

TRAVAUX DE L'INSTITUT DES CULTURES MÉDITERRANÉENNES ET ORIENTALES  
DE L'ACADÉMIE POLONAISE DES SCIENCES

TOME 18

# EGYPT 2023

## PERSPECTIVES OF RESEARCH



edited by

JOANNA POPIELSKA-GRZYBOWSKA  
JADWIGA IWASZCZUK  
KATARZYNA KAPIEC  
KRZYSZTOF J. RADTKE



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## Preface

The present monograph provides an overview of current research and perspectives covering various spheres of interest in present-day Egyptology and a scholarly discussion on various approaches to studies of ancient Egypt in all its aspects and forms.

It is with great pleasure that we offer you the first volume of a collection of themes, a part of which was debated by a large group of 118 scientists from 26 countries from five continents during the *Tenth European Conference of Egyptologists. Egypt 2023: Perspectives of Research* that was hosted by the Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences, to whom we are sincerely indebted. In Warsaw, in addition to guest speeches and sessions with papers, panel discussions were also organised on the leading directions of research on ancient Egypt and their perspectives, namely, archaeology; language and literature, religion; religious texts; art; architecture; Graeco-Roman Egypt and its art ; museum collections; Egyptomania and the reception of antiquity. Many chapters have been reworked or added since the conference presentations. This series of publications, published for 24 years (since 2020 by IMOC PAS in cooperation with Harrassowitz Verlag), is a platform for discussion on current research in the discipline and related fields, as well as interdisciplinary research. Consequently, this publication furnishes a recapitulation of numerous ongoing studies in archaeology and Egyptology, as well as related fields, but also indicates possible avenues for further research within the discipline and as cross- and transdisciplinary studies. Our goal is to foster both constructive and inspiring discussions that will help young researchers thrive and provide more experienced scholars with an opportunity to share their expertise. Both conferences and monographs devote considerable space to the study of ancient Egyptian beliefs, which in recent years have been less frequently featured at symposia and in collective publications. We aspire for our academic meetings and publications to continue to provide a safe environment for all professionals to develop and engage in debate.

We would like to thank all of the conference organisers and especially wholeheartedly we thank Dr. Monika Dolińska, Dr. Ewa Józefowicz, Małgorzata Radomska, Dr. Wojciech Ejsmond and Mr. Piotr Sójka for their unparalleled commitment to work, support and serenity.

We are also grateful to His Excellency, the Ambassador of the Republic of Poland, for his presence.

We also thank Dr. Aleksandra Pawlikowska-Gwiazda and Kacper Laube for guiding us through the expositions of the Ancient Art Gallery and Faras Gallery at the National Museum in Warsaw.

The series of European meetings of Egyptologists was initiated in Warsaw in 1999 by Dr. Andrzej Ćwiek, Prof. Joanna Popielska-Grzybowska and Joanna Kociankowska. The Second and Third symposia were held in Warsaw in 2001 and 2004, and the Fourth conference was organised in Budapest in 2006. The Fifth Conference took place in Pułtusk in 2009, and the Sixth in 2012 in Kraków. The Seventh, Eighth, and Ninth Conferences were held in 2015 in Zagreb, in 2017 in Lisbon, and in 2021 in Trieste, respectively.

With heartfelt gratitude, we want to thank Olivia Temple and Professor Robert Temple, representing The Ancient Egypt Foundation, for their unparalleled support.

We are deeply indebted to Bep and Jan Koek from the Mehen Stichting, Studiecentrum voor het oude Egypte, The Netherlands, for their assistance and presence.

We extend our thanks to Umbra Orientis IMOC PAS, and Agnieszka Radtke in particular, for her exceptional assistance.

This book would not be the same if it were not for the engagement of many people who collaborated with the editors. We express our true gratitude to Dr. Jo B. Harper for proof-reading the texts and to Janusz Janiszewski, Graf Printing House, for their exceptional commitment to work and patience.

We acknowledge our indebtedness to all the Reviewers and Authors for their fruitful co-operation.

Joanna Popielska-Grzybowska  
Jadwiga Iwaszczuk  
Katarzyna Kapiec  
Krzysztof J. Radtke

# Abbreviations

ÄAT	<i>Ägypten und Altes Testament</i>
AAWB	<i>Abhandlungen der deutschen Akademie der Wissenschaften zu Berlin, philologisch-historische Klasse</i>
AAWMainz	<i>Akademie der Wissenschaften und der Literatur (Mainz): Abhandlungen der Geistesund Sozialwissenschaftlichen Klasse</i>
ACER	<i>Australian Centre for Egyptology Reports</i>
ACF	<i>Annuaire du College de France. Résumé des cours et travaux</i>
AfrPraehist	<i>Africa Praehistorica</i>
ÄgLev	<i>Ägypten und Levante. Zeitschrift für ägyptische Archäologie und deren Nachbargebiete</i>
AJA	<i>American Journal of Archaeology</i>
AOAT	<i>Alter Orient und altes Testament</i>
AOB	<i>Acta Orientalia Belgica</i>
ArchVer	<i>Archäologische Veröffentlichungen</i>
ASAE	<i>Annales du Service des antiquités de l'Égypte</i>
ASAtene	<i>Annuario della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente</i>
BÄBA	<i>Beiträge zur ägyptischen Bauforschung und Altertumskunde</i>
BAH	<i>Bibliothèque archéologique et historique</i>
BAR-IS	<i>British Archaeological Reports International Series</i>
BASOR	<i>Bulletin of the American Schools of Oriental Research in Jerusalem and Baghdad</i>
BEJ	<i>Birmingham Egyptology Journal</i>
BESTud	<i>Brown Egyptological Studies</i>
BiAeg	<i>Bibliotheca Aegyptiaca</i>
BiEtud	<i>Bibliothèque d'étude</i>
BIFAO	<i>Bulletin de l'Institut français d'archéologie orientale</i>
BMMA	<i>Bulletin of the Metropolitan Museum of Art</i>
BMSAES	<i>British Museum Studies in Ancient Egypt and Sudan</i>
BollSer	<i>Bollingen Series</i>
BSAE	<i>British School of Archaeology in Egypt (and Egyptian Research Account)</i>
BSAK	<i>Studien zur altägyptischen Kultur. Beihefte</i>
BSEG	<i>Bulletin de la Société d'égyptologie de Geneve</i>
BSFE	<i>Bulletin de la Société française d'égyptologie</i>
CAENL	<i>Contributions to the Archaeology of Egypt, Nubia and the Levant</i>

<i>CahKarn</i>	<i>Cahiers de Karnak</i>
CAJ	<i>Cambridge Archaeological Journal</i>
CAN	<i>Cronica Numismatică și Arheologică. Foaie de informații a Societății Numismatice Române, București</i>
CAsJ	<i>Central Asiatic Journal</i>
CCEM	<i>Contributions to the Chronology of the Eastern Mediterranean</i>
CHANE	<i>Culture and History of the Ancient Near East</i>
CRAIBL	<i>Comptes rendus de l'Académie des inscriptions et belles-lettres</i>
CT III	Buck, A. de, <i>The Egyptian Coffin Texts III. Texts of spells 164–267, OIP 64, Chicago 1947</i>
CT IV	Buck, A. de, <i>The Egyptian Coffin Texts IV. Texts of spells 268–354, OIP 67, Chicago 1951</i>
CT VI	Buck, A. de, <i>The Egyptian Coffin Texts VI: texts of spells 472–786, OIP 81, Chicago 1956</i>
CT VII	Buck, A. de, <i>The Egyptian Coffin Texts VII: texts of spells 787–1185, OIP 87, Chicago 1961</i>
D V	Chassinat, É. 1952: <i>Le temple de Dendara 5: texte, Le Caire</i>
D X	Cauville, S. 1997: <i>Le temple de Dendara 10: les chapelles osiriennes, 2 vols, Le Caire</i>
DÖAWW	<i>Denkschriften der österreichischen Akademie der Wissenschaften</i>
EEF-Mem	<i>Egypt Exploration Fund Memoirs</i>
EES-ExcMem	<i>Egypt Exploration Society Excavation Memoirs</i>
EgArch	<i>Egyptian Archaeology</i>
ENiM	<i>Égypte nilotique et méditerranéenne</i>
EPRO	<i>Études préliminaires aux religions orientales dans l'Empire romain</i>
ERTR	<i>Egyptian Religious Texts and Representations</i>
EtTrav	<i>Études et Travaux</i>
EVO	<i>Egitto e Vicino Oriente</i>
FIFAO	<i>Fouilles de l'Institut français d'archéologie orientale</i>
GHP Egyptology	<i>Golden House Publications Egyptology</i>
GOF	<i>Göttinger Orientforschungen</i>
GöttMisz	<i>Göttinger Miszellen. Beiträge zur ägyptologischen Diskussion</i>
HÄB	<i>Hildesheimer ägyptologische Beiträge</i>
Hathor	<i>Hathor – Estudios de egiptologia</i>
HbOr	<i>Handbuch der Orientalistik</i>
INFO VIS	<i>Information Visualization</i>
IOS	<i>Israel Oriental Studies</i>
JAA	<i>Journal of Anthropological Archaeology</i>
JA EI	<i>Journal of the Ancient Egyptian Interconnections</i>
JARCE	<i>Journal of the American Research Center in Egypt</i>
JAS	<i>Journal of Archaeological Science</i>

## ABBREVIATIONS

JEA	<i>Journal of Egyptian Archaeology</i>
JEH	<i>Journal of Egyptian History</i>
JNES	<i>Journal of Near Eastern Studies</i>
KÄT	<i>Kleine Ägyptische Texte</i>
KRI	Kitchen, K.A., <i>Ramesside Inscriptions. Historical and Biographical I–VI</i> , Oxford 1975–1983
LÄ	Helck, W., Otto, E. (Eds), <i>Lexikon der Ägyptologie I–VII</i> , Wiesbaden 1975–1992
LD	Lepsius, K.R., <i>Denkmäler aus Ägypten und Äthiopien. Nach den Zeichnungen der von Seiner Majestät dem Könige von Preussen Friedrich Wilhelm IV. nach diesen Ländern gesendeten und in den Jahren 1842–1845 ausgeführten wissenschaftlichen Expedition</i> , Berlin 1849–1859
Levant	<i>Levant: The Journal of the Council for British Research in the Levant</i>
LGG	Leitz, Ch. (Ed.) 2002–2003: <i>Lexikon der ägyptischen Götter und Götterbezeichnungen</i> , 8 vols, OLA 110–116, 129, Leuven
LNCS	<i>Lecture Notes in Computer Science</i>
MARB	<i>Mémoire de l'Académie Royale de Belgique, classe des lettres et des sciences morales et politiques de l'Académie Royale de Belgique</i>
MÄS	<i>Münchener Ägyptologische Studien</i>
MDAIK	<i>Mitteilungen des Deutschen Archäologischen Institutes, Abteilung Kairo</i>
MIFAO	<i>Mémoires publiés par les membres de l'Institut français d'archéologie orientale</i>
MMJ	<i>Metropolitan Museum Journal</i>
MonPiot	<i>Monuments et mémoires de la Fondation Eugene Piot</i>
MuzNaț	<i>Muzeul Național</i>
MVEOL	<i>Mededelingen en Verhandelingen van het Vooraziatisch-Egyptisch Genotschap</i>
NAWG	<i>Nachrichten von der Akademie der Wissenschaften zu Göttingen, philologisch-historische Klasse</i>
NeHeT	<i>NeHeT. Revue numérique d'Égyptologie</i>
OBO	<i>Orbis biblicus et orientalis</i>
OCE	<i>Oxfordshire Communications in Egyptology</i>
OIP	<i>Oriental Institute Publications</i>
OIS	<i>Oriental Institute Seminars</i>
OLA	<i>Orientalia lovaniensia analecta</i>
OMRO	<i>Oudheidkundige Mededelingen vit het Rijksmuseum van Oudheden</i>
OpAthRom	<i>Opuscula. Annual of the Swedish Institutes at Athens and Rome</i>
OrMonsp	<i>Orientalia Monspeliensia</i>
PALLAS	<i>PALLAS. Revue d'études antiques</i>
Philae I	Junker, H. 1958: <i>Der große Pylon des Tempels der Isis in Philä. Mit Zeichnungen von Dr. Otto Daum, DÖAWW Sonderband</i> , Wien
PM I <sup>2</sup>	Porter, B., Moss, R.L.B., <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings</i> , 2 <sup>nd</sup> ed., vol. I/2: <i>The Theban Necropolis</i> , Oxford 1970 <sup>2</sup>

PM III <sup>2</sup> , 2	Porter, B., Moss, R.L.B. 19812: Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings III2: Memphis. Part 2: Saqqâra to Dahshur, (Second Edition. Revised and Augmented). Oxford
PM VI	Porter, B., Moss, R.L.B. 1991: Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings VI: Upper Egypt: chieftemples (excluding Thebes), Abydos, Dendera, Esna, Edfu, Kôm Ombo, and Philae, Oxford
PMMA	<i>Publications of the Metropolitan Museum of Art</i>
ProblÄg	<i>Probleme der Ägyptologie</i>
PSArabStud	<i>Proceedings of the Seminar for Arabian Studies</i>
PT	Sethe, K., Die Altaegyptischen Pyramidentexte nach den Papierabdrucken und Photographien des Berliner Museums I–II, Leipzig 1908–1910
QDAP	<i>The quarterly of the Department of Antiquities in Palestine</i>
RdE	<i>Revue d'égyptologie</i>
RevBibl	<i>Revue biblique</i>
RevMuz	<i>Revista Muzeelor, București</i>
SAAC	<i>Studies in Ancient Art and Civilization</i>
SAGA	<i>Studien zur Archäologie und Geschichte Altägyptens</i>
SAK	<i>Studien zur altägyptischen Kultur</i>
SANEM	<i>Studies on the Ancient Near East and the Mediterranean</i>
SAWW	<i>Sitzungsberichte der Österreichischen Akademie der Wissenschaften, philologisch-historische Klasse</i>
SCIVA	<i>Studii și Cercetări de Istorie Veche și Arheologie. Academia Română, Institutul de Arheologie "Vasile Pârvan", București</i>
SDAIK	<i>Sonderschriften des Deutschen Archäologischen Instituts, Abteilung Kairo</i>
SMA	<i>Studies in Mediterranean Archaeology</i>
SME	<i>Studi del Museo Egizio</i>
SRAT	<i>Studien zu den Ritualszenen altägyptischer Tempel</i>
StudPun	<i>Studia Punica</i>
Urk. I	Sethe, K., Urkunden des Alten Reich, Urkunden des Ägyptischen Altertums Abteilung 1, Leipzig 1933
Urk. VII	Sethe, K., Historisch-biographische Urkunden des Mittleren Reiches [VII,1–66]. Unter Mitwirkung von W. Erichsen, Urk.VII (1), Leipzig 1935
UZK	<i>Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Institutes</i>
VDI	<i>Vestnik Drevnej Istorii</i>
VIAS	<i>Vienna Institute for Archaeological Science</i>
Wb	Erman, A., Grapow, H., Wörterbuch der aegyptischen Sprache im Auftrage der Deutschen Akademien I–VI, Leipzig 1926–1950
WVDOG	<i>Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft</i>
ZÄS	<i>Zeitschrift für ägyptische Sprache und Altertumskunde</i>

# The importance of studies on how antiquity is perceived to the understanding of a new civilisational paradigm: the example of painting

Maria Helena TRINDADE LOPES

**Abstract:** The concept of Western Civilisation remained for centuries a prisoner of a geography and a chronology that went back to the Graeco-Roman world. With the development of the study of older civilisations, such as Egypt and Mesopotamia, this geography and chronology no longer made sense. But recognising this reality and, above all, the importance of these civilisations in the construction of a Western and European identity has not yet been fully assimilated into popular awareness. Hence the importance of studies – specific and thematic – that illustrate how these civilisations definitively marked Western and European culture. The case of painting is absolutely paradigmatic.

**Keywords:** reception studies, Western Civilisation, Ancient Egypt, painting

Maria Helena Trindade Lopes, CHAM e Departamento de História, FCSH, Universidade NOVA de Lisboa, Universidade dos Açores, e- mail: mhtl@fcsh.unl.pt

“Art is the murmur of history, heard over the noise of time”

Julian Barnes, *O Ruído do Tempo*

“What does the artist do? He draws connections. He ties the invisible threads between things. He dives into history, be it the history of mankind, the geological history of the Earth or the beginning and end of the manifest cosmos”

Anselm Kiefer, *L'art survivra à ses ruines. Art will survive Its Ruins. Anselm Kiefer au Collège de France*

“Migration is represented in narratives from many cultures. It is also represented in our scientific narrative of the evolution of *Homo sapiens* out of Africa. I can see how the world shapes the narratives we create to describe it. But maybe our narratives also shape the way we perceive the world.”

Jim Cogswell, *Cosmogonic Tattoos*

“Si la civilisation pharaonique fascine, c’est aussi parce que sa colossale monumentalité, son iconographie hiératique, la permanence de ses principes et de la vision du monde qu’elle propose pendant trois millénaires et demi offrent une référence fixe à laquelle s’ancrer quand l’homme moderne se sent ballotté par le flux puissant des variations esthétiques”

Pascal Vernus, “*L’appropriation de l’Égypte par l’Autre de l’antiquité à la culture mondialisée contemporaine: égyptomanie, égyptologie, égyptophilie, égyptosophie sous le coup du «naturel de l’artifice».*”

Reception Studies applied to History,<sup>1</sup> despite being a relatively recent field of research, initiated in the 1960s and 1970s by authors like Hans-Robert Jauss – within the specific scope of Literary Studies – have since been transformed into a very fruitful area of research.

These studies focus on interrogating the varied ways in which “ancient material was transmitted, translated, extracted, interpreted, rewritten, re-edited and represented”<sup>2</sup> by later historical agents, in an interconnected perspective that analyses the intertextuality between material, iconographic data and writings produced in ancient civilisations, and received by later contexts.<sup>3</sup> Naturally, the contingencies and expectations of the authors/agents who analyse this material and adapt it to their reality has to be taken into account, considering the co-extensive political, social, economic and cultural processes, as these influenced the ways in which this ancient material was received and transformed.<sup>4</sup> Finally, “in order to understand how and why a specific ancient material is transformed into heritage, it is necessary to really know antiquity and the different layers of its reception,”<sup>5</sup> so that its appropriation can be objectively identified. And even when this appropriation seems evident to us, it becomes necessary to problematise it, so that its varied meanings can become more perceptible.

Initially, these studies focused exclusively on Classical Antiquity, i.e., on a chronology and on cultures that the West recognised as its civilisational matrix – Greco-Roman culture and the Judeo-Christian tradition. But over time, reception scholars<sup>6</sup> realised that classical studies were themselves a form of reception<sup>7</sup>, and from this realisation they sought to discover the ways in which antiquity had conceived its own histories. This decipherment inevitably led them to older civilisations and cultural contexts, such as the Egyptian, the Mesopotamian, the Hebrew, the Hittite or the Persian.

Thus, today, when we speak of the reception of antiquity by the so-called Western world, we must look beyond the Greek and Roman pasts. We must approach Antiquity in its multiple expressions, integrating African heritage and Asian heritage.

This new understanding of the roots of so-called Western civilisation, to which numerous factors contributed, such as the development of archaeology in Egypt, in Mesopotamia and in Anatolia, for example, with the subsequent development of museology, thanks to objects from archaeological excavations, was further reinforced by the appearance of new publications, which came to question the notion of the Orient, with emphasis on the work of Said<sup>8</sup> at the end of the 1970s.

Since then, ‘the West’ has in some quarters at least been increasingly comprehended as a historical concept that has evolved over the centuries and as a cultural concept. And the first phase of this evolution of Western culture, which was at the same time the longest, corresponds to the geography of the ancient Near East, which begins during the fourth millennium B.C. with the creation of the first societies that will form the cultural structure of Western civilisation: Egypt, in the Nile Valley, and Mesopotamia, in the region between the Tigris and Euphrates rivers. The emergence of these societies allowed the development and accumulation of knowledge that was subsequently spread across the Mediterranean basin to the entire ancient world.<sup>9</sup>

In this geographic and chronological framework, Ancient Egypt naturally assumed a relevant role when we talk about reception. Its immediate identification across social groups, from the literate to the less literate, turned this civilisation into a paradigmatic and successful case among reception studies. This was felt immediately after the Napoleonic campaigns, with the appearance of the term “Egyptomania”, which grew and evolved progressed in the following decades.

As Pascal Vernus, the most brilliant living Egyptologist, points out in a recent article – “L’appropriation de l’Égypte par l’Autre de l’antiquité à la culture mondialisée contemporaine: égyptomanie, égyptologie, égyptophilie, égyptosophie sous le coup du “naturel de l’artifice”<sup>10</sup> – presented at the International Colloquium organised by the University of Fribourg in March 2021, argues that despite the fact that the

<sup>1</sup> Lopes *et al.* 2020: 3–10.

<sup>2</sup> Vargas 2019: 4.

<sup>3</sup> Lopes *et al.* 2020: 3.

<sup>4</sup> Lopes *et al.* 2020: 3.

<sup>5</sup> Lopes *et al.* 2020: 3.

<sup>6</sup> Porter 2008: 469–481; Elsner 2013: 212–217.

<sup>7</sup> Bricault 2019: 195–225; Ashton 2004.

<sup>8</sup> Said 2004.

<sup>9</sup> Lopes 2014: 553–557. Lopes *et al.* 2017: 83–104.

<sup>10</sup> Vernus 2021: 235–254.

term “Egyptomania” appeared at the end of the eighteenth century, its promotion as a domain in the field of Egyptology was not recognised until the 1970s, and was crowned by the work of Jean-Marcel Humbert,<sup>11</sup> whom Vernus describes as “epoch-making”<sup>12</sup> for all that concerns Egyptian inspiration in the arts and decoration. From then on, this field developed significantly and reception studies on Ancient Egypt in its various manifestations gained a unique prominence.

Vernus’ article is undoubtedly the most exemplary in terms of reflections on the subject. His paradigmatic wisdom, creativity and unrivalled erudition in the scientific world of Egyptology speaks for itself.

Among the various manifestations of this millenary civilisation that has produced the least work in reception studies is also one of its most identifiable: painting.

Egyptian painting, governed by extremely complex and sophisticated codes and conventions, has the extraordinary capacity of being recognised by both a worker and an intellectual. And this paradox is due to what Vernus, in the same article quoted above, calls “the naturalness of the artifice.”<sup>13</sup> Egyptian art, especially painting, conveys such an impression of familiarity that it seems to be part of our everyday life, despite being separated by millennia of history.

This distinctive feature of painting derives, of course, from the very precise canons<sup>14</sup> that were maintained throughout Pharaonic history, except for the short Amarna period. These canons, or principles, enabled Egyptian painting to achieve one of its main objectives: to become “art for eternity.”

Bearing this information in mind, I will look at this manifestation from two different perspectives. One that refers to the appropriation of some of the canons of Egyptian art by artists throughout history and another that focuses exclusively on topics or characters that other artists have received or reproduced.

This journey will consider these two possibilities. Let us begin with the appropriation of canons. In this specific field, the existing cases are undoubtedly of excellence, although not so expressive in terms of quantity.

Perhaps the most recognised canon of Egyptian art is the principle of frontality, with which we will begin here.

Picasso, in his work, “Les Femmes d’Alger (O. J. R. M.)”, presents us with a painting with four female figures, in which the figure on the left is clearly represented,<sup>15</sup> following one of the most identifying canons of Egyptian painting: the principle of frontality.

The figure presents the face in profile, the eye in front, eyebrow in profile, an arm in profile, the legs in profile, belly, and hips at  $\frac{3}{4}$  and the breast in profile. Using this form of representation Picasso was able, like the Egyptian artist, to enhance the aspect that most characterised each element of the human body. Drawn in profile, the face is shown to the fullest. And in this profile face, the eye is represented from the front, as this is its most characteristic and revealing element.

Cubism was an artistic movement founded by Picasso and Georges Braque, who used some of the principles of Egyptian painting for their productions. We can speak, eventually, of inspiration.<sup>16</sup>

But let’s go even further. Continuing with Picasso...

Picasso, in his work, “The Portrait of Dora Maar,” one of his mistresses, painted in 1937, which is in the Picasso Museum in Paris, uses what is undoubtedly the most distinctive mark of Egyptian painting, “the principle of the association of points of view.”<sup>17</sup>

This principle was based on the concept that the representation of a person - which he also applies to landscapes and more complex representations - should show all the features of that person and not only those that could be seen in a linear representation. For that purpose, the artist should collect the different views of that person, observed from the front, from the side, i.e., from several points of observation at the same time, and then synthesise them in a representation, thus allowing the total representation of the figure with all its fundamental features.

<sup>11</sup> Humbert 1989.

<sup>12</sup> Vernus 2021: 235.

<sup>13</sup> Vernus 2021: 254.


<sup>14</sup> The six canons of Egyptian art: the principle of frontality; the principle of colouring; the principle of variation in size; the principle of idealisation; the principle of the association of views and the principle of not suppressing figures. On the canons of Egyptian art, see Schäfer 1986; Hartwig 2015: 39–59; Hartwig 2016: 28–56.

<sup>15</sup> Jeune 2005: 18.

<sup>16</sup> Jeune 2005: 18; Warncke *et al.* 1997: 176.

<sup>17</sup> Schäfer 1986: 424–427.



Fig. 1. P. Picasso, *Les Femmes d'Alger (O. J. R. M.)*, 1911-12, MOMA (333.1939), New York 

This model of representation results from the rejection of perspective, since this, in the Egyptian concept of representation, resulted from the angle of view of the observer, being incomplete, imperfect, and reductive, and bringing out only a reduced portion of the person to be represented and not the true essence of the character with all its particularities. Basically, the Egyptian artist always tried to represent what existed, the real, and not what could be seen in a linear perspective. In doing so, the Egyptian artist superimposed intellectual realism on visual realism, which he considered imprecise and reductive.

Now, what did Picasso do in the representation of Dora Maar? Like the Egyptian artist, he captured the essential features of Dora Maar, as if viewed from different angles, and synthesised them in a single composition, thus allowing the observer to see the whole figure and not just a perspective of that figure. In fact, in this painting, Dora's whole face is visualised. The two eyes, the eyebrows, different perspectives of the nose and the forehead are represented. Extraordinary, isn't it? But very Egyptian, despite being the work of Picasso.

Departing now from this tutelary figure, let us explore another canon, that of "the principle of the non-suppression of figures,"<sup>18</sup> so relevant to Egyptian art, as we will see in numerous examples.

<sup>18</sup> Schäfer 1986: 177-198.



Fig. 2. P. Picasso, *The Portrait of Dora Maar*, 1937, Musée Picasso, Paris 

This principle was intended to guarantee that everything that was represented became visible to the observer. To this end, naturally, the law of classical perspective was abolished, and very simple and relatively ingenious techniques were used to achieve the desired objectives. This principle enabled, through lateral displacements, several silhouettes that overlapped in a composition to become perceptible to the observer.



Fig. 3. “Wailing women in the funeral procession”, Tomb of Ramose, (TT 55), Luxor West Bank. 

These displacements, in more complex and longer compositions, could be done with recourse to vertical displacements, to transmit the notion of succession of actions in time. In this case, the reading was to be done from the bottom up and the actions were separated from each other by a horizontal line, the “ground line.”

This technique of displacements – lateral or vertical – allowed, once again, the greatest number of elements of reality to be captured in the same representation.

This is what Roy Lichtenstein,<sup>19</sup> an American painter identified with Pop Art, does in his work “The Red Horseman” from 1974, which is at the MUMOK in Vienna.

He uses the “Egyptian principle of the non-suppression of figures” to allow the viewer to identify the number of horses and runners he represents in his painting. Impressive, isn’t it?

We could go on here about the appropriation of the canons of Egyptian painting by various contemporary artists. However, I will provide only one last example. We are all familiar with the depiction of the “Tomb of Nebamun” from Thebes, dating from around 1350 B.C. (eighteenth Dynasty) which is in the British Museum.

<sup>19</sup> Rondeau *et al.* 2012.



Fig. 4. “Measuring harvest and noting stock”, Tomb of Menna, (TT 69), Luxor West Bank. CC-BY-SA-4.0

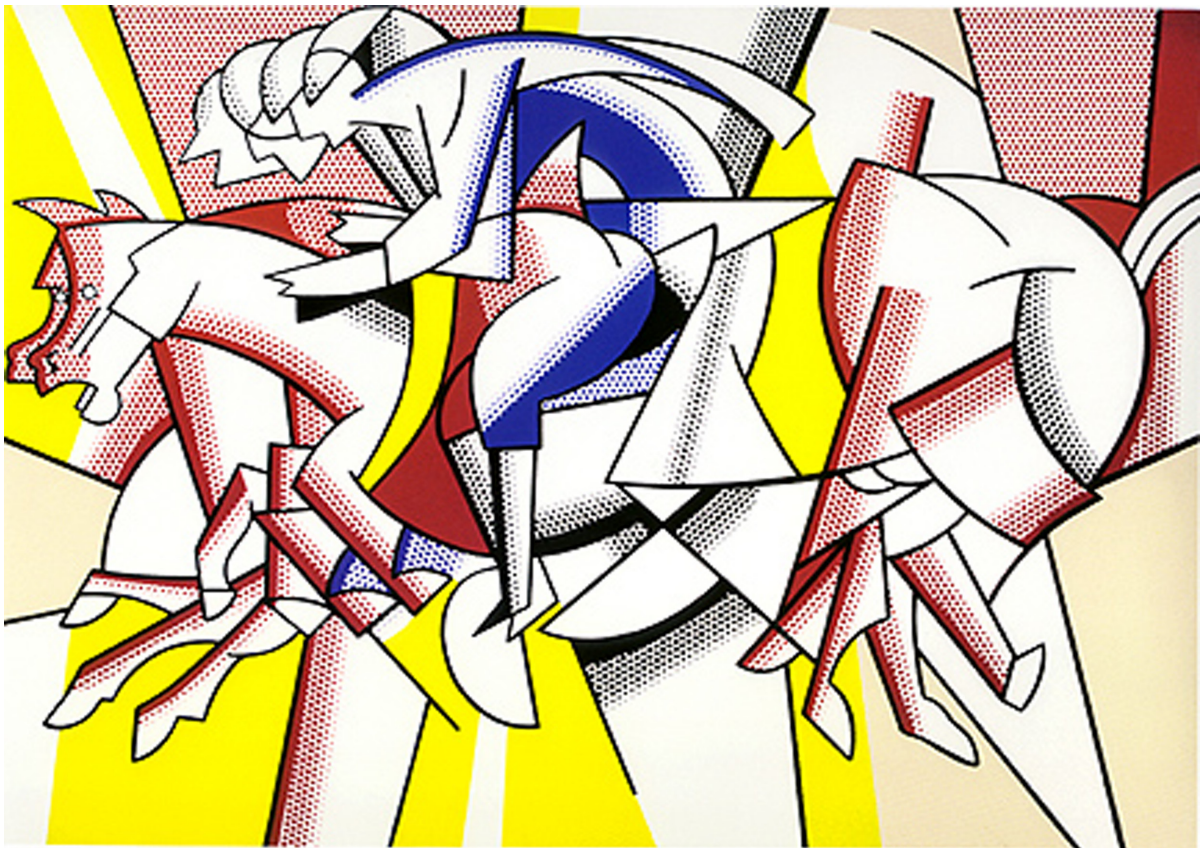


Fig. 5. Roy Lichtenstein, *The Red Horseman*, 1974, Mumok (L 138/0), Vienna. © Estate of Roy Lichtenstein/Bildrecht, Wien 2021.

Let us now confront this model of representation with the painting by the French painter Paul Gauguin (1848–1903), *Te Matete*, which is currently in the Kunstmuseum in Basel, Switzerland. Surprising, to say the least, isn't it? There is a story behind all this similarity,<sup>20</sup> but curiously this story is little known and rarely quoted.

Let us now turn to my second proposed analysis. That which demonstrates how certain themes or characters from Egyptian civilisation – paradigmatic, of course – are continuously and repeatedly received or reproduced by different artists over time.

The pyramids, for example. The pyramids have been an inexhaustible source of inspiration for countless painters.



Fig. 6. “Banquet”, Tomb of Nebamun, Theban Necropolis, British Museum (EA37981), London © The Trustees of the British Museum.



Fig. 7. Paul Gauguin, *Te Matete*, 1892, Kunstmuseum, Basileia. 

<sup>20</sup> <https://www.gauguin.org/ta-matete.jsp>; Danielsson 1969: 16–26.

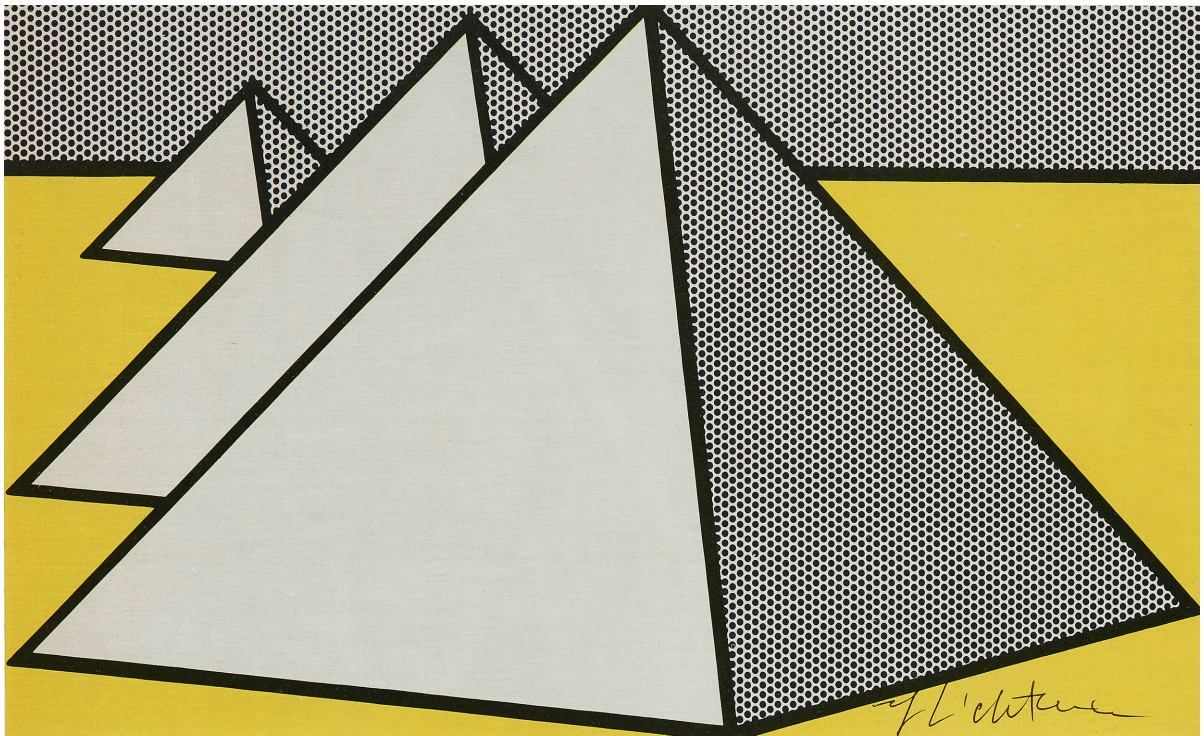


Fig. 8. Roy Lichtenstein, *Pyramids*, 1969, RISD Museum (69081), Rhode Island.

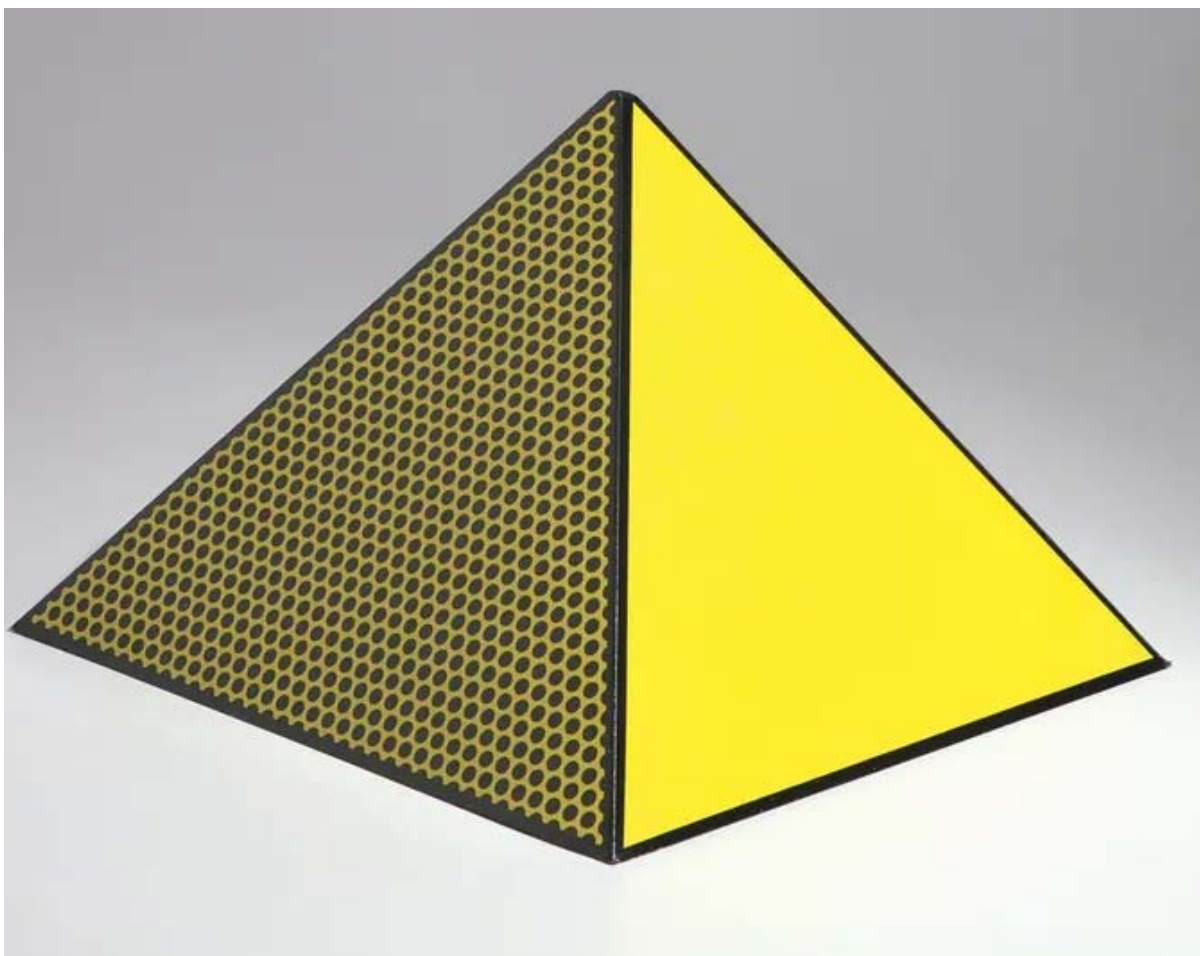


Fig. 9. Roy Lichtenstein, *Pyramid*, 1968, National Gallery of Art (1996.56.46), Washington.

Lichtenstein, the painter we mentioned above to highlight the principle of Egyptian painting of the “non-suppression of figures” and linked to the Pop Art movement, presents among his work numerous representations of pyramids. I present here two of them, “Pyramids,” dated 1969, which is in the RISD Museum in Rhode Island and “Pyramid,” dated 1968, which is in the National Gallery of Art in Washington.

“Early in his artistic career Lichtenstein studied the work of Picasso and Paul Klee”<sup>21</sup> among others. “Eventually he realised that some of the techniques employed by these artists were also used in the comics he loved, including outlines, abstracted shapes, and flattened forms”<sup>22</sup> and “the fragmented pictorial language of Picasso’s Cubism also featured prominently in Lichtenstein’s paintings.”<sup>23</sup>

Such almost invisible but real threads that have connected different creators and creations over time are extraordinary, aren’t they?

I just mentioned that Lichtenstein studied the work of Paul Klee, one of the painters of memory. Klee<sup>24</sup> was a German-born Swiss painter whose work was influenced by artistic movements including expressionism, cubism, and surrealism. “His work became important for the foundation of German constructivism, contributing to the to the formalist thinking adopted by the Bauhaus in Bauhaus in Germany in the 1920s.”<sup>25</sup> We know that he visited Egypt in 1928/1929.

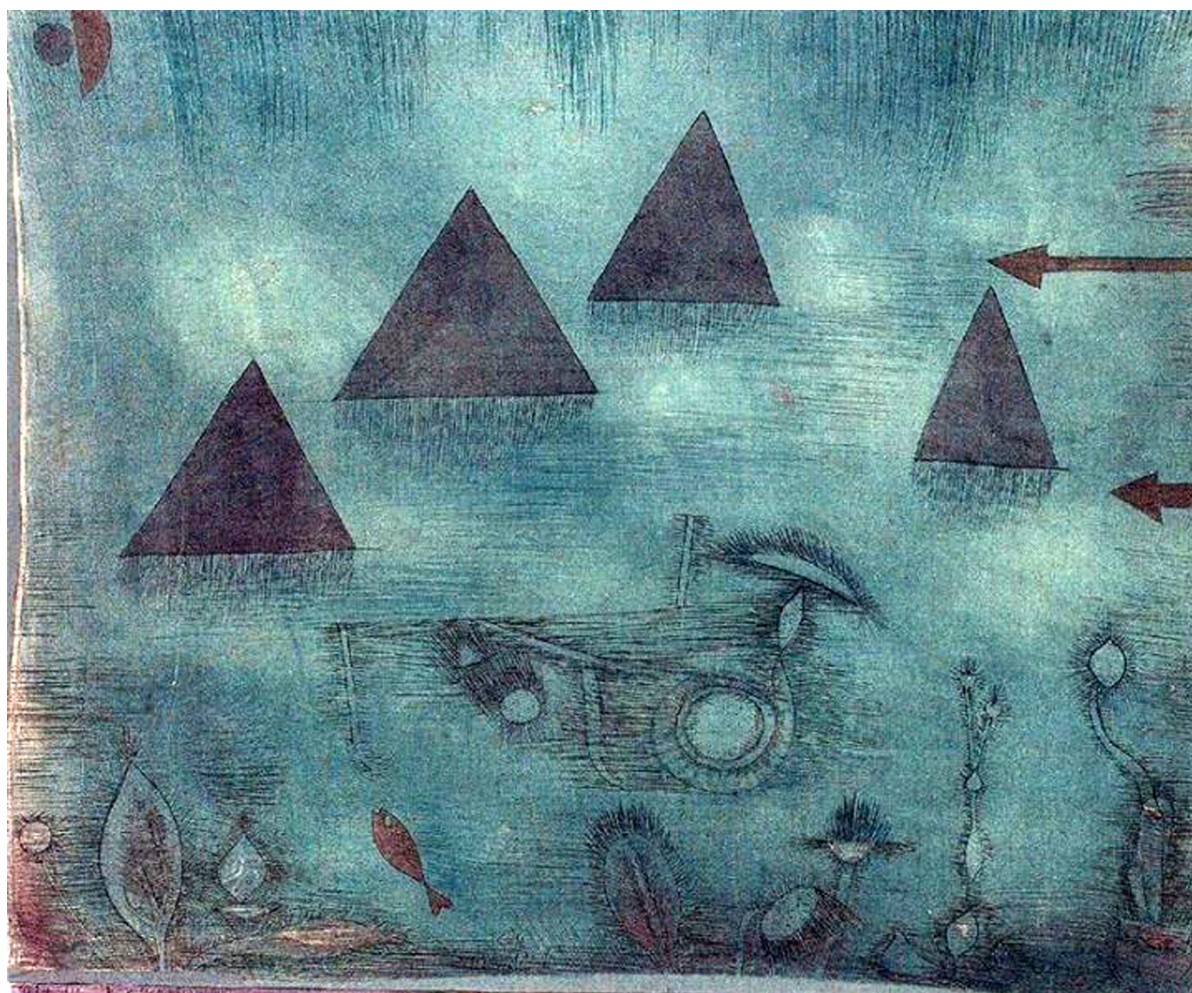


Fig. 10. Paul Klee, *Water Pyramids*, 1924, National Museum of Modern Art, Tokyo. 

<sup>21</sup> <https://www.mmoca.org/learn/teaching-pages/roy-lichtenstein/>


<sup>22</sup> <https://www.mmoca.org/learn/teaching-pages/roy-lichtenstein/>

<sup>23</sup> <https://www.artistrooms.org/sites/default/files/downloads/RoyLichtensteinLearningResource.pdf>

<sup>24</sup> Sallis 2012.

<sup>25</sup> Castro 2010: 7.



Fig. 11. Paul Klee, *Pyramide*, 1930, Zentrum Paul Klee, Bern. 

“Klee (...) was particularly interested not only in the mythological iconography of ancient Egyptian religion, but also in the laws of proportion and construction applied in temple structures and tombs. Yet he was also struck by the light and colour, something that stayed with him and led to a turning point in his later artistic creativity. In line with his artistic theory, according to which impressions of nature must be conveyed through the soul of the painter, Paul Klee’s Egyptian works – right down to individual sketches – only developed after his return.”<sup>26</sup>

<sup>26</sup> [https://lisa.gerda-henkel-stiftung.de/klees\\_bildsprache?nav\\_id=4925&language=en](https://lisa.gerda-henkel-stiftung.de/klees_bildsprache?nav_id=4925&language=en)

Nancy Spector, an American museum curator who has held positions at the Solomon R. Guggenheim Museum in New York City and the Brooklyn Museum, wrote of Klee: “Paul Klee’s persistent shifts in style, technique, and subject matter indicate a deliberate and highly playful evasion of aesthetic categorization. Nevertheless, it is virtually impossible to confuse a work by Klee with one by any other artist, even though many have emulated his idiosyncratic, enigmatic art.”<sup>27</sup> In other words, when we are confronted with a work by Klee, we have that same feeling of familiarity that we feel when we see an Egyptian work of art. To a different degree, of course. Here only an erudite audience has that feeling.

For this man with a melancholic gaze, who besides painting, wrote and played music?, has, among his innumerable productions, two emblematic works: “Water Pyramids,” dated 1924, which is in the Collection of the National Museum of Modern Art in Tokyo and “Pyramid,” dated 1930, which is in the Zentrum Paul Klee in Bern.

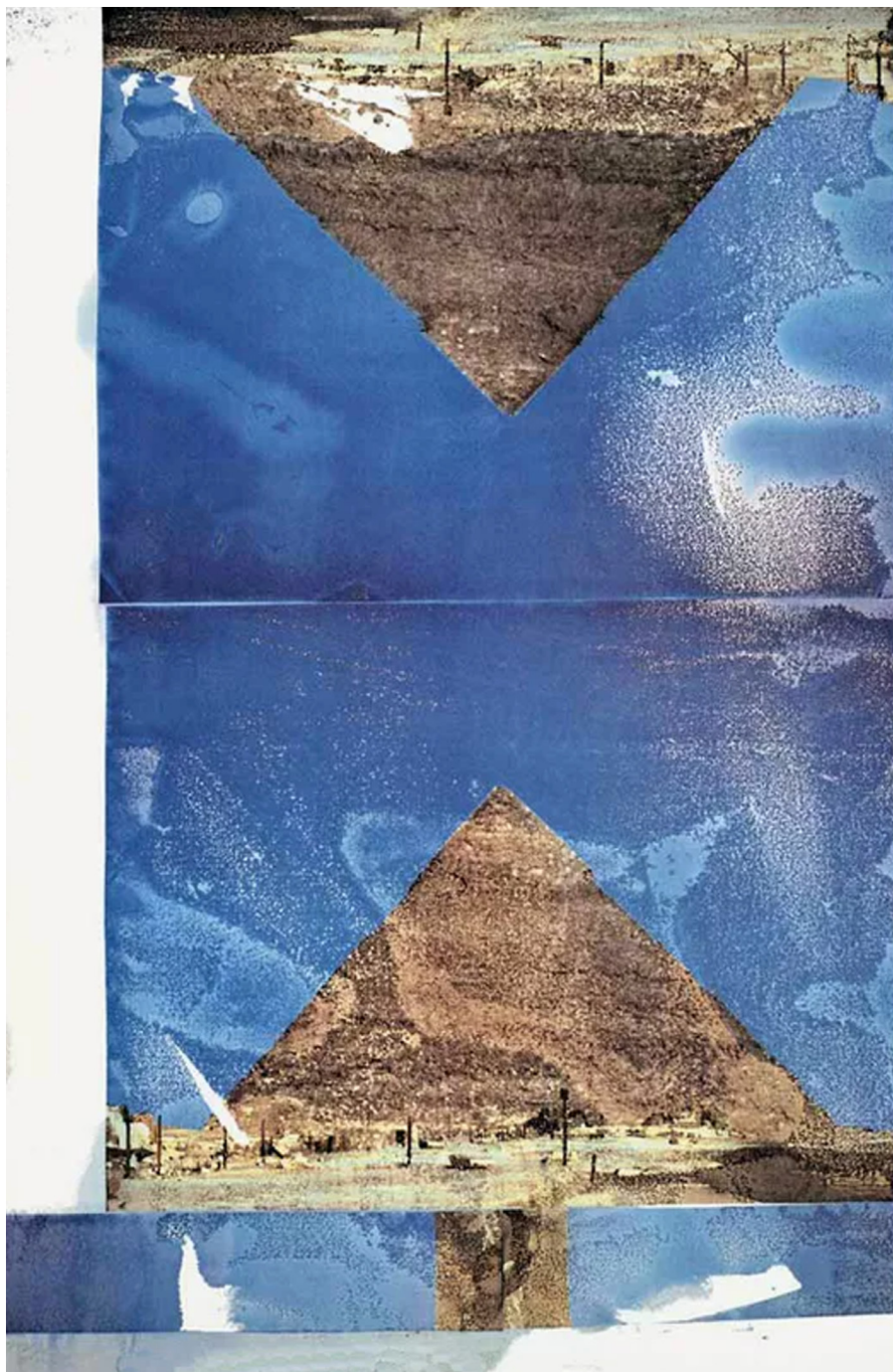


Fig. 12. Robert Rauschenberg, *Architecture*, 1994, National Gallery of Art (1995.62.8), Washington.

<sup>27</sup> Spector 2021.



Fig. 13. Robert Rauschenberg, *Sphinx Atelier*, 1998, Whitney Museum of American Art (99.46a-b), New York. © Robert Rauschenberg Foundation / Licensed by VAGA at Artists Rights Society (ARS), New York.

These are not the only paintings by Klee where the pyramid appears as a dominant theme. There are others<sup>28</sup> that again alert us to those practically invisible but real threads that have linked different creators and creations over the ages...

The pyramid is clearly an archetype that refers to notions such as Cosmos, origins, life, and death... And which civilisation produced, like no other, these concepts? The Egyptian one, naturally.

Let's move forward a few decades and look at another painter whom I admire very much, and who had an exhibition I visited at the Serralves Museum in Porto, Robert Rauschenberg.<sup>29</sup> Rauschenberg is not as well-known as Klee, but he is a recognised artist, linked to Abstract Expressionism and Pop Art. His work linked different materials and forms of narrative - writing, for example - making him an avant-garde artist. "In 1964, Rauschenberg made history when he became the first American to win the Golden Lion award at the Venice Biennale."<sup>30</sup>

<sup>28</sup> Jeune 2005: 18.

<sup>29</sup> João Fernandes 2007; Joseph *et al.* 2003.

<sup>30</sup> <https://www.artsy.net/artwork/robert-rauschenberg-prize>

Among Rauschenberg's works, in addition to the well-known Pyramids Series,<sup>31</sup> dating from 1974, are two works that I consider emblematic: "Architecture," dated 1994, which is in the National Gallery of Art in Washington and "Sphynx Atelier," dated 1998, which is in the Whitney Museum of American Art in New York.

Again, the pyramid, and in the other example, the sphinx, two major symbols of Egyptian civilisation are represented to the public. Why? Because the public, as Vernus notes in his article that I mentioned at the beginning of this paper, immediately recognises these symbols. They are familiar to them, almost as if they were old family photos of ancestors who have disappeared but are still recognised and always remembered.

Finally, to close this series on reproductions of pyramids, I bring you what is, for me, perhaps one of the greatest living contemporary painters, Anselm Kiefer, another painter of memory.

"Anselm Kiefer is a contemporary plastic artist, born on March 8th, 1945 – a few months before the end of the Second World War – in Donaueschingen, (...) and his father was an official of the Wehrmacht – the unified armed forces of Nazi Germany."<sup>32</sup>

"It most certainly would not have been easy to be the son of a Nazi officer and carry with oneself the weight of that inheritance. What to do? What could one do? Forswear the past? To hide it from the world for eternity? Or to transfigure it in some sort of philosophy, poetry and redemptive art that would allow him a reconciliation with the past and with the contemporary world and himself?

Kiefer notes that his biography is the "Biography of Germany." He is the product of the place where he was born, with all its constraints, its history and its cultural memory. Plus, those around him would probably never even allow him to forget that. He was the son of a Nazi Officer!

Only his clarity of mind made Kiefer follow the only sane and, ultimately, possible way. Firstly, for his own personal liberation and pacification regarding the trauma that Nazism must have represented to his generation, and secondly for others around him; instead of judging him, they accept him, they lament and, finally, they consecrate him.

"Master Stroke!"

