurement. Wanting to test how well the new model performs compared to a baseline model, an omnibus test of model coefficients is used to test if the model is significantly better than the baseline model. If the p-value is not below the level of significance of 0,05, the new model is not significantly improved from the baseline model. Similar to the results from the t-test of equality of means, several of the variables displayed p-values under 0,05, including PUM, SPU, DCOX, IIMT, ISMM, and VEAC, meaning that the new models were significantly improved from the baseline models. The same cannot be said about SCOX, SS, SA, and SIS, where $p > 0,05$ means that the new models were not significantly improved from the baseline model. In other words, the discriminant power of each metric variables was tested using predictions, and sex could accurately be determined in between 89,7-97,1% of the cases based respectively on the SPU, DCOX, IIMT, ISMM, and VEAC measurements. On the other hand, sex could accurately be determined in between 72,2-78,3% of the cases based respectively on the PUM, SCOX, SS, SA, and SIS measurements (Tab. 4).

Variable	Baseline model	Omnibus test	Accuracy
PUM	70,80%	0,048	75%
SPU	75,90%	<0,001	89,70%
DCOX	74,10%	<0,001	92,60%
IIMT	75,80%	<0,001	90,90%
ISMM	77,40%	<0,001	93,50%
SCOX	78,30%	0,453	78,30%
SS	76,50%	0,271	73,50%
SA	76,50%	0,72	76,50%
SIS	75,80%	0,371	72,20%
VEAC	76,50%	<0,001	97,10%

Table 4: Results from the binary logistic regression. P-values in bold are below the level of significance (0,05) and means that the sexing accuracy of the new model is significantly improved from the baseline model.

Cohen's Kappa test

One of the pitfalls of accurate sex determination is that the chance for determining correctly is already 50%, and thus the probability of determining sex accurately by chance is also high. Therefore, a Cohen's Kappa test will measure the inter-observer agreement, and thus test the agreement between the results obtained by the author based on visual and qualitative sex determination, and the results obtained by the DSP2 program based on metric and quantitative sex determination, by factoring out agreement which happened due to chance. The level of agreement is measured with the Kappa value and can be assessed as either poor ($k < 0,20$), fair ($0,21 \leq k \leq 0,40$), moderate ($0,41 \leq k \leq 0,60$), good ($0,61 \leq k \leq 0,80$), and very good ($0,81 \leq k \leq 1,00$). Having excluded

results where the sex could not be reliably determined, comparison of the sex determination made by the author and DSP2 program produces a Kappa value of 1,0 which suggests a very good strength of agreement. Similarly, the agreement between the sex determination results obtained by the author and the results obtained by O. Vagn Nielsen back in 1970 was also tested. Here, a Kappa value of 0,837 also suggests a very good strength of agreement albeit not as strong as the agreement between the author and the DSP2 program (Tab. 5).

Observers	Kappa value	N of valid cases	Agreement
Thormann (2022) - DSP2	1	34	Very good
Vagn Nielsen (1970) – DSP2	0,757	31	Good
Thormann (2022) – Vagn Nielsen (1970)	0,837	38	Very good

Table 5: Results from Cohen’s Kappa test of inter-observer agreement. Sex estimation results where sex could not be reliably determined have been excluded.

Discussion and conclusions

The sex of 43 individuals from ancient Nubia was determined using the DSP method based on ten different measurements of the os coxae. Through statistical analysis, results confirmed the magnitude of sexual dimorphism as expressed in the os coxae. Differences in the distribution of measurements observed between males and females were significant for the variables with higher discriminant power, whereas variables with lower discriminant power displayed no significant difference in means between males and females. Additionally, statistics were used to test the discriminating power of each metric variable based on the probability of an individual being determined as either male or female based on the measurement of each metric variable. In general, variables of high discriminant power were able to classify between 89,7-97,1% of the results correctly, whereas variables of low discriminant power were able to classify between 72,2-78,3% of the results correctly. As a final statistical test, the inter-observer agreement was measured for the results obtained from sex determination by the author and the DSP2 program. Here, very good strengths of agreement were measured.

All of these results suggests that the DSP method is a very reliable tool for sex determination. The DSP method for sex determination of skeletal material is advantageous for several reasons. It can be applied by everyone, also people with less experience in classifying os coxae into sexes, and it can be applied on fragmented os coxae (to a certain extent) as well.. When sex cannot be reliably determined due to fragmented coxal traits essential to traditional sexing methods, the DSP method can be applied, requiring only a minimum of four traits to be preserved. Another advantage lies in the method’s ability to accurately classify individuals as either female or males independently of the geographic location of the sample, because the method was based on a heterogeneous sample consisting of metapopulations from different continents. The success of the method is rooted in the accuracy, which is a result of the high threshold, where sex cannot be determined if the posterior probability is below 0,95. Applying such a high threshold instead of the standard 0,5, limits issues of incorrect classification, but addi-

tionally it creates a high percentage of individuals, where sex cannot be reliably determined (Quatrehomme et al. 2017). Compared to the traditional method of sex determination which relies on the subjective scoring of visual traits and attributes, the DSP method offers an objective alternative, where metric data is recorded based on standardized measurements (Rodriguez et al. 2019; Brůžek et al. 2017).