In 1969 he challenges the world, he makes himself noticed, talked about when he is photographed making the Nazi Salute in some Main European Cities. From then on, diving in History, he starts in his material par to "re-establish" both himself and the emotions that History bring him. He leaves Germany. And doing so is to absolutely cut off from his past and roots; as he himself says:<sup>33</sup> "Mon souhait était de faire une rupture d'ordre personnel."<sup>34</sup>

From then on, the confrontation of the present with the collective memory becomes central in the work of Kiefer. The nostalgia for times past and ancient cultures awakens him to the most ancestral human memory and drives him to the Universe of Civilisations and mythologies as far away in time as those of the Ancient Orient, Egypt, Greek, the Old Testament and the Kabbalah.<sup>35</sup>

Kiefer, too, could not resist the Pyramid's allure, as can be seen in his work "Man under a Pyramid," dated 1996, which can be found in at The National Gallery of Scotland and the Tate.

<sup>31</sup> <https://www.rauschenbergfoundation.org/art/galleries/series/pyramid-series-1974>

<sup>32</sup> Lopes 2020: 3.

<sup>33</sup> Lopes 2020: 8–9.

<sup>34</sup> Laroche 2016: 64.

<sup>35</sup> Lopes 2020: 9.



Fig. 14. Anselm Kiefer, *Man under a Pyramid*, 1996, Galleries of Scotland and Tate (AR00037), Edinburgh (Licence: <https://www.flickr.com/photos/32357038@N08/5337091564>)

“The reflection of Kiefer concerning the union of Man and the Universe is very well represented in this painting, which measures more than five meters long.

The Universe appears here symbolized in a pyramid, symbol of the Egyptian Civilisation that made the analogy man/ cosmos its redemptive message.”<sup>36</sup>

As Kiefer asserts: “Là, dans ce tableau, c’est moi, mais ce n’est pas seulement moi, c’est un gisant, un archétype. Ci-gît. Je suis un homme d’aujourd’hui qui a des souvenirs précis des temps anciens [...] Je suis ici, composé de tous mes souvenirs qui remontent jusqu’aux dinosaures et même plus loin. Le futur est lié au passé, mais pas mélangé à lui.”<sup>37</sup>

“To Kiefer, the pyramid is the perfect example of connection between the Earth and the Sky. It announces the possibility of redemption after the ‘hell’ of life, and the lying man illustrates the connection with cosmic times.

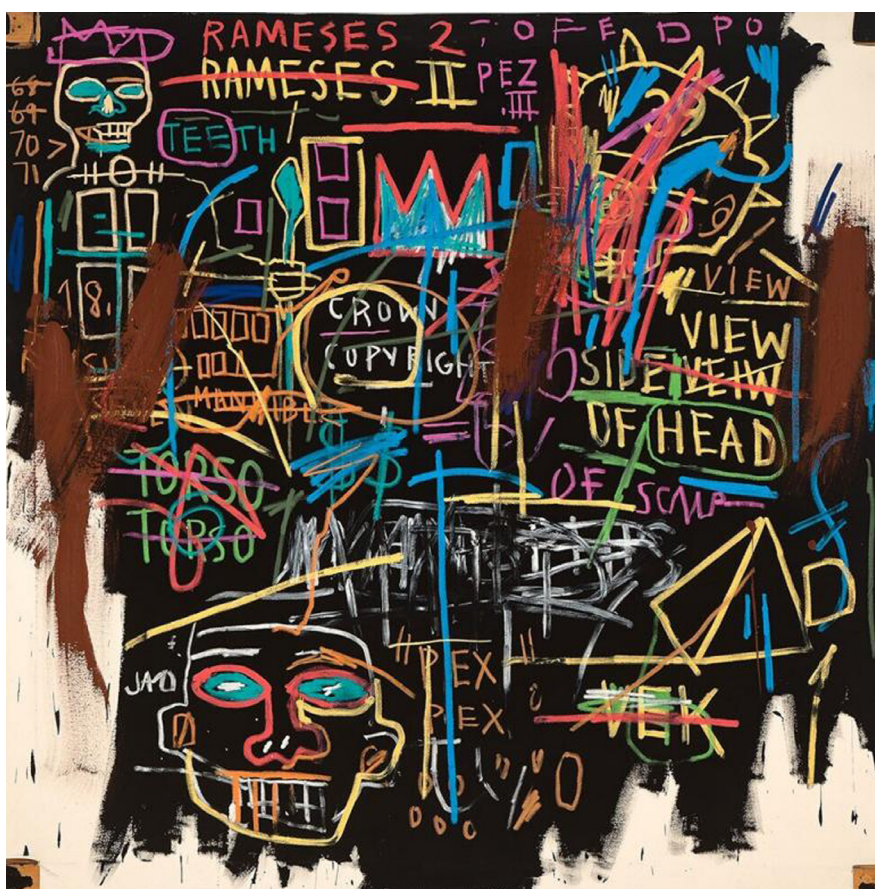
*Man under a Pyramid* also symbolizes the supreme dialogue between body and mind one of the topics of Kiefer’s ‘mental architecture.’”<sup>38</sup>

But if the pyramid, as we have seen from some emblematic examples, is a privileged source of reproduction and inspiration for great creators throughout history, there are others who prefer to focus on the real figures of Ancient Egypt.

<sup>36</sup> Lopes 2020: 11.

<sup>37</sup> Bouhours 2016: 212.

<sup>38</sup> Lopes 2020: 11.



Figs. 15 and 16. Jean-Michel Basquiat, *Kings of Egypt I and II*, 1982, Stichting Museum Boijmans Van Beuningen, Schenking.

Jean-Michel Basquiat, the great Black painter who sought all his life – a short life as we know – the origins of Black painting, looked to Egyptian civilisation as a source of inspiration.<sup>39</sup> In the works, “Kings of Egypt,” dating from 1982, which can be found at in the Stichting Museum Boijmans Van Beuningen in Schenking, Basquiat welcomes two of its most emblematic kings, Ramses II and Amenophis III.

“As an artist known for appropriation (in one of his notebooks, he even quotes a line from the bible with his own copyrighted sign), it seems Jean-Michel Basquiat was also interested in reclamation.

He felt very strongly about the historical narrative attributed to the Western world. Rather than Egypt being the cradle of western society, he saw it as part of Black history. The Kings of Egypt series as a whole seems to be an attempt at visualizing his thoughts by blurring Egyptian history with the visual history of street art and graffiti. Interestingly, it was painted around the time of his first solo show, and just before the height of his career. A few years later, he would paint *Untitled (The History of Black People)*, which furthers the themes seen here by presenting both Egyptian imagery with traditional African iconography. According to some art historians, it solidified his rejection of history as we know it.<sup>40</sup>

Pyramids, kings and gods. Returning to Kiefer again, we come across a magnificent work, “*Osiris and Isis*,” dating from 1985–87, which is at in the SFMOMA Collection in San Francisco.



Fig. 17. Anselm Kiefer, *Osiris and Isis*, 1985-87, SFMOMA Collection, San Francisco. (Licence <https://www.flickr.com/photos/rocor/7158585191>).

“In 1987, Anselm Kiefer finished a great painting, whose title sends to the most important Egyptian myth, the Osiris Myth. Osiris is one of the most important Egyptians gods, the god of the dead and the afterlife, who was murdered by his brother Seth, who divided Osiris’ body into 14 parts and dispersed them around the world. But Isis, his beloved wife and sister, ‘resurrects’ him and so Osiris represents the god of transition, resurrection, and regeneration.

<sup>39</sup> Frohne 1999: 439–451.

<sup>40</sup> <https://www.sartle.com/artwork/kings-of-egypt-ii-jean-michel-basquiat>

This founding myth of the Egyptian Civilisation is here portrayed by Kiefer, through a representation of a grave, a pyramid, to which is tied the dilacerated body of Osiris in 14 pieces of porcelain, which we can see standing out in white. Let's bear in mind that white was also a symbolic colour for death in ancient Egypt.

The model of death and rebirth that consecrates the vision of cyclical time of Kiefer - and which is the model of salvation *par excellence* of Egyptian civilisation - is here exhibited in all its greatness and supremacy. But this ancient story also illustrates the human capacity for evil since Pharaonic times to the German history. And in this way, Kiefer's art represents a combination of past and present."<sup>41</sup>

And finally, to close with a golden key, besides the Pyramids, the kings and the gods, there are also major symbols of ancient Egyptian civilisation, easily recognised by all, which have also been, and are continuously welcomed. I am talking about one symbol in particular, "the eye of Horus," the "udjat," which represented in this civilisation, among other values, well-being, and protection.

My friend and genius painter, illustrator, and performer, Jim Cogswell, who, this year, produced an extraordinary exhibition in Portugal - "Jim Cogswell at Santo Tirso MIEC (International Museum of Contemporary Sculpture) + MMAP (the Abade Pedrosa Municipal Museum): 'Hands, Nets and other Devices'<sup>42</sup> continuously welcomes in his exhibition this emblematic symbol of Ancient Egypt.

In this wonderful exhibition, in which Jim takes us on an imaginary journey through time, history, myths and millenary archetypes, I discovered, in various moments/spaces of his installation, the "udjat", the old Egyptian protective talisman that persists in the popular imagination to this day.

Cogswell, a wizard, and a decipherer of stories, added context, history, life to the objects he presented. He went through the collective memories of different spaces and people, questioned them, and then offered us his own reading of these itinerant memories.

The fact that he was born and raised in Japan naturally broadened his perception of the world, through the apprehension of different types of writing, the three Japanese forms, and the Latin alphabet inherited from his parents. Language and writing format men, making them unconscious prisoners of subliminal messages. Cogswell's insistence on alphabets comes from his Asian background. Printmaking, one of his arts, allowed him to invent an "anthropomorphic alphabet" that is very present in all his exhibitions. In parallel, he has developed the art of drawing removable vinyl illustrations that allow him to interact visually with distinct architectural structures, generating new narratives or enhancing existing ones. Complementarily, he uses video to digitally generate dark matter - cosmogony - producing acoustically interactive mechanised painting. Naturally, painting is the essential support for his different air expressions. But none of this would have the cultural grandeur that is the hallmark of Cogswell's exhibitions if his early training had not been in the humanities - literature, philosophy, and religion. This is the heritage that populates the painter's imagination.

Cogswell pursues the mystery of different decipherments: of the world, of the human, and even of cognition itself.

From this perspective, Cogswell represents in painting what Duras, one of my favourite writers, represented in literature. Both wanted to offer their observers or readers the freedom to participate in the narratives they create, so that each one, individually, and based on their experience and sensibility, could create their own interpretation of the narrative and the characters.

As Jim himself states: "I also want people to make up their own stories. I want them to narrate the piece to themselves. I want them to share their narratives with other people."<sup>43</sup>

In life, as in art, there are never definitive or incontestable conclusions. So, I'm not going to conclude anything after this trip, which has told us about the reception of ancient Egyptian painting. But I leave you with a question:

Why? Why have some of the greatest artists and painters, over time, used, received, and reproduced principles, canons, objects, and topics of Egyptian civilisation in an almost obsessive way?

For me, who knows nothing, there is an answer, based on the argument used by Vernus in the article I quoted at the beginning of this communication: Perhaps because ancient Egypt, with its grandeur and familiarity, manages to fulfil what, for me, should be the primary objective of all artistic forms: to touch us, without the use, without the need, of a single word.

<sup>41</sup> Lopes 2020: 9-10.

<sup>42</sup> <http://miec.cm-stirso.pt/en/portfolio/jimcogswell/>

<sup>43</sup> Cogswell 2018: 52.

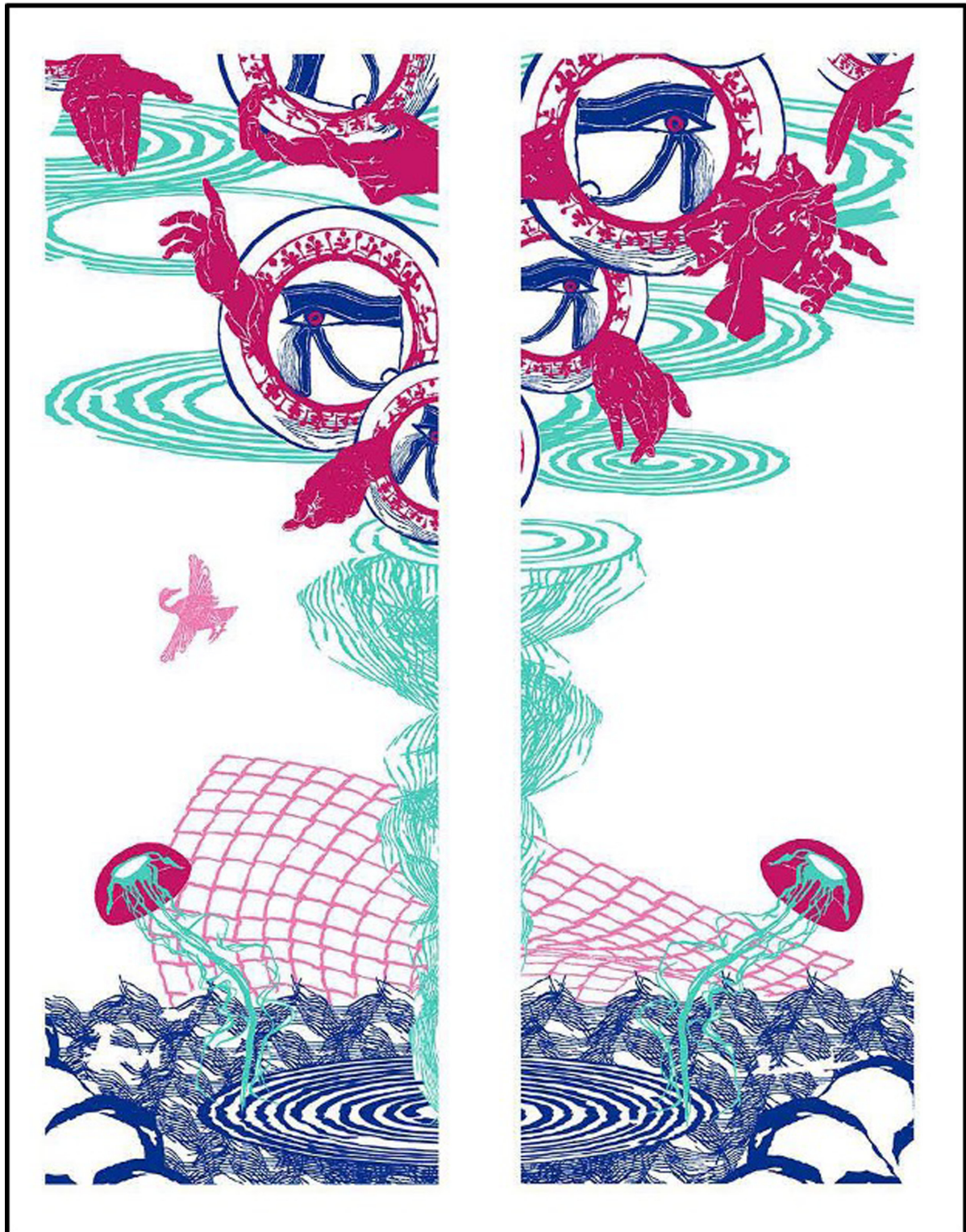


Fig. 18. Jim Cogswell, *The udjat* [In:] 'Hands, Nets and other Devices', 2022, "Jim Cogswell at Santo Tirso MIEC (International Museum of Contemporary Sculpture) + MMAP (the Abade Pedrosa Municipal Museum).

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# Hands, Ornament, and Plunder

Jim COGSWELL

**Abstract:** *Ornament and Plunder* explores visual and thematic territory at the intersection of art, archaeology, and architecture. It describes a series of my own public art projects using machine cut adhesive vinyl as an artistic medium to respond to artefacts in museum collections, most of them objects from the ancient world - Egypt, Roman Egypt, Cyprus, Mesopotamia, Seleucia, Greece. The presentation will explore three such projects: *Cosmogonic Tattoos* at the Kelsey Museum of Archaeology at the University of Michigan; *Vinyl Euripides* at the Cacoyannis Foundation in Athens, Greece; and *Hands Nets and other Devices* at the Abade Pedrosa Municipal Museum and International Museum of Contemporary Sculpture in Santo Tirso, Portugal.

My projects respond to collections of artefacts housed in museums and are a conversation with the architecture of the buildings themselves, but are also about making, about what happens to what has been made, and what making might mean in human culture. They reflect my fascination with hybridity and the grotesque, with pattern and sequence, with the displacement of peoples and objects through conquest and migration, and with spolia, the repurposing of plundered building materials for new construction.

**Keywords:** reception theory, architectural ornament, art/archaeology, spolia, *grottesche*

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As an artist, I live to make things, especially through the forming of materials with my own hands in the tangible, physical space within which I experience my own body, and which I understand myself to inhabit. I use making as a form of thinking. Making for me is a way of learning about the world, and a way of learning about myself. A way of situating myself in the world among others. My making is essentially an investigative practice. What I make is the residue. What I make is always inflected by others, by what has transpired moments or millennia in the past. I think through making and, following that, I think about making. Analogous to archaeological inquiry, I think about what happens to what has been made, and the symbolic force of things that have been made, especially through visual hybridity, metaphor, and exchange.

In my public projects, I ornament modernist architecture to ask what the displacement of objects and peoples can tell us about the constantly morphing nature of cultural identity, the stories we tell ourselves about who we are and where we come from. I begin all my projects by researching individual artefacts through detailed ink paintings based on drawings and photographs of the objects themselves. These studies are then translated into digital vector files to become an inventory of source images for my vinyl compositions. In digital space they comprise a database of painterly forms that I can bring into a limitless set of combinations, digital *grottesche* whose unexpected collisions give ancient artefacts fresh associations, reminding us of our deep human connections to the past. Digital scale elevations assembled from these hybridised fragments are used to machine-cut the vinyl for my installations.

In tattooing the walls, windows, and vitrines of museums and cultural institutions with images of ancient artefacts found inside, I am reframing the stories they tell about who we are and how we came to be who we are. I alter the narratives of objects by re-contextualising them, molding their images to new constraints, responding to what viewers experience from the exterior when walking past windows, from

within when looking out, or when peering into glass vitrines at the artefacts themselves – the framing and layering of forms, reflections, and views, from the constructed rhetorical space of exhibition halls to exterior landscapes. By calling attention to museum display as a picture plane through which one views the panorama of our histories my projects propose museums as fictive spaces built on coincidence and personal narrative, the chance layering of objects and representations subject to the reflections and curiosities of viewers as well as the obsessions of our current predicaments.

In 2017, I was invited by the Kelsey Museum of Archaeology and the University of Michigan Museum of Art across the street to create a set of vinyl window installations on their two buildings in response to the objects in their collections. Among its images a viewer might recognize objects from ancient Egypt, as well as Cyprus, Greece, Rome, Seleucia, India, and Burma, with hands from modern painting and sculpture. I titled it *Cosmogonic Tattoos*. Cosmogonies are our explanations for how our world came to be. They reflect our assumptions about the fundamental nature of the universe. They inflect our values and help determine how we behave in the world, how we think of who we are as a species, as a society, as individuals.

Through collection, curation, and display our museums narrate the objects they contain to also make statements about who we think we are. In *Cosmogonic Tattoos*, I tattooed the exterior windows of two museums with images of what I found inside, reframing the stories they tell about who we are and how we came to be who we are. Through the examination of objects separated from us by deep chronological and cultural divides, it became possible for me, untrained in the archaeological study of the past, to explore the power of architecture, ornament, and material objects to shape knowledge, memory, and cultural identity.

In my installation, a limestone head from Cyprus stands just inside one window of the Kelsey Museum between vinyl duplicates of itself, a monument to cultural migration, keeping watch above a flotilla of drowning hands and heads from the museums' collections. (fig. 1) The exhibit label tells us the limestone head embodies a transitional moment of hybridity between ancient Egyptian and Greek cultural influences, when Cyprus was the destination for Greek refugees fleeing the collapsing centers of Mycenaean Greece. My vinyl is a reminder of the Syrian and Iraqi refugees fleeing collapsing societies across the Aegean to Greece at the time of the exhibit, and the weight of cultural inheritance they carried with them.



**Figure 1.** Jim Cogswell, *Cosmogonic Tattoos* (detail). 2017. Shadows cast onto sunshade from adhesive vinyl on exterior glass. Kelsey Museum of Archaeology, University of Michigan, Ann Arbor, USA. (photo by J. Cogswell)



Figure 2. Jim Cogswell, *Cosmogonic Tattoos* (detail). 2017. Kelsey Museum of Archaeology, University of Michigan, Ann Arbor, USA. (photo by P. Young)

My work insistently foregrounds connections between artistic encounters and other forms of knowledge and experience. Art only develops through acts of integration. *Cosmogonic Tattoos* introduced me to the fascinations of archaeology and opened the way for two subsequent projects based on the examination of objects from the ancient world. *Vinyl Euripides* (2022), at the Michael Cacoyannis Foundation in Athens, Greece was a response to the Greek-Cypriot filmmaker Michael Cacoyannis' cinematic adaptation of three tragedies by Euripides dealing with the Trojan War and its aftermath. My images were based primarily on archaeological artefacts from Greek antiquity found in museums in Athens and Delphi, hybridized with images from the modern world. (fig. 3 and fig. 4)

At the Cacoyannis Foundation my vinyl is installed on fifty-eight panels of glass balustrades on three floors surrounding the central atrium. The sequence of panels on each floor is dedicated to a single film from the trilogy, suggesting carved temple reliefs as well as film frames, transforming the architecture itself into a reference to the cinematic origins of my narrative. To signal his persistent presence as *auteur* in his cinematic interpretations, I inserted Cacoyannis himself as a character within my images by representing him as a film camera assembled from a concatenation of Roman glass from Egypt hoisted on torsos from Greek vase paintings. The arms of Judith, once holding the severed head of Holofernes, pilfered from a modern painting, are embedded within the camera.

*Hands, Nets, and Other Devices* (2022–2023) was an installation at the International Museum of Contemporary Sculpture and Abade Pedrosa Municipal Museum in Santo Tirso, Portugal, in which I continued my exploration of visual and thematic territory at the intersection of art and archaeology. (fig. 5 to fig. 10) The project was a response to the museum's permanent archaeological collection and a conversation with the architecture of the building itself based on images culled from archaeological



Figure 3. Jim Cogswell, *Vinyl Euripides* (detail), 2022, adhesive vinyl on glass. Michael Cacoyannis Foundation, Athens, Greece. (photo by M. Zarkou)

and artistic artefacts from around the world. It especially highlighted objects in the museum collection reflecting the continuous habitation of the Santo Tirso region from prehistoric through Roman, medieval, and modern eras, collected and displayed in a repurposed 17<sup>th</sup> century Benedictine monastery. In my vinyl images no distinction was made between artefacts of the past variously positioned in the permanent exhibition galleries and more modern devices in the museum such as fire extinguishers and chairs, a public sculpture sited in a nearby park, and elaborate monastery windows. All are equally part of the historical record and are unstable human artefacts that wander through time.

On the entrance windows to the museum six hands from modern paintings and sculptures are setting sail on a Burmese harp, much as they did in *Cosmogonic Tattoos*. (fig. 2) Migration by sea. They navigate toward the corner of the building and a cluster of eyes on the entrance doors, eyes that have floated free from the coffin of Djehutymose, priest at the temple of Horus at Edfu, dead for twenty-five hundred years. Each eye is a sparkling fountain, each framed within a separate medallion, each medallion sprouting hands: pointing, reaching, cradling, teaching, clasping, writing, lifting, grasping, offering, touching, blessing. These are the tears of witnesses who know what is coming but are helpless to stop it. Visitors must enter the museum under the eyes of Horus. (fig. 5)



Figure 4. Jim Cogswell *Vinyl Euripides: Iphigenia* (detail), 2022, adhesive vinyl on glass. Michael Cacoyannis Foundation, Athens, Greece. (photo by M. Zarkou)



Figure 5. Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022-2023, adhesive vinyl on glass. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by M. Cogswell)



**Figure 6.** Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022-2023, adhesive vinyl on wall and glass vitrine. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by M. Cogswell)



**Figure 7.** Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022-2023, adhesive vinyl on wall and glass vitrine. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by Miguel Ângelo)



**Figure 8.** Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022–2023, adhesive vinyl on wall. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by Miguel Ângelo)



**Figure 9.** Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022–2023, adhesive vinyl on wall. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by Miguel Ângelo)

All my images are based on close study of objects and artefacts in the collections where I am working. However, my intent is never to catalog the fragments from societies that I am studying, but to imaginatively transform them. I am constructing works of fiction, based on scrupulous attention to archeological evidence. Yet, in the process, I am destabilizing historical identities by combining closely observed artefacts found in vastly different circumstances to construct my fictions. While my knowledge of these objects deepens, I alter their narratives by re-contextualizing them.

On the windows and vitrines of museums, I respond to what viewers experience from the exterior when walking past and from within when looking out – the play of light joining interior to exterior, the framing and layering of forms, reflections, and views, from the constructed rhetorical space of exhibition halls to exterior landscapes. In doing so, I bury ancient objects under new layers of history. By calling attention to museum display as a picture plane through which one views the panorama of our histories my projects propose the museum as a fictive space built on coincidence and personal narrative, the chance layering of objects and representations subject to the reflections and curiosities of viewers as well as the obsessions of our current predicaments.



**Figure 10.** Jim Cogswell *Hands, Nets, and Other Devices / Mãos, Redes e Outros Dispositivos* (detail), 2022–2023, adhesive vinyl on wall. International Museum of Contemporary Sculpture and Abade Pedroso Municipal Museum, Santo Tirso, Portugal. (photo by Miguel Ângelo)

In early phases of my projects, I make many sketches to acquaint myself with the artefacts I am studying, to grasp their material form and experiment with how I might best weave them together. I photograph the artefacts from vantage points that best serve my purposes and use those photos to make hundreds of small ink paintings. Those paintings are translated into digital vector files to supply an inventory of digital fragments that can be endlessly recombined to give life to my vinyl images. By combining multiple fragments from my painted studies to generate my images I am following the time-honored practice of *spolia*, repurposing ancient stones for new monuments. Recycling the past. Curators narrate these objects through a given set of organizational strategies. I am narrating them through another, using reorganization as a tool for opening their fragmentary narratives to the imaginations of viewers.

My research into archaeological artefacts has brought my attention to a special vulnerability of ancient, sculpted objects – a limited supply of hands. In the modern art museum hands are everywhere. More than enough to spare. In paintings and sculptures from the modern world hands are central to

narrating abstract concepts, the dynamics of human relationships, and the identities of depicted figures. In *Cosmogonic Tattoos* I began plundering those modern hands because I needed them so desperately to give archaeological objects agency within my developing narrative. In the end, that plundering became an essential part of the narrative itself. Unwittingly, as I later discovered, I was recapitulating the grisly practice of gathering severed hands as spoils of war in ancient Egypt. (fig. 11)



**Figure 11.** Jim Cogswell *Trojan Women: Pyre*, 2020, sumi ink, shellac ink, watercolor, gouache, acrylic on paper. (photo by J. Cogswell)

Hands have unlimited expressive and narrative potential. They testify to the centrality of making in the development of human cognition. They are reminders of the constructed world and the laborers responsible for bringing it into being. We use hands as a form of communication to shape and express our inner states. They give us away, revealing what we would prefer to keep to ourselves. Hands teach us to feel and to reason, to count and to indicate. Hands give us agency, as creators but also as destroyers. They give form to our willingness to act in the world. I have developed an insatiable appetite for hands.

The remnants from past societies found in archaeological collections – coins, pitchers, amphora, hammers, spindles, buckles, bracelets, weapons, grave markers, tablets, sculptures, vases, bowls – these are all devices that extended the ability of their makers to think about the world as well as to act within it. When we contemplate those objects, we probe details and relationships that extend our own ability to think about the world. We search for a view from which to explore what is most striking about this thing, the curious detail, the narrative implied in its physical proximity to another object, its resemblance to objects elsewhere, the enigma of its presence here. We are particularly attentive to the human presence at the other end of this process, the laborer who fashioned it, made present through traces of brush, tool, and hand on its surfaces. We are also absorbing its fragility, a thing wounded by the violence of history, defaced by natural disaster, reshaped through the normal course of physical decay. Each object testifies to unknowable acts that have fragmented, excised, and displaced it within a pool of artificially clear light among objects gathered from sometimes unimaginably different circumstances. Each object is further qualified for me by an inability to fully comprehend the personal, human weight of ritual purposes, power relations, and quotidian circumstances for which it was originally intended. I am led to face the riddle of my own entangled days.

To design my installations, I take objects from different societies with fundamentally different assumptions about what it means to be human and put them in dialogue with one another. I suggest identities radically different from what they appear to be while on display in museum collections. And those new identities are themselves unstable. Following their metamorphoses is essential to the pleasures in my work and part of its content, a reminder that my whole project is about unstable meanings. And, at a cosmological level, it is an acknowledgement that everything we know, including ourselves, is constituted by the same cosmic dust that originated at the singular moment that our universe formed, in a continual state of dissolution and reconstitution ever since. At least, that's the story that makes sense to me.



# The MORTEXVAR project: assessing variability in Earlier Egyptian mortuary texts

Carlos GRACIA ZAMACONA

**Abstract:** Financed by the Madrid Region through its *Atracción de Talento* programme, the MORTEXVAR (Earlier Egyptian Mortuary Texts Variability) project was run from the University of Alcalá between 2019 through 2024 by an international team of seven members, six collaborators and twenty-two contributors, so far. The MORTEXVAR project encompassed four main research lines: one, the creation of a comprehensive database of the Coffin Texts and Middle Kingdom copies of Pyramid Texts; two, an interdisciplinary approach to these corpora, including archaeology, philology, linguistics, religion studies, OCR engineering, text mining and anthropology; and three, the study of variability by the Coffin Text spells' in-document position and geographical distribution. In addition, the MORTEXVAR project actively contributes to building a library specialised in the Ancient Near East and teaching undergraduate and postgraduate students at the Universidad de Alcalá. In 2024-2026, the project developed into new avenues of research to exploit the possibilities of applying quantitative, AI-based approaches to this extensive text corpus, and dealing with methodological and technical issues, including lack of data and how to cope with it, recovering the original edition of the documents through 3D-modelling, or improving the OCR and image processing, among others (Gracia Zamacona, et al. 2025).

**Keywords:** Coffin Texts – Pyramid Texts – Old Kingdom – Middle Kingdom – Variability – Interdisciplinarity

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The MORTEXVAR (Earlier Egyptian Mortuary Texts Variability) project<sup>1</sup> started at the University of Alcalá, near Madrid, Spain, in July 2019 thanks to the research programme *Atracción de Talento*, funded by the Comunidad de Madrid (Madrid Region government). The project has since grown and currently counts an international team of seven members, six collaborators and twenty-two contributors to the project's specific activities.<sup>2</sup> The project has broadened its initial objectives as well: from a study concentrated in a group of spells (the *ḥpr*-spells and the *s<sup>3</sup>ḥ*-spells) on Middle Kingdom mortuary documents to a more holistic and comprehensive assessment of the whole textual corpus.<sup>3</sup> This was caused by two main reasons: firstly, the need to adapt to the lack of access to sources and bibliography as a consequence of the mobility restrictions caused by the pandemics; secondly, the conviction that to fully understand the production, use and meaning of the material that has come down to us, the study needs to put the focus on the document rather than the text.<sup>4</sup>

In addition to the research, the MORTEXVAR project joined forces with the Middle Kingdom Theban Project,<sup>5</sup> directed by Antonio Morales and established at the University of Alcalá in 2018, to contribute

<sup>1</sup> [www.mortexvar.com](http://www.mortexvar.com)

<sup>2</sup> See the acknowledgements.

<sup>3</sup> Gracia Zamacona 2020.

<sup>4</sup> Gracia Zamacona 2024a.

<sup>5</sup> <https://thebanproject.com/en/>

to establishing Egyptology at Alcalá in two ways: the consecution of a dedicated seminar with facilities at the university's main campus, including a specialised library, and the teaching of an MA programme in Egyptology.

The MORTEXVAR project encompasses three main research lines: the creation of a comprehensive database of the Middle Kingdom mortuary texts; an interdisciplinary approach including archaeology, philology, linguistics, religion studies, OCR engineering, text mining and anthropology; and the study of in-document and geographical text distribution.

## The MORTEXVAR database

The MORTEXVAR database (beta version, 2022) collects data on ancient Egyptian Coffin Texts to digitise them, analyse them and make them accessible.<sup>6</sup> The data have been extracted from two sources: the reference edition of these texts by Adriaan de Buck<sup>7</sup> and the Index of spells by Leonard Lesko.<sup>8</sup> The current MORTEXVAR database (beta version) gives free access to the following:

- The texts' transliteration and (partial) French translation.
- All the 1,185 Coffin Text spells in their 'main' version, usually the first from the left in the edition by the Buck. The versions from the rest of the witnesses will be added in the future.
- The witnesses (text instances) with their provenance and chronology.
- The spells' position in the coffins.

The future MORTEXVAR database will include the following:

- Complete transliteration and translation of all witnesses of the Coffin Texts edited by De Buck.
- Annotation (lexical and grammatical).
- Linking to the (image capture/encoding) OCR-PT-CT project at the University of Alcalá (see § 2.2 below).
- Linking to the hieroglyphic edition by De Buck.

The MORTEXVAR database currently collects and makes available in Open Access a substantial part of the results from Carlos Gracia Zamacona's work on the Coffin Texts since 1999.<sup>9</sup> The making of the database has been made possible by public funding from the Spanish Ministry of Foreign Affairs (1999-2000), the Spanish Ministry of Education (2000-2001) and the Region of Madrid Government through its Atracción de Talento Programme (2019-2024), and is generously hosted at the server of the *Middle Kingdom Theban Project* directed by Antonio J. Morales. The Oriental Institute of the University of Chicago has granted access to De Buck's publication in PDF format.

Currently, the MORTEXVAR database (ISSN 2990-2088) is edited by Carlos Gracia Zamacona at Universidad de Alcalá, assisted by the following team.

- Anthonny Contreras, the engineer who designed and implemented the MORTEXVAR database (2021-2022).
- César Guerra Méndez (MA in Egyptology, University of Liverpool), a research assistant who created an Open Access database for the Osiris spellings in the Middle Kingdom mortuary texts.<sup>10</sup>
- Noelia Madinabeitia, an editorial assistant (2022-2023) who extracted the images from the first two volumes of De Buck's edition of the Coffin Texts to link them to the relevant text passages of the MORTEXVAR database. The objective of this tedious task is to feed the OCR system developed by engineers of the University of Alcalá.<sup>11</sup>
- Anne Landborg (PhD in Egyptology, University of Liverpool), a researcher who is contributing by providing the transliteration and comments of all the versions of the *hpr*-spells published by De Buck.
- Luisa García González (PhD in Egyptology, University of Jaén), a researcher trained by Danijela Stefanović at the University of Belgrade on network analysis. Luisa applied that technology to the Coffin Text spells and coffin owners in 2024, and the first results will be published in 2026.

<sup>6</sup> Gracia Zamacona 2022- (<http://database.mortexvar.com>).

<sup>7</sup> De Buck 1935-1961.

<sup>8</sup> Lesko 1979.

<sup>9</sup> Gracia Zamacona 2013.

<sup>10</sup> Guerra Méndez 2023.

<sup>11</sup> Pizarro *et al.* forthcoming.

- Nieves García Centeno, an editorial and research assistant, oversees the MORTEXVAR database Spanish version.

The database makes all its data freely accessible to the research community and has been so far referred to by:

- The Institut Français d'Archéologie Orientale, Cairo.<sup>12</sup>
- Asociación Española de Egiptología, Madrid.<sup>13</sup>
- Fachgruppe Ägyptologie und Altorientalistik, Leipzig.<sup>14</sup>
- Ancient World Online.<sup>15</sup>

## 2. An interdisciplinary approach

The complexity of the production, use and meaning of these text corpora can only be adequately dealt with through interdisciplinary approaches that combine qualitative and quantitative assessment of data coming from archaeology, philology, linguistics, history, religion studies, OCR engineering, text mining and anthropology, among other scientific fields. Aware of this reality, the MORTEXVAR project has been a motor and partner of the following research activities.

### 2.1. The publication of MOA 1 (2021)

The MORTEXVAR project became intellectually and materially involved in the production of the collective volume *Handbook of digital Egyptology: Texts*.<sup>16</sup> The book was the first issue of the series *Monografías de Oriente Antiguo*, published by the University of Alcalá and had two objectives. Firstly, as a primer applying digital technology to ancient Egyptian texts by collecting the works of many of the leading representatives in this research line. The book quickly drew the attention of research teams like the ORAEC.<sup>17</sup> The book was also of great help to start the shaping up of a new project that became realised through the contact of three engineers of the University of Alcalá interested in the figurative nature of the ancient Egyptian writing system and its interaction with the linguistic message: the OCR-PT-CT project.

### 2.2. The OCR-PT-CT project (2022)

The University of Alcalá funded the OCR-PT-CT project from March to December 2022.<sup>18</sup> The project conceived, designed and developed a digital toolset to perform optical character recognition (OCR) of ancient Egyptian hieroglyphs on the Pyramid Texts (PT) and the Coffin Texts (CT) to provide a semi-automatic transcription of the original text into a standard code known as Manuel de Codage (MdC). Besides the technical challenge, the OCR-PT-CT project might enable researchers to search for textual and sign parallels more efficiently.

The OCR-PT-CT project was run in synergy with the MORTEXVAR project and the GEINTRA<sup>19</sup> and CIARQ<sup>20</sup> research groups to ensure the quality of input data by using the reference text editions in Egyptological research. Access to these editions was granted by the Institute for the Study of Ancient Cultures (University of Chicago) and Professor James Allen (Brown University, Providence). Thanks to its interdisciplinary team (Egyptology and engineering), the OCR-PT-CT project has been implementing a task sequence that constantly considers the flexibility and range of the data set regarding its possible usability with various complex writing systems. The OCR-PT-CT project proposes an OCR system adapted to the chosen corpus to permit minimum manual encoding. The project tries techniques for segmentation of the hieroglyphic script in these texts and classification systems based on deep neural

<sup>12</sup> <https://www.ifao.egnet.net/recherche/ressources-bibliographies/>

<sup>13</sup> <https://www.aedeweb.com/base-de-datos-mortexvar-textos-de-los-ataudes/>

<sup>14</sup> <https://fachgruppeaegyptologie.wixsite.com/aegypten-altorient/%C3%A4gyptische-texte>

<sup>15</sup> <https://ancientworldonline.blogspot.com/2022/09/the-mortexvar-database.html>

<sup>16</sup> Gracia Zamacona, Ortiz-García 2021.

<sup>17</sup> <https://oraec.github.io/2022/09/19/happy-birthday-egyptology.html>

<sup>18</sup> <https://www.mortexvar.com/ocr-pt-ct>

<sup>19</sup> <https://geintra-uah.org/>

<sup>20</sup> <https://tinyurl.com/29m37nuh>

networks. This toolset will allow the researchers to interactively check the chosen corpus without manually encoding much of the text at the sentence level. The engineering team was formed by Daniel Pizarro, Sira Palazuelos and Álvaro Hernández, professors at the University of Alcalá, and their students Adin Bartoli, Laura de Diego and Patricia Cuesta. César Guerra Méndez and Carlos Gracia Zamacona formed the Egyptological team.

### 2.3. The publication of RIPOA 1 (2022)

With this publication, *Lenguas modernas y antiguas: diferencias y similitudes en el estudio de la semántica verbal*,<sup>21</sup> the MORTEXVAR project broadened its research horizon and readership reach. This publication was the first issue of *Estudios Orientales – Monografías RIPOA*, published by the Red de Investigadores Iberoamericanos en Próximo Oriente Antiguo (RIPOA). RIPOA is a network of thirty researchers on ancient Egypt, Anatolia, the Levant, Mesopotamia and biblical studies from a dozen institutions working in an Iberoamerican research institution or from an Iberoamerican country, including Spain and Portugal.

The collective volume RIPOA 1 results from an international workshop held on the 21st of December 2021. In that workshop, a group of researchers in verbal semantics shared their work and exchanged opinions on common points and differences in their research on modern languages (Brazilian Portuguese, Guaraní Chaqueño) and ancient languages (Hitite and Luvite, Egyptian, Hebrew and Greek). The resulting book included most of the papers then read, one additional contribution, and a transcription of the discussion panel. Written in Spanish, Portuguese and English, the book was not only fruitful as a venue of reflection on methods and theories on verbal semantics but also the presentation of the RIPOA network and the MORTEXVAR project to a large readership within the Iberoamerican community in the broadest sense, including Latin America, Spain and Portugal and other parts of the world where Spanish and Portuguese have an essential presence, such as the United States of America and large areas in Africa. To maximise the impact, the series *Estudios Orientales – Monografías RIPOA* is published Open Access on the RIPOA website.

### 2.4. The publication of HES 21 (2024)

One of the primary outcomes of the MORTEXVAR project, the book *Variability in the Earlier Egyptian Mortuary Texts*<sup>22</sup>, stems from a conference held in September 2022<sup>23</sup> that convened seventeen researchers around the operative concept of *variability* in the Pyramid Texts and Coffin Texts and other related texts and materials. The volume includes fourteen contributions about different aspects of variability as a major criterion for retrieving information from sources. The contributions are organised along three conceptual lines:

- Individuals: illustrative case studies because of their uniqueness and their exceptionality within the bigger picture.
- Groups: case studies of ensembles of units that may constitute substreams within mainstream traditions or minor streams outside the mainstream.
- Tracers: variability elements that allow tracing change, innovation or disparity processes.

The studies in this volume showcase unexpected connections between what are usually seen as elements of a system and the system itself and provide specific material to reflect on those concepts (element, system), which are critical to the Western conceptual framework.

The section *Individuals* includes studies on secondary epigraphy (Julia Hamilton), scribal agency (Angela McDonald), divine names' reinterpretation (Jean-Pierre Pätznick), the graphemics of the name Osiris (César Guerra Méndez and Carlos Gracia Zamacona) and the publication of a standard coffin (Veronika Dulíková and Marie Peterková Hlouchová).

The section *Groups* includes studies on representations in the coffins' object friezes (Seria Yamazaki), social collectives mentioned in the mortuary texts (Juan Carlos Moreno García), text sequences (Christelle Alvarez), and textual and ontological or instrumental variations in some ḥpr-spells (Anne Landborg).

<sup>21</sup> Gracia Zamacona, Santos Saavedra 2022.

<sup>22</sup> Gracia Zamacona 2024a.

<sup>23</sup> <https://www.youtube.com/@mortexvar7459/videos>

The section *Tracers* includes studies on the graphemics of the first-person stative ending in the Coffin Texts (Jorke Grotenhuis), the ideological dimension of mortuary equipment (Gersande Eschenbrenner Diemer), sociolinguistic variation within Old Egyptian (Victoria Almansa-Villatoro), variation (graphemic, linguistic and textual) in a specific entextualisation of CT 335 (Dina Serova), and the relationship between grave goods and their representations in the object friezes (Elisabeth Kruck).

### 3. Studies in the variability of the Middle Kingdom mortuary texts spells

A book project is currently being prepared by Iker Barriales Valbuena, Carlos Gracia Zamacona and Anne Landborg with the provisional title *Two case studies of variability in Middle Kingdom mortuary documents*. This book gathers two case studies to assess variability in the mortuary texts written in Middle Kingdom Egypt, mainly Coffin Texts and Pyramid Texts. Each case study covers a different level of analysis. The first chapter deals with document editing and publishing complex processes, as exemplified by the survey on multi-occurrent spells, which are repeated on or fragmented across one single document. The second chapter is a content-based analysis of some texts, as a comparative study of the ḥpr-spells and s'ḥ-spells, their variations of in-document and geographical distribution, and textual structures. The book also reflects on the methods and techniques employed, their usability and limits, and their prospects for research and significance in the humanities.

## Conclusions

All these activities illustrate the main interest of the MORTEXVAR project: to show that variability is a valuable concept in studying the Middle Kingdom mortuary texts. These texts are instead to be seen as repositories of use for the implementation of texts into the burial equipment items, mostly rectangular wooden coffins, the only documents truly edited and published by the ancient Egyptians. By highlighting the documents instead of text units, the MORTEXVAR project shifts focus from the text “corpora” (Coffin Texts, Pyramid Texts) to the material instantiation of the texts (on coffins, sarcophagi, and other burial items) and, most importantly, it changes from conceptualisation based on tree structures to collaborative networks.<sup>24</sup>

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<sup>24</sup> Gracia Zamacona 2024b. For the concepts, see mainly Deleuze, Guattari 1980.

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# The pyramid of Unis revisited

Nils BILLING

**Abstract:** In the long history of pyramid texts studies, perhaps no singular corpus has been more scrutinized than the pyramid of Unis. Being the oldest and more or less intact, it has attracted a lot of scholarly attention, resulting in interpretations of various facets and forms. Starting with the early interpretation by Kurt Sethe that the texts, loosely collected, were supposed to be read by the king during his journey in the beyond in order to guarantee his eternal transformation into an *akh*, Joachim Spiegel and Hartwig Altenmüller used the same corpus in their aim to reconstruct (or re-create) a royal burial ritual. However, besides from reaching quite diverse results in their respective efforts, the two scholars also had a different view on the role of the sepulchral space into which these texts had been adapted. Whereas Spiegel considered the three main rooms – sarcophagus chamber, antechamber, serdab – to have represented the underworld, horizon and sky respectively, Altenmüller paid little attention to such symbolical properties. Later on, Winfried Barta would dismiss any search for a conscious redaction strategy behind the distribution of the texts as more or less futile, while Jürgen Osing and James P. Allen returned to the pyramid of Unis in order to once again look for a more comprehensive corpus-based plan. Over the last decade, the discussion at large has been guided by the sceptic/pragmatic views of Harold Hays, who offered little credence to interpretation of the tomb in reference to the spatial distribution of pyramid texts.

The insight into the workings of units and more or less fixed groups has made it clear that the texts must have had a previous life outside the tomb. The majority of them seems to have a ritual background, although the particular rite concealed behind the words in most cases eludes us. In the pyramid corpus of Unis, however, many passages clearly allude to ritual scenes that, considering where they ended up in the tomb, should have offered a guiding principle for the editors at work. Moreover, both the grammatical structure and contents of the identified groups reveal notable signs of progression, which once again give credence to Sethe's initial observation almost a century ago that the texts might have been meant to assist the king's soul on his trajectory through the chambers and corridors. Even when the combination of particular spells cannot be corroborated in other sources like for instance the sixth dynasty pyramids, thematic and intertextual links are still valuable both to identify and interpret. It is time to revisit the pyramid of Unis.

**Keywords:** Pyramid Texts, monumentalisation, motifs, themes, spatial progression, performative texts

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## Introduction

In the long history of Pyramid Texts studies, perhaps no singular corpus has been more scrutinized than the pyramid of Unis (ca 2350 B.C.). Being the oldest version of its kind and almost intact, it has attracted a lot of scholarly attention, resulting in various interpretations for almost a century. One of the first studies originates with Kurt Sethe.<sup>1</sup> He proposed that the texts, if also collected in a rather free

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<sup>1</sup> Sethe 1931: 520–527, 539f.

manner, were supposed to be read by the king's soul (*b3*) during its journey in the beyond in order to guarantee his eternal transformation into an *akh* (the retrograde writing on the north wall of the antechamber should even facilitate the reading when passing through the chamber!). Four decades later, Joachim Spiegel and Hartwig Altenmüller used the same corpus in their aims to reconstruct/recreate a royal burial ritual.<sup>2</sup> However, not only did the two scholars reach completely different results. They also came to inconsistent conclusions concerning the role of the sepulchral space into which these texts had been inscribed. Whereas Spiegel considered the three main rooms – sarcophagus chamber, antechamber, *serdab* – to have represented the underworld, the horizon and the sky respectively as a stage for concrete ritual performance in a spatial alignment with the physical location of the texts<sup>3</sup>, Altenmüller paid little attention to such architectural properties. His main interest was to identify textual units (“Abschnitte”) from the editors’ master copies, all of which were distributed in the tomb without any apparent reference to the ritual progression.<sup>4</sup>

Ten years after Spiegel and Altenmüller, Winfried Barta would dismiss any search for a conscious redaction strategy behind the distribution of the texts within the pyramids as more or less futile, since many of the spells could obviously end up in different places from one tomb to another. Nevertheless, both Jürgen Osing and James P. Allen soon after returned to the pyramid of Unis in order to once again look for a more comprehensive corpus-based plan.<sup>5</sup> While reassessing the importance in identifying textual units and their combination into longer sequences or groups, the interpretation of the tomb's symbolic properties of these scholars was a lot more cautious than the previous ritual reconstructions. Allen's proposal that it mainly laid out the soul's route through the underworld (sarcophagus chamber) and the horizon (antechamber) echoed to a large extent Sethe's initial ideas about the tomb as a trajectory for the soul, as well as Spiegel's mythologization of its chambers.

A seminal study of the organization of the Pyramid Texts by Harold Hays, based on the previous work and methodology of Altenmüller, Osing and Allen, has made it clearer how the ancient editors worked with more or less solid and, in relation to each other, independent groups of spells in the providing of texts for the different walls.<sup>6</sup> On the basis of his observations, Hays gave little credence to matters of hermeneutics and considered most previous interpretations to represent intellectual guesswork at best. According to him, the internal variation between the different pyramid corpora as well as the undeniably “floating” character of a number of spells between the different groups was enough to disallow any attempt at a corpus-based reading.<sup>7</sup>

That most of these texts must have had a previous life outside the tomb is a long-established opinion. The majority of them obviously had a ritual background – i.e. once used (read/enacted) in real life in a ritualized context – although the particular art of activity and original context concealed behind the words in most cases eludes us. This means that their introduction in the pyramid substructure entailed an adaptation into a new environment, a redactional project that had consequences for their compilation and distribution in the different pyramids, depending on matters as general contents, group affiliation and, as we soon shall see, grammatical structure.<sup>8</sup>

Nonetheless, the obvious organization of the Pyramid Texts on the basis of more or less solid groups, as masterly demonstrated by Hays, must not prevent us from observing cases where the assignment of a particular spell might have been governed, not necessarily by its group affiliation, but by its general contents in conjunction with a specific architectural element. Even if it must be emphasized that while such possible links most certainly were secondary – due to their previous life outside the pyramid – they still may provide a possible insight into the mind of the redactors, demonstrating that the latter actually had a concrete idea about the symbolic properties invested in the chamber system.

In the following discussion, we shall focus on some notable patterns, both in the general thematic distribution of the texts, as well as in the noteworthy choice of a specific location for a number of individual spells. It is time to revisit the pyramid of Unis!

<sup>2</sup> Spiegel 1971; Altenmüller 1972. An earlier version of Spiegel appeared already in 1955 (Spiegel 1955).

<sup>3</sup> Spiegel 1971, 25; cf. Mathieu 1997.

<sup>4</sup> Altenmüller 1972: 273–276.

<sup>5</sup> Barta 1981; Osing 1986; Allen 1994.

<sup>6</sup> Hays 2012: 14, 258f.

<sup>7</sup> Hays 2009: 218–220.

<sup>8</sup> Hays 2012: 136–175.

## The pyramid and its texts – general remarks

In a number of previous works, I have fervently argued that the various architectural configurations of the pyramid substructure during the Old and Middle Kingdom adhered to different (and changing) conceptualizations of it as a monumentalisation of a mythological and ritualized space.<sup>9</sup> So are there, in my view, no reasons to believe that the comprehensive changes in pyramid architecture in the transition between the third and the fourth dynasty were implemented without any regard to analogous alternations in contemporary royal ideological discourse. In addition to moving the locus of the mortuary cult from the north to the east side of a pyramid, the changed outer appearance of the pyramid was combined with a corresponding lifting of the burial chamber from the underground into the core of the building. A possible influence of solar ideology is hard to ignore.<sup>10</sup>

Later, when the chamber system was located just below the base of the superstructure at the end of the fourth Dynasty (Shepseskaf), it had attained a standard bicameral layout with a serdab complex along a west-eastern alignment. The position of the antechamber, as a nexus between the different sections of tomb, was now located exactly under the peak of the pyramid,<sup>11</sup> to all appearances continuously establishing a correspondence between the external and internal configuration of the structure. With the sudden introduction of texts on the walls in the pyramid of Unis, such possible architectural conceptualizations might then become at least partly intelligible. That is, of course, if these texts were in any way thematically organized in a conscious reference to the tomb layout.

The standardized bicameral system of the pyramid mirrors an equivalent division in the Pyramid Texts between addresses to the largely passive king in the *sarcophagus chamber* and the active personal spells in the *antechamber* and *corridor*.<sup>12</sup> In the Unis corpus, the only exceptions to this rule in the sarcophagus chamber are the magical spells against obnoxious creatures in the gable above the sarcophagus and the corresponding gable on the other side, containing texts that have been interpreted as the king's active reception of provisions.<sup>13</sup> On the other hand, the dominating group of offering ritual on the north wall, and the so-called resurrection ritual on the south (PT 213–219, 220–222, 245–246), had to spill over on the adjacent wall spaces on the east main surface and into the passage. The subsequent pyramid corpora in the sixth dynasty would equally make it evident that the editors of Unis had been forced to shorten the amount of offering spells, while there existed a number of further texts of the resurrection ritual that could be added to the initial core found in Unis.<sup>14</sup>

Moving into the antechamber, the previously passive king had, through a general change of grammatical structure in the chosen texts, become an active participant in his own ascent to the sky. Instead of the burial chamber's dominating addresses *to* Unis in the second person (with the exception of the gables), he was now in the antechamber *spoken of*. This latter type of text was originally composed in the first person, but had been edited into the third person when monumentalized on the pyramid walls.