However, even though the collection of metric data is considered an objective process, the usage of sliding calipers and interpretation of measurement description can lead to mistakes in the measuring process. The main disadvantage of the DSP method can thus be found in the identification of the different measurements and their landmarks on the os coxae, where a misreading of the measurements could lead to the calculation of incorrect results. For instance, the SPU and IIMT measurements are at times quite difficult to obtain correctly, and additionally, the arcuate line and acetabular rim are sometimes difficult to identify properly. As suggested by Rodriguez et al. (2019), the method could be improved by adding new measurements concerning other sexual dimorphic features, such as the subpubic angle and pubic arch. This would help the sex determination of the high percentage of individuals, where sex cannot be determined because of the high threshold for discriminant analysis, where either lack of relevant coxal features or varying degree of sexual dimorphism makes the sexing unreliable.

Future research on the application of the DSP method on ancient Nubian material could include testing of sexing accuracy using different combinations of variables, such as the eight and four most discriminating variables, and the four least discriminating variables. Such tests of different combinations of variables requires a sample of complete os coxae. The Nubian sample used in this study included fragmented os coxae, and thus different combinations of variables were difficult to test. Another element of this study which should be drawn awareness to, is the basis of comparison for accurate sexing. The sex estimation results by the DSP2 program are in this study compared with the sex estimation results by the author because the true sex of the individuals is unknown. In order to get a more accurate picture of the DSP2 program and its ability to determine sex accurately, samples of known sex should be used in these kinds of studies.

But despite its premises and preliminary nature, this study presents one of the few engagements with the Nubian skeletal collection from the Scandinavian Joint Expedition since the extensive studies by O. Vagn Nielsen (1970), and to the extent of the author's knowledge, it is the first of its kind to test the validity of the DSP method on ancient skeletal material from this region. In conclusion, the DSP method and its affiliated software program is highly recommended to be used when estimating the sex of skeletal remains, and additionally, it is assessed to be an accurate method to use on ancient Nubian skeletal material as well.

Bibliography

Binder, Michaela. 2019. "The Role of Physical Anthropology in Nubian Archaeology". In *Handbook of Ancient Nubia*, edited by Dietrich Raue, 105-127. Berlin: De Gruyter Reference. <https://doi-org.ep.fjernadgang.kb.dk/10.1515/9783110420388>

Bräuer, Günter. 1988. "Osteometrie". In *Anthropologie, Handbuch des vergleichenden Biologie des Menschen: Band 1*, edited by Rainer Knußmann, 160-232. New York: Gustav Fischer Verlag.

Brůžek, Jaroslav and Pascal Murail. 2006. "Methodology and reliability of sex determination from the skeleton". In *Forensic Anthropology and Medicine*, edited by Aurore Schmitt, Eugénia Cunha, and João Pinheiro, 225–242. Totowa: Humana Press Inc. https://doi.org/10.1007/978-1-59745-099-7_9

Brůžek, Jaroslav, Frédéric Santos, Bruno Dutailly, Pascal Murail, & Eugénia Cunha. 2017. "Validation and reliability of the sex estimation of the human os coxae using freely available DSP2 software for bioarchaeology and forensic anthropology". *American journal of physical anthropology* 164 (2): 440–449. <https://doi.org/10.1002/ajpa.23282>

Buikstra, Jane E. and Douglas H. Ubelaker. 1994. *Standards for data collection from human skeletal remains. Research series no. 44*. Fayetteville: Arkansas Archeological Survey.

Gaillard, Jean. 1960. "Détermination sexuelle d'un os coxal fragmentaire". *Bulletins et Mémoires de la Société d'Anthropologie de Paris*, XIe série, 2: 255-267. <https://doi.org/10.3406/bmsap.1960.1145>

Mays, Simon and Margaret Cox. 2000. "Sex determination in skeletal remains". In *Human Osteology in Archaeology and Forensic Science*, edited by Margaret Cox and Simon Mays, 117–130. London: Greenwich Medical Media Ltd.

Murail, Pascal, Jaroslav Brůžek, Francis Houët, and Eugénia Cunha. 2005. "DSP: A tool for probabilistic sex diagnosis using worldwide variability in hip-bone measurements". *Bulletins et Mémoires de la Société d'Anthropologie de Paris* 17: 167–176. <https://doi.org/10.4000/bmsap.1157>

Quatrehomme, Gérald, Irina Radoman, Luísa Nogueira, Philippe du Jardin, & Véronique Alunni. 2017. "Sex determination using the DSP (probabilistic sex diagnosis) method on the coxal bone: Efficiency of method according to number of available variables". *Forensic Science International* 272: 190–193. <https://doi.org/10.1016/j.forsciint.2016.10.020>

Rodriguez Paz, Adrià, Jytte Banner and Chiara Villa. 2019. "Validity of the probabilistic sex diagnosis method (DSP) on 3D CT-scans from modern Danish population". *La Revue de Médecine Légale* 10 (2): 43-49. <https://doi.org/10.1016/j.medleg.2018.08.002>.