The obvious distinction between two categories of pyramid texts, either voiced in the second person or first/third person, with the former category dominating in the sarcophagus chamber, the latter in the antechamber and corridor, made Jan Assmann characterize them in terms of mortuary liturgies and mortuary literature respectively.<sup>15</sup> While the inscription of liturgies on the walls rendered their performative efficacy eternally present, the mortuary literature represented a storage of knowledge for the tomb owner's personal use. Harold Hays later made a similar distinction between what he termed sacerdotal and personal texts, i.e. collective ritual texts in which somebody addressed or spoke about the beneficiary on the one hand, and texts that originally had been spoken by the deceased himself. However, Hays regarded them as “two bodies of discourse” of a mortuary literature that eventually had become monumentalised in the pyramids (the origin of the personal texts was even to be found in

<sup>9</sup> Billing 2011; 2016, 2017; 2018.

<sup>10</sup> For a discussion on an alleged “solarization” of the pyramid in the fourth dynasty, see Billing 2018: 56–62 and Verner et al. 2006: 178–181.

<sup>11</sup> This exact location of the antechamber is not found in the tomb of Shepseskaf, but which is a monumental mastaba and not a pyramid.

<sup>12</sup> Allen 1994: 18.

<sup>13</sup> Allen 1994: 17; Hays 2012: 105f.

<sup>14</sup> Hays 2012: 679.

<sup>15</sup> Assmann 2001: 334f.

a person's "individual preparation for death", i.e. in real life).<sup>16</sup> *Contra* Assmann, Hays also considered the performativity that once characterized these texts to have been attenuated once they were lifted out of their original context of performance to be adapted in a new monumentalised setting. This was not the least reflected in the often meticulous editorial change in the personal texts from first to third person, at times even documented as secondary changes on the wall surfaces.<sup>17</sup>

However, if the very concept of monumentalisation in general would aim at an eternalization of both memory *and* human activity,<sup>18</sup> there are really no means to determine from an emic point of view what the editors had in mind, if they actually consciously aimed at an attenuation (why not deactivation?) of the texts' ritual efficacy or not. What we do know is that the king, due to these changes, was no longer meant to *speak at all*. Thus, it could be equally possible that the texts henceforth were meant to speak on his behalf in the dark and otherwise silent world of the tomb.<sup>19</sup> Given the long noticed spatial division of the king's agency from passive (sarcophagus chamber) to active (antechamber and corridor), the general objective would then be to effectuate his transformation in a spatial movement through the mythologized quarters of the tomb. In this respect, it should also be added, both the texts with addresses to the king in the second person, and the texts in the first/third person, could equally be counted for as ritual texts, since also the latter category might very well, in its original context, have been recited by a liturgist on behalf of the deceased.<sup>20</sup>

In the following, we shall look closer at some salient traits of textual thematic that can be noticed in relation to the architectural layout in the Unis corpus, all of which in my view evince an undeniable emic consciousness on behalf of the editors of the symbolical properties invested in the pyramid substructure, as well as a general idea of a ritualized space – through the performative presence of the texts (i.e. recitations) – that would effectuate the transformation and celestial ascent of the king.

### *"He has come to you, his father!"*<sup>21</sup> – The arrival of the king at the doors of the horizon

The change of grammatical structure between the two chambers was noticed already by Kurt Sethe almost a 100 years ago, interpreting the tomb as a trajectory of the king's soul towards the east. The texts reflected an idea of the chamber system as not merely rooms for burial and equipment, but as a monumentalisation of a cosmic journey on the other side. As might be expected, this conception would not least be reflected on the walls by the two main places of transition: the passage between the two main chambers and the opening of the corridor to the north.

Due to the obvious lack of space, as just mentioned, the east wall in the sarcophagus chamber had to provide room for the second part of a resurrection ritual, properly adhering to the south wall.<sup>22</sup> This resulted in the strange coincidence (?) that PT 220, the section describing the opening of a chapel, ended up close to the right corner of the physical passage:

§ 194a      *wn ʕ3.wy 3ht nḥbḥb k3nwt.s*

*The double doors of the horizon are opened,  
its bolts are slip back.*

/PT spell 220 (W/F/E inf 8)/<sup>23</sup>

<sup>16</sup> Hays 2012: 12.

<sup>17</sup> Hays 2012: 12f. The degree of this supposed attenuation remains unanswered. For a further discussion on performativity in both speech and monumental contexts, see Billing 2018: 22–33 w. ref.

<sup>18</sup> See Assmann 1991: 17–27; *idem*: 1990: 3f.

<sup>19</sup> Assmann 2001: 334f. ("die Aufzeichnung einer Stimme").

<sup>20</sup> Willems 2019: 212–221. In this respect, given the obvious collective ritual background of the funerary texts irrespective of their grammatical structure, Willems finds the "category of funerary literature redundant" (Willems 2019: 246).

<sup>21</sup> *Jw.n.f ḥr.k jt.f* (§ 200a–201d [PT 222]). A phrase repeatedly uttered to different deities on behalf of Unis, inscribed on the east wall of the sarcophagus chamber in immediate proximity to the passage.

<sup>22</sup> PT spells 213–219, 220–222, 245–246.

<sup>23</sup> The coda hereafter used to refer to the different walls in the pyramids are adapted from the ones established by MAFS: W

Again, it must be emphasised that this spell was originally not created in order to qualify the passage as a door to the horizon. It belonged to the unit PT 220–222 and possibly originated in a previous ritual for the Red crown. However, when the editors saw the conceivable link to this cardinal architectural element, they consciously could have made PT 220 end up in this position.

Such a bold interpretation can actually be corroborated through a comparison with the editorial treatment of the same wall in both Teti and Pepy I, the two immediate successors of Unis. In both these corpora, PT 220 is found on the south wall (where it henceforth properly should be) and thereby detached from the passage. Instead, the editors used another spell, PT 355, for the same purpose, i.e. to qualify the passage as a monumentalisation of the celestial gate.

§ 572b	<i>h3 Ttj pw</i>
§ 572c	<i>tz n.k tp.k jr ksw.k tz n.k ksw.k jr tp.k</i>
§ 572d	<i>wn n.k ʕ3.wy pt snhbhb n.k zw wrw</i>
§ 572e	<i>sß n.k dbt m hʕt ʕ3t sšn n.k dbt m hʕt ʕ3t</i>
§ 573a	<i>hr.k m z3b hbzt.k m m3hz</i>
§ 573b	<i>hms.k hr hndw.k pw wd.k mdw n 3hw</i>
§ 573c	<i>jw.k hr.(j) jw.k hr.(j) jw.k 3 hr.(j)</i>
§ 573d	<i>Hrw js nd n.f.jt.f Wsjr</i>
§ 574a	<i>Ttj pw wt-jnpw.k</i>

*Ho Teti!*

*Your head has been tied to your bones for you,  
your bones have been tied to your body for you.*

*The double doors of the sky have been opened for you,  
the two great bolts have been drawn back for you,  
the brick has been pulled back for you in the great mastaba.*

*Your face is as a jackal, your tail as a lion.*

*You shall sit on this throne of yours and give orders to the spirits.*

*You should come to (me), you should come to (me), you should, indeed, come to (me),*

*Horus who tends his father Osiris, o Teti, your Anubis-embalmer.*

/PT spell 355 (T/F/S inf 21–32)/

Meticulously positioned immediately above the passage, in Teti even entitled “Opening the double doors of the sky” (*wn ʕ3.wy pt*), PT 355 announced that the bodily reconstitution in the sarcophagus chamber was complete, why the lord of the tomb arrived to his son Horus and the doors of the sky stood open.

While PT 355 in the Teti’s corpus had been veritably squeezed into the narrow field beneath the offering ritual, the editors of Pepy I – obviously for the same reason – detached it from its unit with PT 356 and 357 at the start of the same wall in order to cover the register in its exact middle point.<sup>24</sup> But the scribes of this king had more on their mind. As I have previously pointed out, there is notably both a thematical and a phraseological resemblance of this section in PT 355 with PT 674, the first spell on the north wall within the passage:

§ 1994a	<i>jw.n.(j) hr.k jnk z3.k jw.n.(j) hr.k Ppy pn jnk hrw</i>
§ 1994b	<i>dj.(j) n.k mdw.k hntj 3hw nhbt.k hntj jhmw-sk</i>
§ 1995a	<i>gm.(j) tw tz.(j) hr.k m z3b ph.k m kbhw</i>
§ 1995b	<i>kbh.s n.k jb.k m ht.k m pr jt.k Jnpw</i>

– Unis, T – Teti, P – Pepy I; /F – sarcophagus chamber, /F-A – passage, /A – antechamber, /C – corridor; /W – west, /S – south, /E – east, /N – north; sup – gable, inf – main wall.

<sup>24</sup> Billing 2018: 264–267; see also Morales 2016. *Contra* Hays (2009: 212f.), the proliferation of references to the doors of the sky, throughout the chambers and corridors in the inscribed pyramids, should not be allowed to overshadow the obvious and conscious editorial use of PT 355 in reference to the physical passage as evinced in the pyramid of Teti and Pepy I.

*I have come to you, I am your son;  
 I have come to you, Pepy, I am Horus.  
 I will make your staff be at the fore of the spirits,  
 your waterlily bud sceptre at the fore of the Imperishable stars.  
 I will find you and tie your face as a jackal, your hinder-part as Qebehut.  
 She will cool for you your heart in your body in the mansion of your father Anubis.*

/PT spell 674 (P/F-A/N 1–5)/

Once again, the text announces the arrival (*jw*) of the god. Horus comes to his father Osiris Pepy, like in PT 355 positions him at the fore of the spirits (*3hw*) and refers to his facial appearance as a jackal in an apparent embalming context.

Now, returning to the Unis corpus, let us broaden our perspective somewhat further! The litany to the king at the beginning of PT 222, in the centre above the passage, repeatedly uses a formula found in both in PT 355 and PT 674, where each stanza begins: “He has come (*jw*) to you, his father; he has come to you, NN”, adding a divine name at the end. To all appearances, they refer to the different identities of the king’s divine father, who thereafter establishes the king’s rule over both the gods (the Ennead) and Upper and Lower Egypt (§ 202b–c), as it would seem in accordance with the pattern as seen in PT 355 and PT 674.

A recent observation in reference to the passage in Unis by Nathalie Beaux further strengthens the connection between this act of arrival (*jw*) and the physical passage.<sup>25</sup> She has noticed that Sopdu, a god closely linked to Horus, is mentioned twice in two registers precisely above the passage, with the *jw.n.f hr:k* formula both times expressively placed at the top of the main wall. In addition, secondary alterations made in the already inscribed text brings witness to a conscious editorial aim to let this double feature visually mark out the centre of the wall.<sup>26</sup>

The presence of Sopdu in the pyramid of Unis is even more intriguing, as Beaux has additionally observed that the god appears again in the exact middle above the passage to the corridor in the antechamber:

§ 480b      *j3wt j3tj j3t Hrw j3t Stš*  
 § 480c      *shwt j3rw dw3.sn tw*  
 § 480d      *m rn.k pw n Dw3w Spd js hrj ksbwt.f*

*The mounds – the two mounds of Horus and the mound of Seth  
 – and the Fields of Rushes,  
 they worship you in this your name of Morning god,  
 as Sopdu under his acacia.*

/PT spell 306 (W/A/N 21–22)/

Since Sopdu is mentioned only four times in the entire pyramid, this could hardly be considered a coincidence, whatever interpretation is to be made of it. According to Beaux, the references above the passages were meant to delineate the trajectory of the heliacal rising and reappearance of Sirius, a herald of the new year and the birth of Horus.<sup>27</sup> This astral phenomenon seems also referred to in the opening spell of the north antechamber wall, PT 302, why it might very well be correct. In any case – and of more importance in the present discussion – it once again *testifies to an editorial awareness in the distribution of the texts in relation to the physical layout of the tomb.*

<sup>25</sup> Beaux 2015.

<sup>26</sup> Beaux 2015: 15.

<sup>27</sup> Beaux 1994; 2015.

## A reiterated manifestation of power: the king's appearance in the antechamber

While the thematic distribution of texts in the sarcophagus chamber of Unis seems pretty clear, the texts in the antechamber have been less discussed. The reading order was to all appearances meant to be counter-clockwise around the chamber, starting with the well-known appearance of Unis from the Duat in PT 247. This spell, unparalleled in the other pyramids, was a main argument in Allen's likewise famous interpretation of the pyramid as a cosmograph. Together with PT 248–253, it fills the entire gable and pictures the king appearing gloriously in various identities (as a star, as Nefertum, as the Perception, as the great god). Except for PT 253, another type of spell where the king is cleaned together with the sun-god in the Fields of Rushes and lifted up to the sky by Nut, none of these texts would be reused in the later pyramids.

Besides from an exit from the underworld, PT 247 also pictures a cataclysm, a cosmic upheaval at the appearance of the king.

§ 257a      *dd-mdw jr.n n.k z3.k*  
 § 257b      *sd3 wrw m3.n.sn šꜥt jmt ꜥ.k*  
 § 257c      *pr.k m dw3t*

*Recitation: Your son Horus has acted for you.  
 The Great Ones tremble after they have seen the knife  
 in your hand as you emerge from the Duat.*

/PT spell 247 (W/A/W sup 1–3)/

As such, it has a close parallel in PT 337, the corresponding first antechamber spell of Pepy I:<sup>28</sup>

§ 549a      *dd mdw mdw pt sd3 n šꜥt.k Wsjr*  
 § 549b      *jr.k prjw*

*Recitation: The sky shall speak, the earth shall shake,  
 because of your ferocity, Osiris,  
 as you make emergence.*

/PT spell 337 (P/A/W 1)/

Once again, we are dealing with the same *theme*, not modern spell numbers. The architecture apparently held inherent symbolic properties to which the editors had to – or at least had the option to – engage with. Furthermore, as we can see, these spells share, besides from obvious intertextual links, in the case of *šꜥt* even the device of homophony.

Looking closer at the other walls in the antechamber of Unis, we can observe how this cosmic upheaval actually is reiterated *every time* we start reading a new wall. While the south wall offers a continuation of the group that started on the west – PT 260 even overlaps in the corner – the eastern gable above the passage to the serdab opens with the powerful declaration of the so-called Cannibal hymn:

§ 393a      *gp pt jhy sb3w*  
 § 393b      *nmmn pdwt sd3 ksw 3krw*  
 § 393c      *gr r.sn gnmw*  
 § 394a      *m3.n.sn Wnjs hꜥ b3*  
 § 394b      *m ntr ꜥnh m jtw.f wšb m mwwt.f*

*The sky is cloudy, the stars obscured,  
 the celestial stretches quake, the bones of the horizon tremble,*

<sup>28</sup> Billing 2016: 254f.

*the decanal stars grow still,  
for they have seen this Unis, apparent, impressive,  
as a god who lives on his fathers and feeds on his mothers.*

/PT spell 273 (W/A/E sup 1–5)/

This extraordinary composition has been interpreted as a combination of royal epiphany, seizing of comic power and the assurance of offerings.<sup>29</sup> But it has also been recognized that similar themes of “cataclysm, sacrifice, and cannibalism” can be found in yet another spell in Unis: PT 254.<sup>30</sup> As a matter of fact, this brings us back to the opening spell of the main western wall, right beneath the cataclysm of PT 247:

§ 276a      *jdy wrt n k3 Nh̄n*  
 § 276b      *ns hh.(j) r.tn h̄w k3r*  
 § 276c      *j n̄r ʕ3 h̄mm rn.f h̄t hr st n nb w̄*  
 § 277a      *j nb 3h̄t jr st n Wnjs*  
 § 277b      *jr tm.k jr st n Wnjs jr.k3 Wnjs ʕt m.jt.f Gbb*  
 § 277c      *t3 nj mdw.n.f Gbb nj w3.n.f*  
 § 278a      *gmy Wnjs m w3t.f wnm.f n.f sw mwmw*

*Cense the Great One for the Bull of Hierakonpolis.  
The flame of my blast is against you who are around the shrine.  
O great god whose identity is unknown, a meal in place for the sole lord!  
O Lord of the horizon, make a place for Unis.  
If you fail to make a place for Unis, he will put a curse on his father Geb:  
“The earth shall not speak, Geb shall not conspire”.  
Anyone whom Unis finds in his way, he devours raw.*

/PT spell 254 (W/A/W inf 1–2)/

This is not the place to enter into a full discussion of the possible cultic background of this long and highly complex spell, other than to point out: the cataclysmic appearance with a threat against the earth god; the reference to a shrine; and its identification with the horizon. The spell is followed by a shorter version of the same scene in PT 255. These themes of cataclysm and the opening of a shrine, sacramentally interpreted as the horizon (antechamber), made the editors of Teti, just like those of Unis, choose to start the corresponding wall in Teti’s pyramid with PT 254–258 (T/A/W 1–23). Thereafter, this particular text unit would not be used again in any pyramid.

Finally, moving on to the north wall, the first line of the first spell PT 302 pictures Unis’s appearance in the sky in similarly powerful terms:

§ 458a      *sbš pt ʕnh̄ spd n Wnjs js ʕnh̄ z3 spdt*

*The sky bleeds, the Sharp one lives,  
for Unis is the living one, the son of Sothis.<sup>31</sup>*

/PT spell 302 (W/A/N 1)/

It has long been noticed that the north wall in the antechamber of the pyramids normally was given a sequence that centred around the king’s transformation into Horus, the living god.<sup>32</sup> In the pyramid of Unis, moreover, the editors apparently found it convenient to let it start with an announcement of his very

<sup>29</sup> Eyre 2002; Goebis 2003.

<sup>30</sup> Eyre 2002: 77 n. 6.

<sup>31</sup> Pyr. 458a [PT 302].

<sup>32</sup> Hays 2012: 108f.

birth in his stellar identity as Sirius, “the sharp one” (*spd*), indeed the sharpest component of the *Canis major*, Sothis (*spdt*), identified with his mother Isis. As has been argued by Natalie Beaux, the dramatic scenery, with the aurora as a metaphor for the blood of confinement, indicates the birth of a New Year at the heliacal rising.<sup>33</sup>

Thus, we can notice that the theme of a dramatic, cataclysmic appearance in the horizon had been deliberately chosen by the editors of Unis’s pyramid when starting the text sequence of a new wall. On the west wall, it was even used twice, profiting in this respect on the division of the surface in two fields. These two spells, PT 247 and PT 254, could then refer to what the king had left behind (Duat) and the area into which he entered (horizon).

Finally entering the corridor to the north, the first column on the west wall declares the doors to be opened: “Draw back the baboon’s penis! Open the doors of the sky” (*stꜥ ḥnn Bꜥby wn ꜥꜣwy pt*) (W/C/W 1).<sup>34</sup> The last word of the same spell also declares that “Unis is Horus” (§ 503b). Although the sequence PT 313–321, covering the walls in Unis’s corridor, is not found in any of the later pyramids, it has on good grounds been argued, due to the similarity in grammatical structure as well as its general theme, that it represented a continuation of the group on the previous north antechamber wall.<sup>35</sup> Is it then to be considered as a sheer coincidence that the reference to the opened doors of the chapel, sacramentally interpreted as “the doors of the sky”, would end up in the first spell of the corridor?

## Thematic progression in the antechamber? A brief case-study

Having pinpointed recognizable patterns in redactional strategy in reference to physical space and related symbolic properties, going beyond the spells’ formally belonging to specific groups and internal order, can we in like manner say anything about the thematic *progression*, as reflected in the texts? In fact, this seems to be the case. The sarcophagus chamber provided the king with food, clothing and regalia in the Offering ritual on the north wall and transformed him into an *akh* on the south, a combination somewhat aptly characterized by Assmann as the king’s *Versorgung* and *Verklärung*,<sup>36</sup> and probably in that order.<sup>37</sup> Similarly, in the antechamber, the now resurrected and active king would move through the horizon and finally head for the sky in his identity of Horus, the living god, as reflected in the texts on the north wall and in the corridor.<sup>38</sup>

Moreover, it may even be possible to identify signs of progression within one specific sequence of texts, identified by Hays as belonging to “Group C” (“Aggregation with the Gods”).<sup>39</sup> In closing the present discussion, I would like to focus on a salient motif on the west and south wall of the antechamber that occurs too frequently to be ignored: *the throne*.

A general theme in Unis’s journey throughout the pyramid is his aim to take possession of his cosmic kingdom. Indeed, already in the well-known PT 213, *le grand depart*, which is the first text on the south wall by the sarcophagus in all inscribed pyramids, it is stated that the king has not departed dead, but alive, in order to “sit on the throne of Osiris” (*ḥms ḥr ḥndw Wsjr*) (Pyr. 134b). Having arrived in the antechamber, the royal seat is in the texts of the west gable throughout referred to as *st*, thereafter variously as *st*, *nst* or *ḥrw*. It occurs in four consecutive spells on the gable, and five times along the main west and the south wall:

### *West gable:*

§ 263b      *j.n Wnjs r st.f tpt nb.ty*

*Unis has arrived at his throne that is upon on the Two Ladies.*

<sup>33</sup> Beaux 1994.

<sup>34</sup> § 502a [PT 313]. The text in the column is mainly lost, but can be restored from the parallel in the Middle Kingdom tomb of Senwosretankh at Lisht (Allen 1994: 20).

<sup>35</sup> Backes 2017; cf. Hays 2012: 686.

<sup>36</sup> Assmann 2001: 324.

<sup>37</sup> Allen 1994: 16f.

<sup>38</sup> For a lengthy discussion of this dominating theme – the king’s transformation into a falcon/Horus – as manifested on the corresponding north antechamber wall also in the pyramid of Pepy I, see Billing 2018: 361–394.

<sup>39</sup> Hays 2012, 106f., 684.

/PT spell 248 (W/A/W sup 13)/  
 § 264c *hꜣp Wnjs jn jr st.f*  
*Unis has been received by the one who made his throne.*  
 /PT spell 249 (W/A/W sup 15)/

Pyr. 267c *j.n Wnjs r st.f hrt k3w*  
*Unis has arrived at his throne that is in charge of kas.*  
 /PT spell 250 (W/A/W sup 19)/

Pyr. 270a *jw Wnjs r st.f tw hnt swt*  
*Unis is off to his throne, one foremost of thrones.*  
 /PT spell 251 (W/A/W sup 22)/

*West and south wall:*

Pyr. 294a *hr.f šd.f tz.f*  
*His throne, the one he seizes, the one he raises.*  
 /PT spell 254 (W/A/W inf 17)/

Pyr. 301b *jw w<sup>c</sup>.n.f Tm jw.f hr nst Hr w smsw*  
*He has inherited from Atum, he is on the throne of Horus the Elder.*  
 /PT spell 256 (W/A/W inf 25)/

Pyr. 306e *jn sw shm m st.f*  
*He belongs the one who has power over his throne.*  
 /PT spell 257 (W/A/W inf 31)/

Pyr. 366b–c *j.p3.f m 3pd hnn.f<sup>40</sup> m hpr r m nst hwt jmt wj3.k R<sup>c</sup>*  
*Unis flies as a bird, he continuously alights as a beetle on the empty throne in your boat, Re!*  
 /PT spell 267 (W/A/W 25)/

Pyr. 391c *hms Wnjs pn hr st wrt jr gs ntr*  
*Unis sits on the great throne beside the god.*  
 /PT spell 271 (W/A/W 42)/

As we can see here, there is an apparent progression pattern of *arriving at*, *receiving*, *seizing* and – finally – *occupying* his divine seat. Whereas the spells on the gable picture a newly arrived king, the main west wall and the south rather transmit a *fait-accomplis*. Indeed, a more in-depth study of the treatment of central motifs in longer sequences might turn out to be a profitable methodological path in the search for possible editorial strategies at work in the different corpora.

## Concluding remarks

Some 50 years ago, Altenmüller founded a methodological approach in the reading and interpretation of the inscribed pyramids by identifying salient text units and groups with which the ancient editors could elaborate. This method has since then, on good grounds, provided a major guide in the general studies of the Pyramid Texts. Still, the identification of groups must not rule out interpretative approaches that also consider their placement in the tomb as a significant factor. That the editors of the different generations used varied compilation strategies of the corpora is obvious, but that does not exclude the possibility to gain certain insights into what might have been on their minds. In any case, there is no reason to believe that they were completely ignorant of existing symbolic properties connected to the contemporary layout of the royal tombs.

<sup>40</sup> The geminated stem as an expression for continuous repetition of an action (Allen 2017, 194).

In the discussion, we noticed how the same reference to the open celestial doors *and* the arrival of the god in a cultic encounter between father and son could be expressed by the use of different spells in the sarcophagus chamber of Unis, Teti and Pepy I, all in close proximity to the physical passage. Likewise, the antechamber of Unis demonstrated a clear editorial aim to start the west, east and north wall with spells that specifically expressed the king's dramatic appearance in the sky. At the end, in the same chamber, we might even have identified a trait of progression through the way the texts referred to the king in relation to his throne.

A major problem in the study of the Pyramid Texts is that we have very limited knowledge of their previous and contemporary life outside the pyramids, what in biblical exegesis would be called their *Sitz im Leben*. They were clearly adapted for a new environment when they started to be inscribed on the walls, and there is, of course, no way of knowing if the editors considered the chosen texts and their compilation to form a cohesive body of spells. However, a clear thematic coherence of the groups specifically chosen and distributed in the pyramid of Unis seems to point in that direction, most probably providing him with a set of monumentalised ritual voices to affect his continuous transformation in the eternal royal mansion.

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# Empresses of Egypt: Julia Domna in statues and coins from Roman Egypt

Giorgia CAFICI

**Abstract:** In contrast to Ptolemaic queens, the wives of Roman emperors seem to appear infrequently in Egyptian sources, statues, and reliefs. Scholars typically argue that Roman empresses are missing from contemporary texts and depictions because they did not play an important cultic role in Egypt (Hoffman 2015). As a result, while Ptolemaic female sculptures and coins have been the subject of detailed scholarly analysis since the 2000s, the iconographic and stylistic choices adopted in the Egyptian context to depict Roman empresses on statues and coins have not yet been systematically studied.

My current research aims to fill this gap as part of the RESP project (*The Roman Emperor seen from the Provinces. Imaging Roman Power in the Cities of the Empire from Augustus to the Tetrarchs, 31 BC–AD 297*). This is an ERC-funded research project (GA:101002763) that aims to provide a comprehensive study of the visual and material representation of Roman emperors and empresses in the imperial provinces from a new thematic bottom-up perspective that takes provincial culture and art as a starting point for looking back to Rome. RESP's methodological approach to the study of imperial portraiture will compare coins minted in Alexandria with sculptures from Roman Egypt, both classical and Egyptian, in order to trace the specifically Egyptian perspective and place it within a wider provincial context.

The aim of this paper is to present a case study of this research by providing an analysis of portraits from Egypt depicting the Empress Julia Domna in all visual media, together with the written evidence relating to her images in Egypt.

**Keywords:** Roman Egypt, Egyptian portraiture, Roman portraiture, Egyptian statues, Alexandrian coins, Julia Domna

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Temple reliefs, seals, and statues depicting Ptolemaic queens in both classical and Egyptian styles were widespread during the Ptolemaic Period.<sup>1</sup> The depictions of Ptolemaic queens have attracted considerable scholarly attention due to their intricate and relevant nature.<sup>2</sup> Since the 2000s, researchers have as such conducted thorough and often systematic analyses of the representations of the spouses of the Ptolemaic rulers.<sup>3</sup> Additionally, the sculptures depicting Ptolemaic queens have been extensively analysed in wider studies that focus on the royal portraiture of the Ptolemaic Period.<sup>4</sup>

In contrast, the attestations and representations of female members of the Roman imperial family in Egypt have received little attention from the scholarly community, probably due to the limited number of known representations. Graindor's volume *Bustes et statues–portraits d'Égypte romaine*<sup>5</sup> makes almost

<sup>1</sup> See for example ALBERSMEIER 2002; STANWICK 2002; VAN OPPEN DE RUITER *et al.* 2017; JOLITON 2018.

<sup>2</sup> On the prominent status of Ptolemaic queens, see PFEIFFER 2021; MINAS–NERPEL 2022a; MINAS–NERPEL 2022b; MINAS–NERPEL 2025, only to mention the most recent examples.

<sup>3</sup> ALBERSMEIER 2002; VAN OPPEN DE RUITER *et al.* 2017; JOLITON 2018; LORBER 2018; 2023.

<sup>4</sup> STANWICK 2002; BROPHY 2015.

<sup>5</sup> GRAINDOR 1936.

no mention of sculptures depicting empresses.<sup>6</sup> In 1981, Jucker's *Römische Herrscherbildnisse aus Ägypten* mentions four statues of empresses from Egypt.<sup>7</sup> In his 1984 publication *Études sur le portrait impérial romain en Égypte*,<sup>8</sup> Zsolt Kiss analysed over one hundred imperial statues and identified only five as depictions of Roman empresses.<sup>9</sup> It is also worth noting that despite the large number of reliefs depicting Roman emperors from Augustus to the third century AD,<sup>10</sup> there is a notable lack of Roman empresses in Egyptian reliefs. The only known exception is a temple relief at Esna that portrays Julia Domna, the Syrian wife of emperor Septimius Severus, along with Septimius himself and his sons Caracalla and Geta.<sup>11</sup> A study devoted to queens, including Roman empresses, mentioned or depicted in Egyptian sources from Roman times, was finally published by Friedhelm Hoffmann in 2015.<sup>12</sup> After examining the limited number of references to Roman empresses in texts and reliefs, the scholar suggests that their scarcity in contemporary texts and images is due to their lack of significance in Egyptian religious worship.<sup>13</sup>

This overview highlights the lack of systematic studies on the iconographic and stylistic choices made in the Egyptian context for the depiction of Roman empresses.<sup>14</sup> One may question whether Hoffmann's thesis accurately reflects historical reality or if the academic community's lack of interest in systematic studies on the subject has led to incomplete conclusions. Difficulties in identification may have led to an underestimation of the representation of the emperors' wives.

My current research, which is part of the ERC-funded project *The Roman Emperor seen from the Provinces*,<sup>15</sup> aims to contribute to our knowledge of the portraiture of the wives of Roman emperors in Roman Egypt. The investigation will provide a methodical analysis of the representation of the imperial family in Roman Egypt. This will be achieved through a new methodological approach that combines an in-depth analysis of imperial sculptures from Roman Egypt, coins minted in Alexandria, and other visual media such as reliefs, statue pedestals, and written attestations of images depicting emperors and empresses. This study aims to create an up-to-date corpus of sculptures depicting Roman emperors and empresses from Egypt and to reassess the phenomenon of Egyptian imperial portraiture in the context of Egyptian, provincial, and metropolitan portraiture, allowing one to determine whether the small number of depictions of female members of the family reflects the actual situation in Egypt.

The abovementioned relief of the temple at Esna features an exceptional depiction of Julia Domna, which led me to investigate the visual representation of this empress and the female members of the Severan dynasty in Egypt at this early stage of the project. This paper presents the preliminary results of the research on the representation of Julia Domna in Egypt.

Julia Domna was born in Emesa, Roman Syria, to a local family of priests of the deity Elagabalus.<sup>16</sup> In 187, she married Severus, who was then the *legatus Augusti pro praetore* of the Roman province of Gallia Lugdunensis.<sup>17</sup> They had two sons, Caracalla and Geta. Julia Domna played a major role in her husband's reign and is known to have been powerful and influential. Her life and her visual representation have

<sup>6</sup> The Copenhagen bust of Livia (Ny CARLSBERG GLYPTOTHEK inv. 1444) is referenced in a footnote (GRAINDOR 1936, 45, no. 184, Pl. IV) and is followed by a question mark. The only other woman of imperial rank mentioned is the mother of Marcus Aurelius DOMITIA LUCILLA, followed by a question mark (GRAINDOR 1936, 53–56, Pl. XIII). In addition to these, there are 14 portraits of unidentified women that are unlikely to belong to the imperial family (GRAINDOR 1936, 107–126).

<sup>7</sup> JUCKER 1981; Alexandria, Graeco-Roman Museum inv. 3473 (Agrippina minor); Alexandria, Graeco-Roman Museum inv. 3516 (Domitia); a portrait of Sabina in the Sammlung Ros in Zürich (Juncker 1981, 708); Dresden, Staatl. Kunstsammlung, Skulpturensammlung inv. Z. V. 2600 A 54 (Matidia).

<sup>8</sup> Kiss 1984.

<sup>9</sup> Copenhagen, Ny Carlsberg Glyptotek inv. 1444 (Kiss 1984, 38–39, figs. 50–51); Bonn, Akademische Kunstmuseum inv. B 79 (Kiss 1984, 39, figs. 52–53); Alexandria, Graeco-Roman Museum inv. 3516 (Domitia?) (Kiss 1984, 54, figs. 104–105); Alexandria, Graeco-Roman Museum inv. 23862 (Kiss 1984, 68, fig. 164); Alexandria, Graeco-Roman Museum inv. 3225 (Kiss 1984, 85, figs. 218–219). The remaining six female statues featured in the volume are identified as private individuals. In his 1995 article, Kiss mentions another portrait of Julia Mamaea, this time in bronze. (Wien, Kunsthistorisches Museum inv. VI 2357; Kiss 1995, 65)

<sup>10</sup> See for example O'NEILL 2011.

<sup>11</sup> HOFFMANN 2015, 152.

<sup>12</sup> HOFFMANN 2015.

<sup>13</sup> HOFFMANN 2015, 154–155.

<sup>14</sup> It should be noted that Egypt had a closed monetary system, meaning that only coins minted in Alexandria were in circulation within the country. Therefore, the numismatic image of Egyptian coins was the only one that the Egyptian population regularly encountered (VANEERDEWEGH *et al.* 2020, 204).

<sup>15</sup> <https://ercresp.info/index> (accessed on 4 October 2025).

<sup>16</sup> See for example BERTOLAZZI 2017, 70–80.

<sup>17</sup> BERTOLAZZI 2017, 90.

already been thoroughly studied by ancient and modern authors,<sup>18</sup> so I shall recall only the episodes that attest her presence in Egypt. In 199/200, Septimius Severus, Julia Domna and their sons travelled to Egypt.<sup>19</sup> During the winter of 199, the imperial family visited Alexandria. Severus had recently ended the civil war against Pescennius Niger.<sup>20</sup> Unlike other eastern cities, such as Antioch and Byzantium, which remained loyal to Niger until the very end of the war, Alexandria switched sides and recognised Severus as the legitimate emperor in early 194, when Niger's position began to waver. After Severus' victory, it is likely that the city sent envoys to the emperor to congratulate him and possibly seek benefits for their loyalty.<sup>21</sup> Cassius Dio reports that Severus had a strong interest in the antiquities of Egypt and was eager to examine as many artefacts from its past civilisation as possible (D.C. 76, 13, 2). In April 200, the imperial family went on a sightseeing trip. They travelled to Memphis and the pyramids, then proceeded to the Nile and travelled via the Colossi of Memnon to the Sudanese border. They returned to Alexandria before continuing on to Syria and finally Rome (D.C. 76, 13, 1; Hist.Aug.17.4). Julia Domna returned to the eastern part of the Roman Empire and effectively ruled the empire from Antioch during the Parthian War (215–217).<sup>22</sup> However, there is no evidence to suggest that she accompanied Caracalla on his journey to Egypt (215–216),<sup>23</sup> or stayed in Antioch.<sup>24</sup> Some scholars consider it plausible that Julia Domna returned to Egypt, but this remains hypothetical until more solid evidence emerges to confirm it.



**Fig. 1.** Rome, gold Aureus of Julia Domna, RIC IV Septimius Severus 540, 196-206 AD, Berlin, Münzkabinett der Staatlichen Museen inv. 18277495, obverse, 20 mm.

<sup>18</sup> The bibliography on Julia DOMNA is extensive. Some examples include GHEDINI 1984; LEVICK 2007; BERTOLAZZI 2017; GHEDINI 2020; TRUSCHNEGG 2021.

<sup>19</sup> BIRLEY 1999, 133–139; LETTA 1991, 666–667; HALFMANN 1986, 220–221; BAGNALL 2021, 132.

<sup>20</sup> According to Letta and Bertolazzi, the battle of Issum presumably took place in March of 194 (LETTA 1991, 655; BERTOLAZZI 2017, 112).

<sup>21</sup> LETTA 1991, 654; BERTOLAZZI 2017, 127. In 201, Septimius Severus granted both Alexandria and the Nome capitals the privilege of electing a city council, a privilege the Alexandrians had been fighting for since the reign of Augustus (BAGNALL 2021, 124, 132).

<sup>22</sup> ŁUKASZEWICZ 2021, 111.

<sup>23</sup> On Caracalla in Egypt see ŁUKASZEWICZ 2021.

<sup>24</sup> ŁUKASZEWICZ 2021, 111.



Fig. 2. Marble portrait of Julia Domna, Paris, Musée du Louvre MA 1107 © Musée du Louvre, Dist. RMN-Grand Palais, front.



Fig. 3. Marble portrait of Julia Domna, Paris, Musée du Louvre MA 1107 © Musée du Louvre, Dist. RMN-Grand Palais, right side.



Fig. 4. Rome, Brass Sestertius of Julia Domna, *RIC IV* Septimius Severus 857, 196-211 AD, American Numismatic Society inv. 1944.100.51361, obverse, 30 mm.

While there is currently a lack of systematic research on representations of Julia Domna in Egypt,<sup>25</sup> scholars have extensively studied her representations in sculptures and coins from Rome.<sup>26</sup> Two main types of sculptural portraits of Julia Domna have been commonly identified:<sup>27</sup> the Gabii type<sup>28</sup> (Figs 1–3)<sup>29</sup> and the Leptis Type<sup>30</sup> (Figs 4–6).<sup>31</sup> The Gabii type is Julia Domna's version of the orb hairstyle. It is typically characterised by nine or ten waves or rolls of hair that frame the face and are gathered into a large bun. The bun covers most of the back of the head and is roughly divided into loosely plaited sections of hair. The Leptis type is named after the arch of Leptis Magna and represents Domna's variation of the framing augmented-brands hairstyle.<sup>32</sup> The bun is typically smaller and positioned lower on the head, consisting

<sup>25</sup> A concise analysis of the depiction of Julia Domna in the Esna relief, and a reference to the Severian tondo, can be found in MOINE-BIANCHI 2018, 179–180.

<sup>26</sup> See for examples KRZYŻANOWSKA 1957, 183–187, 201–204; FEJFER 1985, 129–138; KLEINER 1992, 326; ROWAN 2011, 249–256.

<sup>27</sup> The number of portrait types identified for Julia Domna in the sculptural record varies considerably from scholar to scholar. See for example ACKERS 2016, 71–72.

<sup>28</sup> ZANKER 1985, 27–30.

<sup>29</sup> [https://numismatics.org/ocrc/id/ric.4.ss.540\\_aureus](https://numismatics.org/ocrc/id/ric.4.ss.540_aureus), <https://collections.louvre.fr/ark:/53355/cl010275285#> (accessed on 4 October 2025).

<sup>30</sup> ZANKER 1985, 27–30; ACKERS 2016, 71–72.

<sup>31</sup> <https://artgallery.yale.edu/collections/objects/157214> (accessed on 4 October 2025).

<sup>32</sup> Scholars sometimes divide the Leptis type into A and B. The main distinction consists of the number of waves of hair



Fig. 5. Marble portrait of Julia Domna, Yale University Art Gallery inv. 2010.143.1, front.

of thinner and more carefully plaited braids of hair. The sections of hair framing the face are also defined by softer, more natural waves. The Leptis type features twisted or braided sections of hair framing the face as decorative elements. It should be noted that Julia Domna is the first woman of the imperial family to be depicted explicitly wearing a wig.<sup>33</sup>

framing the face: the former is defined by ten on each side, the latter by eight (Ackers 2016, 72). Agreeing with Ackers, the differences between the Leptis A and B types are minimal, making it challenging to differentiate between the two on the coinage. This implies that they were not completely separate portrait types, but rather a variation.

<sup>33</sup> ACKERS 2016, 171–175.



Fig. 6. Marble portrait of Julia Domna, Yale University Art Gallery inv. 2010.143.1, right side.

Search results: 325 cities.



Fig. 7. Map of the cities where coins featuring Julia Domna were struck. Source: *RPC Online* (<https://rpc.ashmus.ox.ac.uk>).

From a numismatic perspective, obverse types depicting Julia Domna between 193 and 217 are characterised by three different legends that correspond to three separate chronological periods. The first period of production, from 193–196, bears the legend *IVLIA DOMNA AVG*. The second period, from 196–211, bears *IVLIA AVGVSTA*, and the last period, from 211–217, bears *IVLIA PIA FELIX AVG*.<sup>34</sup> Hill's study of the Severan coinage from the mint of Rome leads him to identify five main types of portraits for Julia Domna with several variations.<sup>35</sup> These types are mainly distinguished by small differences in hairstyle, but they are primarily related to the two commonly recognised types.<sup>36</sup> The evidence indicates that during the early reign of Severus, specifically from 194–209 AD,<sup>37</sup> the Gabii type was the primary portrait choice. Additionally, the Leptis Arch suggests that for a brief period, the later Leptis type was used alongside the Gabii type, as both types are found on the reliefs of the Tetrasyon Arch at Leptis Magna.<sup>38</sup>

Coins featuring Julia Domna's portrait on the obverse were widely minted in the Roman provinces, including Egypt (Fig. 7).<sup>39</sup> The Roman Provincial Coinage database (henceforth RPC) attests that Julia Domna's coins were minted in 337 cities in the eastern provinces of the Roman Empire.<sup>40</sup> According to the RPC database, 84 types of coins depicting Julia Domna were struck in Alexandria. The majority of these were minted during the reign of Septimius Severus, with 30 types dating from the reign of Caracalla.

<sup>34</sup> LUSNIA 1995, 120–121.

<sup>35</sup> In her study of the Severi portraits engraved on coins, based on the study of the ancient numismatics collection of the National Museum in Warsaw (KRZYŻANOWSKA 1957, 176), KRZYŻANOWSKA identifies only four types of portraits of Julia Domna (KRZYŻANOWSKA 183–187).

<sup>36</sup> "E: Youthful features: hair in large bun: homogeneous style. 194–199 [Fig. 1]. M: Features still youthful, but treatment more sophisticated and occasionally idealised: large variety of styles, from very fine to extremely poor. 199–209 (AV, AR); 200–207 (AE) [Figs. 2–3]. Li: Queue added to coiffure, which now began to assume characteristic wig-like appearance of that on latest portraits. 210–212 (AV); 210–215 (AR); 207 (AE). [Fig. 4]. Li (var): Similar to Li, but without bun and with large queue-knot at nape of neck. 2017 (AE) [Fig. 5]. Lii: Similar to Li (var), but with very small queue-knot. 213–215 (AV); 215–217 (AR [denarii]); 208–213 (AE) [Fig. 6]. Liii: As Lii, but with stephane. 216, 217 (AV); 215–217 (AR [double-denarii]); 213–217 (AE). [Fig. 8]. Liii (var.1): Transitional portrait with large bun, queue and stephane. 215 (AR [double-denarii]). [Fig. 7]. Liii (var. 2): Similar to Li (var.), but with stephane. 215 [Fig. 9] (HILL 1964, 8, appendix 4, figs. 1–9).

<sup>37</sup> HILL 1964, 8, app. iv, fig. 1; Ehrenheim 1999, 34; Ackers 2016, 72.

<sup>38</sup> ACKERS 2016, 72.

<sup>39</sup> <https://rpc.ashmus.ox.ac.uk/search/browse?q=julia%20domna%20egypt&page=5> (accessed on 4 October 2025).

<sup>40</sup> <https://rpc.ashmus.ox.ac.uk/search/map?q=julia+domna> (accessed on 3 October 2025).



Fig. 8. Alexandria, billon Tetradrachm of Julia Domna, 193-194 AD  
(<http://www.cngcoins.com> > Electronic Auction 355), obverse, 24 mm.

Out of the 84 types, Julia Domna's portrait is featured on the obverse in 79 of them. Only coins minted during the reign of Septimius Severus bearing the portrait of this emperor on the obverse feature the image of Julia Domna on the reverse.<sup>41</sup> It is noteworthy that only one type, dating to 199/200 AD, the years of the imperial family's trip to Egypt, features her portrait on the reverse side.<sup>42</sup> It is conceivable that this type was created to commemorate the imperial couple's visit to the country. In two distinct types, Julia Domna's full figure is depicted on the reverse side alone, depicted either in a seated<sup>43</sup> or standing posture.<sup>44</sup> Furthermore, she is depicted standing with her children in two different types.<sup>45</sup>

An analysis of the coins for which the date can be determined with certainty<sup>46</sup> reveals that all coins minted during the reign of Septimius Severus, from 193 to 211, feature the portrait of Julia Domna of Gabii type (Fig. 8). The coins featuring the portrait of Julia Domna minted in 193/194 and 194/195 depict the empress with youthful features that begin to age from 195/196<sup>47</sup> onwards, until wrinkles and a double chin appear in some examples minted in 197/198.<sup>48</sup> A non-canonical depiction, showing a fat empress, is

<sup>41</sup> <https://rpc.ashmus.ox.ac.uk/type/78094> (accessed on 4 October 2025).

<sup>42</sup> <https://rpc.ashmus.ox.ac.uk/type/78094> (accessed on 4 October 2025).

<sup>43</sup> <https://rpc.ashmus.ox.ac.uk/type/78099> (accessed on 4 October 2025).

<sup>44</sup> <https://rpc.ashmus.ox.ac.uk/type/78164> (accessed on 4 October 2025).

<sup>45</sup> <https://rpc.ashmus.ox.ac.uk/type/78042>; <https://rpc.ashmus.ox.ac.uk/type/78030> (accessed on 4 October 2025).

<sup>46</sup> For certain coins, the date cannot be determined with certainty due to their poor state of preservation. See <https://rpc.ashmus.ox.ac.uk/search/browse?q=julia%20domna%20egypt&page=5> (accessed on 4 October 2025).

<sup>47</sup> <https://rpc.ashmus.ox.ac.uk/type/69165> (accessed on 4 October 2025).

<sup>48</sup> <https://rpc.ashmus.ox.ac.uk/type/78081> (accessed on 4 October 2025).



Fig. 9. Alexandria, billon Tetradrachm of Julia Domna, 213-214 AD (Fritz Rudolf Künker GmbH & Co. KG > Auction 347), obverse, 25 mm.

the one that characterises the portrait carved on the reverse of the coin minted in 199/200 AD.<sup>49</sup> During the reign of Caracalla, from 211 to 216, the majority of coins are characterised by more mature facial features and the Leptis type hairstyle (Fig. 9), with the exception of one coin issued at the beginning of his reign in 211/212, which depicts a young Julia Domna with the Gabii hairstyle.<sup>50</sup> Thus, it seems that the Leptis type did not arrive in the province of Egypt until after the accession of the new emperor Caracalla. However, it is important to note that coins of uncertain date are all characterised by the Leptis type. Consequently, the attestation of this portrait type could be placed a few years earlier than the currently ascertained date of 211. It should be noted that Julia Domna is not depicted with a stephane on any coins from Egypt.

In Egypt, Julia Domna is also depicted on the so-called Severan Tondo.<sup>51</sup> The wooden panel tempera depicting Severus and Julia Domna side by side with Caracalla and Geta opposite, usually known as the Severan Tondo, is the only surviving painted group portrait of an imperial family from antiquity (Fig. 10). Geta's face was completely erased and covered in excrement due to the *damnatio memoriae*.<sup>52</sup> All four members of the family are sumptuously dressed. The male figures wear crowns adorned with jewels and hold sceptres with gold tips. Domna has a round face and wears a bejewelled tiara, a large pearl necklace, and triple pearl earrings. Her hairstyle, which matches the Gabii type, is brown and wavy. The Severan Tondo is believed to belong to a series of mass-produced group portraits exhibited

<sup>49</sup> <https://rpc.ashmus.ox.ac.uk/type/78094> (accessed on 4 October 2025).

<sup>50</sup> <https://rpc.ashmus.ox.ac.uk/type/83883> (accessed on 4 October 2025).

<sup>51</sup> Berlin, Die Antikensammlung, Altes Museum inv. 31329. The bibliography on the Severan Tondo is extensive. Some examples include ALEXANDRIDIS 2004, cat. 235, 207 and LEMBKE 2023 with more bibliography.

<sup>52</sup> Geta suffered a *damnatio memoriae* after his murder in 211. His images were overthrown, his name was erased from papyri, and his figure was obliterated from group representations of the imperial family (VARNER 2004, 182–183).



Fig. 10. The Severan Tondo, wood, Berlin, Staatliche Museen zu Berlin. Die Antikensammlung. Altes Museum, inv. 31329.

in public places. Heinz Heinen suggests identifying the tondo as one of the *εἰκονίδια* with the portraits of the deified Severus, Caracalla, and Domna mentioned in a papyrus from Oxyrhynchus written during the reign of Caracalla.<sup>53</sup> However, the painting must have been created before 211, the year of Geta's murder and his *damnatio memoriae*. Therefore, it cannot be one of the *εἰκονίδια* mentioned by Heinen, which depict Septimius *divus* after 211. It is likely that the tondo was painted around 198,<sup>54</sup> when Caracalla and Geta became Augustus and Caesar or shortly after, during Severus' visit to Egypt, as Caracalla is still portrayed as a boy.<sup>55</sup>

The relief depicting Julia Domna and the imperial family on the wall of the temple of Esna is likely to be linked to the same period, particularly to the imperial family's tour of the country.<sup>56</sup> The inner southern wall of the Esna temple portrays Julia Domna, Septimius Severus and their sons Caracalla and Geta as royal figures in Egyptian iconography, facing the gods who protect the city (Fig. 11).<sup>57</sup> On the right side, the relief depicts the local gods Khnum, Nebtu and Heka. Severus is depicted standing before

<sup>53</sup> P. Oxy. 12.1449 = Trismegistos 21850 (213–217 AD); GRENFELL *et al.* 1916, 530–535, <https://www.trismegistos.org/text/21850> (accessed on 4 October 2025); HEINEN 1991, 265–283.

<sup>54</sup> A similar date between 198 and 200 AD was also proposed by KISS and LEMBKE (KISS 1984, 79; LEMBKE 2023, 491).

<sup>55</sup> ALEXANDRIDIS 2004, cat. 235, 207.

<sup>56</sup> A similar hypothesis is postulated in GRENIER 2003, 271–272.

<sup>57</sup> SAUNERON 1975, 69, no. 496.

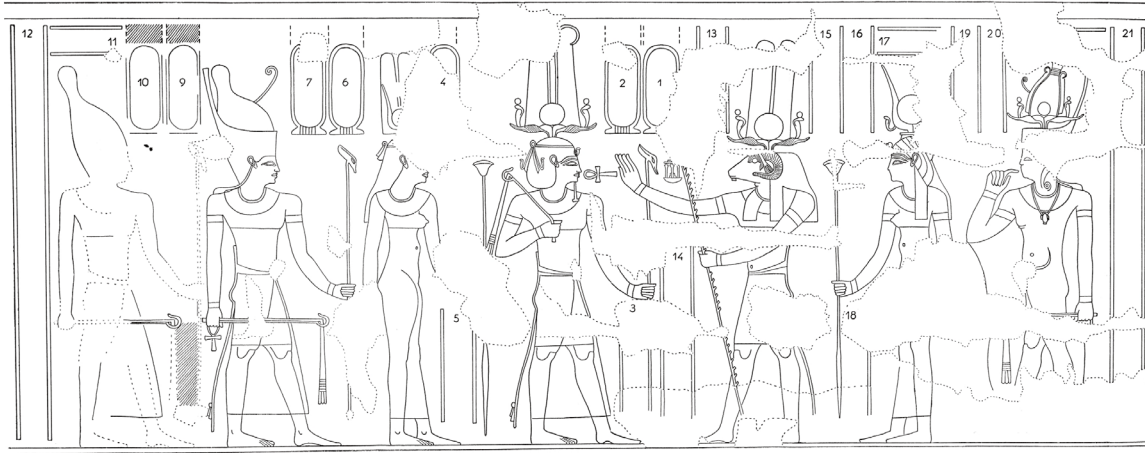


Fig. 11. Temple of Esna, Egypt. On the right side, the gods Khnum, Nebtu and Heka. In front of Khnum, Septimius Severus, Julia Domna, Caracalla, and Geta (the latter erased). Source Sauneron 1952 pl. I.

Khnum with the customary symbols of royalty, including the crook (*heka*), flail (*nekhakha*), and *was*-scepter. In accordance with the pharaonic tradition, he receives an offering of eternal life (*ankh*) from the god. Domna, Caracalla, and Geta are portrayed after Severus. They carry the *ankh* in their right hand. Following his assassination in 211, Geta was erased. The relief depicts Domna holding the *wadj* scepter, which is a common attribute of goddesses. This scepter is also held by Nebtu in this scene. Caracalla is depicted holding the crook, flail, and *was*-scepter, and wearing the crowns of Upper and Lower Egypt. The hieroglyphic inscriptions within cartouches near each figure provide the only means of identifying them.<sup>58</sup> As previously mentioned, it is not uncommon to find Roman emperors depicted as pharaohs in templar reliefs. However, in instances where they are not depicted alone, they are generally portrayed alongside their co-ruler rather than their spouse.<sup>59</sup> It is also worth noting that in this instance, Julia Domna is depicted before the future emperor Caracalla. This suggests that the depiction may date back to an early phase of Severus' reign, possibly when Caracalla was still a child. This could coincide with the imperial family's journey to Egypt.

At present, these are the only known depictions of Julia Domna from Egypt. However, the analysis of epigraphic and papyrus sources will offer a more complete understanding of her portrayal in the country. The papyrus from Oxyrhynchus P. Oxy.12 1449 provides evidence of other images of the empress in Egypt. This papyrus allows us to reconstruct that between 213 and 217 AD, the priests of various temples in Oxyrhynchus and the Oxyrhynchite and Cynopolite nomes listed eight instances of representations, *εικονίδιον*, of Emperor M. Aurelius Severus Antoninus Felix Pius Augustus, Julia Domna the Lady Augusta, and his deified father Severus in a list of returned temple property.<sup>60</sup> It is currently unclear whether the term *εικονίδιον* refers to a painted portrait, as assumed by Heinen,<sup>61</sup> or to a small statue or bust in the purely diminutive sense of *εικόν*.<sup>62</sup> However, it is important to stress the presence of such images during the reign of Caracalla, depicting Julia Domna with her son and the *divus* Septimius.

Nine epigraphic attestations of the name Julia Domna have been identified through a survey of the inscriptions from Roman Egypt.<sup>63</sup> Four of these instances can be confidently attributed to statue bases. On 23 March 211, the city of Alexandria erected a statue of Julia Domna, thanks to the initiative of Didymus

<sup>58</sup> SAUNERON 1975, 69, no. 496. For the titles accompanying the male figures, see Barbagli 2023, 233.

<sup>59</sup> HOFFMANN 2015, 152–155.

<sup>60</sup> *εικονίδιον* τοῦ κυρίου ἡμῶν Αὐτοκράτορος Μάρκου Αὐρηλίου [Σε]ουήρου Ἀντωνίνου Εὐτυχοῦς Εὐσεβοῦς Σεβαστοῦ καὶ τοῦ [θεοῦ πατρὸς αὐτοῦ Σεουήρου καὶ Ιουλίας Δόμνας τῆς κυρίας Σεβαστῆς,] (P. Oxy. 12.1449 l.7), <https://www.trismegistos.org/text/21850> (accessed on 4 October 2025).

<sup>61</sup> HEINEN 1991, 265–283.

<sup>62</sup> For further information on the ancient vocabulary of small-format sculpture see COLZANI 2022.

<sup>63</sup> IGRR I 1063 (TM 102656); IGRR I 1067 (TM 102660); IGRR I 1113 (TM 102689); IGRR I 1185 (TM 88390); IGRR I 1288 (TM 88827); Portes du desert 82 (TM 88390); Portes du desert 84 (TM 88415); SEG 34. 1596 (TM 105015); SEG 48, 1977 (TM 142358). The survey was conducted through bibliographical research, aided by the invaluable tool of the database: <https://inscriptions.packhum.org>. Other epigraphic attestations of the name Julia DOMNA may exist, although they are not included in this initial survey.



Fig. 12. Mummy mask, Paris, Musée du Louvre E 21359 © Musée du Louvre, Dist. RMN-Grand Palais, front.



Fig. 13. Mummy mask, Paris, Musée du Louvre E 21359 © Musée du Louvre, Dist. RMN-Grand Palais, left side.

Serapius, the chief priest of the imperial cult in Alexandria.<sup>64</sup> According to Milne, a sandstone rectangular block held in the Cairo Egyptian Museum is identifiable with the base of a statue erected as a dedication to Caracalla and Julia Domna by Serenus, son of Alexandros, in Kom Ombo on 4 April 214 AD.<sup>65</sup> On 8 September 215 AD, the archer Marcus Aurelius Mocimus dedicated a statue in Berenice in honour of Caracalla, Julia Domna, and all his family.<sup>66</sup> On 11 March 216, another statue was probably dedicated by the city of Alexandria to Caracalla, Julia Domna and *divus* Severus.<sup>67</sup> In 1993, Adam Łukaszewicz personally analysed the marble plate bearing the inscription and identified it as the front part of a statue base.<sup>68</sup> The scholar suggests that only Caracalla was depicted in the sculpture due to the small size of the slab.<sup>69</sup> The current state of knowledge does not allow for verification of this hypothesis. However, after reading P. Oxy.12 1449, it is worth considering whether the sculpture resting on the base could be similar to the *εἰκονίδιον* mentioned in the papyrus depicting Caracalla with his mother and deified father. Further studies are required to confirm or refute this hypothesis. The identification of the marble plate as the front part of a statue base made by Łukaszewicz also suggests that some of these epigraphs may have been part of a statue base erected in honour of Julia Domna. However, only an in-person analysis of the inscriptions and their supports can confirm this hypothesis.

Analysis of the papyrus and epigraphic sources, therefore, shows that the presence of images of Julia Domna in Egypt was certainly more extensive than previously known. The widespread dissemination of Julia Domna's portrait is further confirmed by analysis of Egyptian private portraiture: following the well-documented phenomenon of *Zeitgesicht* in Egypt,<sup>70</sup> it has indeed been possible to identify some plaster mummy masks that resemble Domna's Gabii type, with wavy hair and a small bun, an oval face, and full cheeks (Figs 12–13).<sup>71</sup>

<sup>64</sup> IGRR I 1067 (TM 102660). See also FEJFER 1985, 136.

<sup>65</sup> IGRR I 1288 (TM 88827) = Cairo, CG 9260 (MILNE 1905, 15 n. 9260). Presently, the identity of the subject or subjects depicted in the sculpture remains undetermined. Further information will be obtained through an in-person analysis of the base.

<sup>66</sup> SEG 48 1977 (TM 142358), PFEIFFER 2015, no. 75, 351–353. Presently, the identity of the subject or subjects depicted in the sculpture remains undetermined. Further information will be obtained through an in-person analysis of the base.

<sup>67</sup> IGRR I 1063 (TM 102656).

<sup>68</sup> ŁUKASZEWICZ 2021, 107–108.

<sup>69</sup> ŁUKASZEWICZ 2021, 108.

<sup>70</sup> The phenomenon of assimilating private portraiture with the representation of the most eminent individuals of the times. On the phenomenon of *Zeitgesicht* see ZANKER 1981, 349–361. On *Zeitgesicht* in Egypt see CAFICI 2021.

<sup>71</sup> See for example Paris, Musée du Louvre E 12378, Paris, Musée du Louvre E 21359.

In conclusion, the analysis of Alexandrian coins reveals the presence of both types of Julia Domna portraits in Egypt. The extant material evidence suggests that representations of Julia Domna, except for coins, most likely originate from the reign of Septimius Severus and are likely to have been created at the time of the imperial family's journey to Egypt in 199/200 AD. However, further analysis of papyrus and epigraphic texts reveals that this assumption is not entirely accurate. It is evident that during Caracalla's reign, *ἑκονίδια* were produced featuring the portraits of the deified Severus, Caracalla, and Domna, as mentioned in a papyrus from Oxyrhynchus. Moreover, in the year 211 AD, the city of Alexandria commissioned the construction of a statue depicting Julia Domna. In the year 214, Serenus, son of Alexandros, presumably commissioned the erection of a statue featuring Caracalla and Julia Domna in Kom Ombo. In the year 215, the archer Marcus Aurelius Mocimus dedicated a statue in Berenice to Caracalla, Julia Domna, and the entirety of his family. In the year 216, the city of Alexandria likely commissioned the construction of a statue featuring Caracalla, Julia Domna, and the *divus* Severus. The dissemination of Julia Domna's portrait is finally confirmed by the existence of private portraits that assimilate her representation. Although the research is still at an early stage, the comparative analysis of sculptural, numismatic, and pictorial portraits of emperors and empresses, in conjunction with epigraphic and papyrus remains, as well as contemporary private portraits, is proving to be crucial in recovering data that would otherwise be lost and in contributing to the accurate reconstruction of the artistic phenomenon under study.

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# History of the ancient Egyptian collection in Warsaw

Wojciech EJSMOND

**Abstract:** This paper outlines the history of the collection of ancient Egyptian artefacts housed at the National Museum in Warsaw. It originated from the University of Warsaw's Cabinet of Ancient Curiosities collection, established in 1821. The collection was then transferred as a loan to the newly established National Museum in Warsaw in 1918–19. It expanded between the First and Second World Wars through private and institutional donations and artefacts from Franco–Polish excavations at Edfu. Although the collection suffered partial damage during the Second World War, it was later enriched by Egyptian artefacts of various provenances. It encompasses all periods of ancient Egyptian history and most types of artefacts found in Egypt.

**Keywords:** history of Egyptology, museology, Polish Egyptology, National Museum in Warsaw

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## Introduction

The National Museum in Warsaw houses Poland's largest collection of ancient Egyptian artefacts, comprising approximately 4,700 objects. This assembly has a very different history from many Western European Egyptological collections, such as the Louvre or the British museums, which were state-patronised. Poland was semi-autonomous in the 19th century when these institutions were formed, resulting in very limited state patronage of scientific and cultural institutions in her capital. Therefore, the collection was initially established through donations from private individuals, while a more methodical approach to acquiring objects was introduced in the 20th century, after Poland regained independence. The collection features all periods of ancient Egyptian history and various categories of objects. This paper offers an overview of the collection's history, highlighting key artefacts and emphasising their role in Polish Egyptology.

The current collection's history can be divided into three main periods: its origins within the University of Warsaw (1816–1918), the Interwar Period marked by its transfer to the National Museum, the merging with objects mostly from new excavations, and the destructions of the Second World War (1918–1945), and the post-Second World War era, characterised by additions of objects from confiscations, excavations, donations, museum exchanges, and loans (1945–2021). The fourth section of this paper summarises the current gallery that was opened in 2021.

## Research history

The Egyptian collection of the National Museum in Warsaw is displayed today as part of the Ancient Art Gallery. A brief history of the Ancient Art Gallery was presented by its former curator, Witold Dobrowolski, in an introduction to a comprehensive book guide through the gallery.<sup>1</sup> The Egyptian collection includes objects from several institutions, with the University of Warsaw predominantly contributing the oldest and most significant acquisitions. Tomasz Mikocki and Zbigniew E. Szafrąński compiled a list of classical archaeology objects transferred in 1918–19 by the University to the Museum, with Szafrąński overseeing the Egyptian pieces (see below).<sup>2</sup> Monika Dolińska thoroughly examined the university's ancient Egyptian mummies and coffins and provided additional information on other objects.<sup>3</sup> The limited, dispersed, and sometimes ambiguous nature of the available sources makes tracing the history of these artefacts difficult, as shown by more recent studies that extend our understanding.<sup>4</sup> The topic is far from exhaustively covered.

The collection was further enriched by donations from the French Institute of Oriental Archaeology, permanent loans from the Louvre Museum, and several Warsaw institutions, including the Zachęta – Museum of Art, the Ethnographic Museum, and the Museum of Asia and the Pacific, as well as private donations, such as those from Mieczysław Geniusz, who worked in the operation of the Suez Canal and gathered a collection of artefacts while living in Egypt. These artefacts form an integral part of the collecting histories of these institutions and the people involved, which will not be explored here, except for brief asides into several collections significant for Polish Egyptology to illustrate how these objects were collected and entered the National Museum in Warsaw.

## Origins of the collection at the University of Warsaw (1816–1918)

Egyptian antiquities have been coming to Poland since at least the sixteenth century, and some Polish kings had Egyptian artefacts in their collections.<sup>5</sup> These were often mummies intended for medical use, as was common then. While there was a discernible interest in ancient Egypt and some scholarly studies in Poland during the seventeenth century, it was not until the early nineteenth century that scientific collections emerged in Poland, encompassing ancient Egyptian artefacts and facilitating their studies.<sup>6</sup>

The Russian tsars, who took control of Warsaw after the Napoleonic Wars as kings of Poland, held the city until 1915. They were not particularly generous in fostering Polish academic and cultural life. Furthermore, national uprisings and their repercussions limited the functioning of scholarly institutions. In these unfavourable circumstances, the University of Warsaw, established in 1816, acquired and retained a collection of Egyptian objects, mostly thanks to private donations.

Numerous scientific cabinets were created within the framework of the university. They housed research material and were intended as an aid for students, as well as being available for visitors, thus playing the role of a substitute for the since 1775, but never established *Musaeum Polonicum* – a scientific institution with a diverse collection of various kinds of objects. The Cabinet of Antique Curiosities was established in 1821.<sup>7</sup> It developed poorly in contrast to, for example, the Zoological, Botanical, or Mineralogical cabinets.<sup>8</sup> Thus, the State's Commission for Denominations and Public Enlightenment (later the Ministry of Religions and Public Enlightenment, i.e. the Ministry of Education) publicly encouraged Poles to donate antiquities.<sup>9</sup> Despite being mainly intended to collect objects from Polish lands, it accepted all kinds of ancient objects, including remains of extinct species.<sup>10</sup> Egyptian objects were donated starting from the 1820s, but only mummies attracted enough attention and references in

<sup>1</sup> DOBROWOLSKI 2007: 9–19.

<sup>2</sup> MIKOCKI, SZAFRAŃSKI 1993.

<sup>3</sup> DOLIŃSKA 2003.

<sup>4</sup> DOLIŃSKA 2021; EJSMOND, OŹAREK–SZILKE 2022.

<sup>5</sup> ZINKOW 2000.

<sup>6</sup> For the history of Egyptology in Poland, see KACZMAREK 2002; KACZMAREK 2016; ŚLIWA 2020.

<sup>7</sup> KOLENDO 1993b: 30.

<sup>8</sup> WIERZBOWSKI 1904: 19–20; KOLENDO 1993b: 30.

<sup>9</sup> Texts of the addresses in WIERZBOWSKI 1904: 19–20.

<sup>10</sup> KOLENDO 1993a; KOLENDO 1993b: 30; JAWORSKI 2001: 464; KACZMAREK 2016: 241–272.

contemporary newspapers subsidised their history to be traced. Smaller artefacts, such as figurines and amulets, usually went unrecorded in surviving sources.

A specific situation must be mentioned regarding the formal categorisation and storage of ancient Egyptian mummies at the university. Not all antiquities went to the Cabinet of Antique Curiosities. The inventory of the Zoological Cabinet contained two Egyptian human mummies, the so-called ‘mummy of a child’ (200334 MNW)<sup>11</sup> and the one brought from Egypt by Jan Wężyk–Rudzki in the coffin of Hor–Djehuty (236805/3 MNW),<sup>12</sup> and an unidentified mummy of an ibis.<sup>13</sup> Similarly, the ancient Egyptian mummy of Theban priest Pa–meri (Twenty–first/Twenty–second Dynasty) was preserved at the Zoological Cabinet at the Jagiellonian University in Krakow.<sup>14</sup> Perhaps, mummies – being ancient human remains – were not regarded as ancient art or craft or ‘antiquities’ in the understanding of contemporary antiquarians, but were thought of as natural history specimens, like fossils.<sup>15</sup> Likely, this inclusion of human mummies together with their coffins in the Zoological Cabinet saved them from being taken to Russia after fall of the November Uprising of 1830–1831, in contrast to the rich collection of ancient coins of the Numismatic Cabinet and some other classical art objects that were sent to St. Petersburg.<sup>16</sup> Later, other human mummies, or what remained of them after unwrapping, were preserved in the Anthropological Cabinet, while animal mummies were preserved in the Zoological Cabinet, though the current locations of most of them are unknown.<sup>17</sup>

The first supposedly ancient Egyptian object which entered the collection was the aforementioned mummy of a child (200334 MNW), donated by Jan Alojzy Potocki of Tykocin in 1821. From the very beginning, it was thought to be a forgery. It has numerous analogies in other collections. This class of objects is usually called ‘pseudo mummies’ because they are amalgams of ancient, medieval, and modern materials fashioned into mummy–shaped objects.<sup>18</sup> Perhaps to obtain an authentic mummy and other objects for the university Wężyk–Rudzki went to Egypt in 1826 and brought back a small collection of artefacts, i.e. the aforementioned mummy in coffin and cartonnage (236805/1–3 MNW, Graeco–Roman Period)<sup>19</sup> with a Demotic papyrus (236809 MNW), several amulets, and a small stone or piece of the mortar from the Great Pyramid.<sup>20</sup> He made a detailed description of the aforementioned coffin and cartonnage, together with a reading of one of the hieroglyphic texts covering the cartonnage, which is the first Polish scientific translation from ancient Egyptian. His publication from 1830 is testimony to his up–to–date knowledge.<sup>21</sup> Unfortunately, he did not continue his efforts in this field. This ensemble was donated to the University of Warsaw in late 1826 or early 1827.<sup>22</sup> Worth mentioning in this context is another pioneer of Egyptology in Poland, Stanisław Szczęsny Kossakowski. He was Jean–François Champollion’s friend and proponent of his deciphering of hieroglyphic writing. He gave talks in European cities in Polish, French, and English from 1825, promoting Champollion’s discovery. The text of his lecture was prepared in consultation with the French scholar.<sup>23</sup> This promising beginning of Egyptology in Warsaw was halted by the November Uprising of 1830–1 which crippled intellectual life in the Kingdom of Poland for years.

After the crushing of the November Uprising by the Russian army in 1831, the university was closed until 1862. The remaining part of the collection of antiquities was transferred to the Government Library, which was located in the Kazimierz Palace, the main seat of the former university. The artefacts were exhibited as part of the Zoological Cabinet, despite the formal nonexistence of the university.<sup>24</sup>

<sup>11</sup> EJSMOND, OŹAREK–SZILKE 2022: 18–19.

<sup>12</sup> EJSMOND, OŹAREK–SZILKE 2022: 19–25.

<sup>13</sup> DOLIŃSKA 2003: 451.

<sup>14</sup> ŚLIWA 2007: 119–120.

<sup>15</sup> For the debate in the 19<sup>th</sup> century see, e.g. Riggs 2017: 136–137. Since archaeology and physical anthropology were not invented yet the most ancient past was studied by experts in, e.g., the natural history. Egyptian mummies as vestiges of the most archaic times would naturally be investigated at the departments of natural history, which included zoology, because there was no other branch of science to investigate them yet.

<sup>16</sup> KOLENDO 1993b: 31; MIKOCCI, SZAFRAŃSKI 1993: 148.

<sup>17</sup> EJSMOND, OŹAREK–SZILKE 2022: 11.

<sup>18</sup> DOLIŃSKA 2000; GERMER, KISCHKEWITZ, LÜNING 1994.

<sup>19</sup> EJSMOND *et al.* 2021.

<sup>20</sup> EJSMOND, OŹAREK–SZILKE 2022: 15

<sup>21</sup> J.R. 1830. The current author would like to thank Kacper LAUBE for the information about the publication.

<sup>22</sup> It is uncertain whether or not this was an official travel paid or subsidised by the ministry (EJSMOND, OŹAREK–SZILKE 2022: 20–25).

<sup>23</sup> NIWIŃSKI, SNITKUVIENÉ: 1999.

<sup>24</sup> SOBIESZAŃSKI 1848: 459; DOLIŃSKA 2003: 447.

The university was reopened under the name of the Main School in 1862. The ancient objects from its cabinets, including mummies from the Zoological Cabinet, were transferred to the Museum of Fine Arts, which was established as part of the university in the same year. This transfer was made before the January Uprising of 1863–1864. Its failure practically halted the development of cultural institutions in the Kingdom of Poland for several years, and the Kingdom of Poland was gradually dissolved.<sup>25</sup> Despite this event, Aleksander Branicki, who visited Egypt in 1864, donated to the Main School coffins containing mummies of Amenhotep (fourth century BCE, 236804 MNW) and Djed–Khonsu–iuf–ankh (Twenty-second Dynasty, 236806 MNW), which he acquired in Luxor in April of 1864, and some animal mummies, which are hard to identify now and some of them may be lost.<sup>26</sup>

In 1869, the Main School was renamed and became the Imperial University of Warsaw, with Russian as its official language. Concurrently, the eminent publicist and antiquarian Hipolit Skimborowicz endeavoured to establish an archaeology institution within the university. This culminated in the establishment of the Archaeological Museum (**Fig. 1**) in 1869, initially located in the Kazimierz Palace, the main seat of the university. The museum showcased ancient artefacts sourced from various departments and cabinets, as well as new donations. Its name was changed to the Archaeological Cabinet in 1871.<sup>27</sup>



**Fig. 1.** The interior of the Archaeological Museum at the Imperial University of Warsaw (after Bronisław Podbielski in Anonymous 1869, 265)

Skimborowicz detailed the museum's display in a local newspaper, describing mummies: the one identified today as the pseudo-mummy of a child, the one in the coffin of Hor–Djehuty, and the third in the coffin of Amenhotep. Furthermore, a fractured coffin previously originally containing the fourth one (Djed–Khonsu–iuf–ankh).<sup>28</sup> After unwrapping, the body of Djed–Khonsu–iuf–ankh was transferred to the Cabinet of Comparative Anatomy.<sup>29</sup> The management of the museum was then entrusted to a committee led by Józef Kasznica, succeeded by Antoni Mierzyński until 1877. In that year, the Archaeological Cabinet merged with the newly established Numismatic Cabinet, overseen by Adolf Pawiński. Limited exhibition space restricted public access, but it remained available to the university's teachers and other scholars, including Russian Egyptologist Boris Turayev.<sup>30</sup>

<sup>25</sup> JAWORSKI 2003: 468.

<sup>26</sup> GAŁCZYŃSKA, 2015; EJSMOND, OŻAREK–SZILKE 2020: 30–31.

<sup>27</sup> JAWORSKI 2001: 50; DOLIŃSKA 2003: 451.

<sup>28</sup> SKIMBOROWICZ 1869: 264–265.

<sup>29</sup> DOLIŃSKA 2003: 451–452; EJSMOND, OŻAREK–SZILKE 2022: 28–30. The mummy was identified by Marzena OŻAREK–SZILKE and Wojciech EJSMOND as the one currently preserved at the Medical University of Warsaw.

<sup>30</sup> WIERZBOWSKI 1904; KOLENDO 1993b: 35; DOLIŃSKA 2003: 455.

In 1883, Karol Ignacy Zamoyski donated a mummy in a coffin to the collection, of unknown present whereabouts.<sup>31</sup> The Priestly Cache of Bab el-Gasus was discovered in 1891, and the findings were distributed to various European states by a lottery. Thus, the Russian Empire gained several ensembles, one donated to Warsaw in 1895. It included a coffin of Tai-akhut (141988 MNW, Twenty-First Dynasty)<sup>32</sup> and shabtis in a box, whose present location is unknown, but two shabtis were identified as coming from the assemblage (38379 and 41556 MNW).<sup>33</sup>

In 1896, Teodor Wierzbowski succeeded Pawiński, overseeing the antiquities collection until the university's 'evacuation' to Rostov-on-Don with the Russian army in 1915 during World War I. The evacuation resulted in the loss of numerous ancient objects and collection inventories, complicating the research on the history of the Warsaw collection. Fortunately, most Egyptian artefacts remained in Warsaw and were organised by anthropologist Kazimierz Stołyhwo and archaeologist Roman Jakimowicz. In 1916, historian and classicist Ryszard Ganszyniec (also spelt Gansiniec) became the director of the Archaeological Cabinet, but was swiftly deployed to participate in World War I. In 1917, a decision by the re-established University of Warsaw transferred its antiquities as loans to the newly founded National Museum in Warsaw in tranches in 1918 and 1919.<sup>34</sup>

The modest assemblage of Egyptian artefacts gathered through the nineteenth century was a collection of rather random artefacts mostly dating to the first millennium BCE, encompassing 82 items in the register.<sup>35</sup> It was formed without any methodology or particular scientific aim.

## The Interwar Period and the Second World War (1918–1945)

Although Poland had significant financial problems after regaining independence and was plagued by political instability, sufficient funds were allocated to establish and run a state-patronised museum in Warsaw, which would contain a comprehensive collection of art, craft, and historic objects.<sup>36</sup> One can observe a significant organisational shift aiming at establishing a comprehensive museum in Poland. An expansion in terms of the number of artefacts, an evolution in the ways of acquisition, and curation took place between the First and Second World Wars. Most of the new objects came from documented excavations and were studied by art historians, archaeologists, and Egyptologists. The Egyptian section became the dominant part of the gallery.<sup>37</sup>

The National Museum in Warsaw was established in 1916, but without an adequate premise until its present building was opened to the public in 1938. From that time on, it encompassed the Gallery of Ancient Art, which exhibited the Egyptian collection. The list of the Egyptian objects belonging to the university and loaned in 1918/19 to the museum included about 82 artefacts. In some cases, sets of the objects, like a coffin and cartonnage with a mummy, were counted as separate objects, while small items, such as three strings of beads, were listed as sets of uncounted individual objects, although it is unknown if they originally formed one set.<sup>38</sup> This modest ensemble was enriched by the Tyszkiewicz of Łohojsk family collection transferred to the National Museum by the Zachęta – National Gallery of Art in 1919. It included artefacts excavated at Karnak, Theban Necropolis, and Saqqara by Michał Tyszkiewicz<sup>39</sup> as well as acquisitions made from, i.a., August Mariette during Tyszkiewicz's travel to Egypt in 1861–1862.<sup>40</sup> Tyszkiewicz was a renowned connoisseur of antiquities whose collection encompassed ca. 800 Egyptian artefacts. Something over half of them can be identified today in museums in the United Kingdom, the United States, France, Lithuania, and Poland, the latter including 121 objects in Warsaw.<sup>41</sup> One of the most remarkable artefacts from his assemblage is a papyrus written in cursive hieroglyphic texts and

<sup>31</sup> Anonymous 1883; DOLIŃSKA 2003: 453; EJSMOND, OŻAREK-SZILKE 2022: 31–32.

<sup>32</sup> DĄBROWSKA-SMEKTAŁA 1967: 7; TARASENKO 2017; 2021.

<sup>33</sup> TARASENKO 2017: 108, 118.

<sup>34</sup> KOLENDO 1993b: 35; DOLIŃSKA 2003: 455.

<sup>35</sup> MIKOCCI, SZAFRAŃSKI 1993: 147–170; DOLIŃSKA 2021: 21.

<sup>36</sup> MURAWSKA-MUTHESIUS, FOLGA-JANUSZEWSKA 2006.

<sup>37</sup> MICHAŁOWSKI 1957a: 115–120.

<sup>38</sup> MIKOCCI, SZAFRAŃSKI 1993: 147–170; DOLIŃSKA 2021: 21.

<sup>39</sup> NIWIŃSKI 1994.

<sup>40</sup> NIWIŃSKI 2011: 18–19.

<sup>41</sup> NIWIŃSKI 2011: 18–19.

richly illustrated. Stretching 9.67 meters in length, it was made for Bakai (237128/1–3 MNW), a wetnurse perhaps of Amenhotep II. Unearthed by Tyszkiewicz on December 18, 1861, at West Thebes, the papyrus was discovered within a tomb containing four coffins and a well-preserved wooden stool, found in front of the coffins.<sup>42</sup> Some of the finds were generously donated by their discoverer to the Louvre. He also gave some objects from his collection to museums in Cairo and Vilnius. The discovery of the aforementioned tomb followed the finding of two loosely buried coffins amidst debris. One of these coffins housed a cartonnage, which was transported to Lithuania and eventually made its way to Łohojsk and then to the National Museum in Warsaw. Registered as a World War II loss, this cartonnage (238435 MNW, Twenty-second Dynasty), severely damaged by German soldiers, was later identified during conservation efforts in the 1990s. Although the original appearance could not be fully reconstructed, numerous scenes and texts, once barely discernible, became visible. Notably, the name of the deceased, Lady Nehemes-Bastet.<sup>43</sup> Another collection came from Mieczysław Geniusz, who worked in the operation of the Suez Canal and made acquisitions in antiquities shops.<sup>44</sup> There were also numerous small donations of individual objects.<sup>45</sup> An inventory of the collection made in 1925 lists 220 ancient Egyptian artefacts in total at the museum.<sup>46</sup>

In 1931, Kazimierz Michałowski was the first to receive the chair of classical archaeology at the University of Warsaw.<sup>47</sup> The university initiated collaborative excavations at Edfu through an agreement with the French Institute for Oriental Archaeology in Cairo in 1936.<sup>48</sup> The site was selected mainly because it promised diverse kinds of artefacts from all periods of Egyptian history, especially from the Graeco-Roman Period, in which Michałowski was mostly interested due to his research experience.<sup>49</sup> That is why Polish scholars focused on the upper part of the *kom* Edfu, containing the youngest strata during the first season, while the French worked at the foot of the mound, where Old Kingdom tombs were expected.<sup>50</sup> Poles targeted other parts of the site in the following two seasons.<sup>51</sup> The inaugural archaeological season in 1937 yielded a wealth of artefacts,<sup>52</sup> which were distributed among Egypt, France, and Poland. France gave Poland her share of the *partage*,<sup>53</sup> and thus, approximately 2000 objects were sent to Poland, which are formally owned by the University of Warsaw and loaned to the Museum. The most captivating artefacts were showcased in an exhibition the same year, before the official inauguration of the museum. The aim was not only to show the results of the explorations but also to underline the benefits for the Museum in the form of artefacts which would help to gather funds for further research.<sup>54</sup> This exhibition drew an impressive audience of around 60,000 visitors within two months. Its success led to the establishment of the Gallery of Ancient Art in 1938, and Michałowski was appointed as its first curator (**Fig. 2**).<sup>55</sup>

Two people, from beyond Michałowski's direct circle of students and colleagues, undertook studies of selected artefacts and translations of texts, i.e. Adam Henzel, who authored a popular description of the collection,<sup>56</sup> and Amelia Hertz, who studied some objects but was killed by the Gestapo during the war.<sup>57</sup>

Of great significance is the late 1930s donation by the Institut français d'archéologie orientale of a rich assembly of artefacts from its excavations at Deir el-Medina and fewer objects from Meir. This includes pieces of furniture, baskets (many of them destroyed during the World War II), pottery, and coffins. As a result of excavations and donations, the number of artefacts included ca. 4000 objects.<sup>58</sup>

<sup>42</sup> NIWIŃSKI 1994: 253.

<sup>43</sup> NIWIŃSKI 2011; MAJEWSKA 2018.

<sup>44</sup> MAJEWSKA 1999.

<sup>45</sup> MICHAŁOWSKI 1957a: 118–119.

<sup>46</sup> DOBROWOLSKI 2007: 13.

<sup>47</sup> For an overview of his activities, see REZLER–WASIELEWSKA 2009 and MICHAŁOWSKI's memoirs (MICHAŁOWSKI 1986).

<sup>48</sup> See, e.g. MICHAŁOWSKI *et al.* 1950; Aksamit 2004.

<sup>49</sup> MICHAŁOWSKI 1957b; MICHAŁOWSKI 1986: 156.

<sup>50</sup> MICHAŁOWSKI 1986: 156.

<sup>51</sup> MICHAŁOWSKI 1957b.

<sup>52</sup> BRUYÈRE *et al.* 1937.

<sup>53</sup> MICHAŁOWSKI 1986: 160.

<sup>54</sup> MICHAŁOWSKI 1986: 156, 161

<sup>55</sup> AMBROZIAK 2016.

<sup>56</sup> HENZEL 1929.

<sup>57</sup> ŚLIWA 2011.

<sup>58</sup> DOBROWOLSKI 2007: 14.



Fig. 2. The Gallery of Ancient Art before World War II and the Old Kingdom room with the *ka*-door of Izi (<https://cyfrowe.mnw.art.pl>)

World War II badly affected the University of Warsaw<sup>59</sup> as well as the National Museum in Warsaw.<sup>60</sup> Just before World War II started, the last transport of artefacts from the third season of excavation at Edfu arrived at the museum. The boxes with objects were not even opened, and the items were unregistered due to the rush caused by the beginning of the war. Windows lost glass during bombardments, and many artefacts were affected by the winter of 1939/40. The German army took over the building, and soldiers stayed there while the artefacts were stored at several locations within the museum. During this time, the soldiers destroyed and looted artefacts, including boxes from the last campaign at Edfu.<sup>61</sup> Throughout most of the war, there was no heating in the museum during cold seasons. Sometimes German soldiers, officers, and their friends, like a certain Dr Hans-Georg Rodig, were interested in antiquities and took some objects as souvenirs. In this manner, one Egyptian anthropoid coffin lost its face.<sup>62</sup>

From the war losses, just a few objects will be mentioned here.<sup>63</sup> Old Kingdom lost artefacts include, for example, part of the reliefs, furnishing, and golden jewellery from the mastaba of Izi discovered at Edfu, a wooden figurines dating to the 5<sup>th</sup> Dynasty (Geniusz's collection). A rich collection of Middle Kingdom female figurines (the so-called "concubines") from Edfu was mostly lost. From the New Kingdom, out of eight anthropoidal coffins, only three survived in a very poor state. Of the ca. 200 bronze figurines, only a few were still at the Museum after the war. The most unique set of artefacts that was lost was the Graeco-Roman Period model of human skeleton made of wax and found together with surgical equipment at Edfu.<sup>64</sup> It is estimated that 25% of ostraca and papyri were lost during the war.<sup>65</sup> Some artefacts were later retrieved from Germany or found at several locations in Poland.<sup>66</sup>

As Michałowski wrote after coming back from the prisoner of war camp in Woldenberg (Dobiegiewo) and visiting the museum in 1945: 'In the rooms of the museum one could find ancient pottery scattered on the floor, shattered stone and wooden sculptures, cartonnages, sarcophagi trampled by military boots and partly unwrapped mummies, in which German soldiers had been looking for "hidden treasures".'<sup>67</sup>

## Communist period and transformation (1945–2021)

Poland, particularly Warsaw, was severely damaged during World War II, and many academics lost their lives. After the war, the gallery found itself in a new context. It needed to redefine its function to meet the needs of the emerging socialist society, while all state institutions were heavily politicised by the communist government. The Department of Ancient Art and the Gallery of Ancient Art were established

<sup>59</sup> BERNHARD 1947a.

<sup>60</sup> BERNHARD 1947b, LAUBE 2025.

<sup>61</sup> BERNHARD 1947b: 302; DOBROWOLSKI 2007: 14–16.

<sup>62</sup> BERNHARD 1947b: 304.

<sup>63</sup> For a more extensive but still not complete list, see BERNHARD 1947b: 306.

<sup>64</sup> MICHAŁOWSKI 1938, pl. XLVI.

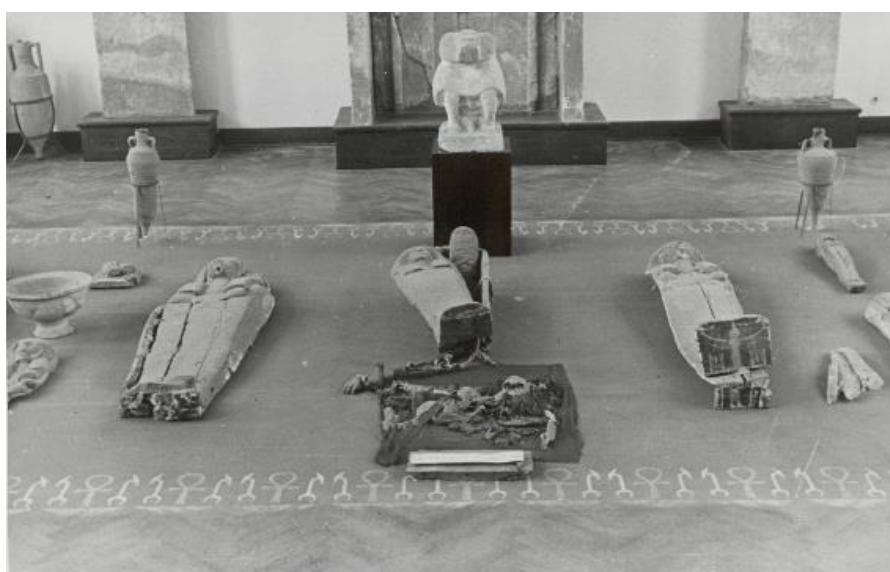
<sup>65</sup> BERNHARD 1947b: 306.

<sup>66</sup> BERNHARD 1947b: 309. DOBROWOLSKI 2007: 16.

<sup>67</sup> MICHAŁOWSKI 1957a: 120 (translation from Polish to English by the current author).

at the reopened National Museum in 1949 to manage the artefacts. Despite inadequate material conditions and political restrictions, significant research and publishing work was accomplished. In contrast to the pre-war situation, new acquisitions led to Greek and Roman art becoming the dominant section of the gallery.<sup>68</sup>

Many objects from the old Ancient Art Gallery were dispersed during the war. Some were brought back from Germany, often in a poor state.<sup>69</sup> ‘Warsaw Prosecute’ was the first exhibition organised by the museum just after the war opened on the 3<sup>rd</sup> of May 1945 and featured museum objects violated by the German army during the World War II, including Egyptian artefacts (**Fig. 3**).<sup>70</sup> In 1948, the ‘Ancient Art’ touring exhibition in the Mazovian Voivodeship was a significant educational event.<sup>71</sup> ‘Ancient Culture’, a similar touring exhibition, was organised in 1950 and visited many cities across Poland. Both were prepared by Maria Ludwika Bernhard,<sup>72</sup> who had worked at the museum as an assistant curator since 1938.<sup>73</sup> Also, many artefacts from the museum were loaned to other exhibitions that were promoting ancient art and archaeology beyond Warsaw.<sup>74</sup> The Ancient Art Gallery became a place of popular events, including, reading of ancient Egyptian poetry in Tadeusz Andrzejewski’s translations and talks for a wide audience.<sup>75</sup>



**Fig. 3.** The Egyptian part of the ‘Warsaw prosecute’ exhibition (<https://cyfrowe.mnw.art.pl>)

After the war, many private collections, including those in the newly acquired lands by Poland, e.g. Silesia, were nationalised, and a central antiquities collection was established at the National Museum in Warsaw. Among other objects, Egyptian artefacts of the Czartoryski family from Gołuchów Palace,<sup>76</sup> stolen by the Soviet army, were repatriated in 1956 and entered the register of the museum.<sup>77</sup> This group of objects includes, among others, an embalmed body of a boy (142474/1 MNW). It came to Warsaw with a mask on its face and was adorned with objects of various chronology, i.e., a mummy net, amulets, as well as some modern objects, including iron pins (**Fig. 4**). This set was obviously composed in modern times using authentic artefacts and forgeries.<sup>78</sup> Another object worth mentioning is the Twenty-first Dynasty mythological papyrus of the songstress of Amun Ta-hem-en-Mut (199628 MNW), originally from Alexander von Minutoli’s collection in Silesia.<sup>79</sup>

<sup>68</sup> MICHAŁOWSKI 1957a: 121–124.

<sup>69</sup> MICHAŁOWSKI 1957a: 120–121; DOBROWOLSKI 2007: 16.

<sup>70</sup> PRZEŹDZIECKA–KUJAŁOWICZ 2018.

<sup>71</sup> For the book guide of the exhibition, see BERNHARD 1948.

<sup>72</sup> MICHAŁOWSKI 1957a: 132.

<sup>73</sup> ŚLIWA 1998.

<sup>74</sup> MICHAŁOWSKI 1957a: 133.

<sup>75</sup> MICHAŁOWSKI 1957a: 135. For ANDRZEJEWSKI see LAUBE 2024.

<sup>76</sup> See, e.g. FROEHNER 1897.

<sup>77</sup> BERNHARD 1958.

<sup>78</sup> DOLIŃSKA 1997; 2000: 31–33.

<sup>79</sup> ANDRZEJEWSKI 1959.

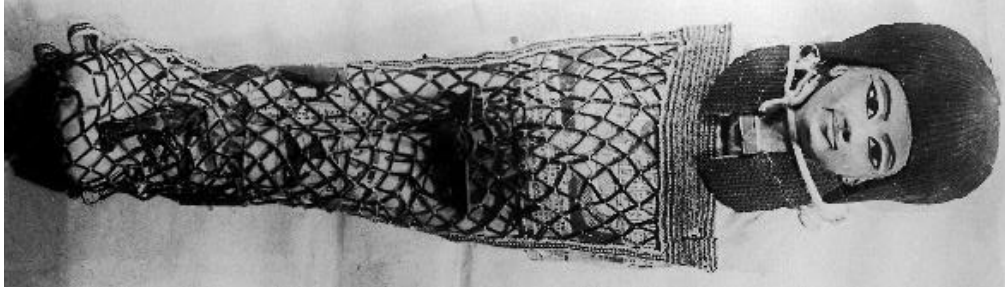


Fig. 4. Mummy of a boy (142474/5 MNW) with various objects from different periods (Dolińska 2000, Fig. 2)

What exactly happened with some of the private collections during the war and how these objects entered the National Museum is often unknown, as in the case of the so-called Papyrus of Bytom (147822 MNW), which was identified by Mykola Tarasenko as coming from Alexander's Branicki collection in Sucha Beskidzka castle. This hieratic papyrus, dating from the first century BC or the first century AD, was made for Lady Kheryt-aset-aa.<sup>80</sup> Objects from the bombed train evacuating the University of Königsberg collection were also placed at the museum.<sup>81</sup> Old and new acquisitions were displayed in a modern way in the reopened gallery (Fig. 5).<sup>82</sup>

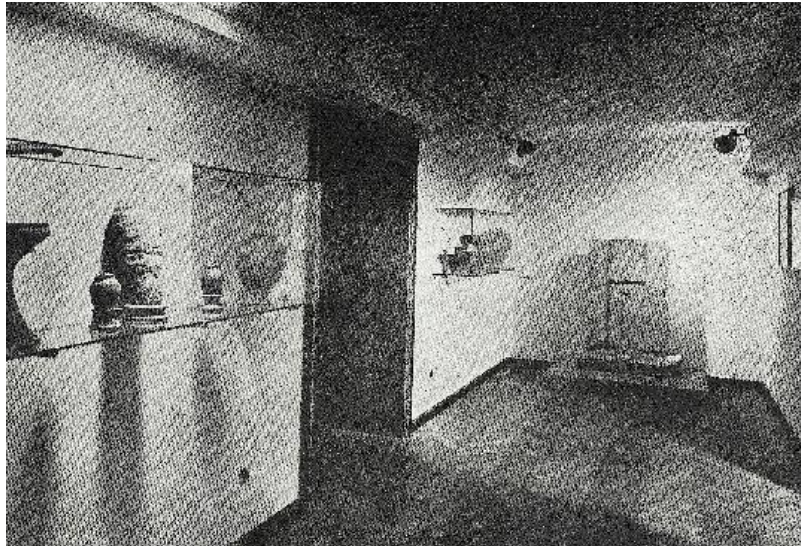


Fig. 5. *Ka*-door of Izi and artefacts from his tomb at the after-World War II Gallery of Ancient Art (Michałowski 1957a, Fig. 15)

Also, an exchange of artefacts was made with the German Democratic Republic, resulting in, e.g., the acquisition of a cat mummy (253 MNW, Graeco-Roman Period) and other objects for some paintings.<sup>83</sup> Two other cat mummies were donated by UNESCO (181 and 252 MNW, Graeco-Roman Period).<sup>84</sup> The Yorkshire Museum gave a coffin containing cartonnage and the mummy of Panepy (147801/2 MNW), a priest from Karnak contemporaneous with the Twenty-second Dynasty.<sup>85</sup>

A testimony to interest in archaeology of many Poles whom history placed in various circumstances during World War II is a collection gathered by a soldier of the Polish Armed Forces in the East (the so-called 'Anders' Army'), Antoni Czechowicz, who gathered a few hundred small artefacts during his stay as a Polish soldier in Egypt in the 1940s. After his death, they were donated by his widow to the museum in 2001.<sup>86</sup>

<sup>80</sup> TARASENKO 2016.

<sup>81</sup> DOBROWOLSKI 2007: 17.

<sup>82</sup> MICHAŁOWSKI 1957a.

<sup>83</sup> EJSMOND, PRZEWŁOCKI 2014: 254.

<sup>84</sup> EJSMOND, PRZEWŁOCKI 2014: 248, 252.

<sup>85</sup> DĄBROWSKA-SMEKTAŁA 1967.

<sup>86</sup> DOBROWOLSKI 2007: 19.

Michałowski organised the Ancient Art Gallery and was its first director from 1938. After World War II, he became the deputy director of the National Museum and held directing positions at the University of Warsaw and the Polish Academy of Science. He was responsible for educating a generation of scholars, who took academic positions at these institutions, thus establishing the so-called ‘Polish school of Mediterranean archaeology’. Michałowski coined the term ‘Mediterranean archaeology’ to distance the field from classical archaeology in the eyes of the communist authorities since, for them, it had implications for the old regime’s aristocratic and bourgeois milieu. He had a master plan for the development of Mediterranean archaeology in Poland. The museum was an integral part of his agenda. He believed that a collection of antiquities is essential for any studies related to ancient times since it provides first-hand material for training and further enquiries. Thus, this base had to be expanded to cover the widest spatio-temporal frames and a variety of objects. The Research Centre for Mediterranean Archaeology of the Polish Academy of Science (current Institute of Mediterranean and Oriental Cultures) was established in 1956 as the key part of the Polish school of Mediterranean archaeology.<sup>87</sup> He also created the Polish Centre of Mediterranean Archaeology in 1959 at the University of Warsaw together with its Station in Cairo in the Heliopolis district,<sup>88</sup> which is still responsible for most of the Polish fieldwork in the eastern Mediterranean.<sup>89</sup> Archaeological sites and discovered objects were intended to be studied by scholars hired at the aforementioned institutions, while artefacts from these excavations handed to Poland were preserved and further studied at the museum, where they served for popularisation, teaching, and further research. According to this system, scholars from all these institutions had to cooperate closely.

The Egyptian artefacts at the museum were studied and published by scholars from the aforementioned institutions for decades and are still subjects of inquiry. Michałowski’s arrangement was very beneficial for the museum. Master’s and PhD theses at the reopened postwar Department of Mediterranean Archaeology (formerly the Department of Classical Archaeology) of the University of Warsaw focused on the objects in the collection.<sup>90</sup> Of the numerous artefacts and their groups which were studied, only a few can be mentioned here.<sup>91</sup> Greek papyri and ostraca had been studied already before World War II by Jerzy Manteuffel, who later established the Department of Papyrology at the University of Warsaw.<sup>92</sup> Barbara Ruszczyk examined the Sixth Dynasty false door of Nomarch Izi from Edfu (139944/1–3 MNW).<sup>93</sup> Andrzejewski wrote his MA on the aforementioned Book of the Dead of Bakai,<sup>94</sup> and his PhD was about the aforementioned Mythological Papyrus from von Minutoli’s collection.<sup>95</sup> His research also included other manuscripts at the Museum and elsewhere in Poland.<sup>96</sup> Besides that, some coffins were published by, e.g., Marek Marciniak (Hor-Djehuty, 236805/3 MNW, first century BC/first century AD)<sup>97</sup> and Elżbieta Dąbrowska-Smektała (Tai-akhut, 141988 MNW, Twenty-first/Twenty-second Dynasty)<sup>98</sup> as single objects or as groups coming from one site, e.g. New Kingdom coffins from Deir el-Medina by Mirosław Barwik.<sup>99</sup> Certain groups of objects from various sites were also published, like scarabs,<sup>100</sup> shabti,<sup>101</sup> and basketry works.<sup>102</sup> Later, the Twenty-first and Twenty-second Dynasty coffins were included in Andrzej Niwiński’s habilitation monograph.<sup>103</sup> For Karol Myśliwiec, a sculpture sketch (141274 MNW, possibly from the reign of Ramses III), was a departure point for a wide study of royal portraiture.<sup>104</sup> He also published sculpture models from the Museum.<sup>105</sup> Iconographic motifs were also the subject of

<sup>87</sup> LICHOCKA 2017.

<sup>88</sup> CHUDZIK 2019.

<sup>89</sup> LASKOWSKA-KUSZTAL 2007.

<sup>90</sup> BERNHARD 1949; MICHAŁOWSKI 1962.

<sup>91</sup> See also MICHAŁOWSKI 1957a: 129–132; 1962.

<sup>92</sup> ŁANOWSKI 1954.

<sup>93</sup> RUSZCZYK 1958.

<sup>94</sup> ANDRZEJEWSKI 1951; ANDRZEJEWSKI 1957.

<sup>95</sup> ANDRZEJEWSKI 1959; ŚLIWA 2019: 7–8.

<sup>96</sup> ANDRZEJEWSKI 1960.

<sup>97</sup> MARCINIAK 1964. The cartonnage from this coffin was published by Irena Pomorska (POMORSKA 1963).

<sup>98</sup> DĄBROWSKA-SMEKTAŁA 1967.

<sup>99</sup> BARWIK 1989–1990.

<sup>100</sup> LIPIŃSKA-BOŁDOK 1959

<sup>101</sup> POMORSKA 1959.

<sup>102</sup> KOŁODZIEJCZYK 1963.

<sup>103</sup> NIWIŃSKI 1988.

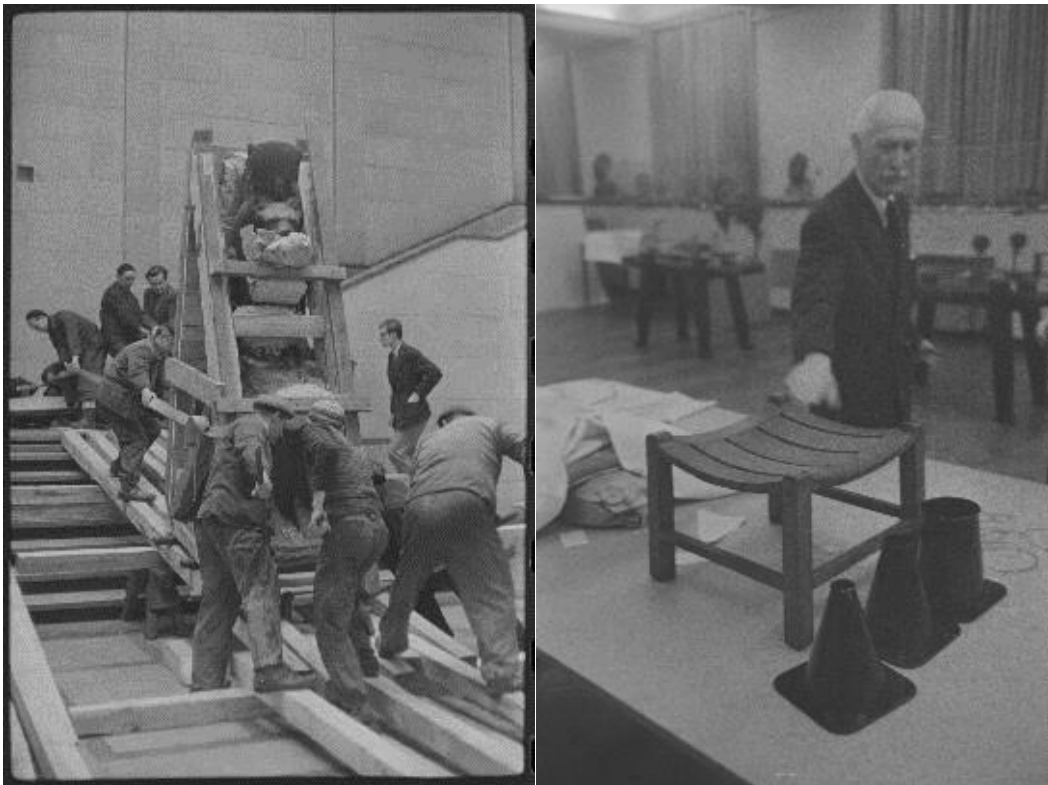
<sup>104</sup> MYŚLIWIEC 1976; 2021.

<sup>105</sup> MYŚLIWIEC 1970.

research, like Krystyna Nitka's research on depictions of Bes.<sup>106</sup> During the two decades after the opening of the Ancient Art Gallery, a massive amount of work was done, resulting in many groups of artefacts and singular objects being studied and published for the first time; therefore, the above account is in no way exhaustive. Unfortunately, due to the economic and political predicament of Poland within the Soviet sphere of influence, the possibilities for academic exchange were limited and many studies were published in Poland and Polish, especially papers in *Rocznik Muzeum Narodowego w Warszawie* (*Yearbook of the National Museum in Warsaw*). Thus, the language barrier and restricted circulation of the volumes made research results poorly known abroad

As a result of Michałowski's excavations at Tell Atrib from 1957, some objects were brought to Warsaw, for example, a foundation deposit from the reign of Amasis (148901–148911 MNW) and a stela-naos with a female figure dating to the Late Period – Ptolemaic times (238069 MNW). A column with a Corinthian capital from the portico of baths dating to the first half of the second century AD (149374 MNW) also came from the site, but due to its Hellenistic character is displayed now in the Graeco–Roman section of the gallery.

Michałowski's relations with French scholars led to the permanent loaning of ca. 150 objects from the Louvre in 1960, including some ancient Egyptian artefacts. Among them, the statues of Sakhmet (143400 MNW) and Amun with the facial features of Tutankhamun (143399 MNW) being prime examples (**Figures 6 and 7**). In a peculiar twist of history, the New Kingdom stool from the aforementioned Theban tomb, discovered by Tyszkiewicz and donated to the Louvre, was included in the loan. This massive loan was celebrated by an exhibition „Sztuka starożytna – depozyt Muzeum Luwru” (Ancient Art – the Louvre Museum's Deposit) in 1960–1961 (**Fig. 6**).