Schulter-Ellis, Frances P., Dwight J. Schmidt, Lee-Ann C. Hayek, and James Craig. 1983. "Determination of sex with a discriminant analysis of new pelvic bone measurements: Part I". *Journal of Forensic Sciences* 28 (1): 169-180.

Thormann, Mathilde Sehested. 2022. "Validity of the Diagnose Sexuelle Probabiliste (DSP) method on Sudanese Nubians from the Pharaonic period". Unpublished project, University of Copenhagen.

Vagn Nielsen, Ole. 1970. "Human Remains. Metrical and Non-Metrical Anatomical Variations". In *The Scandinavian Joint Expedition to Sudanese Nubia Vol. 9*, edited by Torgny Säve-Söderbergh, 1-139. Oslo: Scandinavian University Books.

Review

Inside an Ancient Assyrian Palace: Looking at Austen Henry Layard's reconstruction

Ada Cohen and Steven E. Kangas. Hood Museum of Art, Dartmouth College, University Press of New England, New Hampshire, 2017. xiv, 88 pages: illustrations, map, 26 cm. ISBN: 9781611689976, 161168997X. Price 334,95 DKK / 24,99 USD

Anna Silberg Poulsen

The book sets out to explore the famed plate 2, *Hall in Assyrian palace, restored*, from Henry Austin Layard's 1849 publication *The Monuments of Nineveh, from drawings made on the spot*. Cohen and Kangas approach the plate from two different research avenues: The first deals with the accuracy of the polychrome interior represented in the reconstruction. The second research avenue dives into the creation of the original plate and who was involved in the creative process. The two research avenues intersect in their frequent discussion and reflection upon the plate and how its representation of ancient Assyria reflects the Victorian worldview.

I will recommend reading this book to get an idea of what Layard excavations meant for their contemporaries in Britain, and the increased attention the ancient Assyrians got following the excavations. It is also a good introduction to how the plate reflects the scientific understandings of polychromy at the time, as well as its Victorian sensibilities and biases.

The book is divided into five chapters: Introduction, Layard's Victorian Palace, Floor with Puzzle, Coloured Drawing and Lithographic Plate, Plate 2 and the History of Art. The publication is well illustrated and a good source for examining the plate in closer detail.

The first two chapters deal mostly with the first research question of uncovering and exploring the accuracy of the plate, as well as providing additional context from Layard's personal correspondence to support the polychromy of the reconstruction. The chapters also draw comparisons between the plate, and the reconstruction of The Nineveh Court in the Crystal Palace which Layard was also responsible for. The chapters are very good at contextualising the plate, and highlighting the Victorians' orientalism. The last three chapters deal with the second question of examining who made the plate. I found this part of the book interesting from an art historical perspective, but not so much from an archaeological one. It demonstrates good detective work, from uncovering an inscription hidden in the scribbles of the floor decoration in plate 2, to reconstructing an artist's life and story. The chapters also provide even more social context to the publication of Layard's *The Monuments of Nineveh, from drawings made on the spot*, and *Nineveh and its remains*, by uncovering the many people involved in its production, particularly those involved in producing the lithographs.

Anna Silberg Poulsen,
MA Near Eastern Archaeology
UCPH.

Contact:
mzc592@alumni.ku.dk

Research interests:
Polychromy, Archaeogaming,
Digital archaeology

The final chapter tries to place plate 2 in art history, and to do so they quote Michael Ann Holly's book *The Melancholy Art*. The quote from Holly's book speaks of the contradiction between fascination for an object and the knowledge that it is impossible to fully grasp the meaning of it, but also that the knowledge does not dim the fascination of the object. Cohen and Kangas use the quote to encourage more transparent fascination and joy in present day research, inspired by how Layard shared his joy and fascination for the field of Assyriology and archaeology. I think the link between the last chapter and the rest of the book would have been clearer if the theories and approaches by Holly had been presented earlier in the work.

The highlight for me was when the authors compared a watercolour of the same subject as plate 2, which are thought to be the prototype for the plate. The watercolour might have been produced by Layard himself, but Cohen and Kangas comment on the depiction of the cuneiform inscriptions depicted in the watercolour, and compares it to Sanskrit, opposed to cuneiform. They point out that Layard was known to have copied and admired the cuneiform script, and the depiction of the inscription seems out of character, even if it was done in a medium like watercolour. They also compare the colours of the watercolour illustration with the published plate 2, and they find that blue is more prevalent in the watercolour, where the plate uses hues of green, which reflects the Victorian ideas of Assyrians preferring green to blue.

The audience of the book is a little unclear to me. The nature of the subject is very specific, but I believe this publication is written in an accessible manner and is able to be read by both a casual reader, and the extensive notes makes it a valuable book for researchers with an interest in the subject.