**Fig. 6.** Transportation of the Sakhmet statue at the National Museum and Kazimierz Michałowski supervising „Sztuka starożytna – depozyt Muzeum Luwru” exhibition in 1960, pointing at the stool from the Michał Tyszkiewicz collection (<https://cyfrowe.mnw.art.pl>)

The discovery of the cathedral at Faras in 1961 by Michałowski, hailed ‘the Faras miracle’ due to the extraordinary preservation and successful salvage excavations, dominated the academic activities of the gallery for many years. A permanent exhibition of Faras artefacts was inaugurated in 1972. An independent Faras Gallery was established in 1997 as a separate unit.<sup>107</sup>

<sup>106</sup> NITKA 1970.

<sup>107</sup> RUSZCZYC, ZDROJEWSKA 1987: 28; SULIKOWSKA–BEŁCZOWSKA 2021: 36–37.

Some of artefacts representing pharaonic culture were sourced beyond Egypt proper, notably at Faras in Sudan, where, among others, blocks bearing the names of Thutmose III were found by Michałowski (e.g. 234648 MNW) during a salvage campaign related to the construction of the Great Aswan Dam. While, some blocks with Egyptian-style decorations are exhibited at the Faras Gallery due to their findspots, like the lintel with uraei and solar disc (149500 MNW, first–fifth century AD).

Non-Egyptian style artefacts found in Egypt are also present, e.g. a Fayoum portrait of a boy (236767 MNW). This object was acquired by the architect Józef Pakies from the museum in Giza in 1898. It spent some time as a loan at the Czartoryski Museum in Krakow before being bought by the National Museum in Warsaw from Władysław Khal in 1939.<sup>108</sup> A confluence of Egyptian and Hellenistic traditions is a third-century AD tombstone allegedly from Terenouthis (MNW 199595) which came from the Archaeological Cabinet at Lyceum Hosianum in Braniewo.<sup>109</sup> In addition to the texts on papyri and ostraca in Greek.<sup>110</sup>

Of course, despite the aforementioned excavations, the Egyptian collection was still expanding by other means. For example, a wooden funerary stela was acquired (200593 MNW, Twenty–sixth Dynasty).<sup>111</sup> Special exhibitions presenting newly acquired objects were made and the permanent exhibition was updated from time to time. Artefacts from the museum were sometimes loaned abroad, e.g. to Essen for an exhibition of ancient Egyptian art and to Polish academic institutions for studies.<sup>112</sup> The Ancient Art Gallery was temporarily closed in 1980 due to renovation, and the Egyptian section was reopened after two years.<sup>113</sup>

Numerous scholars studied the artefacts, predominantly employees of the Gallery. The first assistant hired at the gallery was Bernhard, who had worked at the museum since 1938 and managed artefacts as an assistant, assistant professor, and eventually curator of the Ancient Art Department until 1961. Her PhD (defended in 1938) was about ancient lamps at the Museum. Despite the manuscript only partly surviving World War II, it was reconstructed and published in 1955, including images and descriptions of the objects lost during the war.<sup>114</sup> Various scholars were responsible for ancient Egyptian objects: Barbara Ruszczyk (worked at the museum from 1949 to 1990), Jadwiga Lipińska (1958 – 2002); Aleksandra Majewska (1966 – 2008), Joanna Aksamit (1992 – 2008); and Monika Dolińska (2000 – 2020).<sup>115</sup> Since 2013, Małgorzata Korzeniowska and, since 2023, Kacper Laube have been responsible for the pharaonic artefacts. Custodians of the Egyptian collection also directed field projects in Egypt. Lipińska was responsible for works at Deir el-Bahari and later took the directorship of the mission at the temple of Thutmose III, continued by Dolińska. Ruszczyk supervised excavations at Tell Atrib, later directed by Myśliwiec in close cooperation and with her presence at the site.

Michałowski retired in 1972 at the age of 71. His legacy is the operating system of the aforementioned institutions, which he directed. It began to deteriorate after his retirement, as each of the entities started to drift apart and make individualised policies. This state of affairs affected studies on the collection. Nevertheless, the collection and contributions of scholars who studied the artefacts are the subject of ongoing research projects by representatives of various institutions.<sup>116</sup> For example, the collection includes about 43 human and animal mummies and their parts, sometimes in coffins.<sup>117</sup> These containers were subjected to meticulous processes of conservation and restoration by the museum in cooperation with the Academy of Fine Arts in Warsaw.<sup>118</sup> There was a project to conduct a radiological examination of human Egyptian mummies in Polish collections in the late 1990s.<sup>119</sup> The Warsaw Mummy Project was initiated in 2015 and aims at a comprehensive study of all the mummies at the Museum.<sup>120</sup>

<sup>108</sup> KIJOWSKA, SULIKOWSKA–BĘLCZOWSKA 2021: 263.

<sup>109</sup> GODLEWSKI 1985.

<sup>110</sup> See, e.g. BRUYÈRE *et al.* 1937.

<sup>111</sup> RUSZCZYK, ZDROJEWSKA 1987, 25, il. 12.

<sup>112</sup> RUSZCZYK, ZDROJEWSKA 1987, 31.

<sup>113</sup> RUSZCZYK, ZDROJEWSKA 1987, 38.

<sup>114</sup> BERNHARD 1955.

<sup>115</sup> The current author would like to thank Monika DOLIŃSKA for her consultation.

<sup>116</sup> E.g. POPIELSKA–GRZYBOWSKA and ZINKOW 2024; LAUBE 2024.

<sup>117</sup> See, e.g. DOLIŃSKA 2017; EJSMOND, OŻAREK–SZILKE 2022.

<sup>118</sup> See, e.g., UCHMAN–LASKOWSKA 2003.

<sup>119</sup> URBANIK *et al.* 2001a; 2001b. Worth mentioning is an X-ray of the mummy of a boy 142474/5 MNW done in 1958 (MICHAŁOWSKI 1962, 145), which was the first published radiological examination of an ancient Egyptian mummy in Poland. Andrzej NIWIŃSKI and Aleksandra MAJEWSKA explored the mummy of Amenhotep, 236804 MNW (NIWIŃSKI 1993).

<sup>120</sup> OŻAREK–SZILKE *et al.* 2021.

## The 2021 Gallery



Fig. 7. The first room of the current Ancient Art Gallery (photo by W. Ejsmond)

The Ancient Art Gallery went through a renovation and was reopened in 2021.<sup>121</sup> It begins with the Egyptian section. The first room (Fig. 7) features the statue of Sakhmet (143400 MNW), the mummy of the sacred ram from Elephantine (143327 MNW), Thutmose III's sphinx from Edfu (141267 MNW), stelae and numerous small artefacts. The side rooms showcase, i.a., papyri, pottery, mummies, coffins, and other artefacts related to funerary contexts, often after extensive restorations which made them attractive display objects (Fig. 8). The last room exhibits first-century BC/first-century AD naos (141278 MNW), a cultic statue of Horus (141268 MNW), the base of an altar (139377 MNW), and other reliefs from Franco-Polish excavations at Edfu (Fig. 9), together with small artefacts from other sites. Many objects, archival images and their descriptions are available in two generic book guides<sup>122</sup> and the 'digital museum' database: <https://cyfrowe.mnw.art.pl>

The collection at the National Museum contains almost of Egyptian artefacts in Warsaw and is still growing. A small ensemble of ancient Egyptian objects was loaned to the museum by the Asia and Pacific Museum in Warsaw in 2018. The gallery houses a comprehensive collection representing the entire history of ancient Egypt, from the Predynastic Period<sup>123</sup> up to the times of Roman rule along the Nile.<sup>124</sup> It also features most of the kinds of objects known from ancient Egypt. Therefore, this ensemble provides useful educational tools and materials for studies. It is impossible to mention all the significant

<sup>121</sup> For the description of the current gallery see SULIKOWSKA-BEŁCZOWSKA 2020.

<sup>122</sup> DOBROWOLSKI 2007 and SULIKOWSKA-BEŁCZOWSKA 2020.

<sup>123</sup> AKSAMIT 2004.

<sup>124</sup> KIJOWSKA, SULIKOWSKA-BEŁCZOWSKA 2021.

artefacts and stories related to them, thus, this short text is only an overview without any claim for being a complete presentation, only sketching the most important aspects of its history, which still await a detailed study.<sup>125</sup>



Fig 8. The 'Mummy room' of the current Egyptian Gallery at the National Museum in Warsaw (photo by W. Ejsmond)



Fig. 9. The 'Edfu room' with a statue of Horus, naos of the Distant Goddess, and altar base (photo by W. Ejsmond)

<sup>125</sup> For a comprehensive but not exhaustive bibliography of the collection up to 2007 see DOBROWOLSKI (Ed.) 2007: 158–159.

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# The Sun as a phenomenon in Old Kingdom architecture

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**Abstract:** The article aims to explore the intricate relationship between religious beliefs and the architectural designs of royal pyramid complexes and non-royal tombs during the Old Kingdom. The study also examines solar influences on the architecture of the monuments built in two distinct cemeteries: the Abusir royal necropolis in the Memphite region and Qubbet el-Hawa, the cemetery of officials from the 1st Upper Egyptian nome. Through a comparative analysis of architectural forms and spatial arrangements, the text highlights the evolving role of the solar cult and practices in the mortuary architecture. The text also investigates the design of the royal pyramid complexes in Abusir, as well as the manipulation of sunlight within Qubbet el-Hawa's rock-cut tombs, focusing on the profound significance of solar symbolism in the ancient Egyptian mortuary landscape.

**Keywords:** Old Kingdom – solar cult – Abusir – Qubbet el-Hawa – tombs – pyramid complexes

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## Introduction

The architecture of the royal mortuary complexes and of the non-royal tombs of the Old Kingdom show how deep and important the relationships were between religious beliefs and these architectural projects in ancient Egypt. Unfortunately, even though the Pyramid Texts represent an important source of our knowledge of the religious beliefs connected with kings and kingship, the real character of this influence in certain architectural situations is not fully clear.

This article briefly summarises and discusses features, mainly architectural, which have solar meaning in both the selected locations – Abusir in the Memphite necropolis where the pyramid complexes were built for the kings (fig. 1) and the Qubbet el-Hawa cemetery of officials of the 1<sup>st</sup> Upper Egyptian nome. It seeks to compare architecture and space set in two very different landscapes belonging to holders of such different positions within ancient Egyptian society. The monuments verify their connection with the solar cult, which experienced a rapid evolution over the course of the Old Kingdom. The implications of the sun in both situations, including for monuments of different dimensions, represent an opportunity to improve our understanding of the role of the sun in the layout of mortuary architecture.

In the Abusir necropolis, an investigation was undertaken to examine the forms and orientations of architectural elements within the landscape. This analysis is predicated on data pertaining to the association with the solar cult. Conversely, Qubbet el-Hawa is the focal point for an examination of its excavated internal spaces, affording a distinctive opportunity to scrutinise the intentional manipulation



Fig. 1. View of the Abusir royal pyramid necropolis from the upper part of the Userkaf sun temple (J. Krejčí, CIE FA CU)

of sunlight within tombs in this cemetery. Sunlight was a pivotal determinant influencing the design, architectural spatial arrangements and decoration of the tombs situated in this specific situation. Consequently, the initial segment of this research endeavour will concentrate on the pyramid complexes of the Old Kingdom's royal structures and the funerary complexes situated in Qubbet el-Hawa.

## Rituality and space

Religious convictions and belief systems were in ancient Egypt conveyed through ritual practices – as a manifestation of symbolic thought – and in the form of images presented in the appropriate architectural context.<sup>1</sup> The connection between ritual and spatial dimensions and layout was intricately woven into the array of architectural features used in the monumental mortuary architecture by following the ruling cosmologies and geomentality. The concepts of space, order and composition had a fundamental importance in the cultural interpretation of reality within ancient Egyptian society, which also integrated a cyclical temporal conception embodied initially in stellar objects in the night sky and later also in the solar deity in the day sky.

The ancient Egyptian cosmogonies played an important role in the understanding of the natural processes and phenomena in the surrounding world by the ancient Egyptians.<sup>2</sup> During the creating of the layout and architectural design of the sacred constructions, spatial considerations were apparently influenced by these religious teachings. The geometric interpretations of the concepts connected with the ancient Egyptian cosmogonies, as a consequence of thinking in images, were decisive both in the religious theoretical frameworks and in the architectural composition. An important role in this process was also played by lighting and sunlight.

Thus, in contrast to the linear characteristics of the individual's earthly existence, the sun personified a phenomenon based on its recurrent rebirth on the eastern horizon. The deceased king aspired to adhere to this idea. This interaction between both realities with an abstract geometric nature was to be transferred

<sup>1</sup> Teeter 2015, 329–340; Kemp 1992 [1989], 37–82; Cervelló Autuori 1996, 13–32.

<sup>2</sup> See, e.g., Popielska-Grzybowska 2020: 35–57.

to the funerary space with a marked liminal nature, to support one of the most significant *rites of passage* of ancient Egypt.<sup>3</sup>

The sun was conceived as an animated entity, embodying an important deity influencing kingship, from the first half of the Fourth Dynasty, at the latest. This development considerably influenced the establishment of the sun in the centre of gravity in ancient Egypt. In general, there was a symbiotic relationship between the deity and its human representative, which had to be ensured through intended ritual practices, the ultimate goal of which was to maintain balance in the cosmos.<sup>4</sup> The influence of the cosmos, its composition, geometry, and rhythm, extended to the intangible strata of the landscape through the agency of the Goddess Maat, linked to the divine order and balance system.<sup>5</sup> Architecture, again, with its capacity for creating spaces and generating functions, acted on the landscape to compose shapes and project the sunlight. In ancient Egypt in general, the temple – the eternal abode of the gods – acted as a place to represent the solar cycle, with the objective of preserving the balance of the cosmos in the landscape.<sup>6</sup> Likewise, the tomb was to serve as a transitional space for the transformation of the deceased. The tomb incorporated architectural features, which through their symbolical meaning helped this transformation. It was created along the major architectural axes, which allowed the king to return to the sun and enhance the solar cults.<sup>7</sup>

The presence of solar cults in ancient civilisations such as Egypt<sup>8</sup> emerged from elemental mythical thought, whose purpose was to interpret reality and the powers of nature for their understanding. Perception, analysis and representation in the form of images are part of the cognitive development rooted in simple and abstract concepts of a marked spatial nature as a representation of geomentality.<sup>9</sup>

Sacred structures, such as pyramid complexes and temples, were intricately crafted for ritual purposes. These buildings served as spaces where linear time intertwined with the unending solar cycle that represented perpetual regeneration. Cyclical time was ever-present through the changing illumination of important parts of their decoration and statuary by the sun's rays penetrating the temples' interiors through open courtyards, windows and slits positioned in the side-walls of their rooms below their ceilings. Located with precision and distinctly defined in the landscape, these constructions played a crucial role in delineating and characterising the liminal transition space. A comprehensive definition of sacred space for the ancient Egyptians implied its delimitation and segregation from the whole, specifically from chaos in the exterior.

## Beginnings

Although the exact origins of sun worship in the Nile Valley and in the adjacent desert regions are not known, it is very probable that it began to be integrated into the royal ideology during the Early Dynastic Period. Since the names of the kings to some extent also expressed their political-religious agenda, it is important to mention the name of King Nebre/Reneb of the Second Dynasty. It shows that the sun, and respectively the God Re,<sup>10</sup> played a role in the royal ideology already in the early stages of the development of the Egyptian state. The names of non-royals such as Redifankh, Rekhitre, Inure, Hesire or Rekhuef document the spreading importance of Re/sun also in non-royal circles.<sup>11</sup>

The major site connected with the solar religion was Matariya. In connection with the rise of its religious importance already during the reign of Netjerikhet, fragments of a fine limestone naos found by Ernesto Schiaparelli are much debated.<sup>12</sup> The naos, once erected in the local temple, was decorated

<sup>3</sup> Van Gennep 1909; Geist 1996; for the transformation of the king's body as known based on the Pyramid Texts cf. Popielska-Grzybowska, Manfredi 2017: 241–250.

<sup>4</sup> Assmann 1995: 218; Quirke 2015: 101.

<sup>5</sup> In the opinion of J. Kahl, the principle of *maat* appears in the same period when the cult of the God Re became more important – Kahl 2007, 51.

<sup>6</sup> Quirke 2015: 52; Belmonte, Lull 2023: 377–458.

<sup>7</sup> Assmann 1995: 208–221.

<sup>8</sup> Oesterdiekhoff 2007.

<sup>9</sup> Oesterdiekhoff 2007: 100; for the concept of geomentality in ancient Egypt, see: Hutchinson-Wong, 2024: 157–178.

<sup>10</sup> Some authors argue that the sign *r<sup>c</sup>* in the king's name does not refer to the God Re, but simply to the sun itself; see, e.g., Helck 1987: 74; Quirke 1992: 22.

<sup>11</sup> Kahl 2007: 29–34.

<sup>12</sup> Weill 1911: 9–26; Ricke 1935; Smith 1946: 132–137; Morenz, 2002: 137–158; Busmann 2010: 101–102; Nuzzolo, Krejčí

with detailed reliefs (of two scales, both of them were nevertheless rather small). Inscriptions containing a royal name date it to the reign of Netjerikhet. It has been suggested that a part of its decoration represents a depiction of the God Geb,<sup>13</sup> who was one of the gods of the Heliopolitan Ennead. The God Sutekh, another member of the Ennead, was also portrayed in the naos' decoration. The teaching connected with the Ennead was influenced by natural phenomena – most importantly the daily journey of the sun across the sky and the annual Nile floods. This developed into a complex system of ideas about the repeated, endless resurrection and re-creation of the world, and the idea of the *primaeval hill*. This teaching was closely linked to the royal office as is clearly shown in the *Pyramid Texts*.

During the Fourth Dynasty (ca 2640–2500 BC), the personality of the king was closely linked with the sun god, endowed with full creative capacity, spatially represented by distinct geographical positions. This connection found its expression during the reign of Djedrefre with the adoption of the title “son of Re”<sup>14</sup> into his royal titulary (it became part of the royal titulary by default during the first half of the Fifth Dynasty). In this context, it is important to note that under Djedefre, phrases referring to the desire for eternal life as was the case of the God Re appear for the first time: *ʿnh mi Rʿ* – ‘to live like Re’ and *ʿnh dt mi Rʿ* ‘to live forever like Re’.<sup>15</sup>

## Characteristics of the Old Kingdom and their relationship with the solar cult: Necropoleis of Abusir and Qubbet el-Hawa (fig. 2)

The Old Kingdom is distinguished by the establishment of large pyramid complexes for kings, juxtaposed with tombs for non-royals built around the monumental tomb complexes of their earthly lords or on separate cemeteries along the edges of the Nile valley – in this study they are represented by those in the southernmost part of Upper Egypt. The centralised political framework significantly influenced the cultural landscape at various strata. This territorial centrality had both practical and religious meanings. The religious side of the system was, during the Fourth and Fifth Dynasties, much influenced by venerating the sun as an unequivocal reference and supreme force in both dimensions of existence. This conceptual spatialisation and geometricisation of reality promoted the development of an intense cult of the solar deity, which would manifest itself in various ways:

- Royal symbolism: the king, embodying Horus on Earth and in the second half of the period considered a descendant of Re, continued to preside over the afterlife posthumously.
- Pyramid complexes: designed to ensure the safe transition of the deceased king to the afterlife; the pyramid complexes fused the architecture and landscape in which they were positioned, emphasising the deep connection between architecture and the solar cult in the usage of the architectural forms and the role of the sunlight and sun rays in creating the cult space.
- Architectural alignment of the pyramids: the deliberate alignment of the pyramids themselves with the cardinal points and especially the celestial bodies; the descending – however, more precisely, ascending – corridors pointed to the area of the pole of the northern sky, the vicinity of which was inhabited by other gods (i.e. celestial objects), and to which area the king ascended.
- Architectural alignment of the pyramid complexes: at the beginning of the Fourth Dynasty the overall orientation of the pyramid complexes changed – from an astral, south-north (see previous point on the alignment of the pyramids) to an orientation along the east-west axis influenced by the strengthening sun cult. The continuity of the individual parts of the pyramid complex – a valley temple as a monumental gateway to the whole pyramid complex in the easternmost part of the complex – a causeway linking the valley temple on the edge of the fertile Nile floodplain with a mortuary temple at the foot of a pyramid – and the pyramid itself, a massive tombstone above the burial chamber with the king's body – shows the influence of the sun's path from the eastern to the western horizon on the architecture and layout of the king's complex. It also points, beside its religious connotations, to the lived experience of everyday life. The intentional composition of

2017: 357–358; Ugliano, Dietze 2022: 1–10.

<sup>13</sup> Smith 1946: 134.

<sup>14</sup> Beckerath 1984: 32.

<sup>15</sup> Müller 1964: 132.

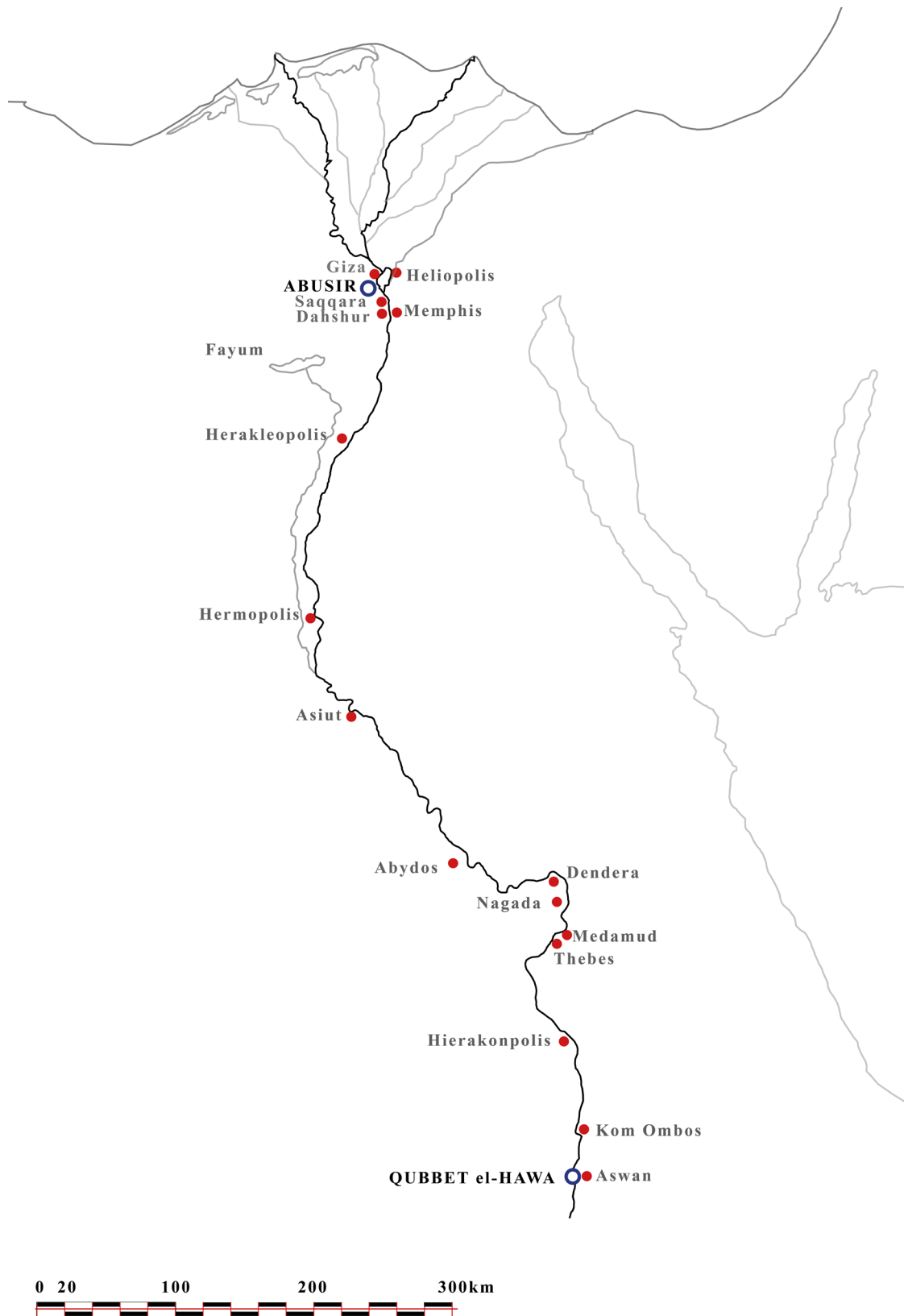


Fig. 2. Location map of the necropoleis of Abusir and Qubbet el Hawa (M. D. Joyanes Díaz)

the complex was influenced by the solar cult, which reached its peak during the period when the Abusir pyramid complexes were built within a religiously charged, sacred landscape.

- Sun temples: a new architectural type that originated at the beginning of the Fifth Dynasty, whose function was very closely linked with the mortuary cult in the pyramid complexes, but also

extended to areas associated with the kings themselves (*cf.* the scenes of the *sed*-festival from the Niuserre sun temple) and with divine cults – especially that of Re, but also of other divinities such as Hathor (who was considered to be Re’s eye), Khnum, etc.

- Textual record: the *Pyramid Texts*, which decorated the side walls of the entrance corridors, anterooms and burial chambers of the royal pyramids from the end of the Fifth Dynasty, served as guides for the pharaoh’s transformation and journey after death.
- The religious records also included testimonies of solar boats that transported the sun through the celestial space of day and night, so representing the cyclical continuity of life on Earth.<sup>16</sup> The kings were believed to accompany Re in his solar boat (*PT 334*, *PT 384*) during the journey across the sky.<sup>17</sup>
- In essence, the royal funerary practices of the discussed period were intricately intertwined with solar beliefs, incorporating geometric and spatial elements, reflecting a manifestation of centralized power that extended from the centre to the periphery, to reach very relevant places such as Elephantine. In this situation it was important that the Nile served as a natural vector that established the direction perpendicular to the geometry that the sun describes in the celestial vault.

## Heliopolis and the solar cult

The association of the sun cult with the ancient city of Heliopolis, *Iunu*, modern Matariya, becomes evident between the Fifth and Sixth dynasties, and by the development of the title Greatest of the Seers (of Heliopolis), earlier connected with organising expeditions to Sinai,<sup>18</sup> later with the sun as Heliopolitan High Priests.<sup>19</sup> Nevertheless, an earlier origin of the solar cult in *Iunu* is possible, as has been discussed on the basis of the archaeological evidence (see above – the fragments of Netjerikhet’s naos). The religious importance of Heliopolis, which connected its symbolism as a religious centre of the country with the funerary and mortuary rituals through geographical and spatial interrelationships, displayed its implications in the architectural design of the royal complexes of the Memphite necropolis and through them later also in Qubbet el-Hawa and other sites. Without any doubt, the city and its temple occupied an important role, linking far trade routes both from east to west (and vice versa) with the major transport artery of Egypt – the Nile River. The practical importance of *Iunu* has also been shown by the *Wadi Djarf Papyri*, namely *Papyrus B II*, which reports the transport of food (including bread) from Heliopolis.<sup>20</sup>

Analyses and theories about the intervisibility between monuments built on the western bank of the Nile and the temple in *Iunu* have been consistent<sup>21</sup> and underline the importance for not only the foundation of the royal necropolis in Abusir but also for the construction of the first sun temple – that of Userkaf. The alignment of the Giza and Abusir pyramids focused supposedly on the centre of the Heliopolitan temple has been deemed a crucial aspect in understanding the local solar temple’s role in the conception for the funerary landscape on the west bank of the Nile valley. This design, often debated as a key element in the royal ideology of the Fourth Dynasty, serves as both a ritual and topographical reference. However, the topographic conditions pose numerous challenges to affirming this theory, suggesting that the visual interrelationship between Heliopolis and the Giza and Abusir necropoleis was fundamentally symbolic, especially in the case of Abusir. Its position prevented one from seeing the area of the supposed centre of the Heliopolitan temple due to the curvature of the Earth and the existence of the rock promontory of the Cairo Citadel.<sup>22</sup> Some authors<sup>23</sup> also theorize about the importance of the visual interconnections between the known sun temples – those of Niuserre and Userkaf – and Niuserre’s pyramid for their positioning in the sacred landscape of the western edge of the Nile valley.

<sup>16</sup> Popielska-Grzybowska 2020: 38.

<sup>17</sup> Popielska-Grzybowska 2020: 38.

<sup>18</sup> Helck 1984: 69.

<sup>19</sup> Jones 2000: 386–387; Krejčí, Nuzzolo 2017: 366–369.

<sup>20</sup> Tallet 2021: 53–60.

<sup>21</sup> Jeffreys 1998: 63–71; Verner 2008: 43–57; Magli 2013: 125–140, Belmonte, Lull 2023: 409–411 and others.

<sup>22</sup> Krejčí 2011: 22–23.

<sup>23</sup> E.g., Magli 2013: 134–142, fig. 5.2.

## The Memphite royal pyramid complexes

The king was the only god who lived on Earth and the most important person in the country. This social arrangement promoted the construction of royal monumental architectural complexes, which was possible thanks to technological development supported by an effective administrative system. At the beginning, as has already been mentioned, the pyramid complexes, and especially the pyramids, were influenced by stellar eschatology and oriented towards the north. Later, however, even though the pyramids remained oriented along the south-north axis, their general orientation shifted from south-northern to east-western.

The Fourth Dynasty consolidated the cult of kings who started to consider themselves to be descendants of Ra. Graphically and symbolically, the connection between the pyramidal tombstone above the burial chamber with the king's mummified body and the solar teaching became evident when, at the beginning of the Fourth Dynasty, the mortuary temple was moved from the north face of the pyramid to the one facing the rising sun. In this way, the shift of orientation of the royal pyramid complexes from astral, i.e., south-north, to solar east-west, was finished during the reign of Snofru (Fig. 3). This dominating east-west direction of the pyramid complexes thus referred to the everyday journey of the sun through the day sky from east to west and to its dangerous journey, after entering the underworld through akhet every night. This journey culminated in its rise in the eastern horizon every morning. This journey was a guarantee of rebirth not only of the sun but also of the king, who accompanied the sun god as a member of his entourage.



Fig. 3. Snofru's pyramid in Meidum with its causeway showing the pyramid complex's east-west orientation (J. Krejčí, CIE FA CU)

It was also during Snofru's reign that the shape of the pyramid proper with flat sides came into existence. I.E.S. Edwards connected the shape of the true pyramid with the supposed conical shape of the sacred stone deposited in the temple of Heliopolis, *benben*.<sup>24</sup> On the other hand, as J. Popielska-Grzybowska supposed, following the *Pyramid Texts*, that the *benben* represented a piece of hard land from the moment the *primaeval* hill emerged from the waters of chaos. The *benben* stone should have been kept in the temple as a remembrance of the first piece of solid land.<sup>25</sup> Its real nature is not known.

<sup>24</sup> Edwards 1979: 290–291.

<sup>25</sup> Popielska-Grzybowska, 2020: 156–157.

The true pyramid implies the existence of a pyramidion on its summit. In some cases, as is shown by the inscriptions from Sahure's causeway, the pyramidion might have been covered with plates of so-called "white gold" or of copper.<sup>26</sup> The shining, gilded pyramidion at the top might have been seen as a substitute for the sun and a materialised symbol of the resurrection of the sun, and with him the king, on the primeval hill, *i.e.*, the pyramid.

One sacred building, whose attribution to the solar cult raises a certain degree of scepticism, is a stone structure probably built during the reign of King Khafre in front of the Great Sphinx at Giza, the so-called Sphinx Temple.<sup>27</sup> The ambiguity in the interpretation of its function is mainly due to the non-existence of any associated text or decoration as well as the extensive damage to it. As later examples of temple architecture, such as the large temples of Aton in central el-Amarna,<sup>28</sup> indicate, large open courts have often been associated with solar worship. The astronomical observations made by M. Lehner<sup>29</sup> in the area of the Sphinx Temple and the whole Giza Plateau show, though indirectly, that this building was probably associated with the solar cult in the days of the spring and autumn equinox, the sun illuminated the eastern niche in the axis of the temple's open courtyard at sunset. Moreover, during the days around the summer solstice the sun observed from the axis of the temple appeared to set precisely between the pyramids of Khufu and Khafra. In this way, the positioning of the two pyramids and between them the setting sun disk might have represented in architecture and landscape a materialised sign for akhet. This notion also appears in the name of the Khufu pyramid complex *Akhet Khufu*.<sup>30</sup>

The role of sunlight and its interaction with the architectural elements of the pyramid complexes of the second half of the Old Kingdom and its important accentuating function regarding the decoration of the mortuary and valley temples show the importance of sunlight and the sun in the architecture of this period. We are able to document a gradual evolution from the mortuary temples with large open pillared courtyards and few interior spaces opening into the courtyard (Snofru, Khufu, Menkaure) to the temples with smaller columned courtyards and enclosed interior spaces extending into the depth of the masonry (Sahure, Niuserre). This development also led to the use of slits in the side walls, positioned just below the ceiling, through which the sun's rays penetrated the interiors of the temples. In this way, the interior spaces and their decoration could thus have been accentuated through the deliberate and controlled use of the sun's light. The temples therefore show the employment of light as a shaping principle in architecture.<sup>31</sup>

## The sun temples of the Fifth Dynasty

The field of Egyptology has adopted the term "sun kings" in reference not only to the climax of the solar cult, but also to the *Papyrus Westcar* (Berlin Papyrus 3033),<sup>32</sup> with the aim of rationalising the changes in state leadership at the advent of the Fifth Dynasty. Nevertheless, already during the previous, Fourth, dynasty, the connection between the Egyptian kings and the sun god was demonstrated by the already mentioned incorporation of the name of Re in the names of the kings, the title "son of Re" in their titulary, as well as by many new features in the royal mortuary culture and ideology of the royal office.

The reasons that led the second king of the Fifth Dynasty to establish the new royal necropolis at Abusir, located between Saqqara and Giza are not clarified fully. There might have been practical and logistic reasons.<sup>33</sup> As has already been mentioned, some scholars have suggested that the position of the Abusir necropolis was influenced by an endeavour to build it on a point that offered a view of the obelisk of the temple of Re in Heliopolis.<sup>34</sup>

Userkaf, the first king of the Fifth Dynasty, was also the first to begin construction at Abusir with the establishment of his sun temple,<sup>35</sup> even though his monumental tomb was situated near Netjerikhet's

<sup>26</sup> El-Awady 2009: 192–194, fig. 90.

<sup>27</sup> Ricke 1970.

<sup>28</sup> Pendlebury 1951: 5–20.

<sup>29</sup> Lehner 1997: 129–130.

<sup>30</sup> Verner 2001: 189; cf. also Belmonte, Lull 2023: fig. 6.22.

<sup>31</sup> Arnold 2010: 47–57.

<sup>32</sup> Lepper 2008.

<sup>33</sup> Krejčí 2016: 67–72.

<sup>34</sup> Magli 2013: 134–142; Magli 2023: 7156–7169.

<sup>35</sup> Ricke 1965; Ricke et al 1969.

complex at Saqqara. A major architectural novelty, the sun temples<sup>36</sup> followed the arrangement of the pyramid complexes with a lower/valley temple in the east, a causeway connecting the valley temple with the upper part of the complex and an upper temple in its western part, on the lowermost terrace of the Western Desert. The pivotal feature of the sun temples was represented by the so-called obelisks (or “obeliskoid” constructions) erected on the pedestal buildings in the upper temples,<sup>37</sup> as is shown by the determinatives in the names of the sun temples.<sup>38</sup> The upper temple with the obelisk was in place of the mortuary temple and the pyramid in the pyramid complexes themselves. The solar nature of these temples is essentially manifested by the open courtyards on which the obeliskoids on the pedestal buildings were erected. The singular elements of these innovative constructions show how functionally they related to the royal pyramid complexes. Without a doubt, the functionality of the sun temples was not focused only on its connection with a mortuary cult of a king in the pyramid complex, but the sun temples were, as is shown by the example of the sun temple of Niuserre, important for the celebration of the *sed* festival.<sup>39</sup> Besides the cult of the God Re, the cult of the Goddess Hathor and other gods were performed in them.

It is reasonable to suppose that the commencement of the sun temples’ construction was an attempt to legitimise Userkaf’s ascension to the throne<sup>40</sup> and to justify the link of the new dynasty with the sun god, as expressed in the Papyrus Westcar.<sup>41</sup> Six sun temples are known from epigraphic material, but only that of Niuserre<sup>42</sup> and Userkaf<sup>43</sup> are known and have been investigated archaeologically. Within the precinct of Niuserre’s sun temple, in the Room of the Seasons, the side walls were adorned with relief depictions, showcasing a comprehensive array of scenes venerating the entire spectrum of creation and the cyclical regeneration of nature and the cosmic order during the three seasons of the year.<sup>44</sup> This annual renewal was also connected with the Nile and its cyclical processes of flooding, water subsidence and harvesting. Nevertheless, the role of the solar god as a guarantor of resurrection and regeneration was pivotal in this whole process. Moving from the bright sunlight in the open courtyard, through the chapel and Room of the Seasons and then a dark inner corridor inside the base of the obelisk, back to the sunlight at the obelisk’s foot was obviously a deliberate play with the alternating light and shadow. It was probably intended to represent the transition from darkness, i.e., death, to sunlight, i.e., life and rebirth. In the case of these buildings, it was only the king, as the only son of the sun god, who could make this very significant journey for him. This festive journey full of important religious values brought the king important recognition.<sup>45</sup> A magnificent example of the craftsmanship of the period is certainly represented by a large altar made of five blocks of travertine (Egyptian alabaster). These blocks representing hieroglyphic signs for an offering altar and a sun disk are placed in such a way that they can be read as “Re’s offering altar”. Moreover, *four hetep* signs are placed in such a way that they are exactly orientated to the cardinal points. In the middle between them the sign of the solar disk – *ra/Re* – has been placed. The configuration of this object with its orientation to the cardinal points also shows how it was closely linked to the perception of the cult cosmos, the sun cult and other important aspects of religious life.

The two sun temples for which there is archaeological evidence, those of Userkaf and Niuserre,<sup>46</sup> had rather differing architectural elements and forms even though the general layout is similar. The architecture of the upper part of the latter temple, in addition to the obelisk building and the altar in the open courtyard, included important cult spaces of the chapel and the Room of the Seasons. The decoration of the last-mentioned space clearly refers to the solar cycle and the fertile power of the sun. The king is involved in the process as he leads the procession of the nomes and fecundity figures towards the enthroned Re-Harakhty; this scene was very probably positioned above the entrance to the internal corridor in the pedestal building leading to its roof terrace, to the foot of the obeliskoid construction.<sup>47</sup>

<sup>36</sup> Voss 2004; Nuzzolo 2018.

<sup>37</sup> For the reinterpretation of the form of these constructions – see Nuzzolo, Pirelli, Zanfagna et al. 2018: 48–51, fig. 6.

<sup>38</sup> Kaiser 1956: 104–116; Winter 1957: 222–233.

<sup>39</sup> Kees, Bissing 1923; Kees, Bissing 1928.

<sup>40</sup> Nuzzolo 2018.

<sup>41</sup> Hays 2002: 20–30; Magli 2009.

<sup>42</sup> Borchardt 1905.

<sup>43</sup> Ricke 1965; Ricke et al. 1969.

<sup>44</sup> Kees, Bissing 1923; Kees, Bissing 1928; Edel, Wenig 1974; Krejčí, Nuzzolo 2020: 116–122.

<sup>45</sup> Nuzzolo 2018: 217.

<sup>46</sup> Bissing 1905; Ricke 1965; Ricke et al. 1969.

<sup>47</sup> Krejčí, Nuzzolo 2020: 218–220.

## Sahure's pyramid complex

Although Sahure's complex is not distinguished by large dimensions, it represents a milestone in the development of the royal tombs of the Old Kingdom. A new standard concept of the pyramid complex influenced by the culminating solar cult came into existence and became a source of inspiration for Sahure's followers on the Egyptian throne. Among the basic components of the pyramid complex and the innovations connected with the sun and solar religion can be listed as follows:

- The pyramid complex was carefully and symmetrically arranged along a main axis in an east-west direction that followed the path of the Sun across the sky (see fig. 4). The individual parts formed an architecturally and functionally harmonious ensemble.
- The columned courtyards of Sahure's (and Niuserre's) mortuary temples with their basalt pavement and above them palm columns representing palms (in the case of Niuserre's temple papyroform columns), which supported the architraves of the ambulatory ceiling, apparently refer to the Nile valley filled with the inundated fertile waters, with the sun at its maximum declination.
- The lighting of the rooms in the mortuary and valley temples as well as of the causeways. The rooftop terraces of the valley and mortuary temples did not have only one level since at that time they were built at different elevations above the individual temple rooms. This made it possible to set up the already mentioned slots near the ceilings, which then shed the sunlight on significant internal details, statues, or specific scenes in the relief decoration.<sup>48</sup> In the temple cult, this arrangement might have played an important role in some ceremonies, for example at sunrise on the days of important religious festivals.
- The rooftop terrace, which was accessed by a staircase ramp in the north part of the mortuary temple, also served for astronomical observation as it follows from the content of the Neferirkare temple archive.<sup>49</sup>



Fig. 4. General view of Sahure's valley temple, causeway and mortuary temple from the king's pyramid, showing the east-west orientation of the complex and its symmetrical arrangement (J. Krejčí, CIE FA CU)

<sup>48</sup> Arnold 2010.

<sup>49</sup> Posener-Krieger 1976: 29–31.

## Niuserre's pyramid complex

Another important Abusir pyramid complex is that of Niuserre.<sup>50</sup> Besides this monument, he also commanded the construction of his sun temple. The oldest attestation of one of the symbols of the solar religion – a monolithic obelisk – is also very probably dated to his reign. A fragment of a red granite pyramidion of an obelisk was found close to the southwestern corner of the mastaba of Vizier Ptahshepses in 1974.<sup>51</sup> It was undoubtedly a part of the architecture of the neighbouring pyramid complex of Niuserre and only reached the place where it was found because of the quarrying of building stone inside this complex. D. Arnold<sup>52</sup> suggested that the obelisk could have been erected on the so-called *Eckbau* of Niuserre's pyramid complex,<sup>53</sup> which is located near the find site of the obelisk fragment. Nevertheless, there is no direct proof for this possibility and this arrangement would probably have caused significant problems when erecting such an obelisk on the roof terrace of the *Eckbau*. It is more probable that it was erected on a platform detected to the north of the Northern *Eckbau* (protopylon). If it was really made during the reign of Niuserre, it predates by several dozens of years the oldest obelisk documented in Heliopolis, which dates back to the reign of the Sixth Dynasty King Teti.<sup>54</sup>

## The use of quartzite as a construction material

The choice of stone materials was of great symbolic significance in ancient Egyptian sacred architecture. Many of these stones were used for their symbolic meaning, with colour being an essential quality for their choice. In this way, basalt made a direct reference to the life-giving silt brought by the annual Nile flood and probably also a god of the earth of the Heliopolitan Ennead, Geb.

Among the building materials which were related to the solar cult, quartzite (respectively siliceous sandstone) played an important role. This relation was based on this stone's colouring, which in Egypt can vary from golden, yellow, and orange, to red, brown and grey, which is similar to the shades of the sky during sunrise or sunset.<sup>55</sup> The association of metamorphic sandstone with the solar cult came into existence also due to the relative proximity of its quarries to the centre of the sun cult in Heliopolis at Gebel el-Akhmar. The use of quartzite to a larger extent is detectable in connection with the rising role of the solar religion in the monumental royal architecture – an early example represented by the sun temple of Userkaf. One can observe it also in mortuary monuments built by the Abusir sun kings (i.e., in the pyramid complex of Niuserre), and it can again be encountered to a larger extent in the Sixth Dynasty (e.g., the mortuary temple of Pepi I in South Saqqara).

## Influence of the sun cult on the architecture of the non-royal tombs

It seems, however, that in the Memphite area, and also in Abusir itself, the sun cult had an influence on the form of tombs built for persons of non-royal origin. The tomb of the vizier Ptahshepses built in the cemetery of the dignitaries, northeast of the Niuserre pyramid in central Abusir, is one of these. The architecture of the tomb includes a staircase to the roof terrace of the tomb. According to N. Alexanian, the staircase was used during the performance of religious rituals associated with the sun cult on the roof of the tomb. It seems that this was the function of the staircase of all large tombs dated to the Fifth and Sixth Dynasty.<sup>56</sup> Other such evidence has been debated in connection with Tomb AS 31 in South Abusir, whose owner, unfortunately, remains anonymous for the time being, although some of his (even priestly) titles are known. This large tomb is distinctive for its non-standard construction: the upper part of the

<sup>50</sup> Borchardt 1907.

<sup>51</sup> Verner 1976: 111–118.

<sup>52</sup> Arnold 1998: 163.

<sup>53</sup> Borchardt 1907: Blatt 28.

<sup>54</sup> Martin 1977: 43, 47.

<sup>55</sup> Aufrère 1991: 698–702; Robins 2008: 24–29.

<sup>56</sup> In her article, N. Alexanian did not discuss the possibility that the roof terraces of the non-royal tombs were also used for stargazing in the night sky – Alexanian 2003: 27–40; Krejčí 2009: 52–53, 159.

superstructure is built in the form of a mastaba, while the lower part is hewn out of the rock (limestone). The layout of its main, i.e. eastern, façade encompasses an entrance in the form of a (simplified) false door made from a large monolithic limestone block. The alignment of the rock-cut passageway that follows behind it is shifted from the east-west direction towards the south-east (as does the chapel cut into the rock that follows the doorway).<sup>57</sup> This distinctive deviation in the alignment of both the corridor and chapel, warrants a detailed investigation to elucidate the rationale behind such a decision, particularly in the context of the orientation of the upper part of the tomb with the north-south orientation, which is also characteristic of other tombs in the cemetery.

## Elephantine, the capital of the 1st Upper-Egyptian nome

The first Nile cataract with Elephantine Island represents a natural boundary in the Nile landscape and, during the Old Kingdom, also the southern border of the Egyptian state. However, this site was more than a mere frontier. It played the role of a logistics base for expeditions and the expansion of the Egyptian state into Lower Nubia. The interests of the elites that ruled Elephantine extended well beyond the limits of the first nome of Upper Egypt.<sup>58</sup> The local elites and part of the other people living there were involved in commercial activities not necessarily promoted by the monarchy but that followed their own agendas. Consequently, the state appears to have been more interested in capturing and taxing the flows of goods passing through the first Nile cataracts than in imposing tight control over the economic activities that took place there. The centralised power of the king extended to Upper Egypt, where the role of the provincial governors had a very relevant coherence in their relations with the Residence in the Memphite area. Elephantine's governors continued their activities and kept their networks of contacts abroad after the collapse of the Old Kingdom around 2160 BC.

During the later part of the Old Kingdom, the weakening of central control over the country enabled the peripheries and their administrators to initiate a period of showcasing their importance and of building impressive monuments, well noticeable in the landscape. In the specific case of Elephantine, its substantial distance from the Residence and its role in the control of the border territory gave rise to the accumulation of power that started to directly influence the design of the funerary complexes of the local nomarchs.

Given the authority of the governors, we can perhaps consider that they wanted to follow some of the royal patterns in the designs of their mortuary architecture and its religious connotations – such as the causeways, or the stelae in the form of obelisks – in order to emulate royal models in their pursuit of higher social status. The solar architectural forms emerge in the Memphite area, most importantly an open courtyard, which, through its openness to the sky, probably carried solar connotations.<sup>59</sup> Additionally, the erection of an obelisk flanking the entrance to the tomb and axially, serving as a visual representation of transition, manifested its linkage with the solar teaching. These compositions, as described by S. Quirke,<sup>60</sup> were employed to convey the connection between time and space and underscore the importance of sacred space. The rock-cut tombs of the governors and the ruling elite sought to replicate the external landscape and geometry within, a concept vividly depicted through paintings and reliefs. These artistic representations adhere to the compositional frameworks observed in royal mortuary complexes.

The royal pyramids – square artificial and geometric “mountains” – which gained their prominence as a focal feature of the Memphite royal cemeteries from the beginning of the Third Dynasty onwards, were accompanied by other complex structures within the pyramid precincts. Meanwhile, in Qubbet el-Hawa, the creation of a small interior space had commenced and was considered sacred due to its location where the light began to penetrate. Gradually, this space was transformed into a sequence of quadrangular spaces cut into the rock, rhythmically connected through their orchestration along a common axis, linking the exterior and interior of the tombs. The orientation considerations were essential within a belief system that was crafted for death, guided by orthogonal directions delineated in the landscape by the Nile and the

<sup>57</sup> Bárta 2011: 15–21. It is very likely that this arrangement was deliberately aimed at the moment of sunrise on the eastern horizon during the winter solstice.

<sup>58</sup> Jiménez Serano 2023: 19–92.

<sup>59</sup> As has been discussed in the case of the Temple of the Sphinx – Ricke 1970.

<sup>60</sup> Quirke 2001: 79–92.

sun. The development and composition of the interior space culminated in rock-cut tombs, organised, and arranged around an axis that penetrated the interior, bringing time into the substance, the rock, through its illumination.

## The cemetery of Qubbet el-Hawa

Examining the geometry of the Sun and the celestial sphere and its implications on the placement, alignment, and architectural design of structures designated for funerary rituals and mortuary cult is a pivotal aspect in the investigation of the tombs of the Elephantine residents (fig. 5). In this context, scrutinising the illumination patterns within the excavated space serves as a key factor in elucidating the sun's significance in shaping the spatial composition designated for the interment of the members of the local community's elite.

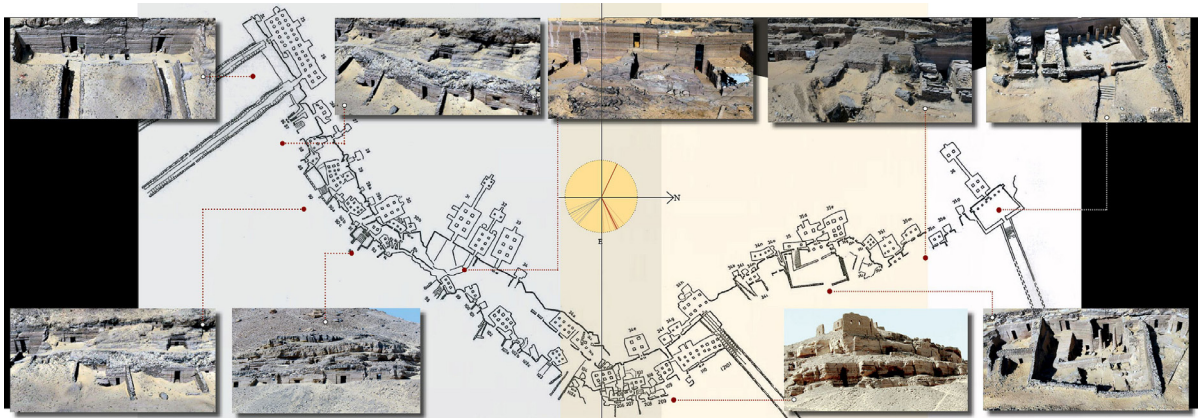


Fig. 5. plan of the Qubbet el-Hawa necropolis, orientation, and photographs of some important tombs (map: Edel, Seyfried, Vieler, 2008: Plan 1; drawing and photographs – the Qubbet el-Hawa Project: Joyanes-Diaz; Mozas-Calvache; Perez-Garcia).