Writing a PhD in Germany

Mette Bangsborg Thuesen

Deciding to go abroad for a PhD is not necessarily an easy choice. Yet, given the few positions available in Denmark, it is an option that is worth considering and which can offer new outlooks and develop you as a scholar. Based on my experience as a PhD fellow in Berlin, I will here share some ideas on what to expect and prepare for, when considering Germany as a place for writing your doctoral dissertation.

Applying in Germany

In Germany there are two ways of finding a funded PhD. One way is to apply for a position as a research assistant (“Wissenschaftlicher Mitarbeiter*innen”), where you work part-time on a project or as a teaching/administrative assistant. The second option is to apply for a scholarship that provides you lesser payment and without employment benefits. This, however, allows you to work full time on your dissertation, and is what I eventually also opted for. In my current position at the Berlin Graduate School of Ancient Studies I have a monthly scholarship of 1200 euros from the DAAD (the German Academic Exchange Service). Now you may think “1200 euros! That’s barely more than the Danish SU!”, and yes it may not sound like an awful lot, but living costs in Berlin and in most of Germany are still significantly lower than in Denmark, meaning that you can easily make the money last without living in discomfort.

Most call for applications can be found circulated on mailing lists such as one from KU or agade. If you are interested in one of the multiple positions available in Berlin, I can also recommend checking Berliner Antike Kollege’s Facebook page, where new calls regularly pop up. The application process in Germany is relatively straight forward and does not differ from other places. You will typically need to provide a cover letter, project proposal, proof of writing (for example, a chapter from your MA-thesis), CV and proof of English (TOEFL or IELTS). Once you have a project in mind, the most important step is to contact a potential supervisor, who can also help you through this process. However, bear in mind that German academy has a different hierarchy than in Denmark, and some professors are notorious for exploiting the labour of the students. Therefore, always ask other students about a professor you do not know well enough beforehand, so you can find out whether the supervisor is a good match for you.

Study life in Germany

Although Germany is a neighbouring country and may not seem too culturally different from Denmark, there are still some adjustments you have to get used to. The main cultural shock for me was getting acquainted with the German bureaucratic system, something which all foreigners as well as local people struggle with. Although we often joke about German efficiency, you quickly learn the deceitful nature of this narrative

Mette Bangsborg Thuesen,
Archaeology, MA in Nearea-
stern Archaeology, UCPH, PhD
student at FU Berlin

Contact: mettebt93@zedat.fu-berlin.de

Research interests: Parthian
and Sasanian archaeology,
pottery studies, commensality



after a visit to the local Bürgeramt or the university administration. Everything is far from digitized, which means paperwork is actual paperwork. *Under no circumstance will the university accept a scanned copy of your MA-diploma sent by email.* You either have to bring the physical copy to the university or send it by postal mail. Furthermore, you cannot assume that different administrative departments communicate and share documents between them. Having spent many days of my Summer in 2019 with preparing the enrolment papers so I could register at the Department for Near Eastern Archaeology at Freie Universität, I arrived in Berlin only to find out that I had to do another enrolment process. This was simply because I had only been registered in the department and still had to be officially registered at the university, which meant filling out more application forms and the printing of more copies of my diploma.

However, once the Kafkaesque administrative work at Bürgeramt and at the university is done, you are fully free to delve into your new PhD life. At the Berlin Graduate School of Ancient Studies, where I am studying, you partake in a structured PhD programme, which requires you to accumulate a certain amount of credit points next to your research. These points are gathered for example by participating in weekly research colloquiums, where you share your work and progress with other PhD students, by doing an internship or by organising workshops. It helps your academic training and provides valuable work experiences you will need once the PhD has concluded.

Through these programmes and classes you will also get in touch with other students of ancient studies from different fields of archaeology, history, art history and linguistics. Being exposed to such a variety of approaches and ideas not only stimulates the academic mind, but is also an opportunity to make new and lasting friendship. In general, I find the study environment in Berlin very vibrant and there are always a lot of student initiatives going on. There are for example dedicated networks for archaeological theory, digital archaeology and pottery studies, where students meet on a monthly basis to discuss current research trends and methodological issues.

My favourite part about the campus of Freie Universität, however, is the political atmosphere. Around the Mensa (the main cafeteria) there is always a protest going on and you are surrounded by posters of “Defend Rojava” or “Jin Jiyan Azadi”. *Most recently a closed Italian restaurant that is located on the university campus was squatted by students. This is now a progressive LGBTQ+ space that initiates sustainable activities, such as distribution of residual foods collected at the nearby supermarkets and clothes sharing. In sum, there is always something happening in Berlin and with other major archaeological research institutions around such as the German Archaeological Institute (DAI), there is also the opportunity to discover new excavation projects.*

So why go to Germany?

There are of course some cons to take into consideration. If you go for a PhD in Germany you have to accept that the payment is quite low in comparison to the salary that is

provided to PhDs in Denmark, but as mentioned earlier, this will be compensated by the lower living costs. The hardest part may be that you will have to sacrifice time away from your family and friends. Understandably, it is not easy for everyone to just uproot their life in Denmark and move to a new country. It requires flexibility and there might be things that already settle you, such as a partner or children. However, for those who have the opportunity and the spirit to tackle such a challenge, I can only send my strongest encouragement to just go for it!

You will be exposed to a different work environment that will give you new perspectives on how to do research; you will improve your resume by showing that you have experience from abroad; you will expand your network that will ultimately give you more opportunities for fieldwork and other jobs following the PhD. First and foremost, it is also an incredible opportunity for self-growth, and being given the opportunity to live in a city like Berlin, where every day feels like a new adventure, is incredibly fun and rewarding.

Spotlight

In this section, you will find relevant information if you are a student or recent graduate:

We present some of the graduates from CCRS who have submitted their theses within the last year. We have asked them to give a short description of the topic of the thesis (as an inspiration for you) as well as words of advice for current students. If you have recently graduated from a program offered by CCRS or written a thesis on a subject which covers Ancient Southwest Asia and Northern Africa, and want to share your good advice and research, get in touch.

We also list some of the conferences that you might find interesting and tell you why conferences are important for your development into a researcher. On top of that we present a few chosen foundations that you can apply to for funding.

We also introduce you to some of the relevant networks and other ways you can create relationships with students in other countries.

We hope you enjoy this section! If you have suggestions, please contact us at chronologjournal@gmail.com.

Best,
Chronolog Editorial board



Statue of Lion from Hama, dated to 900-720 BCE. National Museum of Denmark. Excavated in the Danish expedition to Hama, Syria in 1935. Drawing © Anna S. Poulsen after photo by Brian Jenkins

Graduate Spotlight

Patrick Nørskov Pedersen

I am a former student at the Department of Cross-Cultural and Regional Studies at the University of Copenhagen. My specialization is in the study of late Pleistocene-early Holocene forager and early agricultural societies of Southwest Asia. I am trained in techno-typological and functional analysis of stone artefacts, including use-wear analysis. My main academic interests include stone tools, past foodways, the anthropology of technology, the archaeology of the body and archaeological theory.

Thesis title: Approaching Past and Changing Foodways Through Ground Stone

Human diet, food procurement and processing underwent fundamental changes as agriculture slowly emerged in Southwest Asia during the Late Epipaleolithic and Neolithic between c. 15,000 – 8,000 years ago. My thesis examined the role ‘food processing’ ground stone tools (like mortars and querns) played in the foodways of people during this transformative period. To better understand how people processed their food resources then I analyzed the ground stone assemblages from two sites located in eastern Jordan, Shubayqa 1 and 6, dated to this period.

Focusing on technological and functional aspects of tool use, I developed a body-centered approach to ground stone analysis that combines conventional techno-typological analysis with microscopic use-wear analysis. My approach centers people’s bodies, their movements (‘gestures’), and the dynamic relationships people had with tools, using these body-tool relationships as proxies for changing foodways. Tool morphology and use-wear traces is where we may see novel ways of processing, preparing and eating food materialized.

Central to this approach is the idea that morphology, style and wear are interconnected representations of a continuous technological dialogue between people, their bodies, tools and surroundings.

In addition to outlining this novel approach to ground stone, my thesis interpreted the changes we seen at the Shubayqa sites. It found that while both processing strategies and raw material change over time, the tools appear to change somewhat independently of the food processed. While in the transition from the Epipaleolithic and Neolithic periods we see marked changes in the gestures used, and consequently in tool morphology, the wear traces suggested continuity in what people were processing. My research thus highlights the complexity of past foodways and technological practices. Ultimately, I argued that the changing foodways of the Levantine Neolithic are intimately connected to body-tool relationships, and *how* processing activities changed is as central as *what* people were consuming.

A piece of advice for other students: Take your time and stay open!

Do not rush through your studies, but take your time, prioritize your free time and friends, try out things that are not necessarily the most obvious and always stay curious. I know people are constantly being paced to be faster and stuff. But, do try to relax and give yourself time to process and think. Read stuff purely out of interest and pleasure and not just, what you are asked to read or think you should read. Some of the best ideas come from being exposed to influence from outside your field or from new or marginalized perspectives.



Patrick Nørskov Pedersen
PhD, University of Copenhagen.
Photo © Author

Chris Madsen Stie

MA, University of Copenhagen

I have a bachelor's degree in History (2016), a bachelor's degree in Egyptology (2019) and a master's degree in History of Religions (2022). I minored in Near Eastern Archeology, Theology and Comparative Cultural Studies, and my focal-point has always been on ancient near eastern religions (including Old Testament Studies), generally approaching the subject from philological, ethnographical and historiographical perspectives.