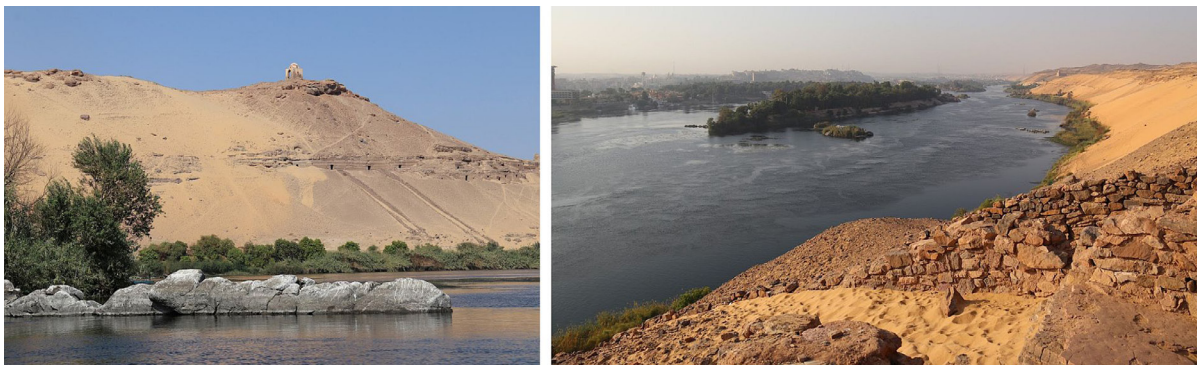
During the Old Kingdom, burial activities in the Qubbet el-Hawa necropolis played a pivotal role in the transformation of the landscape through the cutting of the tombs into the cliffs of the escarpment. The occupation of several levels, “terraces”, along the slope commenced at the escarpment’s northeastern periphery with the construction of the initial tombs. A comprehensive analysis of the cemetery’s growth and construction reveals how certain tombs, once identified and oriented, acted as focal points attracting smaller tombs that clustered around them. This emulation of the compositional pattern found in the Memphite royal necropoleis with the royal pyramid complexes as focal points for construction of the tombs of other members of the royal family as well as non-royals is evident in Qubbet el-Hawa too. The tombs of the Elephantine governors feature a causeway leading up to them from the Nile’s bank, a courtyard, a chapel (with niches) with shafts connected to burial chambers, all meticulously embedded within and behind the defining western wall of the excavated space, the entrance courtyard. In Qubbet el-Hawa, in a similar way to the superstructures and substructures of pyramids, we can thus distinguish an exterior space connected with the landscape, and an interior space cut out in the bedrock. The connecting phenomenon was sunlight streaming through the entrances of the tombs into their interiors. Depending on the social status of the members of this provincial elite, the tombs exhibited greater precision in their composition, orientation and design, revealing knowledge of astronomy, geometry and construction.<sup>61</sup>

Among the architectural features borrowed from the royal pyramid and complexes, the causeway which connected the landing stage on the Nile bank with the tomb itself certainly can be counted. It facilitated the transport of burial equipment as well as the coffin containing the body of the deceased to the tomb. The courtyard in front of the entrance to the tomb served as a stage for rituals attended by members of the community, acting as the initial ritual space. The ascent to the tomb was not merely logistical but constituted part of the ceremonial path for the transformation of the deceased from a mortal individual to a transfigured being worthy of cultic remembrance. This stage was public and communal,

<sup>61</sup> Joyanes Diaz et al. 2022.

reinforcing the deceased's identity as both a member of the social elite and a continuing participant in the collective memory.<sup>62</sup> Only relatives and priests had the privilege of entering the main space of the tomb, the offering chapel. The offering chapel served as the focal point of the ongoing mortuary cult activities, enabling the ka of the deceased to receive sustenance. The body of the deceased in the coffin was interred, together with the burial equipment, in the burial chamber located at the bottom of the funerary shaft. It was after the funerary ritual when the burial chamber was sealed (for eternity) that and became his/her transitional abode, a site for his/her transformation. The funerary ritual, therefore, was not a singular event but part of an ongoing system of commemorative practice where tombs functioned as loci with their architectural prominence, spatial clustering and iconographic singular programs expressing affiliations to family lines, professional roles and cultic obligations. The collective memory strengthened community bonds and legitimised elite authority across generations with the reaffirmation of the social and administrative cohesion of the southern frontier.<sup>63</sup>

Two of the most noteworthy examples of causeways are the tombs of the QH25-QH26 complex (see fig. 4), whose joined chapel halls span altogether over 70 meters in width. However, also other ramps, such as those of Tombs QH34h, QH35l, or QH36, are still visible today in the northern part of the cemetery (see fig. 6).



**Fig. 6.** A general view of the Qubbet el-Hawa cemetery with well visible causeways of Tombs QH25 and QH26 from Elephantine and a general view of Elephantine from Qubbet el-Hawa (photos by M. D. Joyanes Díaz)

In the same way, the tombs we are examining, Tombs QH25 and QH26,<sup>64</sup> belonging to Mekhu I and Sabni I, also have a wide access courtyard, thanks to the existence of a solid and resistant rock stratum that allowed the creation of such a horizontal platform. While the Mekhu and Sabni complex features an access space neatly delimited by a perimeter wall, Tomb QH35d, belonging to Heqaib-Pepynakht II, had to have a staircase and walls separating the sacred and orderly space from the rest of the terrain, providing the illusion of a false mastaba.

The dimensions of the entrance gates were determined by the importance of the tomb owner within the community, also reflecting the monumental nature of the interior, its height, and the desired control of lighting. Occasionally, as seen in the case of Tomb QH26, the names, images, and inscriptions carved on the facade aimed to perpetuate the memory of the deceased. The standout feature among the tombs is the significant size of the doorways in both complexes, reaching a height of 4.00 meters. Undoubtedly, the regulation of light entering the interior of the tomb was linked with the usage of a functioning architectural design and in connection with the monumentality of the excavated space.

Notably, following the remarkable tomb of Harkhuf (QH34n) adorned with an extensive carved biography near its entrance doorway,<sup>65</sup> another distinctive complex emerged, namely Heqaib Pepynakht II (QH35d) and his son Sabni II (QH35e), characterised by a spatial arrangement that would later be replicated.

Tomb QH35 represented the final resting place of Heqaib Pepynakht I, who held the prestigious titles of nobleman and governor.<sup>66</sup> Similar titles can be found in both the QH25-QH26 tomb

<sup>62</sup> Vischak 2020: 179–215.

<sup>63</sup> Vischak 2020: 179–215.

<sup>64</sup> Edel, Seyfried, Vieler 2008: 5–272; Jiménez Serano 2023, 66–70.

<sup>65</sup> Angelini, Vittozzi, Baldi 2016: 71–79; Jiménez Serano 2023: 27–28, 61–63.

<sup>66</sup> Müller 1940: 67–68; Jones 2000: 654, no. 2390.

complex<sup>67</sup> and in Tomb QH35d and Tomb QH35e.<sup>68</sup> While Tomb QH35 features a basic design with a transversal chapel and two pillars, Tombs QH35d and QH35e exhibit a more intricate arrangement of their exterior and interior spaces.

The entrance to Tomb QH35 is accessed via a rock-carved stairway that begins at the level of the courtyard and ascends approximately 4 meters. Within the same tomb cluster, Tomb QH35d, with two columns flanking its entrance, was cut into the rock. Around this central point, subsidiary tombs are arranged along the perimeter of the courtyard, creating a comprehensive interdependent organisation. An important note is deserved by the Tomb of Sabni II (QH35e), whose entrance was so positioned that it was facing towards the tomb of his father. The preceding tombs leading up to Tomb QH35d manage to align their ritual axis or axis perpendicular to the summer solstice sunrise. The earlier tombs, such as QH34n and QH35,<sup>69</sup> are oriented and located with their axis centred around this position, although not achieving the same precision as the Heqaib Pepynakht II tomb. This evolutionary process culminates with the precise orientation of Tomb QH35d. It is not surprising that Sabni II, the son of Heqaib Pepynakht II, constructed his tomb as a continuation of the interior space, aiming to maintain the same orientation.

### The QH25-QH26 complex: an architectural space for Mekhu and Sabni

The Heqaib complex managed to replicate the funerary model of the royal mortuary complexes by reinterpreting architectural elements influenced by the Nilotic landscape and incorporating them into the excavated space. Bringing light inside allowed for control over its flow and timing, while reproducing the exterior conditions within the tomb. The orientation and its entire ceremony were established on the usage of basic trigonometric principles and methods, involving ropes and the establishment of angles. With these tools, it was possible to incorporate celestial geometry and order into the composition of the interior space. Tomb complex QH25-QH26<sup>70</sup> represents a significant advancement compared to previous tombs. Its facade was arranged parallel to the solstitial line (Fig. 7).

The overall tomb scheme is a representation of the sun's transit from east to west when it crosses to the other side of the earthly plane.

The two doors carved into the rock wall that forms the tomb complex facade have two small obelisks (obelisk stelae) on either side. As has been already mentioned, it is possible to see a similarity between the hypostyle in the tomb of Mekhu and the pillared hall of Sabni and the columned courtyards in the royal mortuary temples. Another analogy is represented by the general longitudinal layout of the tombs and their spatial organisation.

The sun lighting their decoration brings the depicted figures back to life every day (see fig. 8). The sun rays penetrating into the interior of the tombs mark time through space, making the images of father and son and their relatives accentuated. It is obvious that this happened at chosen moments in time – one can hypothesise that they were important for ceremonial or religious reasons. An important role was played by the position of the *ka*-niche of Mekhu, in which his statue hewn out of the rock was located on the west wall of the hypostyle.

Entering the tombs, the visitor finds himself, perhaps surprisingly, in a very symbolically conceived space. The entrance and largest part of the tombs is the hypostyle (in the case of Mekhu's tomb; in the case of Sabni's tomb it was the pillared room) carved out of the sandstone, the rock in which the tombs are hewn. The hypostyle with its size and intricate architecture was apparently of great importance for the tomb owner, and it was a matter of prestige. The hypostyle is a structurally oversized space, with a "forest of columns" whose layout and architectural features respond to canons which might have been related to some aspects of the sun. Besides the complex interplay of the architectural forms of the rock-cut columns and sun rays, the columns can be seen as simplified copies of the columns with floral design used in the royal complexes and related so to the solar ideas, and regeneration. Mekhu's columned chapel represented, together with the hypostyle in the mortuary temple of King Raneferef in Abusir,<sup>71</sup> an exception in the Old

<sup>67</sup> Edel, Seyfried, Vieler 2008: 28–70.

<sup>68</sup> Edel, Seyfried, Vieler 2008: 776–777.

<sup>69</sup> Edel, Seyfried, Vieler 2008: Plan 1.

<sup>70</sup> Edel, Seyfried, Vieler 2008: 4–272.

<sup>71</sup> Verner 2006.

Kingdom sacred architecture.

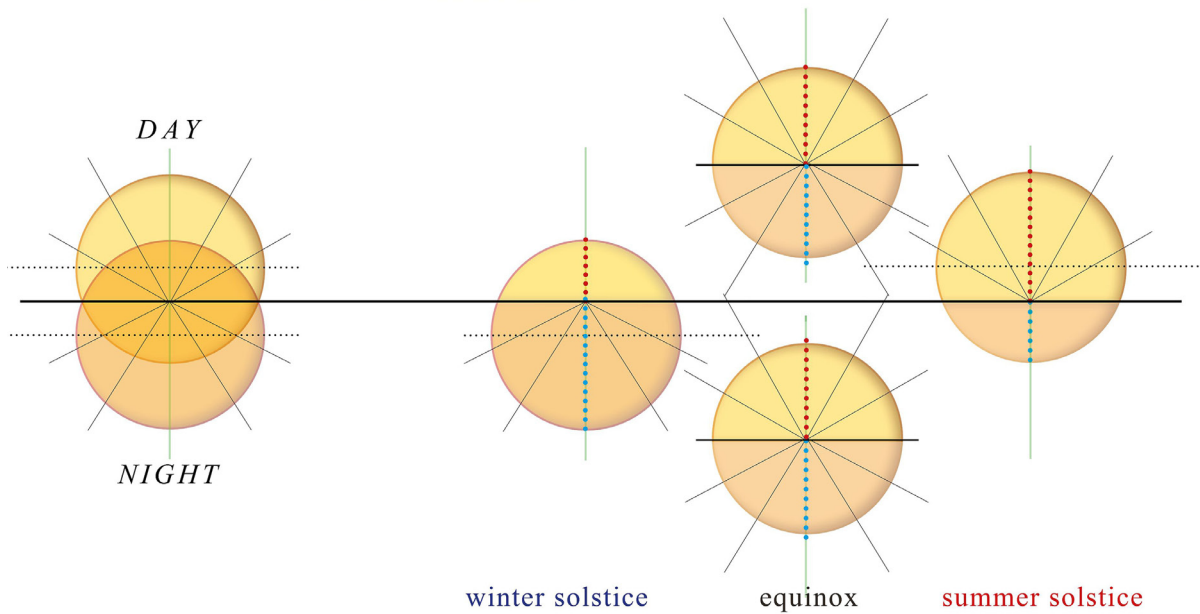


Fig. 7. Orientation and sun-light diagrams of the tomb complex QH25-QH26, map of Tombs QH25 and QH 26 showing their causeways leading to both tombs from the Nile bank, the broad open courtyard in front of them, as well as joined hypostyle and pillared halls (M.D. Joyanes Díaz)

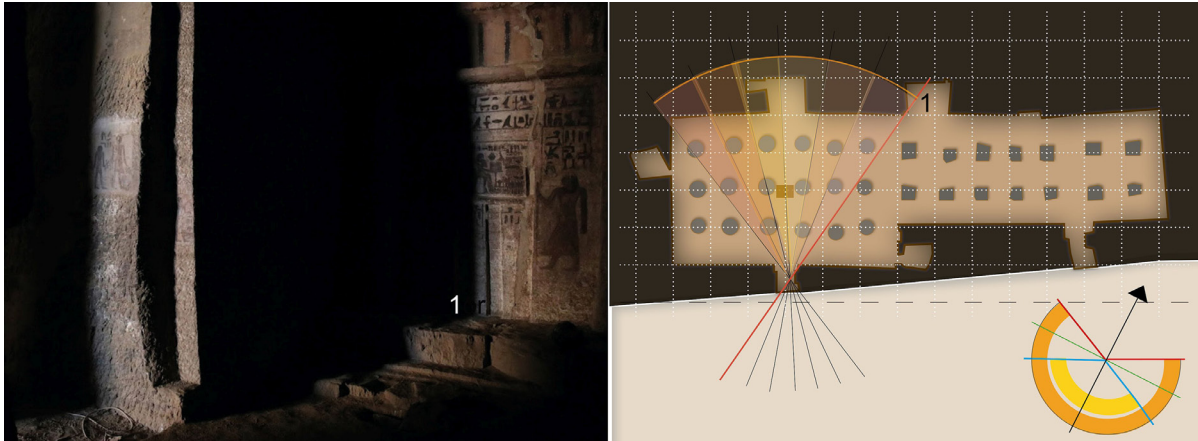


Fig. 8. Orientation and lighting diagram of the niche of Tomb QH26 (M.D. Joyanes Díaz, Photo: M.D. Joyanes Díaz)

The landscape was brought into the tomb space through light, capable of marking the different moments of solar time by projecting its rays into the interior. It was easy to recognise through the projection of light into the interior space the temporary moment that was taking place outside, in the external world. Thus, the passing of the seasons throughout the year, as well as the hours of the day, could be known by observing which parts of the interior of the tomb light up. The absolute time of the sun given by its position in the sky and its rays could thus be perceived in a controlled way through the architecture of the tomb. This enabled the ability to keep track on (“to control”) time through space and the lighting of the paintings and reliefs depicting the father and his son, the tombs’ owners. This was one of the ideas behind the overall layout of the tomb.

Situated within an evocative landscape over the Nile and driven by the desire to materialise knowledge of the solar cycle as a symbol of power, this architectural complex represents a symbolic space in which time and space are intertwined in a spectacular manner (fig. 5). The architecture of the QH25-QH26 complex exemplifies a profound understanding of solar geometry and the deliberate control of interior lighting. Day after day and throughout the year, the space reveals the passage of time at its own pace, the resurrection of Mekhu and his son.

## Conclusions

Given the territorial, political, and religious interdependence of the Memphite area with Aswan, it is a considerable challenge to conduct a spatially oriented comparative investigation of the architectural and funerary landscapes created for the kings and one of the kingdom’s most important local communities. Similarities are undoubtedly to be found in the layout of the architectural space. On the other hand, the different social statuses of the owners gave rise to distinct architectural forms. The impact of the geographical location and the pre-existing landscape on the cemetery and the tomb structures was strong. Important was a symbolic architectural interpretation of the solar cycle. The geographical location and the original landscape influenced the construction of the royal mortuary complexes and non-royal tombs.

The power dynamic between the central authority of the Egyptian state and its periphery was a determining factor in the representation and composition of burial spaces. Different approaches to conceptualising the language of architectural forms depending on the intended message gave rise to architectural and decorative programmes for the tombs. The perception, conception and representation of cult space were intertwined with geometry and solar geomentality.

The powerful relationship between the central state administration, religious beliefs and the periphery determined the composition of funerary spaces. Different ways of conceiving the language of architectural forms led to different ways of design and creation of the architecture of the tomb, depending on the message to be conveyed. Thus, further investigation of the connection between the solar cycle and the architectural project to its location in the landscape will be very important. It was about connecting the landscape to the cosmic order through architecture and geometry, where the incidence of sunlight

played a key role in creating the powerful sacred landscape still in place today. The geographical and symbolic contextualisation of the religious changes took place during the Old Kingdom, with the peak of the sun cult during the Fifth Dynasty and its subsequent retreat in favour of the God Osiris, who is so amply documented in the *Pyramid Texts* at the end of the same period. This process can be traced by the construction of the sun temples and the axiality of the pyramid complexes as well as of some architectural features. In all these inquiries, as previously noted, the sun's position, both symbolically and physically, held paramount significance. It served as the focal point of existence and a pivotal factor in the spatial interpretation of funerary constructions. The sun's influence, through sun rays, the movement of the sun in the sky, but as well the ideas connected with the kingship and royal authority and thoughts incorporated into the Heliopolitan cosmogony, was manifested in key spatial and geometric aspects, contingent upon the geographical position, orientation and nature of the space conceived to facilitate the mortuary cult and rituals connected with it. Its other significant role can be seen in the accentuation of the individual features of the cultic spaces – important scenes of the relief or painted decoration, as well as the statuary, false doors, etc. We cannot completely rule out that time-tracking was also an aspect of the usage of sunlight in some cult spaces, as the example of Tombs QH25-QH26 shows.

These conclusions raise new research questions that invite further exploration. Among them is the question of how and if the symbolic understanding of the solar regenerative cycle shaped the architectural conception of elite tombs across different regions of Egypt. To what extent did light management and solar alignment in tomb architecture serve ritualistic, symbolic (or even calendrical) purposes? Additionally, the convergence of solar and Osirian ideologies in the spatial conception and decorative programme of the tombs during the period of religious transition in the second half of the Old Kingdom presents another avenue for investigation. Finally, understanding the role of architectural geometry, composition and orientation decisions in mediating cosmic order and expressing localised elite power could offer deeper insights into the interplay between sacred spaces and landscapes on the one hand and political and economic power on the other hand. Together, these questions pave the way for enriching discussions on the intersection of architecture, ideology, and celestial symbolism not only during the period of the Old Kingdom but also in ancient Egypt in general.

This paper was prepared utilising the current findings and the outcomes and insights garnered during the ongoing project initiated in 2019 at Qubbet el Hawa, operating under the title “Qubbet el-Hawa Necropolis of Archaeology, Architecture, and Landscape” in Aswan, Egypt, situated in the southern region of the country.<sup>72</sup>

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<sup>72</sup> Joyanes et al. 2022.

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# The decline of settlement at Tell el-Farkha. Some reflections on the late Early Dynastic and early Old Kingdom occupation

Agnieszka MAĆZYŃSKA

**Abstract:** The site of Tell el-Farkha in the Eastern Nile Delta is best known for the remains of the Predynastic and Protodynastic occupation. The earliest settlement, associated with the Chalcolithic Lower Egyptian Culture, appeared here in the first half of the 4<sup>th</sup> millennium BC. Occupied continuously for approximately 1000 years, the site is a rich source of evidence illustrating social, economic, political, and ideological processes taking place in the Egyptian Nile Valley and the Delta in the 4<sup>th</sup> and partly the 3<sup>rd</sup> millennia BC. It is here that a large brewing centre, extensive residential structures, a deposit of two gold figurines of early ruler, and many other significant objects have been discovered. The settlement began to decline in the middle of the Early Dynastic period and was finally abandoned in the early Old Kingdom. This paper focuses on the ceramic assemblage collected during exploration of the youngest phases of occupation, dating to the late Early Dynastic and early Old Kingdom periods. It is an attempt to analyse the decline of Tell el-Farkha in a wider political, social, and economic context.

**Keywords:** pottery; Tell el-Farkha; Early Dynastic; Old Kingdom, royal administration

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## Introduction

Tell el-Farkha is located in the Eastern Nile Delta, in the Daqahliya Province, some 120 km northeast of Cairo (**Fig. 1**). Discovered in 1987, the site was excavated between 1988 and 1990 by the Italian Archaeological Mission to the Eastern Nile Delta.<sup>1</sup> Since 1998 it has been explored by the Polish Archaeological Mission to the Eastern Nile Delta. Tell el-Farkha occupies an area of ca. 4.5 hectares with a maximum height of ca. 4.5 m above the level of the cultivation plain. The site was placed along the northern edge of gezira and its southern slope delimited by houses of the village to the south and east and it is actually marked by three mounds: Eastern Kom, Central Kom and Western Kom (**Figs 2-3**).

Tell el-Farkha is best known for the remains of the Predynastic and Protodynastic occupation. The earliest traces of the occupation associated with the Chalcolithic Lower Egyptian Culture emerged here on a sandy gezira in the first half of the 4<sup>th</sup> millennium BC. The youngest human activity of the site dates back to the early Old Kingdom period. Occupied continuously for approximately 1000 years, Tell el-Farkha is a source of rich evidence illustrating social, economic, political, and ideological development in the 4<sup>th</sup> and partly the 3<sup>rd</sup> millennium BC.<sup>2</sup> The collected evidence significantly improved our knowledge

<sup>1</sup> Chłodnicki *et al.* 1990: 1991.

<sup>2</sup> Chłodnicki 2012a.

of the Delta communities from the Predynastic to the early Old Kingdom.<sup>3</sup> The most notable ones include a big brewery centre (Western and Central Koms), a trade centre with the evidence of contacts with the southern Levant (Central Kom), an early administrative and cultic centre (Western Kom), an early mastaba dated to 3300 BC and a deposit of 62 Predynastic ivory figurines hidden in a ceramic jar as well as two unique golden figurines of early Protodynastic rulers (Eastern Kom).<sup>4</sup>

The decline of Tell el-Farkha began in the middle of the 1<sup>st</sup> Dynasty and the site was finally abandoned at the end of the 3<sup>rd</sup> Dynasty or early 4<sup>th</sup> Dynasty.<sup>5</sup> This paper focuses on the two youngest occupation phases (6c and 7), dating to the late Early Dynastic and early Old Kingdom periods (**Table 1**). It is an attempt to analyse the political, social, and economic context in which the site lost its importance and eventually disappeared. Late Early Dynastic and early Old Kingdom ceramic assemblages from the Central Kom are presented and analysed in comparison to pottery from other Deltaic sites dated to the period in question. The author's objective is to precisely determine the chronology of the decline process as well as to define its underlying factors.

**Table 1.** Chronology of the Tell el-Farkha site (Chłodnicki 2012a: Table 1; Jucha 2011)

OCCUPATIONAL PHASE		CHRONOLOGY
Phase 1		Naqada IIB?-C
Phase 2		Naqada IID1
Phase 3		Naqada IID2/IIIA1
Phase 4		Naqada IIIA1-IIIB
Phase 5		Naqada IIIB-IIID
Phase 6	a	Early Dynastic - first half/middle of 1 <sup>st</sup> Dynasty
	b	Early Dynastic – second half /end of 1 <sup>st</sup> Dynasty
	c	Early Dynastic – end of 1 <sup>st</sup> Dynasty/2 <sup>nd</sup> Dynasty
Phase 7		3 <sup>rd</sup> – 4 <sup>th</sup> ? Dynasty

## Nile Delta in the late Early Dynastic and early Old Kingdom periods

The Nile Delta was an attractive area for human occupation since Prehistoric times. For Palaeolithic and Epipalaeolithic hunter-gatherers and pastoral groups the Delta and its fringes offered easy access to rich aquatic and desert resources. The introduction of agriculture into Egypt in the second part of the 6<sup>th</sup> millennium BC and its spread during the 5<sup>th</sup> millennium BC resulted in the emergence of fully-fledged farming and animal breeding communities in Lower Egypt and then all across the Nile Valley.<sup>6</sup> Their social, economic, and ideological development during the Predynastic period eventually led to the formation of the Egyptian state in the last quarter of the 4<sup>th</sup> millennium BC. Archaeological evidence from the Delta confirms the existence of the settlements which could be local power centres, such as Buto (**Fig. 1**).<sup>7</sup> Moreover, In the Eastern Delta the presence of exchange routes between Egypt and the southern Levant had a great impact on the development of this area and resulted in the emergence of major exchange centres (Tell el-Farkha, Tell el-Iswid, Minshat Abu Omar). Given their size and wealth, it is likely that they also served as political or ideological centres in the Pre- and Protodynastic periods.<sup>8</sup>

In the Early Dynastic and Old Kingdom periods the Nile Delta was still an important habitation area. While the continuity of occupation from the Predynastic to the Early Dynastic period was confirmed on some sites, changes in the settlement pattern are fairly well visible. At the end of the 4<sup>th</sup> and in the

<sup>3</sup> Chłodnicki *et al.* 2012.

<sup>4</sup> Chłodnicki *et al.* 2012; Ciałowicz 2012ab; 2018b; 2022.

<sup>5</sup> Ciałowicz 2022.

<sup>6</sup> Maćzyńska 2018: 65-81.

<sup>7</sup> Ciałowicz 2017; 2022; Köhler 2016; 2017; 2020.

<sup>8</sup> Ciałowicz 2017; 2022.

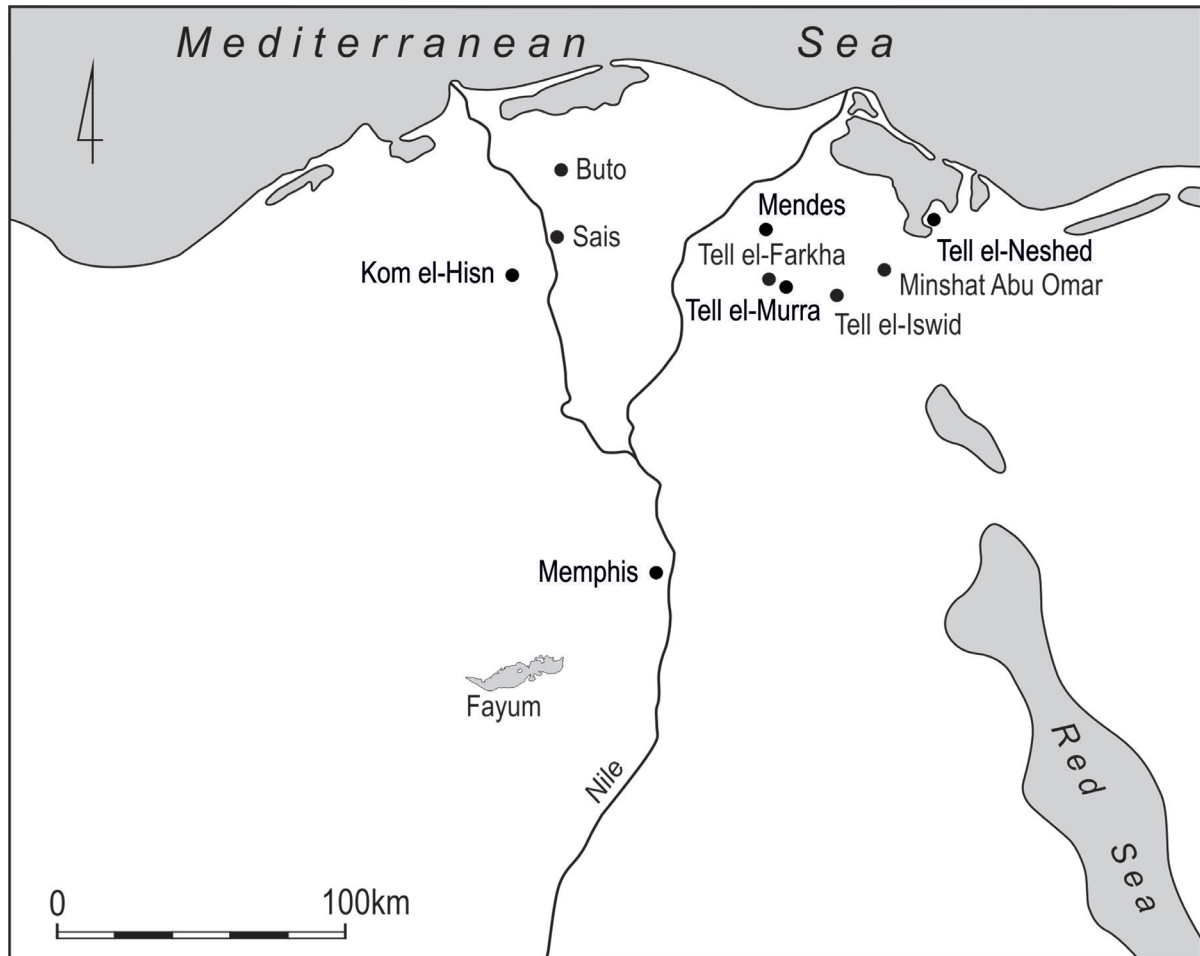


Fig. 1. Map of Lower Egypt showing the location of sites of the Lower Egyptian culture (prepared by J. Kędelska).

beginning of the 3<sup>rd</sup> millennium BC a shift in occupation from the north-eastern to the western and southern parts of the Delta is observed, caused probably by the presence of important cultic centres (Buto, Sais) as well as the number of estates and royal domains established in those areas.<sup>9</sup> Moreover, in the north-eastern part of the region, a gradual decline of old settlement centres from the middle of the 1<sup>st</sup> Dynasty was recorded. The change could be related to a variety of interrelated reasons, such as the decreasing importance of the land trade route in the Eastern Nile Delta and the increasing importance of the sea trade route to Lebanon in the Early Dynastic period.<sup>10</sup> The settlements situated at and benefiting from the land route since the Predynastic period lost its *raison d'être* and began to shrink in size in the 3<sup>rd</sup> millennium BC.<sup>11</sup> Moreover, the climatic changes during the 2<sup>nd</sup> Dynasty, changes in the flooding pattern and its eventual stabilisation at a lower level probably had an impact on the water network in the region and forced the local population to adjust to the new conditions. Similarly, the activity of the Nile branches may have been another contributor to the changes in the settlement pattern, at least to some extent.<sup>12</sup> However, the settlements in the area have not been fully researched and their state of preservation in some parts of the region is poor, which makes the study more difficult.<sup>13</sup>

The Old Kingdom was a time when the Egyptian polity matured after its initial stage at the end of the 4<sup>th</sup> millennium BC. At the beginning of this period, the royal power was restored by the kings of the 3<sup>rd</sup> Dynasty after the politically unstable time of the 2<sup>nd</sup> Dynasty.<sup>14</sup> Reforms undertaken by the Crown aimed to increase its presence in the provinces. Royal administration institutions were created to control rural

<sup>9</sup> Małecka-Drozd 2020: 34.

<sup>10</sup> Sowada *et al.* 2021; Mathilde, Badreshany 2023.

<sup>11</sup> Jucha 2016: 74.

<sup>12</sup> Stanley, Warne 1998; Toonen *et al.* 2015; Pennington *et al.* 2021.

<sup>13</sup> Wenke 2016b: 3; Małecka-Drozd 2020: 34-40.

<sup>14</sup> O'Connor 1989; Wilkinson 1995; 1999.



Fig. 2. The Tell el-Farkha site. General view (photo by R. Słaboński).

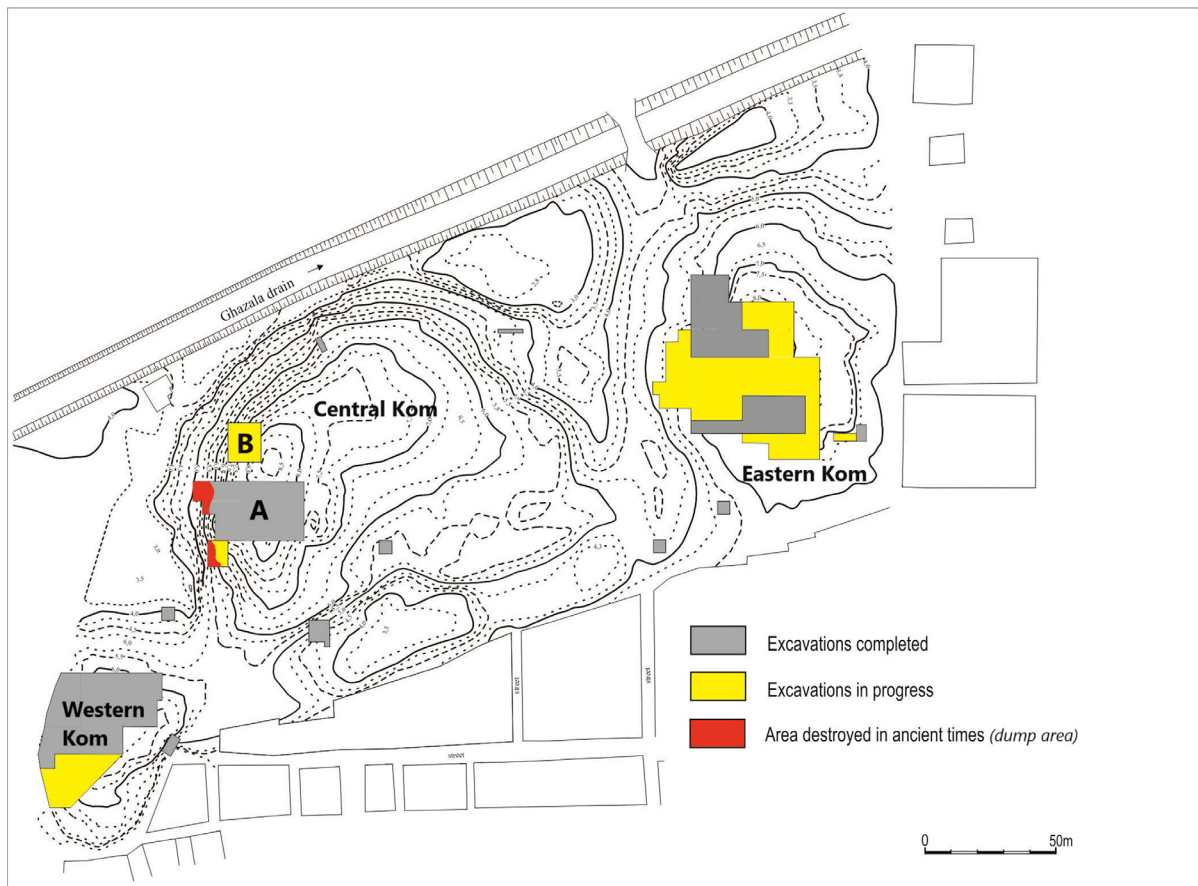


Fig. 3. Plan of the Tell el-Farkha site (prepared by M. Chłodnicki).

resources in the countryside, most notably the *ḥw.t* and the *ḥw.t-ʿ3.t* representing production centres or agricultural domains and the *šmw.t* in charge of food storage control.<sup>15</sup>

The population of Egypt increased at that time and the Delta was an attractive location given its wide open fertile area and river channels offering not only access to water but also easy movement between localities. The special attention paid by the rulers to the Memphite region had an impact on the population movement across the Delta and its concentration in that area. However, some changes in the settlement pattern are visible in other parts of the Delta as well. While the western and central parts of the region witnessed steady development since the late Early Dynastic period, the occupation in the eastern part continued to decrease during the whole Old Kingdom period. The old centres stagnated, and some of them (like Tell el-Farkha) disappeared altogether. This trend was accompanied by the emergence of new settlements in the form of estates or domains directly connected to the Crown and managed by royal officials.<sup>16</sup>

## Tell el-Farkha – a quick glance at the late Early Dynastic and early Old Kingdom occupation

The large-scale excavations at Tell el-Farkha revealed the existence of a settlement occupied continuously from the first part of the 4<sup>th</sup> millennium BC to the middle of the 3<sup>rd</sup> millennium BC. Despite the site's rapid development in the 4<sup>th</sup> millennium BC, in the second part of the 1<sup>st</sup> Dynasty it began to shrink in size. The Western Kom, where the cultic and administrative centre was located, was abandoned with the occupation continuing on the Central and Eastern Koms. Importantly, part of the Eastern Kom was continuously used as a necropolis.

The studies on the settlement revealed that structures clustered on the Western, Central, and Eastern Koms had developed gradually almost from the beginning of the site. Two of the clusters on the Central and Eastern Koms still existed in the late Early Dynastic and Old Kingdom periods (occupational phases 6 and 7). However, no organisational patterns in either of them have been identified.<sup>17</sup> It was probably the sandy gezira on which the occupation concentrated that forced people to adjust to these specific topographic and environmental conditions. Hence, the settlement was organised rather randomly.<sup>18</sup>

The youngest settlement remains on the Central and Eastern Koms consist mostly of multi-room structures of different sizes with mud-brick walls. In most cases, a central courtyard surrounded by rooms was identified.<sup>19</sup> The structure orientation was not unified and it changed occasionally, probably in line with changes in the course of the Nile (e.g. on the Eastern Kom).<sup>20</sup> The mud-brick structures were accompanied by silos, or round storage facilities with thin walls made of mud or sometimes of mud-bricks (**Fig. 4**). Most of them were 2.5-3.5 m in diameter with wall thickness ranging from 15 to 30 cm.<sup>21</sup> However, bigger structures of 5 m diameter existed as well. In the smaller silos, barley grains were found.<sup>22</sup> The bigger structures may have been used for the storage of other commodities, such as straw or tools.<sup>23</sup>

Most structures discovered on the site could be related to domestic and/or production functions. However, in the early Old Kingdom, the emergence of fully-fledged production facilities has been observed at Tell el-Farkha. On the Eastern Kom, a bread production complex was identified, consisting of two mud-brick structures.<sup>24</sup> The first one, probably rectangular in shape, has been excavated only partly (ca. 6 m x 2.8 m). It consisted of two rooms where concentration of ashes and a large number of broken bread moulds have been found. Moreover, a circular silo was attached to the northern side of the structure. Another structure was located approx. 11 metres north of the first one. It was almost square in shape (7.10 x 6.80 m). In one of its five rooms, two big vats and 4 complete bread moulds were discovered (**Fig. 5**).

<sup>15</sup> Moreno Garcia 2013; Guyot *et al.* 2019.

<sup>16</sup> Jucha 2016: 73-74; Wenke 2016b: 1; Małecka-Drozd 2020.

<sup>17</sup> Małecka-Drozd 2021: 307.

<sup>18</sup> Pawlikowski, Wasilewski 2012.

<sup>19</sup> Chłodnicki 2012c: 112.

<sup>20</sup> Małecka-Drozd 2021: 308.

<sup>21</sup> Chłodnicki 2012b: 30.

<sup>22</sup> Martens-Kubiak 2012: 431.

<sup>23</sup> Chłodnicki 2017: 54.

<sup>24</sup> Adamski, Kołodziejczyk 2014.



**Fig. 4.** The settlement structures of phase 6c on the Central Kom at Tell el-Farkha (photo by R. Słaboński).



**Fig. 5.** Breadmaking facility on the Eastern Kom at Tell el-Farkha (photo by R. Słaboński).



**Fig. 6.** The round structure (photo by R. Słaboński)

Two grinding stones, a quern, and probably remains of a hearth were identified, all in the same room. According to B. Adamski and P. Kołodziejczyk<sup>25</sup> the structure was used specifically for dough mixing. Most probably, the two structures were closely related functionally (preparing the dough and baking bread in moulds). The evidence including hearth remains, mould fragments and complete moulds, as well as the proximity of the silo and vats used for mixing the dough, indicate that the bread production process was fairly well organised.

Besides the domestic and economic buildings, a structure that may have been used by royal administration was identified on the Central Kom.<sup>26</sup> With a diameter of 7 metres, the round massive building was constructed of two adjoining mud-brick walls, each of them 0.95 m thick (Figs 6-7). Moreover, the remains of another round wall of the same thickness were identified in the vicinity. The structure was erected probably in the middle of the 1<sup>st</sup> Dynasty and was in use in the early Old Kingdom period. Furthermore, a fragment of a rectangular structure attached to the north-western part of the round building and erected probably at the same time has been identified. The more notable finds from within and around the structure include fragments of ceramic vessels and mud-brick debris. In addition, 3 graves and human bones scattered around the building have been identified. Their interpretation is still unclear as the local necropolis was situated on the Eastern Kom. However, the most interesting finds from the area in question have been found in rectangular structures attached to the north-western part of the round building. A clay stamp with hieroglyphs, four red polished dishes lying on each other (Fig. 8), and a pot were discovered in the corner of one of the rooms.<sup>27</sup> The round structure was probably a tower with several floors. Its function remains unclear, although it could be a state facility *hw.t.* or *šwn.t* serving a few functions and operating as a storage site, a work centre, a head site of an agricultural district, and a defensive centre.<sup>28</sup> The presence of human bones as well as graves could also be linked to the official function of the structure.<sup>29</sup>

<sup>25</sup> Adamski, Kołodziejczyk 2014: 67-69.

<sup>26</sup> Chłodnicki 2017: 55-58; Chłodnicki, Mączyńska 2018.

<sup>27</sup> Chłodnicki, Mączyńska 2018: 88-90.

<sup>28</sup> Małecka-Drozd 2021: 319.

<sup>29</sup> Małecka-Drozd 2021: 325.

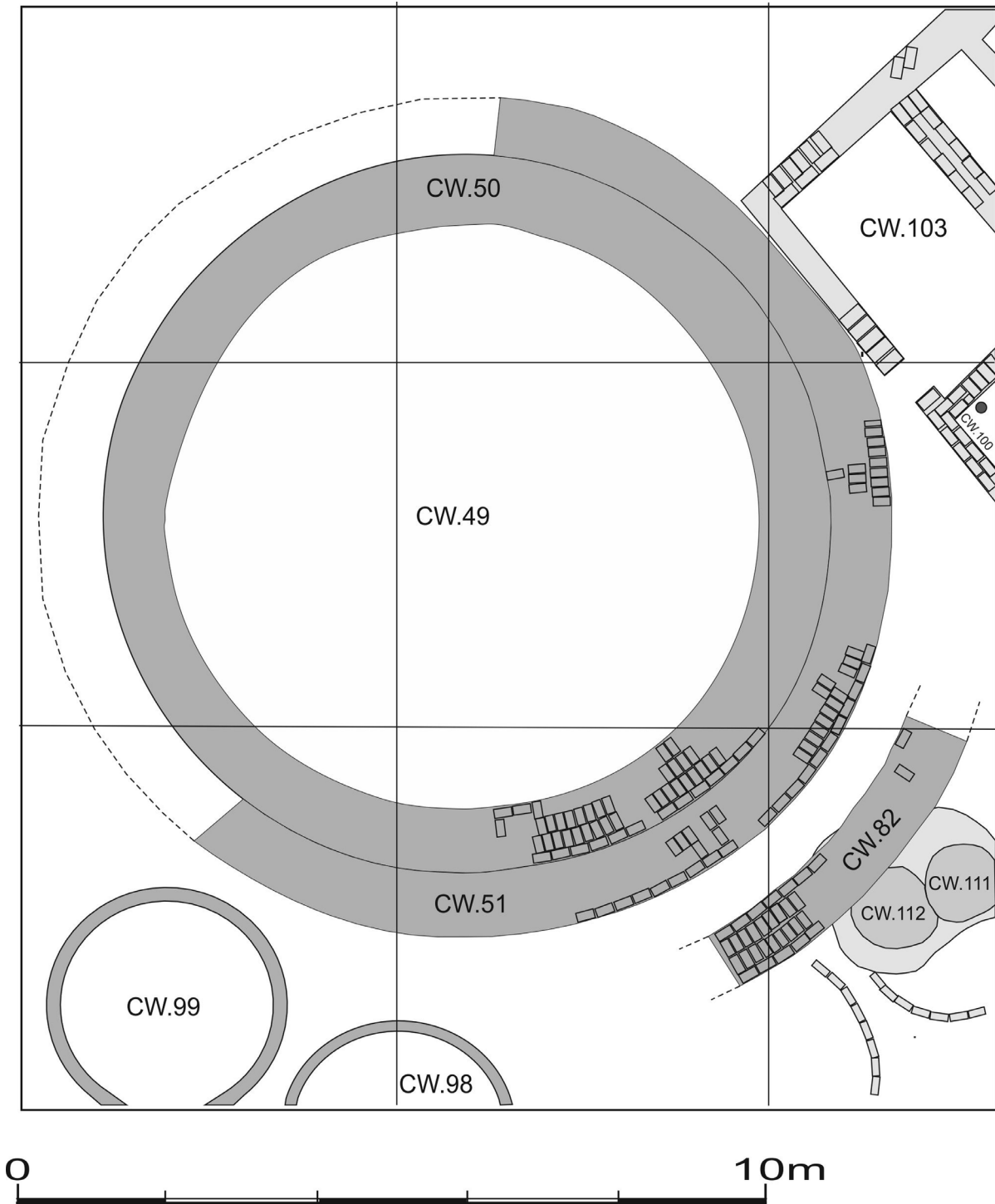


Fig. 7. Plan of the round structure and the surrounding area (prepared by M. Chłodnicki)

Since the late Predynastic period (Naqada IIIB), the inhabitants of Tell el-Farkha buried their dead in the necropolis located on the Eastern Kom.<sup>30</sup> Although undisputable evidence of the continuous occupation of the settlement exists, many of the Early Dynastic burials dated to the late 1<sup>st</sup> and early 2<sup>nd</sup> Dynasties (phase 6) were dug into older funeral structures, thus destroying them. It seems that their diggers were unaware of the older cemetery or had little respect for them. Phase 6 graves were oriented to the north, and their diversity reflects the social inequality of that period. Most of them were simple pits, either oval or roughly rectangular. In some of burials remains of mats lined the pits and/or covering the body have been identified. In one-third of all burials the bodies were placed in basket coffins.

<sup>30</sup> Dębowska-Ludwin 2012; 2018; 2023; Ciałowicz 2022.



Fig. 8. Plates found in the room attached to the round structure (photo by R. Słaboński)

The offerings were very scarce in this grave type.<sup>31</sup> Moreover, among the late Early Dynastic graves some mud-brick structures were identified. They were rectangular in shape, rather small (approx. 2 x 0.8 m), and consisted of two parts – a superstructure and a subterranean part with a burial chamber and a small offering annex. The offerings in mud-brick graves were numerous, although their quality in many cases was poor (Fig. 9a).<sup>32</sup>

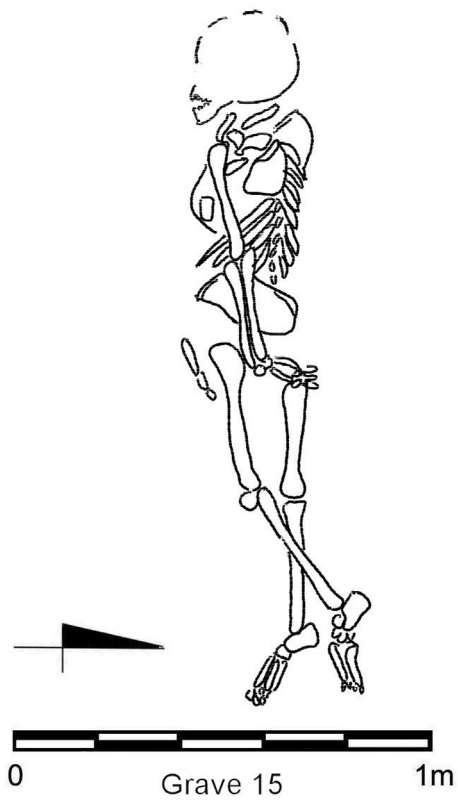
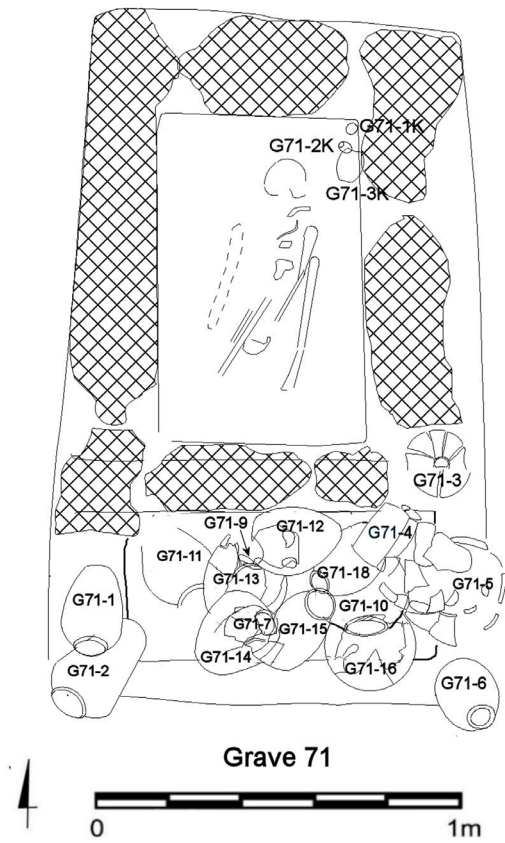
The early Old Kingdom burials (phase 7) have been identified on the very top of the Eastern Kom. They are oriented to the west and are mere simple, elongated pits (approx. 1.7 x 0.4 m) with almost no offerings. The bodies were deposited in the straight side position (Fig. 9a, 9b).<sup>33</sup> The low number of these graves (30) as well as their simple construction and poor equipment are a testimony to the final stage of the site and its decline.

To conclude, the population of the settlement in the late Early Dynastic and the early Old Kingdom was small and relied mostly on agriculture. The evidence collected so far indicates household activities typical for rural community (e.g. cereal cultivation and processing, food production). From the second half of the 1<sup>st</sup> Dynasty the settlement began to shrink, with the Western Kom abandoned and activity focused on the Central and Eastern Koms, where part of the area functioned as a necropolis. The architecture developed without a fixed plan, adapted to local topography, though the Old Kingdom saw the appearance of organized production facilities such as a bread-making complex, as well as a massive round mud-brick structure possibly linked to royal administration denoting control over the site and probably over the surrounding rural area. The Eastern Kom necropolis was in use from the late Predynastic period onward. Early Dynastic burials show growing social differentiation, while Early Old Kingdom graves were few, simple, and poorly equipped, reflecting the decline of the site.

<sup>31</sup> Dębowska-Ludwin 2012: 67; 2013: 55; 2018: 23; 2023.

<sup>32</sup> Dębowska-Ludwin 2018: 23; 2023: 129-140.

<sup>33</sup> Dębowska-Ludwin 2012: 72; 2018: 24; 2023: 140-144.



**Fig. 9.** Graves of phase 6 a 7 at Tell el-Farkha: a – grave 71; b – grave 15 (photo by R. Słaboński; drawings by J. Dębowska-Ludwin; Dębowska-Ludwin 2023)

## Late Early Dynastic and Early Old Kingdom pottery from Tell el-Farkha

The studies on the late Early Dynastic and early Old Kingdom pottery assemblages from a few locations at Tell el-Farkha have shown that all of them have one thing in common: continuation of the pottery tradition from the Protodynastic period to the early Old Kingdom. Although changes in pottery technology and typology have been observed, the late Early Dynastic and early Old Kingdom traditions cannot be seen separately as they share many common elements. The observations from Tell el-Farkha are consistent with the evidence of the early Old Kingdom pottery tradition from other sites.<sup>34</sup> According to K.A. Kytmarova<sup>35</sup>, the pottery of the 3<sup>rd</sup> Dynasty until the reign of King Snofru in the 4<sup>th</sup> Dynasty follows a much older ceramic tradition, dating back to the Protodynastic and Early Dynastic periods.

Ceramic assemblages dated to phases 6 and 7 have been collected in a few locations on the site on Eastern and Central Koms.<sup>36</sup> The largest collection of pottery comes from the Central Kom. The youngest layers have been excavated in open trenches, although the state of their preservation varies and depends on the location. The most disturbed and mixed layers were identified in the main trench on the top of the kom excavated between 1999 and 2006 (**Fig. 3 - A**).<sup>37</sup> In the trenches located on the western slope of the kom adjoining to the main trench, the layers were better preserved, but their exploration was difficult due to the presence of a big rubbish dump on the western edge of the kom, created probably during the late 1<sup>st</sup> Dynasty. The dump destroyed older occupational layers, as its filling was densely packed with mixed potsherds dated to the late Early Dynastic and early Old Kingdom. The location of the dump on the western slope of the Kom after the abandonment of the Western Kom suggests that this area marked the settlement's boundary in the last two phases of occupation.

The best-preserved layers dated to the late Early Dynastic and early Old Kingdom have been found in the trench located on the northern slope of the Central Kom, where the round administrative structure was identified (**Fig. 3 - B**). Layers 1 to 6 have been dated to phase 7 (the early Old Kingdom) and layers 7-17 to phase 6c<sup>38</sup> (end of 1<sup>st</sup> Dynasty – 2<sup>nd</sup> Dynasty)<sup>39</sup>. Nearly all potsherds collected in the trench are made of Nile clay. Only a few fragments (fewer than 1%) are made of marl clay (**Table 2**). Most potsherds (diagnostic and non-diagnostic) are made of Nile clay tempered with medium to coarse sand and a conspicuous amount of straw, up to 5mm long (NIC1-2), or with medium to coarse sand and straw, often longer than 10 mm (NIC3-4). Fine fabric tempered with fine to medium sand and fine and very fine straw occurs is much less common (NIA; NIB).

**Table 2.** Occurrences in percentages of fabrics in phases 6c and 7 at Tell el-Farkha (according to Nordström, Bourriau 1993: 168–182; Bourriau *et al.* 2000: 130-132)

Fabric	Phase 7		Phase 6c	
	non-diag	diag.	non-diag	diag.
NIC1-2	51,03	38,81	76,28	52,15
NIC3-4	38,45	24,50	15,07	19,81
NIA-B	10	36,59	8,03	27,89
Marl	0,52	0,10	0,62	0,15
TOTAL %	100	100	100	100

<sup>34</sup> see; Guyot *et al.* 2018: 84.

<sup>35</sup> Kytmarowa 2016: 265

<sup>36</sup> See e.g. Jucha 2009; 2011; Mączyńska 2009; 2019; Chłodnicki, Mączyńska 2018; Kaźmierczak, Doros 2018; 2019.

<sup>37</sup> Chłodnicki 2012c.

<sup>38</sup> In an attempt to correlate the late occupation of the Central Kom with the operation of the cemetery at the Eastern Kom, the author accepts the division of phase 6 into 3 sub-phases, as proposed by M. Jucha (Jucha 2011).