Thesis presentation

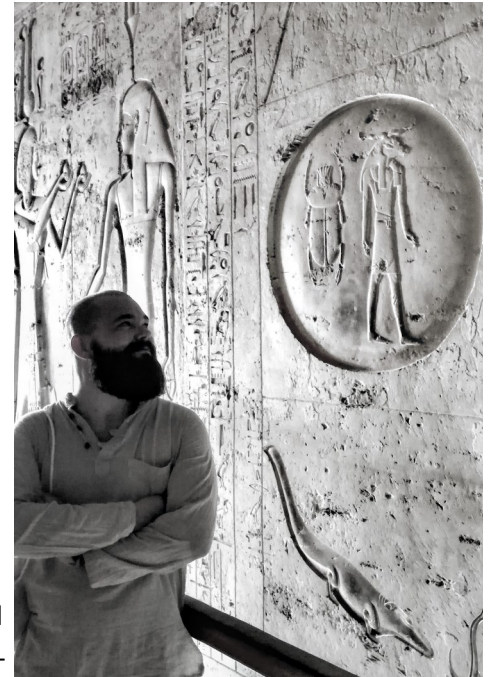
Since the establishment of Egyptology as an academic discipline in the early 19th century, chapters 125 and 110 of the so-called 'Book of the Dead' have been interpreted as conceptualized ideals regarding the deceased's posthumous judgment (125) and subsequent entry into a 'paradisiacal' afterlife location (110). However, nothing of this kind is actually mentioned in the sources and by applying the proper philological and ethnographical contextualization, the analytical findings of my master's thesis are as follows:

Chapter 125 consists of 'admittance liturgies' exclusively regarding the deceased's ritual entry into an intertextually prominent cultic 'hall of mAaty' housing the great god Osiris. Likewise, chapter 110 is not an expression of a 'paradisiacal' afterlife location but comprises ritual constellations for the provisioning and consumption of food offerings. Teleologically speaking and converging with sacerdotal norms in the ancient Egyptian mortuary and temple cult, chapters 125 and 110 are thus expressions of ideals regarding cultic qualification and ritual nourishment of the deceased.

Furthermore, in my historiographical discussion it is argued that the conventional interpretations are heavily influenced by an anachronistic and harmonizing framework characterized by Eurocentric and Christian eschatological and soteriological ideals, thus representing axiomatic and taxonomic remnants of the historical and cultural context in which early Egyptology arose. Consequently, a critique of the traditional readings has been formulated following the notion of a 'material turn' in the Study of Religions and the related theoretical concept of 'semiotic ideology', combined with a theory of translation that is grounded in cultural relativism: The conventional interpretations are thus expressions of a distinct semiotic ideology in which signs (e.g. words and objects) related to the context of ancient Egyptian funerary religion primarily are regarded as expressions of ideals concerning transcendence, and not materiality – even though the latter is accepted in readings of identical but extra-contextual signs.

A piece of advice for other students

You should look for relevant methodological and theoretical inspiration outside your field (for the philologists: e.g. translation theory, hermeneutics, etc.).



Chris Madsen Stie

BA History

BA Egyptology

MA History of Religions

University of Copenhagen

Photo © Author

Magnus Arvid Boes Lorenzen

I am currently associated with Copenhagen, Lund, and Oslo Universities, in the Religious Roots of Europe MA-programme. My background is in Assyriology, History of Religion, and Anthropology. My primary research interests are the relationship between religion, power, and history-making in West-Eurasia, and the interplay between West-Eurasian traditions of faith, particularly, but not exclusively, in Late Antiquity, with an orientation towards popular thought on contemporary meetings of culture and religion in mind.

Thesis presentation

My BA-thesis is a first step in a longer exploration of the use of narratives of ancestors and divinities in legitimization and consolidation of power, in a comparative light. In this thesis, I compare two pairs of narratives. First, those of the birth of Moses in Genesis, and of the Mesopotamian king Sargon of Akkad in a few Akkadian cuneiform-sources, and by critically approaching the literature, and contextualizing their historical contexts, particularly of the Sargon-story, I argue for a Neo-Assyrian composition, and consider its relevance for the dynastic politics of the Sargonid kings, focusing especially on Sargon II, and the power-struggles between Assyria and Babylonia in the early 1st millennium BC.

Second, I compare segments of Saxo Grammaticus' *Gesta Danorum* and the Prose Edda, particularly, segments in *Gesta Danorum* concerning the marriage of the alleged ancestor of king Valdemar I, Hadingus, and Regnhild, and in the Prose Edda the marriage of sea-god Njorð with the giantess Skaði. From this, I focus on *Gesta Danorum* and this texts' historical context, investigating its use for the Valdemar-dynasty in both furthering the young Danish kingdom's political sovereignty from the German emperors, the Popes, and the southern Bishops, while affirming its political relations to these, and making a claim to legitimacy of rule on the Danish throne over the many contenders the Valdemar-dynasty had to face.

Finally, relying on some anthropological theoretical points from Graeber and Sahlin's *On Kings* (2017), I return to the four pairs of narratives at the base of the thesis, to discuss the way in which narrative-forms can be either appropriated or drawn from a cultural landscape, used particularly in conjunction with the establishment of genealogies that connect individual rulers or groups and factions to ancient, powerful heroes, gods, or other ancestor-figures, and through this legitimize their claims to power.