<sup>39</sup> The ceramic assemblage from the round structures was published by Chłodnicki, Mączyńska (Chłodnicki, Mączyńska 2018). The paper only discusses pottery from layers 1-17. Layers 18 to 27 dated to the 1<sup>st</sup> Dynasty (sub-phases 6a and 6b) were published by Mączyńska (Mączyńska 2019: 109-114). Ceramic assemblages from all the trenches located in the Central Kom will be published shortly.



Fig. 10. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

Table 3. Occurrences in percentages of wares in phases 6c and 7 at Tell el-Farkha (P – Red slipped ware; R1 – Rough coarse ware; R2 – Rough ware; S – Hard smoothed ware; Y – Yellow slip ware (YR – rough; YS – fine), for more details see Mączyńska 2004: 426).

Wares	Phase 7		Phase 6c	
	non-diag.	diag.	non-diag.	diag.
	n=5020	n=411	n=11051	n=979
P	5.24	32.92	4.00	25.04
R1	38.45	24.6	15.07	19.81
R2	50.8	33.62	75.96	47.47
S	4.46	3.05	4.55	2.3
YR	0.75	5.19	0.32	4.83
YS	0.3	0.62	0.1	0.55
TOTAL%	100	100	100	100

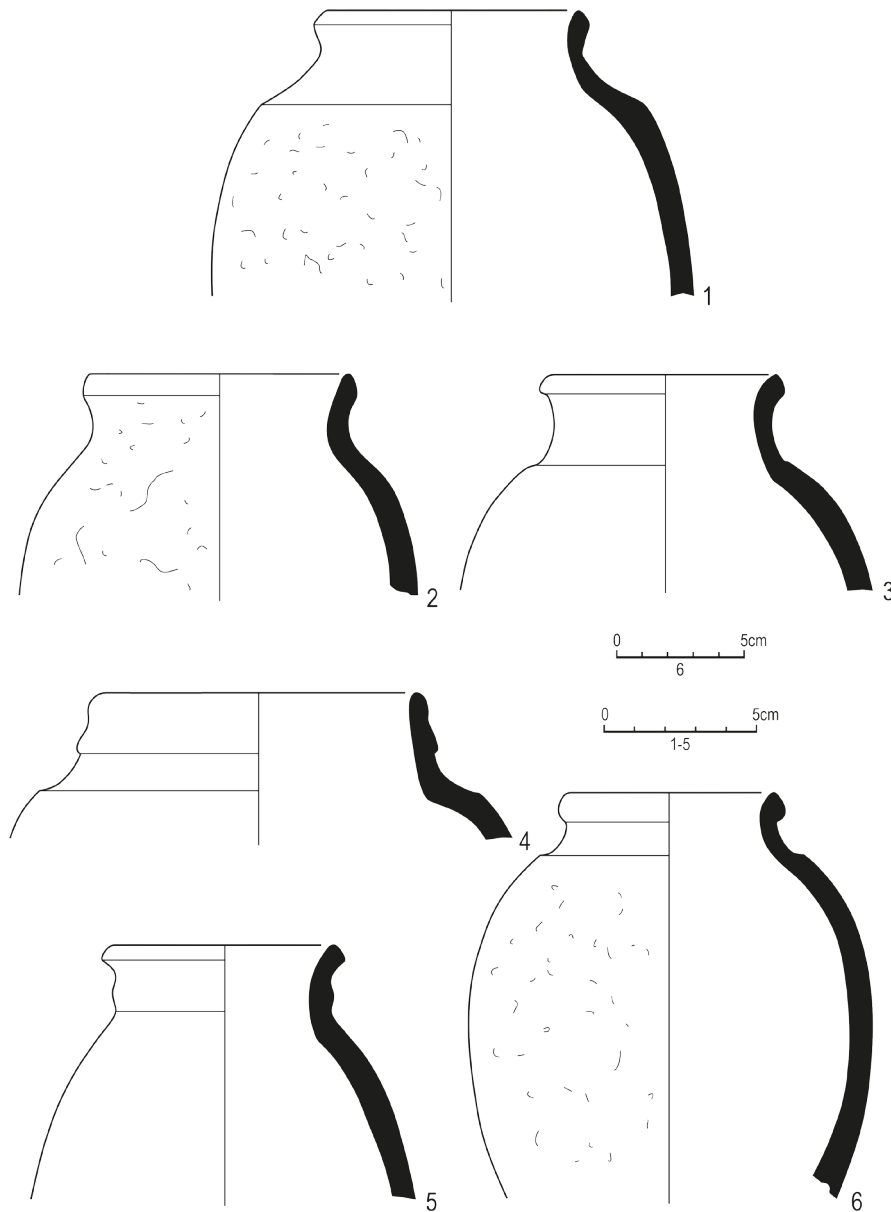


Fig. 11. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

In both phases, the most dominant ceramic class are vessels made of NIC2 with rough surface (rough ware - R2 ware), although between phases 6c and 7 they become less frequent (**Table 3**). This is accompanied by an increase in coarse rough ware (R1-ware - made mostly of NIC4). These two changes have been identified for both non-diagnostic and diagnostic potsherds and may be attributable to a few factors. The growing number of coarse rough ware in the early Old Kingdom layers is closely related to the growing number of bread mould fragments which are the most numerous group in phase 7 (31.04%) (**Table 4**). The site's decline, probably accompanied by a decrease in the number of inhabitants and users of ceramic vessels must have had an impact on the repertoire of vessel forms used on the site. However, being a staple commodity, bread was still baked. The high ratio of bread mould sherds in comparison to other vessel forms is related to their short lifetime and common breakage during the baking process.

Bread moulds found at Tell el-Farkha could be divided into two types. Broad and shallow forms with a pointed rim are typical for the Early Dynastic period, whereas narrow and deep forms are a hallmark of the early Old Kingdom. Most of them have flattened or concave rims, although some rims are thickened on the inside. Although both types have been found in phase 6c and 7 layers, the deeper forms prevail and their number increases in phase 7 when compared to phase 6c (from 18.34% to 26.15%) (**Fig. 10**). The numbers of shallow bread moulds in phases 6c and 7 are consistently below 5% (**Table 4**). Beer jars are

**Table 4.** Occurrences in percentages of vessel types in phases 6c and 7 at Tell el-Farkha.

VESSEL TYPE	PHASE 7	PHASE 6C
Bread mould (wide and shallow) (B1)	4.89	4.43
Bread moulds (narrow and deep) (B2-7)	26.15	18.34
Shallow plates (D2-D3)	6.38	9.94
Restricted bowls with pointed rim, burnished (DP4-5; E1ab; E2a)	8.83	10.02
Bowls with an interim rim (F)	1.44	0
Bowls with convex walls and a lip rim (D7b; J2)	0.29	0
Carinated bowls (K; I3)	1.15	0
Bowls with everted, pointed or angular rims (D7; D11-12; D15; D17-18)	5.75	6.28
Rough plates (D9)	0.57	1.54
Thick-walled small bowls (D1)	0.58	0
Rough conical bowls (DR4-5)	1.43	1.90
Bowls with an almost vertical walls, flaring rim and wide flat base (D6)	0.86	0.83
Spouted bowls (IS1-2)	0	0.47
Big vats (A1-2)	2.87	2.54
Storage jars (G; H; IR; ER2b)	9.48	7.81
Shouldered beer jars (L5, M6R, M4R)	18.90	27.44
Beer jars with a direct rim (L4)	1.15	0
Collared beer jars	0.29	
Jars with a ribbon rim (M4SYS; M6YS)	2.88	0
Squat jars (M2SYS)	1.14	0.83
Small jars with everted pointed rim (L1)	1.15	0.47
Jars with a lip rim, a short neck and an ovoid body (L3, M6S; M4S)	2.59	5.13
Jars with a short neck and rolled or triangular rim (M2R)	0.94	1.79
Jars with a neck and an everted rim (M7S)	0.29	0.12
Cylindrical jars (O)	0	0.12
<b>Total</b>	<b>100%</b>	<b>100%</b>

the second most numerous vessel group among phase 6c and phase 7 forms. This form appeared at Tell el-Farkha in the Predynastic period. It has been suggested that beer containers may have evolved from Petrie's jar R81/R84/L30 to the shouldered jars.<sup>40</sup> In the late Early Dynastic layers (phase 6c) only wide shouldered beer jars with a lip and in some cases with a short neck were present (Figs 11:1-3, 5-6; 12:3). Their surfaces are scraped and wavy, although some jars with only wavy surfaces have been found as well. Their relative share decreases from phase 6c to phase 7 (27.44% vs. 18.90%). In phase 7 two new types of beer jars appeared: narrow beer jars with a direct rim and a wavy surface (1.15%) (Figs 12:1-2; 17:4) and collared beer jars (only 1 rim potsherd known from the Central Kom) (Fig. 13:3; Table 4).

The second biggest group identified in the trench consists of fine bowls, usually covered with red slip and burnished. These vessels have been found only in phase 6c and are medium-sized and big closed bowls with a spout. Most of them have a rolled rim, but some vessels with simple rims occur as well (Fig. 14:5). Shallow plates with an interior covered with red slip and burnished typical for the Early Dynastic layers from phases 5 and 6ab have also been found in layers of phases 6c and 7 (9.94% and 6.38%, respectively) (Fig. 15:1-2; Table 4). Although the Early Dynastic plates are of very high quality, made of fine fabric (NIB) and with a slipped interior showing sophisticated burnishing, vessels made of coarser fabric lacking slip or burnishing appeared in Late Early Dynastic period and early Old Kingdom

<sup>40</sup> see Baba 2021; Małecka-Drozd, Kaźmierczak 2021; Wang *et al.* 2021: 9.

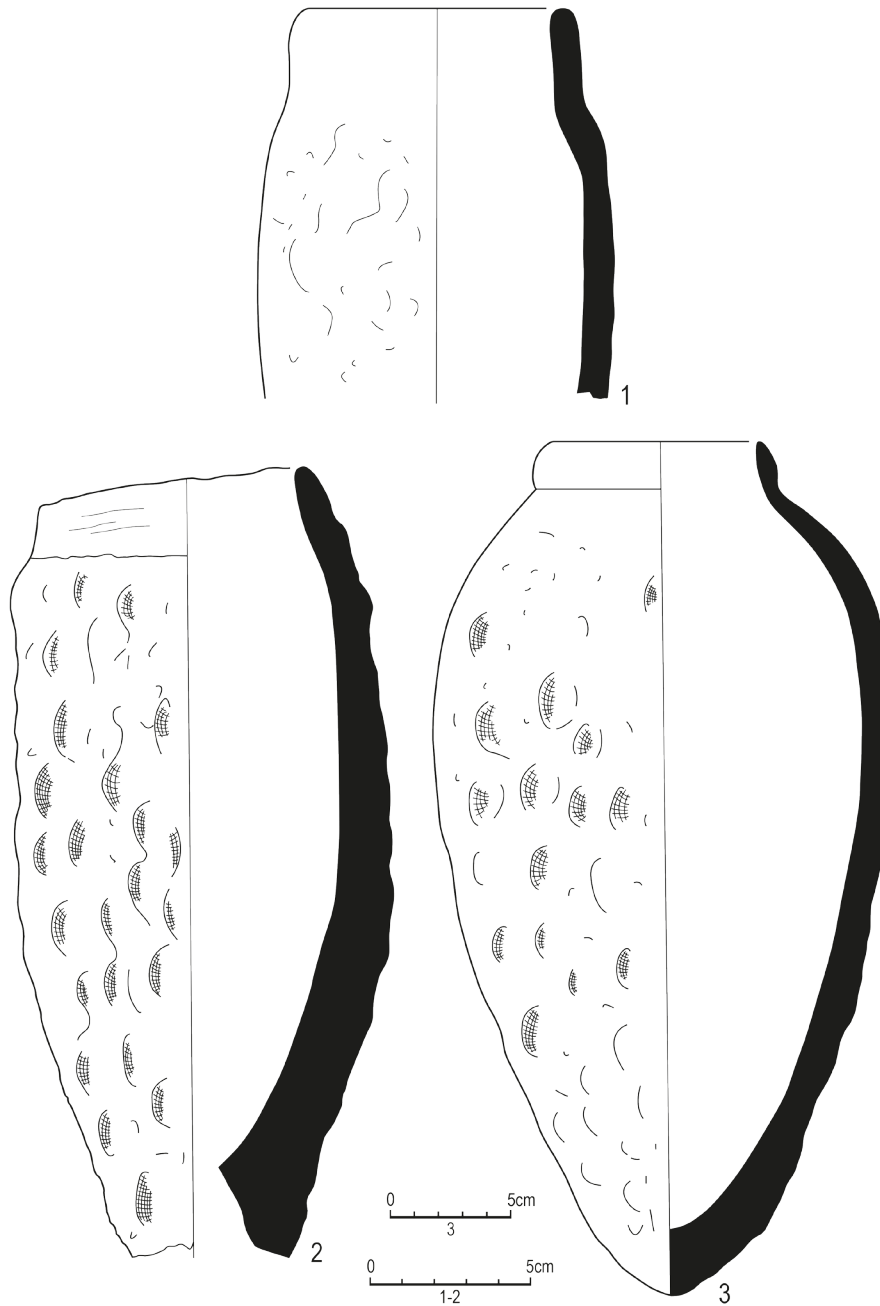
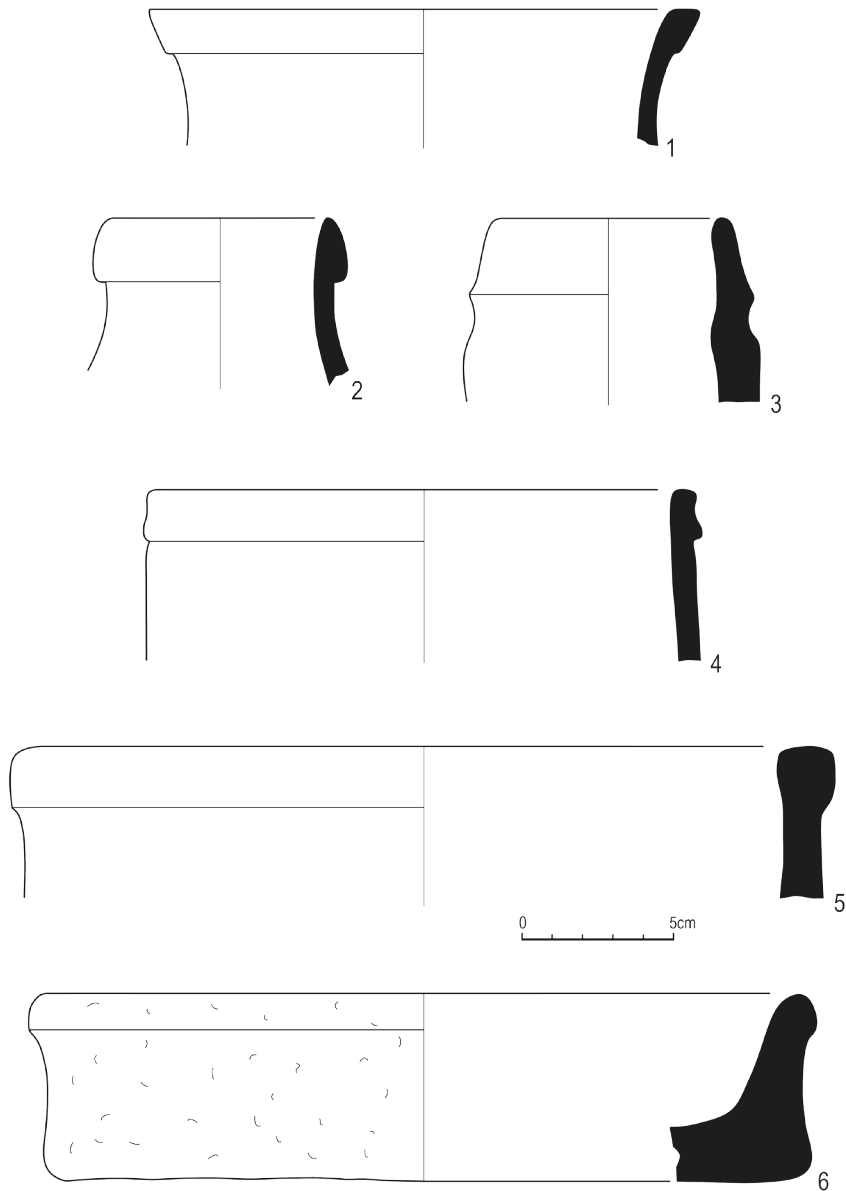


Fig. 12. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

period (in phase 6c – 2.01%; in phase 7 – 0.29%). Another open form that originated in the Early Dynastic period is a bowl with a direct rim and dense stroke burnishing, mostly horizontal in the upper part and oblique in the lower part. In phases 6c and 7 these forms are present in similar quantities (10.02% and 8.83%, respectively) (Figs 15:3; 16:1; 17:3, 5-6; 18:3; Table 4). In layers dated to the early Old Kingdom (phase 7) three new fine bowl forms appeared: a bowl with an interim rim (Figs 15:4-5; 16:3; 17:1), a carinated bowl (Fig. 19), and a burnished bowl with convex walls and a lip rim (Figs 13:1; 20:4-6). In the first group, only bowls with an interim rim located just below the vessel edge have been found on the Central Kom, accounting for approx. 1.44% of the assemblage. The carinated bowls, also known as Meidum bowls, first appeared in phase 7 (1.15%). All rim sherds belong to the A3 type in the typology proposed by Op de Beek.<sup>41</sup> They have an angular transition below the rim, the maximum diameter is at the height of the shoulder, and the body is hemispherical. The third new type of open vessel (a burnished bowl with convex walls and a lip rim) is the least numerous (0.29%) (Table 4).

<sup>41</sup> Op de Beek 2004.

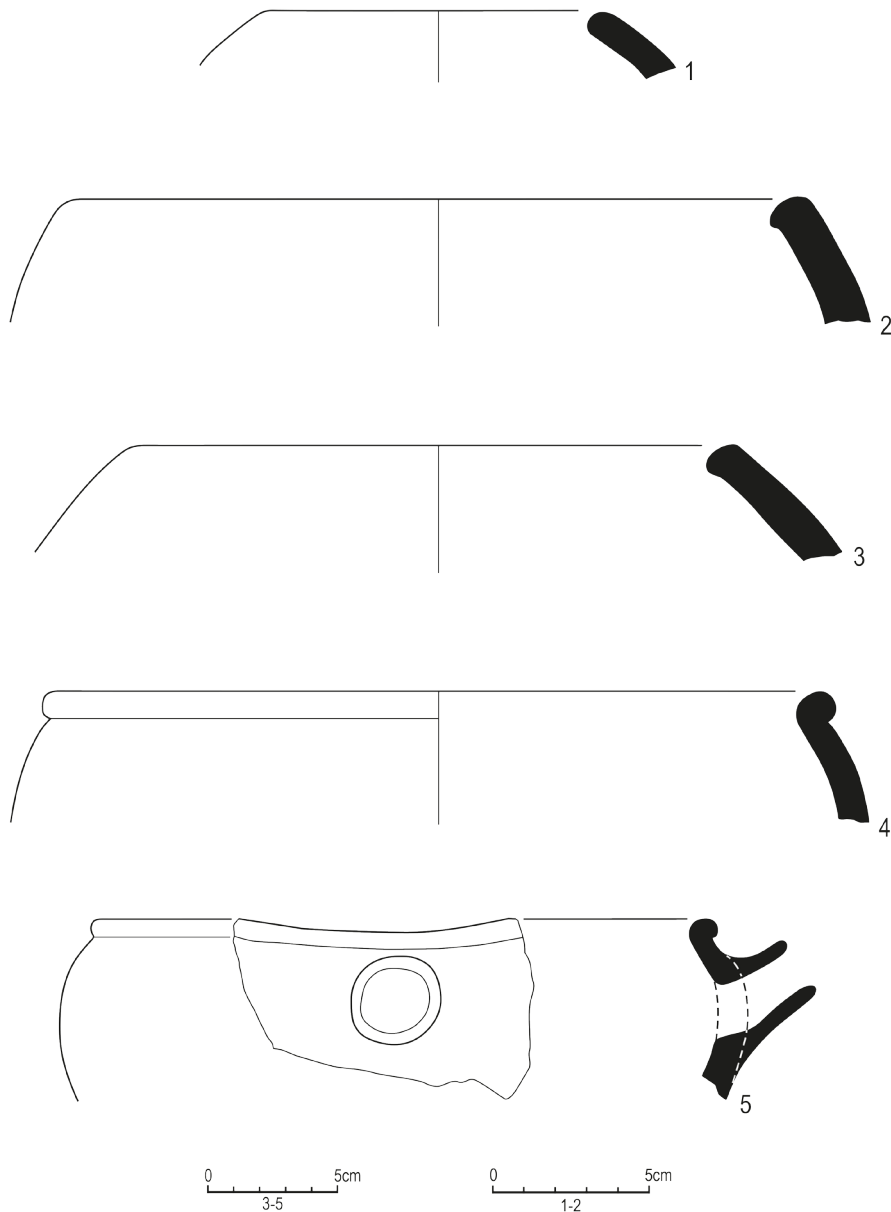


**Fig. 13.** The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

A few types of closed vessels from phases 6c and 7 have been identified: jars with a lip rim, a short neck, and an ovoid body, jars with a long neck and an everted rolled rim, small jars with an everted pointed rim, jars with a short neck and a triangular or rolled rim and squat jars with a thick (trapezoidal) rim (Figs 13:2; 21:1-3, 5, 7; 22:1, 3-6). New forms known only from the early Old Kingdom include jars with a ribbon and a rounded inner lip (2.88%) (Figs 11:4; 21:4, 6; 22:2; Table 4). Among potsherds from phase 6c, a few fragments of cylindrical jar have been identified as well.

Forms present in similar quantities in layers from phases 6c and 7 are medium-sized and large vats with a thickened rim, hole-mouth jars, and other storage jars, rough conical bowls, stands, and plates (Figs 13:4-6; 14:1-4; 16:2, 4; 17:2; 18:1-2, 4; 20:1-3). They were used in common household activities in the late Early Dynastic and early Old Kingdom periods and are rooted in the Protodynastic period.

The ceramic assemblage collected from the trench is typical for the late Early Dynastic and early Old Kingdom periods and consists of “old” forms commonly used in the Early Dynastic period (1<sup>st</sup> and whole 2<sup>nd</sup> Dynasty) and “new” vessel forms introduced during the 3<sup>rd</sup> Dynasty. The pottery tradition of the final two phases (6c and 7) of Tell el-Farkha is closely related to the tradition of the Early Dynastic period (phase 5). Continuous development of the pottery tradition on the site is well-attested.



**Fig. 14.** The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

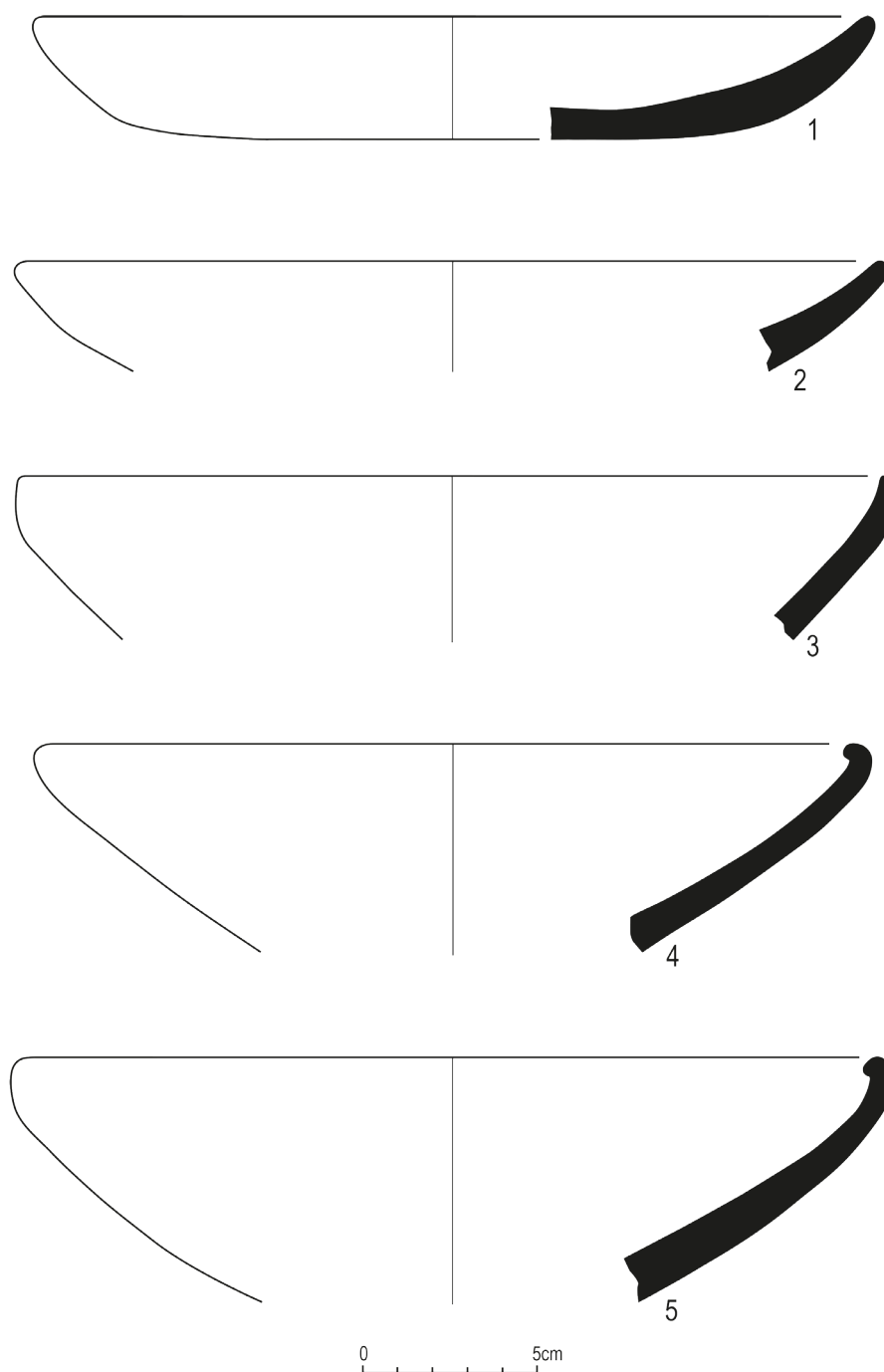
The assemblage from the trench located on the Central Kom is parallel to other assemblages found on the site (such as those from the settlement and the necropolis on the Eastern Kom) dated to phases 6 and 7.<sup>42</sup>

### Comparative analyses of the late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha and other sites

The late Early Dynastic and early Old Kingdom assemblage from Tell el-Farkha shares many features with assemblages from other sites dated to the same period (e.g. Buto, Mendes, Kom el-Hisn).<sup>43</sup> However, the greatest potential for comparative analyses is offered by two sites located in the Eastern Nile Delta: Tell el-Murra and Tell el-Neshed (**Fig. 1**). The remains of occupation in the late Early Dynastic and early Old

<sup>42</sup> See e.g. Jucha 2009; 2011; Mączyńska 2009; Rozwadowski 2010; Kaźmierczak, Doros 2018; 2019.

<sup>43</sup> Cagle 2003: 113-118; Adams 2007; Hartung *et al.* 2012: 98-109; Wenke 2016a: 255-262; Kroeper 2016: 263-293; Wodzińska 2016: 295-301; Hartmann 2017.

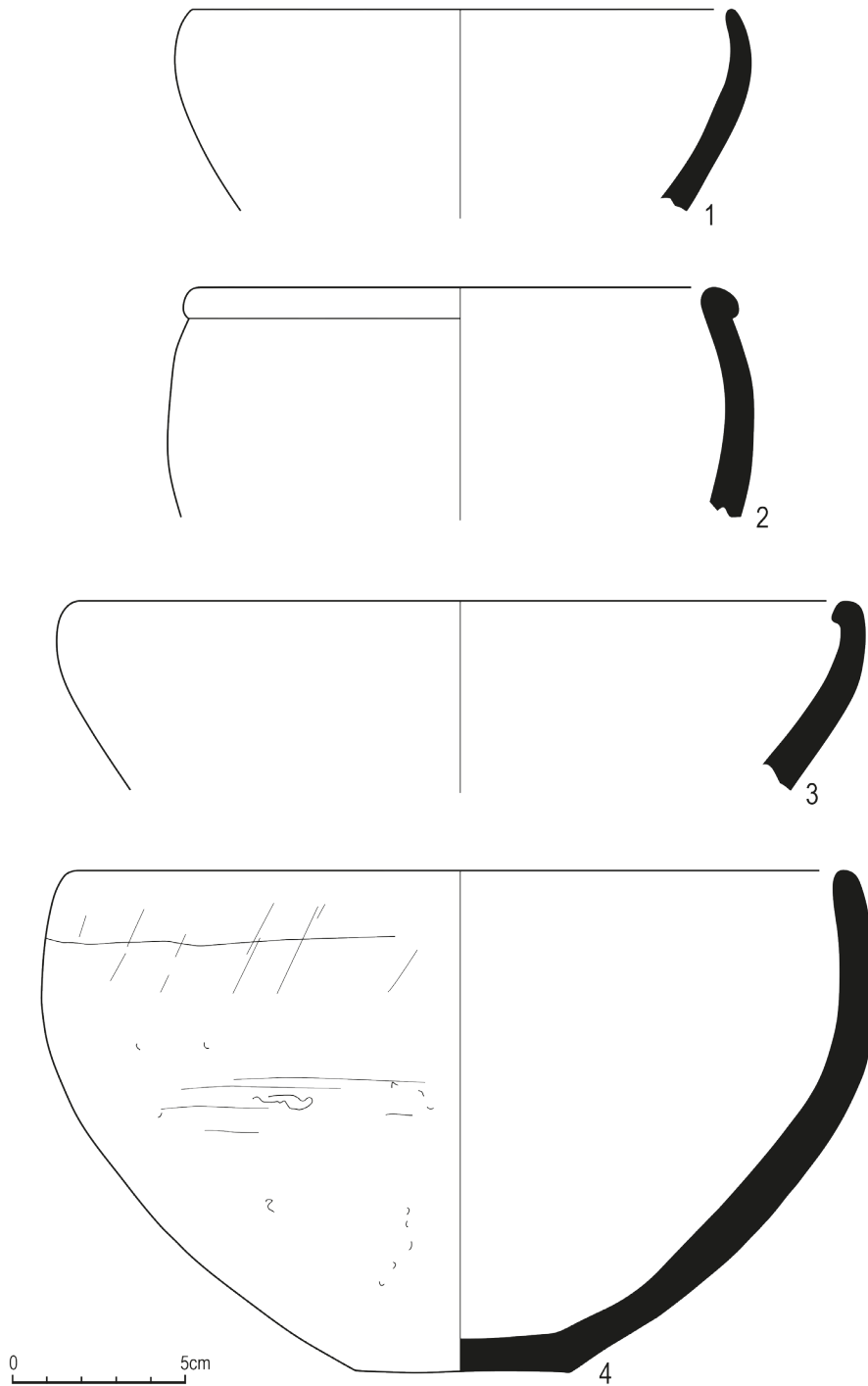


**Fig. 15.** The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

Kingdom have been identified on both of them and they are located in the vicinity of Tell el-Farkha. Tell el-Murra is located in the Sharqia province, only 10 km away in a straight line from Tell el-Farkha. Since 2008, the site has been explored by Polish archaeologists from the Jagiellonian University in Kraków. The settlement was occupied from the middle of the 4<sup>th</sup> millennium BC to the 6<sup>th</sup> Dynasty, when it was abandoned.<sup>44</sup> Tell el-Nashed is also located in the Sharqia province, 7.6 km to the northeast of Tell el-Mura and some 20 km away in a straight line from Tell el-Farkha. In 2015 and 2016 Tell el-Nashed was excavated by researchers from the French Institute of Oriental Archaeology (IFAO).<sup>45</sup> The explorations have confirmed that the site was occupied since the transition from the 2<sup>nd</sup> and 3<sup>rd</sup> Dynasty to the 4<sup>th</sup> Dynasty.

<sup>44</sup> Jucha, Bąk-Pryc 2017; Małecka-Drozd 2018: 419; Małecka-Drozd, Kaźmierczak 2018.

<sup>45</sup> Guyot *et al.* 2018; 2019.



**Fig. 16.** The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

A few differences are visible in the status of these 3 sites. The decline of the Tell el-Farkha must have started in the second part of the 1<sup>st</sup> Dynasty, when it began to shrink in size and gradually lost its importance in the Eastern Nile Delta settlement pattern. Although Tell el-Murra also shrank in size in the early Old Kingdom, it continued until the end of the 3<sup>rd</sup> millennium BC (the 6<sup>th</sup> Dynasty). During the 3<sup>rd</sup> and 4<sup>th</sup> Dynasty, when Tell el-Farkha was abandoned, Tell el-Murra probably continued as a rural community specialising in crops storage and processing, operating as part of the royal economy system.<sup>46</sup> A similar path was followed by the settlement at Tell el-Neshed. According to F. Guyot,<sup>47</sup> the site was not founded in the early Old Kingdom period, although its earlier beginning needs to be confirmed during

<sup>46</sup> Małecka-Drozd 2018: 431-432.

<sup>47</sup> Guyot *et al.* 2019.

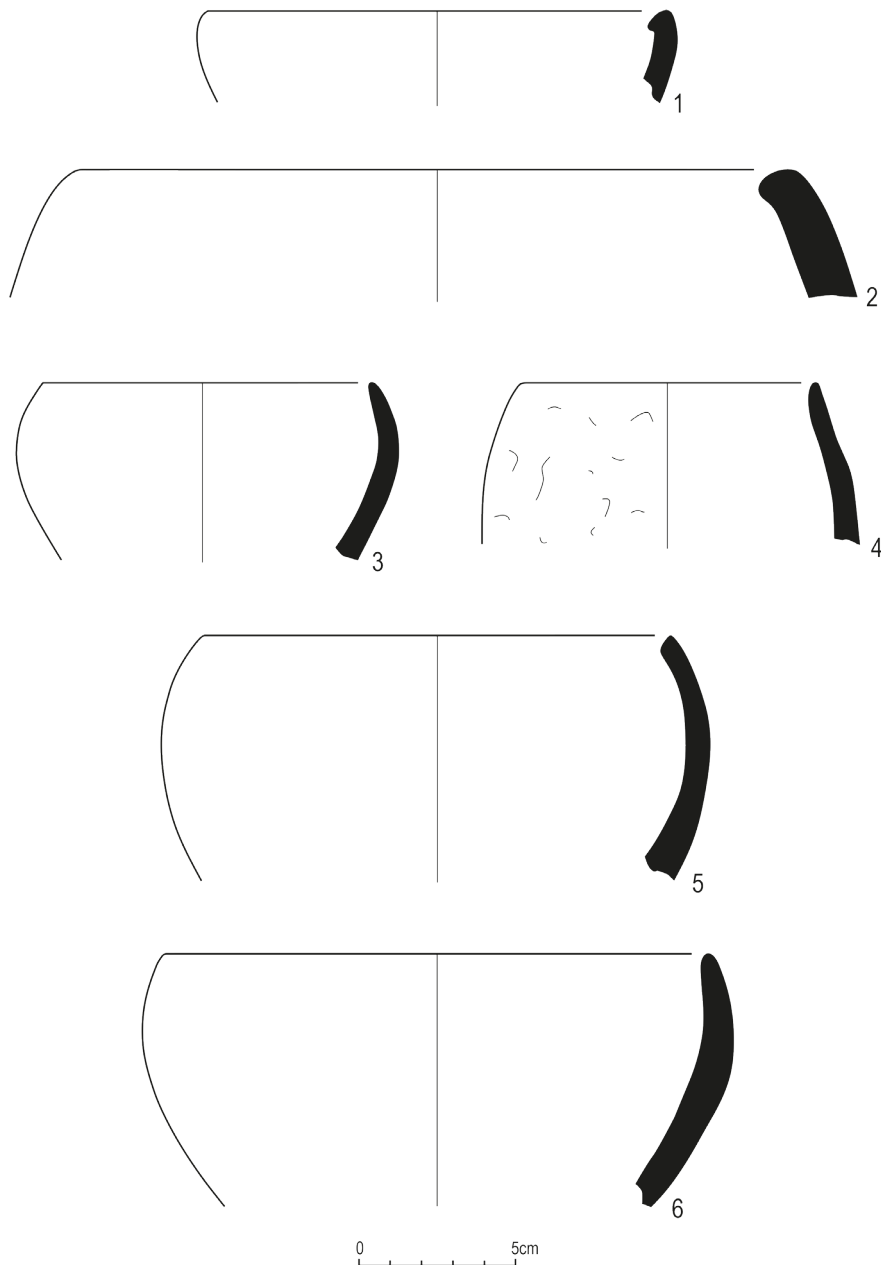


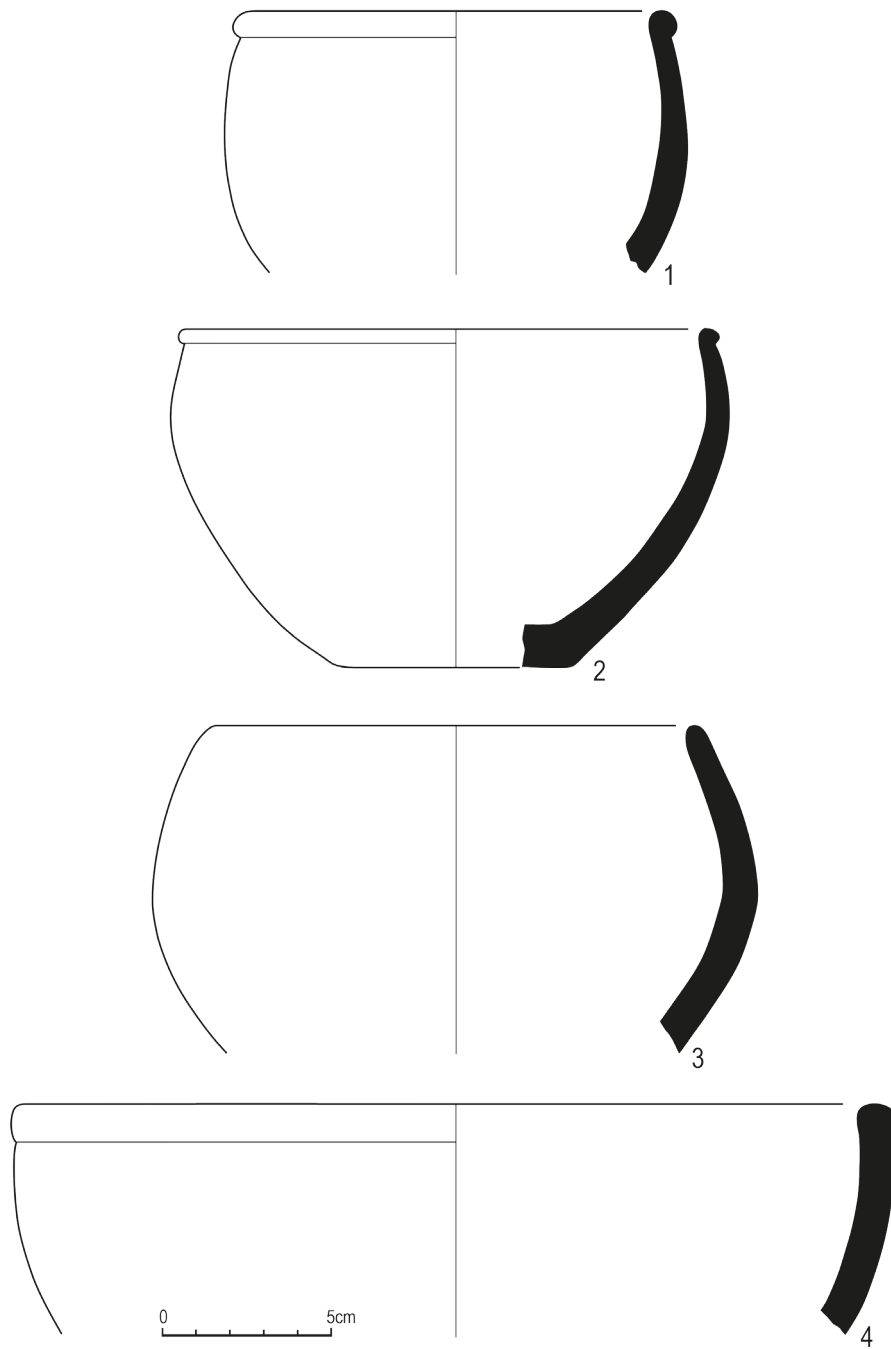
Fig. 17. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

further works. The rural community from Tell el-Neshed could also operate under the royal administration. Although the settlement was not a royal institution, it may have been attached to a *ḥw.t*(-*ʿ3.t*) or a *grg.t* during the 3<sup>rd</sup> or the 4<sup>th</sup> Dynasty.<sup>48</sup> Tell el-Neshed, Tell el-Murra, and Tell e-Farkha share many features in architecture and installations as well as in the archaeological assemblages. Hence, they may have enjoyed a similar economic status from the Crown's perspective. That said, the most significant fact in this context is that Tell el-Farkha and Tell el-Neshed were abandoned in the early Old Kingdom period, while Tell el-Murra was still occupied until the 6<sup>th</sup> Dynasty and the end of the Old Kingdom period.

The Tell el-Murra ceramic assemblages dated to the late Early Dynastic and early Old Kingdom periods are parallel to those collected at Tell el-Farkha. A large group of vessels are bread moulds with an angular transition and flattened or rounded rims. However, the shallow and wide forms are accompanied by deeper and narrower vessels. In most forms, the internal part of the rim is thickened.<sup>49</sup> Quite common among ceramic vessels are beer jars, also known as Tell el-Farkha broad-shouldered jars with a lip rim,

<sup>48</sup> Guyot *et al.* 2019.

<sup>49</sup> Kaźmierczak 2016: 123-127; Małecka-Drozd, Kaźmierczak 2018b: 64; Jucha 2019.



**Fig. 18.** The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

as well as narrower vessels with a direct rim. Beer jars with a collar have also been found.<sup>50</sup> Broad and narrow-shouldered beer jars are also common among grave offerings in burials dated to the second part of the 1<sup>st</sup> and 2<sup>nd</sup> Dynasties.<sup>51</sup>

Another major group of Tell el-Murra vessels are bowls, plates, and trays. Some of them are similar to those collected at Tell el-Farkha: shallow plates with a burnished interior covered with red slip, red polished bowls with convex walls and a pointed rim or a lip-rim, red polished bowls with an inner rim, and spouted bowls. Meidum bowls from the early Old Kingdom layers are represented by three types: Op de Beeck's type A3 with the maximum diameter at the height of the shoulder and a well-developed neck (these have also been found at Tell el-Farkha<sup>52</sup>); Op de Beeck's type B1 with the same diameter at the

<sup>50</sup> Kaźmierczak 2016: 123-127; Małecka-Drozd, Kaźmierczak 2018b: 64.

<sup>51</sup> Kaźmierczak 2016; 2021: 195.

<sup>52</sup> Jucha 2011; Kaźmierczak, Doros 2018.

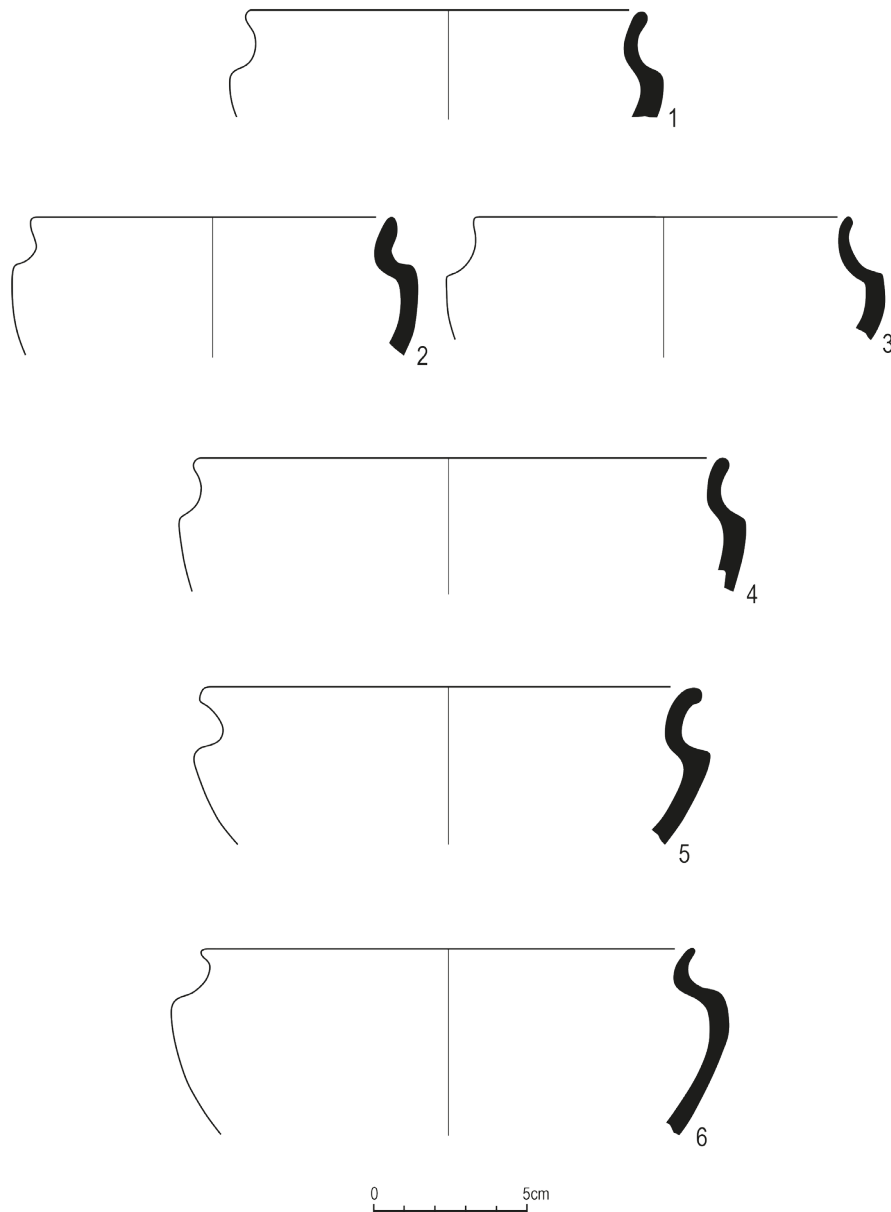


Fig. 19. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

rim and the shoulder; and Op de Beeck's type B3b with the maximum diameter at the rounded shoulder. No traces of the latter two types have been found in the northern trench on the Central Kom.<sup>53</sup>

At Tell el-Murra as well as at Tell el-Farkha large vats were probably used for mixing bread dough. Shallow rough trays with a flat base and a low stand are present. One vessel form which has not been found at Tell el-Farkha is a rough bowl with an internal mid-height rim.

According to M. Kaźmierczak<sup>54</sup>, the pottery found at Tell el-Mura represents a typical early Old Kingdom period assemblage, especially common during the 3<sup>rd</sup> and 4<sup>th</sup> Dynasty. It includes forms used in the Early Dynastic period and new vessel forms that emerged at that time. As the site occupation continued until the 6<sup>th</sup> Dynasty, some changes in younger layers have been observed. The number of potsherds originating from Meidum bowls, collared jars as well as bowls with an interim rim decreased. No such potsherds have been identified in the late Old Kingdom layers.

Some parallels are also visible between the ceramic assemblages from Tell el-Farkha and Tell el-Nashed. Bread mould fragments account for almost a half of the assemblage collected at Tell el-Nashed. In the layers dated to the 3<sup>rd</sup> and the beginning of the 4<sup>th</sup> Dynasty, the two types (broad and shallow forms

<sup>53</sup> Op de Beeck 2004; Kaźmierczak 2014: 123; 2014b.

<sup>54</sup> Kaźmierczak 2014: 127.

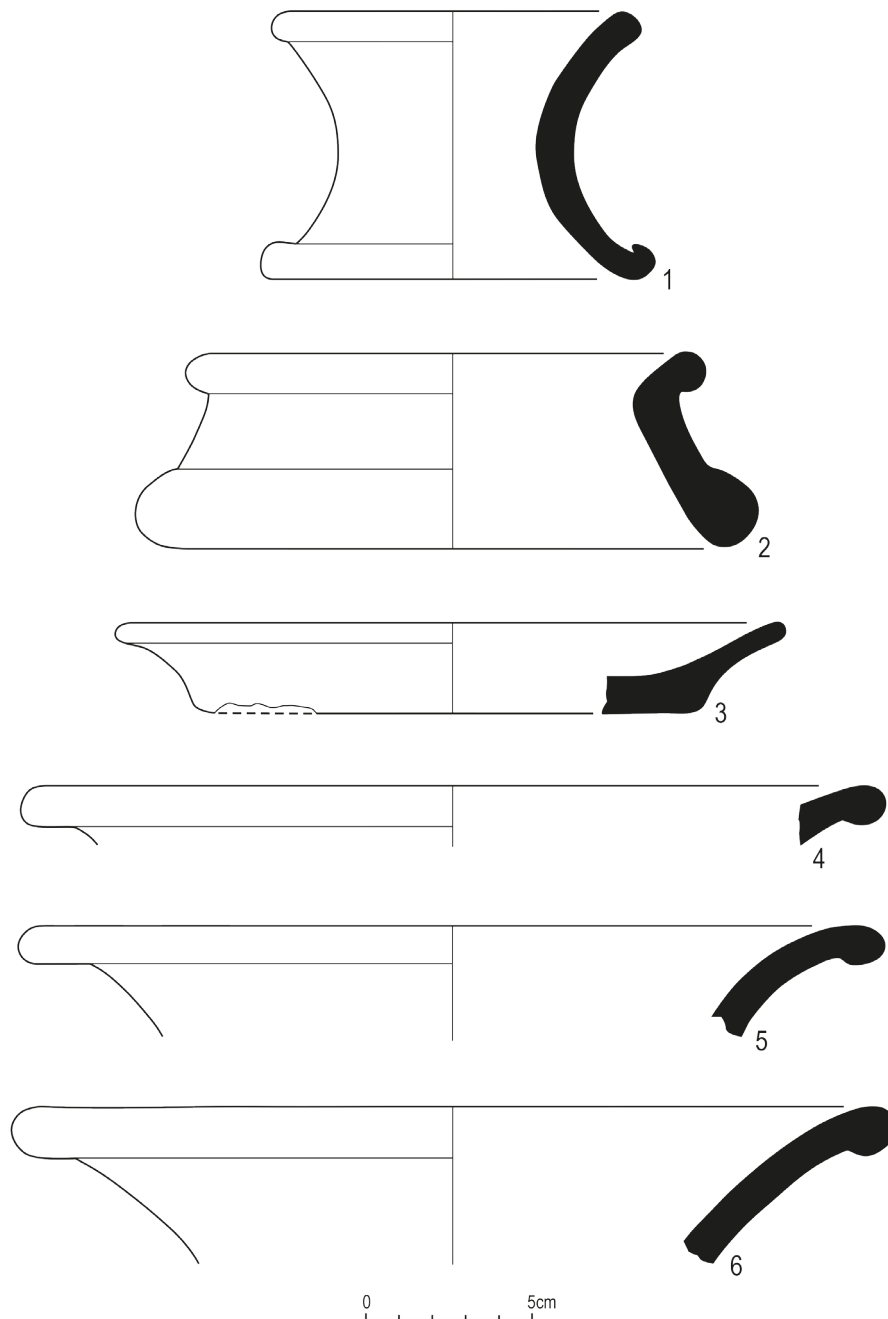


Fig. 20. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

as well as deeper and narrower moulds) have been identified, although the former are absent from Level 1 dated to the 4<sup>th</sup> Dynasty.<sup>55</sup> At Tell el-Farkha, the shallower forms are present in similar numbers (approx. 5%). Moreover, rough bread trays with a flat base appeared during the transition between the 3<sup>rd</sup> and 4<sup>th</sup> Dynasties.