A piece of advice for other students

Making a bachelor's thesis demands a good amount of self-discipline, however, where the obvious disciplines of proper time-management, source-research, and other more "practical" disciplines are often stressed, I quickly wanted to mention another, but to my mind equally important one. You will likely experience moments of panic, self-doubt, and feelings of insufficiency, and in these moments, a different kind of more loving self-discipline is needed: The disciplining of our inner critic – it will have no positive impact on us, if it doubts us so much, we become paralyzed. It might sound counter-intuitive at first, but discipline also involves being disciplined enough to distinguish the unfair criticisms we can put on ourselves to from the important and relevant ones.



Magnus Arvid Boes Lorenzen

BA Assyriology
University of Copenhagen
MA-student, University of
Copenhagen, Lund and Oslo
Universitets in the Religious
Roots of Europe-programme.
Photo © Author

Funding for activities

We recommend applying for funding for your activities such as data collection in international museums, participating in excavations and field schools etc.

These are a selection of foundations, let us know if you have other suggestions:

Det Danske Institut i Damaskus/The Danish Institute in Damascus

Grants for projects in the Islamic parts of the Near East, for researchers, MA or PhD students. Please note that MA-students and PhD-students applying for grants have to enclose a recommendation from a supervisor.

The grants can be used for conferences, publications, but only in exceptional cases for salary for yourself.

Grants are open for applications twice a year: end of February and end of September, with a deadline around 1 March and 1 October.

See how you apply here: <https://damaskus.dk/ophold-og-legater/>

Elisabeth Munksgaard Fonden

The foundation provides grants for students and graduates in prehistoric archaeology, classical archaeology, and history. Grants are typically up to DKK 50,000 and only for projects starting after 23. December in the year of application. Funding will only be granted if you can attest that the project including this funding is fully financed.

Areas of funded activities: research in the above areas, publication of research results including PhD theses, students and recently graduates travel and study stays and other expenses in connection with research.

Deadline for applications: 1 October, you will receive answer on 23 December.

See how you apply here: <https://natmus.dk/historisk-viden/forskning/elisabeth-munksgaard-fonden/>

Fiedlers Fond

Funding for young promising Danish botanists and archaeologists who are either students or graduates but not with fixed employment. Grants are usually DKK 3,000-15,000.

Grants are given for concrete projects such as study trips, field work, work at museums which demand a stay abroad.

Deadline: mid-March – see exact date in link below.

See how you apply here: <https://uddannelse.snm.ku.dk/fiedlerslegat>

Please also check: <https://hum.ku.dk/omfakultetet/legater/> where relevant grants are announced—please note that grants are only shown here if the call is open for applications. You may also want to check Legathåndbogen which you will find online.

Conferences

Depending on your focus of research there are definitely a conference out there for you. These are a few of the conferences we know of – let us know if you know of any other conferences that are suitable for students and newly graduated.

Why even go to a conference? Although fees are sometimes high or they are held abroad which carries extra costs, you will be updated on the latest news from excavations and hear the latest research by eminent researchers. You will also start to build a network which you will need when you start applying for field schools, excavations, and jobs later. We can warmly recommend checking next year's conferences well in advance and then apply for funding.

Do you want to present your research at a session or as a poster? Here is how to approach it: Find the conference that suits you (check programmes for previous events). Check deadline for abstracts and the formal requirements (e.g. a fixed template). Many require that you have registered for the conference to send your abstract.

EACC—Egyptological-Assyriological Conference in Copenhagen

Our very own UCPH-conference, now for both Assyriology and Egyptology which means that anyone studying the history, culture, language or archaeology of the Near East can send in their abstracts. The conference is organized by students at CCRS (ToRS) and usually takes place in May every year.

Follow their Facebook site: [Egyptological~Assyriological Conference in Copenhagen](#).

ICAANE— International Congress on the Archaeology of the Ancient Near East

Held every second year, in April or May, and with different universities as host – see <http://www.icaane.net/>. In 2023, it is held in Copenhagen. You will usually need to have graduated to be able to send an abstract.

ICE—The International Congress of Egyptologists . ICE takes place in Leiden, Holland, in collaboration with Leiden University. Well worth visiting and on top of the scientific content visit Rijksmuseum Van Oudheden. The website for 2023 is:

<https://ice2023.com/>

CRE—Current Research in Egyptology holds an annual conference. You will need to be postgraduate to send your abstract. <http://cregyptology.org.uk/>

ASOR—American School of Oriental Research – you will need to be a member to participate or send abstracts: <https://www.asor.org/am/2023/call-for-papers-2023>

RAI—Rencontre Assyriologique Internationale—5 days on a key theme within Assyriology: <https://iaassyriology.com/rencontre/>

Others

Please also check organisations and conferences that are focused on specific research such as e.g. International Union for Prehistoric and Protohistoric Sciences (check.

<https://uispp.net/>). Or the Experimental Archaeology Conference:

<https://exarc.net/meetings/eac13>.

Pottery Network

Are you stuck with your pottery research? Do you need a new way to *kiln your time*?
Drop your sherds, seize the clay and join our group!

We are a newly established Archaeological Pottery Network offering a supportive space where to share ideas and present doubts concerning your research. It doesn't matter at what stage of your academic career you are at: we are here to help you!

Our group is formed by PhD students from Berlin working on different kinds of ceramic objects in archaeology, who felt the need to create an informal forum where we can discuss methodological issues and current trends in pottery studies. The idea is not only to connect early-stage career researchers, B.A. and M.A. students of the Freie Universität Berlin and of the Humboldt-Universität zu Berlin to each other, but also specialists, academics and non-academics, working on pottery in archaeology at different institutions both within and outside Germany. We meet every last Thursday of the month in hybrid format, allowing people to participate online.

Contact:

Mette Bangsborg Thuesen
Andrea Valsecchi Gillmeister
pottery@berliner-antike-kolleg.org

Time & Location:

Last Thursday of every month 5:30 – 7:00 PM
Freie Universität Berlin, Hittorfstr. 18, 14195 Berlin
and online via Webex (hybrid format)

Programme 2023

January 26th - Ceramics and Quantification: An Archaeological Evergreen Revisited",
Guest_Lecture by Dr. Gabriele Puschnigg (Austrian Academy of Sciences)

February 23rd – Evaluating different methods for the analysis of survey-pottery from the middle-Euphrates (N-Syria), presented by PhD student Antonia Höhne (Freie Universität Berlin)

March 3rd-4th - Pottery making workshop at Freilichtmuseum Groß Raden, with Anja Behrens.

March 30th - Ceramics in contemporary art, presented by artist Beth Collar

April 27th - Connecting the dots: Network Theory and its application in pottery studies, presented by PhD student Daniela Greger (University of Lausanne)

June 1st - Pottery in cultic context: Case study Nuraghe Su Mulinu, presented by PhD student Mattia Lauretti (Freie Universität Berlin)

June 29th - Changing Societies and Innovative Pottery in West Africa, presented by PhD student Søren Feldborg (Goethe University Frankfurt)



**POTTERY
NETWORK**

General Information

For Chronolog Journal Issue 1, 2023

Guidelines to Authors

1. Chronolog aims to provide a peer reviewed journal in which students with relations to UCPH can publish their research on the ancient Near East.
2. Contributions are accepted in English.
3. Contributions may include scientific articles, essays or book reports.
4. List of finalised MA's and PhDs only relate to UCPH
5. List of conferences and fonds/grants relate primarily to UCPH
6. All submissions are to be made via <https://tidsskrift.dk/Chronolog>
7. The author's guidelines can be found at <https://tidsskrift.dk/Chronolog>. Please check the current guidelines as they are updated regularly.
8. Guidelines for images and illustrations can be found on <https://tidsskrift.dk/Chronolog>. Illustrations should be sent as separate files. Colour images are welcome.
9. Only illustrations with cleared copyrights, permission for internet publication, and full credit information as required by copyright holders can be used. Any complaint of use of uncredited or copy righted images should be directed to the author of the article/essay.
10. All contributions are double-blind peer-reviewed by invited specialists, the editors may use a single peer reviewer for articles by BA-students.
11. The editors reserve the right to suggest and make appropriate alterations in the wording of manuscripts sent for publication.

Copyright

Copyright of text remains with the individual authors.

Copyright in images remains with the originating source. Any infringement must be taken up with the author directly.

Disclaimer

The views expressed by authors in articles printed in Chronolog are not necessarily those of the editors and are the responsibility solely of the individual contributors.

Until next time...

Chronolog is a part of the organising team of ICAANE 2023. We have a student lounge at the conference where all students can find a quiet space and a cup of coffee.

Tuesday night we organize a quizz night to help the students network.

We will also repeat our workshops on how to write an article, on copyrights of illustrations for your articles, and how to find funding for projects.

And of course we are working toward Issue 2 which will be published in March 2024.

Call for papers for issue 2

Are you a student of archaeology, languages or history of the ancient cultures in Southwest Asia or Egypt? Are you interested in seeing your research project published in a peer-reviewed academic journal?

Then read on!

If you are

- A BA or MA student from University of Copenhagen
- Alumni from University of Copenhagen (no more than 5 years after graduation)
- Have presented a paper at EACC, Berlin-Copenhagen Seminar or ICAANE

Then we would love to see your research project in Chronolog Journal.

Your article should be on a topic within archaeology, anthropology, philology, art history, museum studies, and history of ancient Southwest Asia or Egypt.

Chronolog is peer reviewed and open access, giving you all the best possibilities for making a splash with your research!

Submit your article on: <https://tidsskrift.dk/Chronolog> before **1 October 2023 for Chronolog Journal Issue 2, 2024.**

You can follow us on social media:

Facebook – Chronolog – Student Journal

Instagram: [chronology_journal](#)

Or contact us at chronologjournal@gmail.com

CHRONOLOG



UNIVERSITY OF
COPENHAGEN



المعهد الدنماركي بدمشق
DET DANSKE INSTITUT I DAMASKUS