While the repertoire of beer jars from Tell el-Nashed is similar to that from Tell el-Farkha, some quantitative differences have been identified. The three types known from Tell el-Farkha (broad-shouldered jars with an ovoid body and a lip rim; narrow jars with a direct rim; jars with a collar) have been found at Tell el-Nashed. Although the first type is the most numerous in Level 1 dated to the beginning of the 4<sup>th</sup> Dynasty (20.45%)<sup>56</sup> and Level 2 dated to the 3<sup>rd</sup> Dynasty (27.5%), its relative share gradually decreases in the early Old Kingdom period, which is fairly in line with the findings from Tell el-Farkha. The beer jars with a direct rim are less numerous at Tell el-Nashed than at Tell el-Farkha (Level 1 – 8.1%;

<sup>55</sup> Guyot *et al.* 2018: 92-93)

<sup>56</sup> Of all the diagnostic fragments of jars (Guyot *et al.* 2018: Fig. 4)

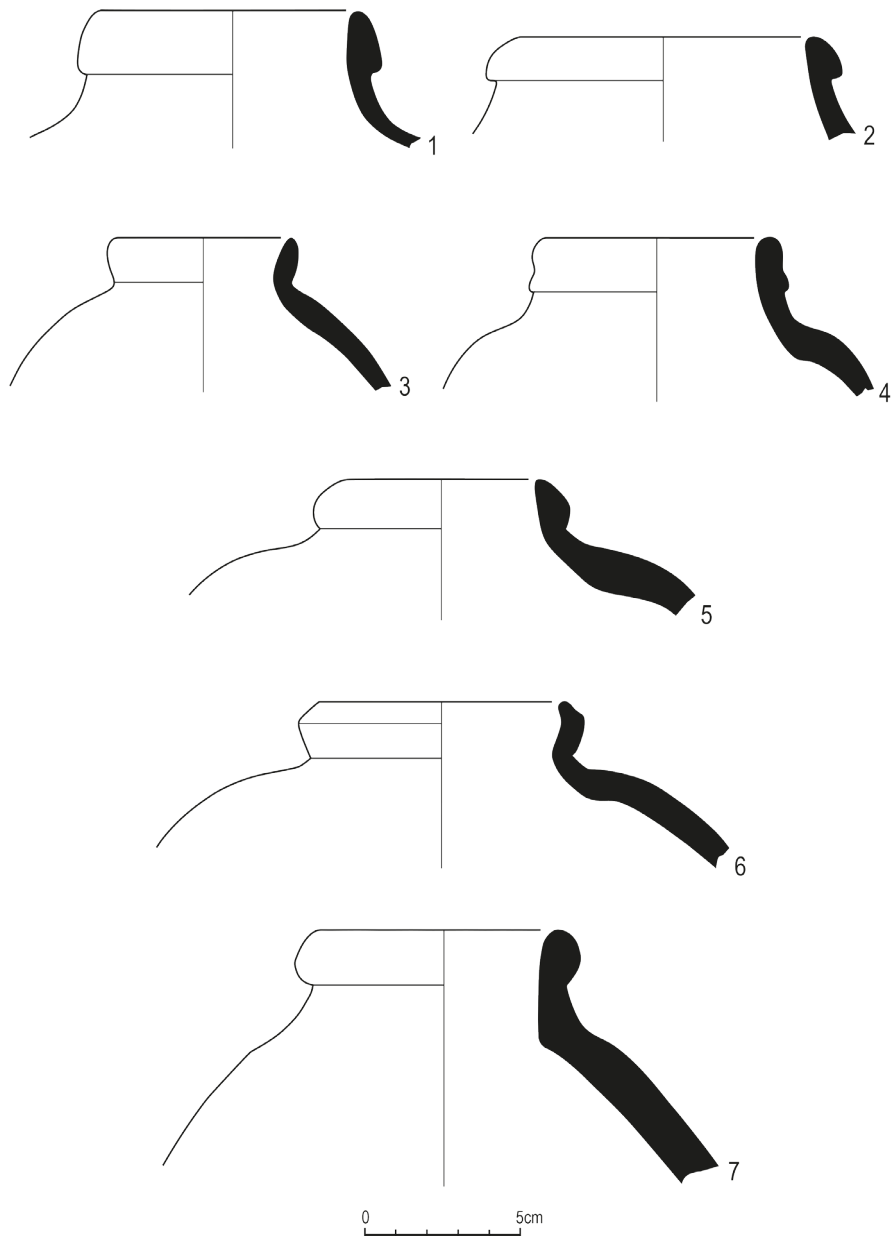


Fig. 21. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

Level 2 – 10%), but also this vessel form had gradually become less common. Only 11 collared beer jar potsherds have been identified in Level 1 dated to the 4<sup>th</sup> Dynasty (2.6%), and only one at Tell el-Farkha (**Table 4; Fig. 13:3**).

Both sites show also similarities in terms of fine pottery groups. The burnished shallow plates covered with red slip originated in the older Early Dynastic tradition are present. At Tell el-Neshed a tendency for using coarser fabric has been noted. Also, the finishing quality had been gradually compromised, with a large percentage of these vessels being unburnished and made of coarser fabric. At Tell el-Farkha coarser plates appeared in phases 7 and 6c, although good quality red burnished vessels were still numerous. Among bowls with burnished surface covered with red slip, vessels with an interim rim, restricted bowls with a pointed rim, bowls with convex walls and a lip rim, vessels with convex walls and a pointed rim, and bowls with an everted, direct or angular rim have been found. The first three types are typical for the early Old Kingdom, while the last two are known from Early Dynastic sites as well. All of them are present also at Tell el-Farkha. Importantly, unlike in Tell el-Neshed not a single fragment of a bowl with an interim rim in the lower part of the wall has been found in Tell el-Farkha.

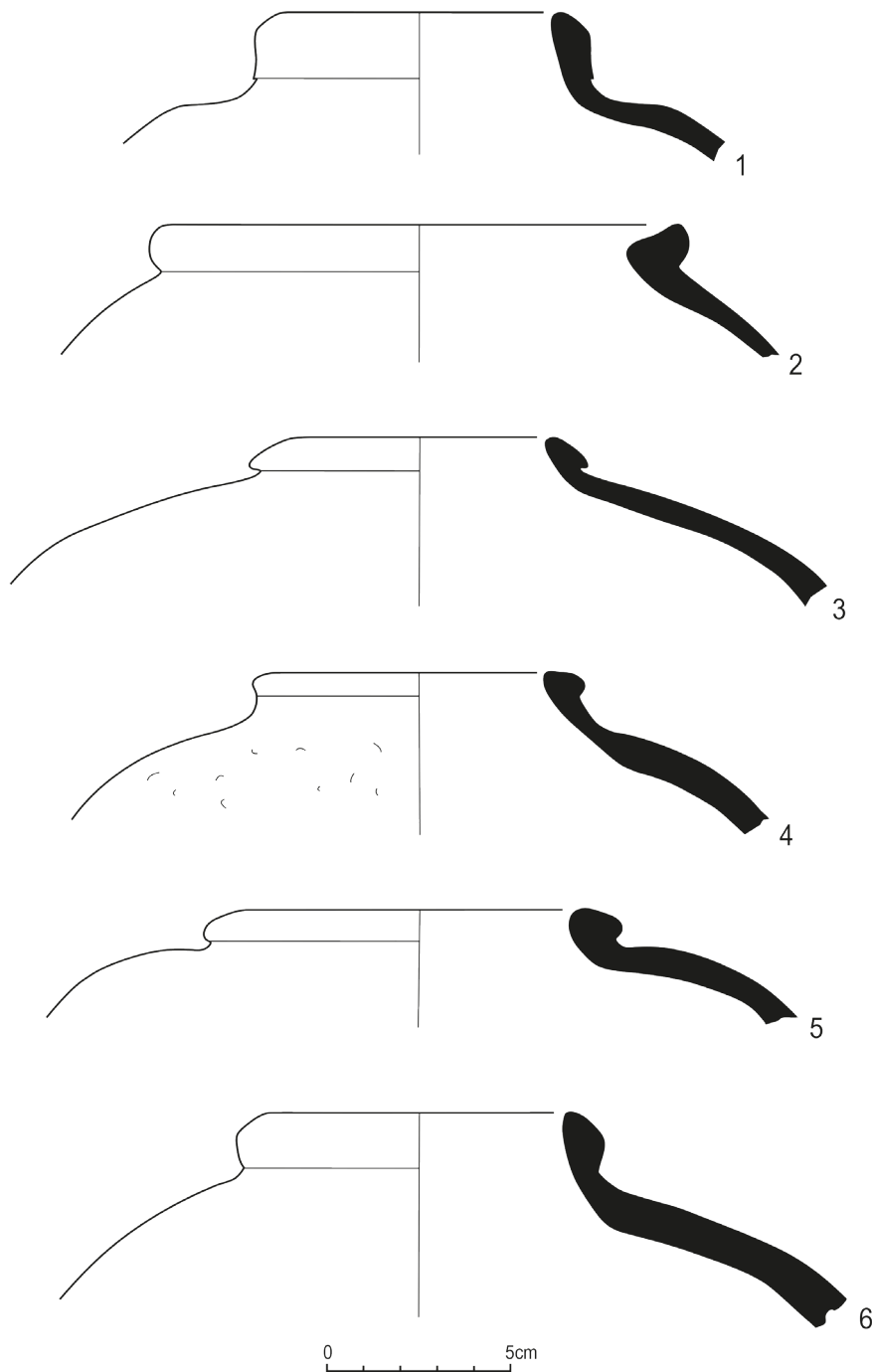


Fig. 22. The late Early Dynastic and early Old Kingdom pottery from Tell el-Farkha (drawings by A. Mączyńska, prepared by J. Kędelska).

Studies on the ceramic assemblage from Tell el-Nashed also showed a correlation between two fine forms: (1) restricted bowls with a pointed rim covered with slip and burnished horizontally under the rim and oblique on the lower part of the body; and (2) Meidum bowls. Carinated bowls found on the site represent an early type with an angular transition below the rim and the maximum diameter at the shoulder (Op de Beeck's type A3). Although they are quite rare in Level 2 (0.9%), in Level 1 they account for approx 3.6% of all open forms. According to F. Guyot<sup>57</sup> their growing share between the levels is accompanied by a decrease in restricted bowls with a pointed rim. This makes the Tell el-Nashed different from Tell el-Farkha, where Meidum bowls are only present in phase 7 dated to the early Old Kingdom (1.15%) (Table 4). Moreover, the percentage of burnished restricted bowls in phases 6c and 7 is very similar and decreases only slightly.

<sup>57</sup> Guyot *et al.* 2018: 89.

The repertoire of the storage jars from Tell el-Nashed is similar to that from Tell el-Farkha. On both sites ovoid jars with a short neck and a triangular or rolled rim and jars with an everted rim which originated in the Early Dynastic are present. Similarly, jars with a large ribbon rim and a rounded inner rim and jars with a squat profile and a thick trapezoidal rim are also known from both localities. These two forms are typical for the early Old Kingdom (3<sup>rd</sup> and 4<sup>th</sup> Dynasties). While at Tell el-Nashed they occurred only in Level 1, at Tell el-Farkha the former has been found only in phase 7 layers and the latter (which probably evolved from typical 2<sup>nd</sup> Dynasty forms) has been identified in both phases (6c and 7, corresponding to the late Early Dynastic and early Old Kingdom periods).

At Tell el-Nashed a diverse repertoire of medium-sized and large storage vessels (hole-mouth jars and vats) has been found as well. These forms are linked to the Early Dynastic or even Predynastic pottery tradition. Since they were commonly used in households, they are also present in large numbers at Tell el-Farkha.

### The decline of Tell el-Farkha – some thoughts inspired by ceramic assemblages

The ceramic assemblages from three adjacent sites in the Eastern Nile Delta (Tell el-Farkha, Tell el-Murra, and Tell el-Nashed) are dated to the same period: the early Old Kingdom. Although for Tell el-Nashed the occupation in the late Early Dynastic period has been suggested, no data has been published so far to confirm this claim. Tell el-Farkha and Tell el-Murra were continuously occupied in the Early Dynastic and early Old Kingdom periods. In all three assemblages, a strong relationship of the early Old Kingdom pottery tradition with the older Early Dynastic or even Predynastic pottery traditions is well visible.

Although the three sites were occupied simultaneously, certain differences in their assemblages may give us some clues as to the fate of Tell el-Farkha. It has been suggested that end of the settlement came during the 3<sup>rd</sup> Dynasty or in the beginning of the 4<sup>th</sup> Dynasty. M. Jucha<sup>58</sup> went even further claiming that the occupation of the Eastern Kom may have ended in the beginning of the 3<sup>rd</sup> Dynasty. However, more recent fieldwork has yielded materials typical for the 3<sup>rd</sup> and 4<sup>th</sup> Dynasties on the site.<sup>59</sup> In the case of the Central Kom, the end of the 3<sup>rd</sup> and the beginning of the 4<sup>th</sup> Dynasty have been suggested as the final phase of occupation. Tell el-Nashed was abandoned during the early 4<sup>th</sup> Dynasty, while Tell el-Murra operated till the 6<sup>th</sup> Dynasty.<sup>60</sup>

Meidum bowls are an important chronological marker. At Tell el-Farkha they first appeared in the last occupational phase dated to the early Old Kingdom. Early carinated bowls of the same type (A3) are present at Tell el-Nashed and Tell el-Murra. However, on the latter site, other types of Meidum bowls have been identified. Their presence resonates well with the longer occupation of the site. Although some of those (types B1 and B3) could occur in the early Old Kingdom assemblages, they are quite typical for the 4<sup>th</sup> Dynasty and were probably introduced only after Tell el-Farkha and Tell el-Nashed had been abandoned.<sup>61</sup> The correlation between the carinated bowls and restricted burnished bowls and the growing number of Meidum bowls accompanied by phasing out of restricted bowls between the 3<sup>rd</sup> and the 4<sup>th</sup> Dynasty observed at Tell el-Nashed has not been fully confirmed at Tell el-Farkha. The percentage of carinated bowls on the site is lower than at Tell el-Nashed Level 1 and the prevalence of restricted bowls in phases 6c and 7 is comparable, with only a very slight decrease (just above 1%). Meidum bowls appeared at Tell el-Farkha probably during the 3<sup>rd</sup> Dynasty, but were rather uncommon, as restricted bowls were still far more numerous at that time. The small decrease in this bowl form may mark the initial stage of a process that was more advanced and more visible at Tell el-Nashed due to its longer occupation.

At Tell el-Farkha, bowls with an interim rim in the upper part of the walls are present, while those with flaring walls and an interim rim down on the walls have not been found. This could also indicate that the site was abandoned before the latter type first appeared at the beginning of the 4<sup>th</sup> Dynasty. As both forms are present at Tell el-Nashed, Tell el-Farkha must have come to an end earlier than Tell el-Nashed did.

<sup>58</sup> Jucha 2011: 970.

<sup>59</sup> Kaźmierczak, Doros 2018: 131.

<sup>60</sup> Guyot *et al.* 2018: 83; 2019.

<sup>61</sup> Kaźmierczak 2016.

Another important chronological indication is offered by beer jars. Those with a direct rim appeared in the 2<sup>nd</sup> Dynasty, reaching their peak in the 3<sup>rd</sup> Dynasty and during the transition between the 3<sup>rd</sup> and 4<sup>th</sup> Dynasty. Collared beer jars are linked to the 2<sup>nd</sup> Dynasty as well. They disappeared some time during the 4<sup>th</sup> Dynasty. The low percentage of the first type and only a single sherd of the second type at Tell el-Farkha indicate that both beer jar types were uncommon there even during the 3<sup>rd</sup> Dynasty, when there were popular at the other localities (e.g. at Tell e-Murra).

The early Old Kingdom chronology of Tell el-Farkha could be confirmed by yet another vessel type: jars with a squat profile and a thick trapezoidal rim and jars with a ribbon rim and a rounded inner rim, typical for the late 3<sup>rd</sup> and the early 4<sup>th</sup> Dynasty.

To conclude, the ceramic assemblage from Tell el-Farkha indicates that the site was occupied during the 3<sup>rd</sup> Dynasty. Unfortunately, the data collected in the northern trench on the Central Kom is insufficient to confirm its occupation in the 4<sup>th</sup> Dynasty. The differences between the assemblages from Tell el-Farkha and Tell el-Nashed make it reasonable to suggest that the end of the settlement at Tell el-Farkha came earlier than that of Tell el-Nashed. Although it has not been possible to confirm that the site still existed in the early 4<sup>th</sup> Dynasty, some vessel forms indicate that it may have been occupied during the transition from the 3<sup>rd</sup> to the 4<sup>th</sup> Dynasty or in the very beginnings of the 4<sup>th</sup> Dynasty.

In this context it is quite important that utilitarian or domestic vessels are the most resistant to change, as they have little or no symbolic meaning. Their use and content remain pretty much stable, even in times of social, political, or ideological changes.<sup>62</sup> A gradual decline of Tell el-Farkha could be related not only to a decrease in its size and importance, but also to a dwindling number and social and economic status of its inhabitants. These processes may have had an impact on the repertoire of vessels used by those who remained on the site in the late Early Dynastic and early Old Kingdom. The presence of the round structure allegedly occupied by a royal institution sustained contacts and interrelations with other localities and institutions administered by the Crown. As such, it may have been a source of new vessel forms which appeared on the site in the period in question. However, the general population probably continued to use the more familiar vessels used for food processing or storage.

## Conclusions

The archaeological evidence suggests that the Eastern Nile Delta was a densely populated area in the Pre-, Protodynastic and Early Dynastic period. Major settlements in the region served as local political, economic, and ideological centres. They were home to local rulers, elites, other officials acting in the name of early rulers, as well as merchants. However, for some of those settlements the time of prosperity and development ended in the middle of the 1<sup>st</sup> Dynasty, and Tell el-Farkha is a fine example<sup>63</sup> Although the remains of the occupation from the 4<sup>th</sup> millennium BC onwards show that the settlement had continuously developed and grown in importance and probably served as a major social, economic, and ideological centre in the time of state formation, in the middle of the 1<sup>st</sup> Dynasty it lost some of its significance and shrank in size. The change was probably triggered by a variety of political, economic, ideological and environmental factors (e.g. changes in trade routes, high level of floods, emergence of new centres).<sup>64</sup> In the late Early Dynastic and early Old Kingdom periods the settlement at Tell el-Farkha was probably a rural village. Its inhabitants must have focused on cereal cultivation and processing and domestic animal breeding. The high number of storage facilities, remains of bread production and the dominance of poor graves in the necropolis may be seen as evidence for a low social status of the local population at that time<sup>65</sup>

The Old Kingdom witnessed the rebirth of royal power and the need to enhance the Crown's presence in the countryside. The royal administration created in provinces aimed to manage local rural resources in the name of the Crown with the help of officials closely linked to the royal court.<sup>66</sup> Tell el-Farkha was surrounded by arable lands, and the high number of silos found there indicates that farming was

<sup>62</sup> Rice 1984; 2005.

<sup>63</sup> Van den Brink 1992; Jucha 2016; Köhler 2017; Ciałowicz 2018b; Małecka-Drozd 2018; 2020; 2021; Guyot *et al.* 2019.

<sup>64</sup> Ciałowicz 2022.

<sup>65</sup> Chłodnicki, Mączyńska 2018.

<sup>66</sup> Moreno Garcia 2013.

an important industry at the site. The presence of the round structure and the large stamp seal with hieroglyphic signs found in its vicinity could indicate that despite a decrease in the site's size and importance Tell el-Farkha was managed by the royal administration system and may have belonged to the royal institution known as *hw.t.* or *šwn.t.*<sup>67</sup>

The decline of the site at the end of the 3<sup>rd</sup> Dynasty or in the transition time between the 3<sup>rd</sup> and 4<sup>th</sup> Dynasty is far from unique. The settlement at Tell el-Neshed, located also in the Eastern Nile Delta, was abandoned shortly after the end of Tell el-Farkha in the early 4<sup>th</sup> Dynasty. The underlying reasons are unclear, as both sites seem to have operated under the royal administration and were probably part of the royal estate.<sup>68</sup> The settlement at Tell el-Murra, which played a very similar role as a rural village, was occupied until the 6<sup>th</sup> Dynasty.<sup>69</sup> F. Guyot<sup>70</sup> suggest that although the reform establishing the royal estate in provinces was aimed mostly at controlling land and resources in the name of and for the Crown, it may have also aimed at taking over the land from the hands of the local elites, thus depriving them of power and influence. If this assumption is true, Tell el-Farkha and Tell el-Neshed were the 'victims' of the royal reform.

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<sup>67</sup> Małecka-Drozd 2021.

<sup>68</sup> Guyot *et al.* 2019.

<sup>69</sup> Jucha 2019.

<sup>70</sup> Guyot *et al.* 2019.

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# What do we need to apply Deep Learning to ancient Texts from Egypt and Sudan?

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**Abstract:** Based on the state of the field in 2023, this paper examines the application of Natural Language Processing (NLP) and deep learning to ancient languages from Egypt and Sudan: Ancient Egyptian, Coptic, Old Nubian, and Meroitic. These languages pose unique challenges for NLP due to the complex writing systems, limited datasets, and incomplete Unicode standardisation. The study reviews existing digital corpora, encoding standards including Unicode and Manuel de Codage (MdC), and ongoing OCR/HTR efforts. A case study of Coptic machine translation using MarianMT demonstrates the critical importance of corpus size for translation quality. The article concludes by discussing strategies for expanding digital resources and the role of open science in advancing computational approaches to ancient language research.

**Keywords:** Natural Language Processing; Deep Learning; Ancient Egyptian; Coptic; Digital Humanities

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## Introduction

The burgeoning field of digital humanities has transformed the landscape of linguistic research. This is particularly true of research on ancient languages such as Egyptian,<sup>1</sup> Coptic, Old Nubian, and Meroitic. The creation and curation of digital text corpora for these languages are not mere scholarly pursuits; they are essential to preserving and accessing cultural heritage. Digital corpora enable researchers worldwide to engage with texts that span millennia. While digital media face their own challenges—including format obsolescence, software dependency, and the impermanence of online platforms—they offer significant advantages in accessibility, reproducibility, and the potential for widespread distribution that physical artifacts such as papyri, inscriptions, and manuscripts cannot provide. When accompanied by proper digital preservation strategies, such as format migration, redundant storage, and adherence to open standards, digital corpora can serve as a valuable complement to the preservation of physical cultural heritage.

Despite their undeniable value, ancient languages pose unique challenges for modern Natural Language Processing (NLP) technologies. They often have intricate scripts and grammatical structures while lacking the extensive annotated datasets needed to train conventional NLP models. The challenge is further compounded by the esoteric nature of these languages, as they demand a deep understanding of historical, cultural, and linguistic contexts.

NLP is a domain of computational linguistics that enables computers to understand, interpret, and generate meaningful human language. For ancient languages, NLP can unlock textual corpora that the labor-intensive nature of traditional philological methods has left inaccessible to broad analysis. It offers

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<sup>1</sup> Rosmorduc 2015 explains computational approaches to Egyptian languages up to 2015. This article widens the topic, including Coptic, Old Nubian and Meroitic and computational studies in Egyptology after 2015.

tools for automatic translation, semantic analysis, and mining of linguistic patterns, all of which can enrich our understanding of ancient cultures.

The relevance of NLP to ancient languages is multifaceted. Firstly, it can facilitate the processing of large volumes of text. This has been particularly daunting with ancient languages due to a need for proficient scholars. Secondly, NLP can assist in reading and analysing texts by identifying patterns and proposing hypothetical interpretations. Finally, it can promote education in these languages by creating interactive platforms that make ancient texts more accessible to the public and scholars alike.

However, applying existing NLP technologies to ancient scripts is highly complex. Most NLP tools are engineered for modern languages, which benefit from vast resources such as dictionaries, annotated corpora, and linguistic research. Ancient languages often lacked these comprehensive resources. In addition, encoding guidelines, a critical component of digital text representation, may not fully support their scripts. However, efforts have been made by scholars, technicians, and interested citizens so that the encoding schemata and tools to facilitate digitisation have now been established even for ancient languages that are not considered major.

In recent years, the field of NLP has seen significant advancements, particularly with the integration of machine learning. More specifically, deep learning techniques that use neural networks inspired by human brain architecture have brought great progress. 2017–2018 breakthroughs such as the Transformer architecture have been followed by the emergence of models like BERT and GPT-1. Since mid-2022, large-scale language models such as GPT-3.5 Turbo (released in late 2022) and the subsequent GPT-4 (released in early 2023) have, through ChatGPT,<sup>2</sup> garnered attention for their ease of use and natural-language-generation capabilities. Furthermore, unique web services powered by large-scale language models have been introduced, such as Google Bard,<sup>3</sup> which was recently strengthened by an LLM called Gemini (released in late 2023). The resulting model has good multimodal recognition.<sup>4</sup> Another such service is Anthropic's Claude 2,<sup>5</sup> which is good at dealing with long texts. While these services sometimes produce hallucinations—false or misleading information—they are frequently highlighted in the media for their abilities to respond in natural language, translate, structure data, programme, and summarise information.

In our discussions, we will delve into the cutting-edge NLP technologies that have been applied to ancient Egyptian and Sudanese languages and explore the potential unlocked by deep learning. We will examine trials in machine translation of the Coptic language as a case study, and then debate strategies to further promote machine learning in NLP for these languages. The development of extensive open text data resources will be critical to advancement in this area. Our discussion will also tackle the various distinct challenges associated with these languages.

This paper aims to navigate the complexities of adapting NLP for ancient languages. It will provide an overview of the current state of digital text corpora, the intricacies of digitally encoding diverse scripts, and the ways that NLP's efficacy for ancient texts has been augmented. It will underscore the significance of digital corpora as a bridge between traditional philology and computational linguistics, and will explore how this synergy can yield novel insights into languages that shaped human history. Our scope extends beyond the mere digitisation of texts to the broader implications for linguistic analysis, cultural understanding, and knowledge preservation.

The first issue in enabling NLP for ancient languages is that the writing systems of ancient languages can differ greatly from those of the modern languages on which NLP is trained. For example, the absence of spaces in Ancient Egyptian Hieroglyphic script, Hieratic, and Demotic poses a significant challenge for tokenisation, a fundamental NLP process. Nevertheless, efforts to enable it are underway.<sup>6</sup> Doing so requires researchers to standardise the encoding of Ancient Egyptian writings. The Unicodisation of Hieroglyphs is currently advancing through the addition of control characters.<sup>7</sup> Coptic and Old Nubian are feasible with the current status of Unicode. Some special characters, such as those found in documentary papyri and magical signs, have not yet been included in Unicode. For the characters in documentary

<sup>2</sup> "Introducing ChatGPT," Open AI, accessed December 21, 2023, <https://openai.com/blog/chatgpt/>.

<sup>3</sup> "Bard," Google, accessed December 21, 2023, <https://bard.google.com/chat/>.

<sup>4</sup> "Build with the Gemini API," Google AI for Developers, accessed December 22, 2023, [https://ai.google.dev/?utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=BRAND\\_Core\\_Brand&gad\\_source=1/](https://ai.google.dev/?utm_source=google&utm_medium=cpc&utm_campaign=BRAND_Core_Brand&gad_source=1/).

<sup>5</sup> "Claude," Anthropic, accessed December 22, 2023, <https://claude.ai/>.

<sup>6</sup> Jauhainen 2022.

<sup>7</sup> Nederhof *et al.* 2023, Nederhof 2021, Nederhof *et al.* 2021, Nederhof *et al.* 2017, Richmond & Glass 2016, Nederhof *et al.* 2023, Nederhof *et al.* 2017, Everson & Richmond 2007.

papyri, the problem can be solved by using IFAO Grec Unicode,<sup>8</sup> which employs Unicode's Private Use Area for those signs. Ancient (Hieroglyphic, Hieratic, and Demotic) Egyptian uses logograms and determinatives as well as phonograms,<sup>9</sup> whereas Coptic, Old Nubian, and Meroitic use only phonograms. Because of this, the required effort for encoding and NLP of Ancient Egyptian is assumed to be higher.<sup>10</sup>

Large corpora of Ancient Egyptian texts exist in Thesaurus Linguae Aegyptiae<sup>11</sup> and Ramses Online.<sup>12</sup> Corpora for Coptic include Coptic SCRIPTORIUM<sup>13</sup> and Marcion.<sup>14</sup> In addition, the Totenbuch Project,<sup>15</sup> Elephantine Project,<sup>16</sup> Demotic Palaeographical Database Project (DPDP),<sup>17</sup> Thot Sign List,<sup>18</sup> Coptic Magical Papyri Kyprianos Database,<sup>19</sup> Cult of Saints,<sup>20</sup> and papyri.info<sup>21</sup> have Ancient Egyptian and/or Coptic texts in specific areas. However, the lack of encoded texts is a challenge. The number of digitally encoded texts is fewer than those of major classical languages such as Ancient Greek,<sup>22</sup> Latin,<sup>23</sup> Classical Arabic,<sup>24</sup> Sanskrit,<sup>25</sup> and Classical Chinese,<sup>26</sup> as well as Classical Hebrew.<sup>27</sup>

Still, efforts in Unicode and Manuel de Codage (MdC) for Egyptian, as well as Optical Character Recognition (OCR), show promise toward augmenting texts of these languages.<sup>28,29</sup> Creation of OCR and Unicodised text corpora for Old Nubian is also being attempted.<sup>30</sup> A Paris team is expected to provide

<sup>8</sup> "IFAO—Institut français d'archéologie orientale," Institut français d'archéologie orientale du Caire IFAO, accessed December 22, 2023, <https://www.ifao.egnet.net/publications/outils/polices/#grec/>.

<sup>9</sup> See Polis 2018.

<sup>10</sup> For Coptic, see Layton 2011: 11–34; for Old Nubian, see van Gerven Oei 2022: 33–50, for Meroitic, see Rilly and de Voogt 2012: 7–10.

<sup>11</sup> For Version 2, which has a more user-friendly interface and interlinear glosses, see "Welcome to the Thesaurus Linguae Aegyptiae," Thesaurus Linguae Aegyptiae v2.1.2, accessed December 22, 2023, <https://thesaurus-linguae-aegyptiae.de/home/>. For the first version which has more search functions, see "Thesaurus Linguae Aegyptiae," Thesaurus Linguae Aegyptiae, accessed December 22, 2023, <https://aaew.bbaw.de/tla/>.

<sup>12</sup> "Ramses Online," Ramses Online, accessed December 22, 2023, <http://ramses.ulg.ac.be/>. See also Polis *et al.* 2013.

<sup>13</sup> "Coptic Scriptorium: Digital Research in Coptic Language and Literature," Coptic SCRIPTORIUM, accessed December 22, 2023, <https://copticcriptorium.org/>.

<sup>14</sup> "Marcion: Revelator of True Gnosis," Marcion software exploring original Gnostic scriptures, accessed December 22, 2023, <https://marcion.sourceforge.net/>.

<sup>15</sup> "Die altägyptische Totenbuch: ein digitales Textzeugenarchiv," Totenbuch Projekt, accessed December 22, 2023, <https://totenbuch.awk.nrw.de/>.

<sup>16</sup> "Texts and Scripts from Elephantine Island in Egypt," Staatliche Museen zu Berlin, Preußischer Kulturbesitz, accessed December 22, 2023, <https://elephantine.smb.museum/>.

<sup>17</sup> "Demotic Palaeographical Database Project," Ruprecht-Karls-Universität Heidelberg, accessed December 22, 2023, <http://129.206.5.162/>.

<sup>18</sup> "Thot Sign List: Home Page," Thot Sign List, accessed December 22, 2023, <https://thotsignlist.org/>.

<sup>19</sup> "The Database – Coptic Magical Papyri," Coptic Magical Papyri: Vernacular Religion in Late Roman and Early Islamic Egypt, accessed December 22, 2023, <https://www.coptic-magic.phil.uni-wuerzburg.de/index.php/the-database/>.

<sup>20</sup> "The Cult of Saints: A research project on the Cult of Saints from its origins to circa AD 700, across the entire Christian world," the University of Oxford, accessed December 22, 2023, <https://cultofsaints.history.ox.ac.uk/>.

<sup>21</sup> "Papyri.info," Papyri.info, accessed December 22, 2023, <https://papyri.info/>.

<sup>22</sup> These five languages were mentioned by Edward Sapir as "just five languages that have had an over-whelming significance as carriers of culture" (Sapir 1921, IX, 2). For examples of Greek corpora, see "Perseus Digital Library," Perseus Digital Library, accessed December 22, 2023, <https://www.perseus.tufts.edu/hopper/>, and "TLG: Home University of California, Irvine," Thesaurus Linguae Graecae, accessed December 22, 2023, <https://stephanus.tlg.uci.edu/>.

<sup>23</sup> For example, Perseus Digital Library and "TLL Open Access: Thesaurus linguae Latinae," Bayrische Akademie der Wissenschaften, accessed December 22, 2023, <https://thesaurus.badw.de/tll-digital/tll-open-access.html/>.

<sup>24</sup> For example, "The Quranic Arabic Corpus - Word by Word Grammar, Syntax and Morphology of the Holy Quran," The Quranic Arabic Corpus, accessed December 22, 2023, <https://corpus.quran.com/>, and "Open Islamicate Texts Initiative," OpenITI, accessed December 22, 2023, <https://openiti.org/>.

<sup>25</sup> For example, "DCS—Digital Corpus of Sanskrit," Digital Corpus of Sanskrit, accessed December 22, 2023, <http://www.sanskrit-linguistics.org/dcs/>.

<sup>26</sup> For example, "DAIZOKYO DATABASE Home," Taisho Tripitaka The SAT Daizōkyō Text Database, accessed December 22, 2023, [https://21dzk.l.u-tokyo.ac.jp/SAT/index\\_en.html/](https://21dzk.l.u-tokyo.ac.jp/SAT/index_en.html/), and "Chinese Text Project," Chinese Text Project, accessed December 22, 2023, <https://ctext.org/>.

<sup>27</sup> For example, "Sefaria: a Living Library of Jewish Texts Online," Sefaria, accessed December 22, 2023, <https://www.sefaria.org/texts/>.

<sup>28</sup> For overview, see Gozzoli 2013, and for cons, Nederhof 2013.

<sup>29</sup> See Nederhof 2016 for the OCR of handwritten Hieroglyphs. For Coptic OCR, see Lincke 2021, Lincke *et al.* 2019, Miyagawa *et al.* 2019. Also, a pipeline for making digital Coptic corpora including OCR, see Miyagawa *et al.* 2018.

<sup>30</sup> For making an Old Nubian corpus, see Miyagawa & van Gerven Oei 2021. For OCR for Old Nubian, see Miyagawa 2024.

a Unicode-encoded corpus of Meroitic. Moreover, private companies such as Ubisoft and Google Arts & Cultures are developing character recognition for Hieroglyphs.<sup>31</sup>

Despite the challenges, there have been promising developments in adapting NLP technologies for ancient scripts. Machine learning algorithms have been tailored to accommodate non-standard input. Specialised character-recognition software has been developed to digitise inscriptions and texts. Collaborative projects such as the Coptic SCRIPTORIUM<sup>32</sup> have begun to compile digital lexica and annotated texts that are linked with Coptic Dictionary Online.<sup>33</sup> These are now augmented by data from the Dictionary and from the Database of Greek Loanwords in Coptic (DDGLC).<sup>34</sup> This project will provide the foundational data necessary for NLP applications. Moreover, under an umbrella project called KELLIA,<sup>35</sup> institutions like the TLA project of the Berlin-Brandenburg Academy of Sciences and Humanities, the Digital Edition of Coptic Old Testament Project of Göttingen Academy of Sciences and Humanities,<sup>36</sup> and the New Testament Virtual Manuscript Room of the Institute for New Testament of Textual Research at the University of Münster<sup>37</sup> have developed a Coptic NLP Service and adapted deep learning technologies such as DiBERT to be used in NLP for Coptic.<sup>38</sup>

## Large Language Models and Corpus Data Size

Large Language Models (LLMs) like GPT (Generative Pre-trained Transformer) represent the cutting edge in Natural Language Processing technology. These deep-learning models are trained on extensive corpora in a process known as masked training, which allows them to predict and generate human-like text. The efficacy of an LLM is often directly tied to the size of its training corpus; for example, GPT-3 was trained on a corpus of approximately 570GB, which is roughly equivalent to 890,000 books.

Creating a significant corpus of an ancient language is both challenging and necessary. The scale of data needed for practical NLP tasks is immense. As a reference point, successful modern-language models often train on corpora comprising millions of words. This presents a hurdle for ancient languages, where texts are scarce and digital corpora still need to be developed.

In summary, the potential for LLMs to revolutionise the study of ancient languages is significant, but it is contingent on the creation and growth of large, machine-readable text corpora. This requires a concerted effort in digitisation, standardisation, and collaboration within the field of digital humanities.

## Case Study: Machine Translation for Ancient Languages

In the realm of artificial intelligence, Large Language Models (LLM) and Deep Learning stand as two pillars revolutionising the way machines understand and generate human language. An attempt at machine translation to Coptic from Greek was already made by the team of Argyro Kontogianni.<sup>39</sup> LLMs are highly sophisticated models trained on massive datasets encompassing vast swathes of written text.

<sup>31</sup> Ubisoft is a computer game maker. They are collaborating with the TLA team of the Berlin-Brandenburg Academy of Sciences and Humanities in creating The Hieroglyphics Initiative. See “The Hieroglyphics Initiative: an open source digital platform for Egyptology,” Berlin-Brandenburgische Akademie der Wissenschaften, 14. Feb 2019, accessed December 22, 2023, <https://www.bbaw.de/veranstaltungen/veranstaltung-the-hieroglyphics-initiative-an-open-source-digital-platform-for-egyptology/>. For Fabricius, a project to aid in reading Hieroglyphs, see “Fabricius,” Google Arts & Culture, accessed December 22, 2023, <https://github.com/googleartsculture/workbench/>.

<sup>32</sup> See Schroeder & Zeldes 2016.

<sup>33</sup> “Coptic Dictionary Online,” Coptic Dictionary Online, accessed December 22, 2023, <https://coptic-dictionary.org/>. See Feder *et al.* 2018.

<sup>34</sup> “Database and Dictionary of Greek Loanwords in Coptic (DDGLC),” Department of History and Cultural Studies, Freie Universität Berlin, accessed December 22, 2023, <https://www.geschkult.fu-berlin.de/en/e/ddglc/index.html>.

<sup>35</sup> KELLIA stands for the Koptische/Coptic Electronic Language and Literature International Alliance. See “KELLIA,” Georg-August-Universität Göttingen, accessed December 22, 2023, <https://kellia.uni-goettingen.de/>.

<sup>36</sup> “Coptic Old Testament: CoptOT Public,” Digital Edition of the Coptic Old Testament, accessed December 22, 2023, <https://coptot.manuscriptroom.com/>.

<sup>37</sup> “New Testament Virtual Manuscript Room,” INTF, accessed December 22, 2023, <https://ntvmr.uni-muenster.de/>.

<sup>38</sup> “Coptic NLP Service,” Coptic SCRIPTORIUM, accessed December 22, 2023, <https://tools.copticscriptorium.org/coptic-nlp/>.

<sup>39</sup> Kontogianni *et al.* 2020.

The deep-learning foundations of models such as GPT and BERT (Bidirectional Encoder Representations from Transformers) give them an exceptional ability to understand the context, nuance, and complexities of language. Deep Learning itself is a subset of machine learning that employs multi-layered neural networks to mimic the neural structures of the human brain.<sup>40</sup> This allows the modeling of complex patterns and relationships within data. Deep learning networks drive the unprecedented effectiveness of LLMs in processing and generating language, paving the way for innovations like MarianMT.

MarianMT is a neural machine translation framework that emerged following the development of large language models like BERT and its derivative, BART (Bidirectional Auto-Regressive Transformer).<sup>41</sup> BART is a version of BERT but is made for Sequence-to-Sequence (Seq2Seq), namely a system to output one sentence from one input sentence. BERT<sup>42</sup> revolutionised NLP by allowing machines to understand the context of words in a sentence. BART, which builds upon BERT, is designed for sequence-to-sequence tasks and is particularly effective in text generation and comprehension. MarianMT leverages advancements in transformer architectures, like those in BERT and BART, to provide powerful and efficient text translation across various languages. MarianMT is a high-performance, neural-network-based machine translation framework. Utilising the same models as BART, its translations are similar but not identical to those in the associated test sets. Each model is approximately 298 MB, and more than 1,000 models are available.

Originally trained by Jörg Tiedemann using the Marian C++ library, MarianMT supports fast training and translation. All models are transformer encoder-decoders with 6 layers in each component, and the performance of each model is detailed in its model card.<sup>43</sup>

MarianMT models are smaller than many other translation models, which makes them suitable for fine-tuning experiments and integration tests. For multilingual models, a user can specify the desired output language by prefixing the `src_text` with a language code. Guides are available for translation, summarization, and causal language modeling tasks. The `MarianConfig` class allows the instantiation of Marian models, and the `MarianTokenizer` class facilitates tokenisation.

Importantly, MarianMT is particularly beneficial for low-resource languages. Its efficient architecture and small model size make it adaptable and easy to fine-tune with limited data. Limited data may be all that is available for less commonly spoken languages, so this adaptability gives MarianMT a distinct advantage over other models for this purpose.

These findings underscore the need for expansive digital text corpora to train LLMs effectively for ancient languages. The data demands of creating a usable NLP tool through machine learning are substantial. For instance, a Coptic corpus would need to be 20 times larger than the test data used in the pilot study.

Miyagawa succeeded in training a Japanese-Ainu translation model on a corpus of over 459,827 words. This model achieved a SacreBLEU<sup>44</sup> score—a metric for evaluating machine translations—of 32.905 (scores between 30 and 50 are generally considered high quality). Using the same method, a pilot study of English-Coptic machine translation used a training corpus of 10,000 Coptic words and 77,000 characters, which yielded a poor SacreBLEU score of only 4.475.

The pilot study for the English-Coptic machine translation was conducted using MarianMT. The corpus of 10,000 Coptic words and 77,000 characters was scraped from [Tasbeha.org](https://tasbeha.org), which has various Bohairic Coptic lyrics of hymns and liturgical texts, and which recently adopted Coptic Unicode. The resultant SacreBLEU score of 4.475, however, indicates a low translation quality. This outcome underscores the essential need for a larger corpus to improve the performance of machine translation systems for Coptic. The study suggests that a corpus approximately 20 times larger would be necessary to achieve better results. The corpus used in the pilot study was derived from only around 50 lyrics and 1,000 sentences from [Tasbeha.org](https://tasbeha.org), even though the site has over 2,000 lyrics, which could provide a sufficient corpus size.

<sup>40</sup> For machine learning for Egyptology focusing on machine translation, see Kelly *et al.* 2022.

<sup>41</sup> Lewis *et al.* 2020.

<sup>42</sup> Devlin *et al.* 2019.

<sup>43</sup> “MarianMT,” HuggingFace, accessed December 22, 2023, [https://huggingface.co/docs/transformers/model\\_doc/marian/](https://huggingface.co/docs/transformers/model_doc/marian/). Model naming follows the format “Helsinki-NLP/opus-mt-{src}-{tgt},” with inconsistent language codes. Two-letter codes are usually found via a specific link, while three-letter codes require searching “language code {code}.”

<sup>44</sup> “Sacre BLEU Score: PyTorch-Metrics 1.2.1 documentation,” TorchMetrics, accessed December 22, 2023, [https://lightning.ai/docs/torchmetrics/stable/text/sacre\\_bleu\\_score.html](https://lightning.ai/docs/torchmetrics/stable/text/sacre_bleu_score.html).

Comparison of the Japanese-Ainu model with the English-Coptic model indicates that corpus size and quality are indeed critical for the effective machine translation of ancient languages. The success of the Japanese-Ainu model demonstrates the potential for ancient language translations if adequate corpora are developed.

For ancient languages, where text resources are limited, every available text must be leveraged to create a large enough corpus to effectively train machine translation models. The quality of the corpus, including the accuracy of the source and target texts, also significantly influences the outcome because generally if there are many errors in the corpus, the machine learned the errors and outputs similar errors. The above studies offer a roadmap for future research and corpus development in machine translation for ancient languages.

The corpus size of Coptic SCRIPTORIUM is already sufficient to create a Coptic-English machine translation. However, of the languages on which this article focuses – Ancient Egyptian, Coptic, Old Nubian, and Meroitic—only Coptic seems readily translatable through machine learning. For Ancient Egyptian, the currently available corpora might be sufficient, but the language's orthography presents a challenge. For Old Nubian and Meroitic, there is a near absence of data openly available in digital format. From character encoding to OCR and corpora publication, this article will discuss how text data essential for machine learning can be efficiently obtained for these languages.

Recently, Andrew Megalaa and Maxim Enis at Williams College trained a language model on Coptic SCRIPTORIUM corpora to create an application that translates between English and Sahidic Coptic, known as Coptic Translator.<sup>45</sup> In their work, they used Helsinki-NLP/opus-mt-mul-en, and for English-Coptic, they used Helsinki-NLP/opus-mt-en-mu.<sup>46</sup> They achieved high BLEU scores, another evaluation metric. Thus, for the Sahidic dialect of the Coptic language, we now have a successful case of machine translation. Machine translations of other dialects of Coptic, Ancient Egyptian, and Old Nubian are now awaited. Computer assistance in the further decipherment of Meroitic as a Para-Nubian language is also expected.

## Existing Corpora

In this section, we will address the current state of digitisation of ancient texts.

First, Coptic has no Unicode problem and has the best developed NLP tools, led by Coptic SCRIPTORIUM. The Coptic SCRIPTORIUM initiative, funded by the National Endowment for the Humanities (NEH), exemplifies the advancements in digital text corpora for ancient languages. This publicly available, multilayered, tagged corpus has significantly contributed to Coptology by providing a robust platform for linguistic analysis and NLP tasks. It encompasses one million, two hundred thousand words, annotated with rich linguistic and bibliographic metadata. Its extensive annotations include lemmata, parts of speech, morphology, syntactic information, and loan word data. The SCRIPTORIUM initiative facilitates research and serves as a model for digitising and annotating ancient language texts. Currently, it has more than two million tokens on December 23, 2023.

Coptic SCRIPTORIUM has been a pioneer in the realm of syntactic parsing, offering essential NLP services. It uses XML following the Text Encoding Initiative (TEI) Guidelines P5<sup>47</sup> and the subset of those guidelines for classical philology, called EpiDoc.<sup>48</sup> It also incorporates the online multi-layered corpus platform ANNIS, which enables flexible searching by users along with statistical analysis. It enables comprehensive syntactic parsing, which is pivotal for linguistic research. The annotations provided through TEI and displayed by ANNIS allow for sophisticated searches and statistical analyses of the Coptic corpus, thereby fostering the development of machine-readable data for Coptic. For Ancient Egyptian, resources include the Thesaurus Linguae Aegyptiae, and the St. Andrews Corpus.<sup>49</sup> For Late Egyptian texts, Ramses Online is also available. These provide a wealth of digitised texts for scholarly

<sup>45</sup> "Coptic Translator," Coptic Translator, accessed December 22, 2023, <https://coptictranslator.com/>. Also, for the competence of this model, see Enis & Megalaa 2023.

<sup>46</sup> Tiedemann & Thottingal 2020.

<sup>47</sup> "TEI: Text Encoding Initiative," TEI, accessed December 22, 2023, <https://tei-c.org/>.

<sup>48</sup> "EpiDoc: Epigraphic Documents in TEI XML," stoa.org, accessed December 22, 2023, <https://epidoc.stoa.org/>.

<sup>49</sup> "St Andrews Corpus," St Andrews Corpus, accessed December 22, 2023, <https://mjn.host.cs.st-andrews.ac.uk/egyptian/texts/corpus/pdf/>.

work. While not as extensive as the Coptic SCRIPTORIUM, they are sufficient to lay the groundwork for the digitisation and annotation efforts that will be needed to develop NLP applications.

The state of digital resources for Old Nubian and Meroitic languages is evolving. A digital parallel corpus for Old Nubian is under construction, with efforts led by Vincent van Gerven Oei and So Miyagawa. This endeavor is particularly challenging given the relatively small size of the existing corpus of Old Nubian. Therefore, the feasibility of developing usable NLP tools through machine learning for Old Nubian is in question.

For the Meroitic language, digitisation is in its early stage. Texts from the *Répertoire d'Épigraphie Méroïtique* (REM) may be in the process of being digitally input, although there is some lack of certainty about this. The eScripta project and researchers like Claude Rilly are potentially contributing to this effort. With its classification as a para-Nubian language, and with translations by scholars such as Claude Rilly, Meroitic presents an exciting opportunity to apply NLP in deciphering inscriptions.

In summary, these case studies highlight achievements and ongoing challenges in the field. While projects like the Coptic SCRIPTORIUM have made significant strides in digitising and annotating texts for NLP use, the transformative digital process is still in its early stages for other ancient languages. The ongoing work in these areas not only aids in linguistic research but also contributes to cultural understanding of ancient civilisations.

Although these languages are in early stages of digitisation, we can download raw data and TEI XML data of TLA text, along with annotation and translation, from the AED (Ancient Egyptian Dictionary) GitHub repository.<sup>50</sup> This repository has more than 11,000 Egyptian texts. The TEI data are separated into multiple files, which means there is a need to combine the data, then parse it by coding. This will undoubtedly take time, but it is worth doing to enable the creation of an Ancient Egyptian-to-German or German-to-Ancient Egyptian machine translation. An attempt at machine translation from Ancient Egyptian was recently made by the team of Asmaa Sobhy with a resultant SacreBLEU score of 70.71. This score is remarkably good.<sup>51</sup>

## Expanding the Digital Corpora

Expanding the digital corpora for ancient languages is a multifaceted endeavor incorporating state-of-the-art technology and collaborative efforts. Strategies for growing these corpora include applying Optical Character Recognition (OCR) and Handwritten Text Recognition (HTR). These tools are indispensable for converting the myriad available text images into machine-readable formats, especially those provided through the International Image Interoperability Framework (IIIF).<sup>52</sup>

IIIF technology has been particularly influential because it has made high-resolution images of ancient texts widely accessible. This facilitates the sharing of images across institutions and enhances the precision of OCR/HTR processes. The result of the attempt for Coptic–English machine translation presented in Section 3 underscores the necessity of transcribing available text images and sharing text data, which are critical for building robust digital corpora.

In corpus linguistics, digital archives serve as reservoirs of linguistic data. They provide the raw materials to construct comprehensive corpora. The Bodmer Lab,<sup>53</sup> the Chester Beatty Online Collections,<sup>54</sup> and DigiVatLib<sup>55</sup> are archives that offer a wealth of digitised texts and could be essential in developing linguistic corpora.

Miyagawa's project presented herein is a collaboration with Vincent van Gerven Oei. It focuses on building a digital corpus for Old Nubian, employing the Unicode standard, which is still under construction for this language.<sup>56</sup> Old Nubian's corpus size is relatively small, posing questions about the viability of using machine learning to develop practical NLP tools for this language. For Meroitic, the digitisation effort is even more nascent, and there is a pressing need to digitise texts from the REM.<sup>57</sup>

<sup>50</sup> "simondschweitzer/aed-tei," GitHub, accessed December 22, 2023, <https://github.com/simondschweitzer/aed-tei>.

<sup>51</sup> Sobhy *et al.* 2023.

<sup>52</sup> "Home — IIIF," International Image Interoperability Framework, accessed December 22, 2023, <https://iiif.io/>.

<sup>53</sup> "Bodmer Papyri," bodmerlab, accessed December 22, 2023, <https://bodmerlab.unige.ch/fr/constellations/papyri/>.

<sup>54</sup> "Chester Beatty Digital Collection," Chester Beatty Library, accessed December 22, 2023, <https://viewer.cbl.ie/viewer/>.

<sup>55</sup> "DigiVatLib," Vatican Apostolic Library, accessed December 22, 2023, <https://digi.vatlib.it/>.

<sup>56</sup> Miyagawa & van Gerven Oei 2021.

<sup>57</sup> Leclant 2000.

To summarise, the expansion of digital corpora for ancient languages is a collaborative and technology-driven process. By leveraging OCR/HTR and IIIF technology, and using digital archives, researchers can enhance the size and quality of the available digital corpora. This will pave the way for further advancements in corpus linguistics and NLP.

## Unicode and Text Encoding

Digitisation of ancient scripts is critical in the modern era, to preserve historical texts and enable computational analysis of them. Unicode, a standard led by Unicode Consortium, seeks to encode as many scripts as possible. This standard plays an essential role in the text digitisation process. It provides a universal character set encompassing a diverse range of scripts, including those used in Coptic, Ancient Egyptian, Old Nubian, and Meroitic.<sup>58</sup>

Before the Unicodeisation of Ancient Egyptian, Egyptologists applied various encoding systems to Ancient Egyptian writings. Because Unicode still does not have a complete Hieroglyphic character set, some of these other systems are still used today. The history of these tools reflects the progress of the digital humanities in the study of ancient languages and cultures. The development of encoding technologies has made it significantly easier to catalog, share, and analyse ancient Egyptian texts and has contributed to the broader field of digital linguistics.

For example, Winglyph, made by Hans van den Berg and based on GLYPH, is a software tool for typesetting ancient Egyptian hieroglyphs. It is part of a suite of digital tools that Egyptologists and other scholars use to represent hieroglyphic texts in digital formats. Some of these tools can be traced back to the early days of computing, when Egyptologists sought ways to leverage technology for their research. Winglyph itself is not compatible with today's platforms but its successor, WebGlyph, is now available online using MdC.<sup>59</sup>

The „Manuel de Codage,” often abbreviated as MdC, is a standard system for computer-encoding ancient Egyptian transliterations and hieroglyphic texts. It was developed in the late 20th century when Unicode did not yet support these characters. It is important to note that MdC should not be conflated with other encoding systems such as the Hieroglyphica code set or the JSesh code set. Although these systems developed from one another, they are not identical: the code points differ across sign lists, and the glyphs they represent are not always equivalent. MdC remains widely used in academic contexts for encoding hieroglyphic text, though the field is now transitioning toward Unicode standardisation. For the current state of Egyptian Hieroglyphs in Unicode, see the Unicode Consortium's proposal document published in 2023.<sup>60</sup> Hieroglyph image-makers such as JSesh use MdC-based input with a user-friendly graphical user interface (GUI)<sup>61</sup> as an input method. JSesh is also a state-of-the-art hieroglyph editor and outputs images of the hieroglyphs, providing an affordable way to create complex layouts of glyphs, including glyphs that are not listed in Gardiner's list. Gardiner's list was the norm as a repertoire of the hieroglyphs, but it is not covering all the existing hieroglyphs, so various new schemas of the glyph list are emerging. The most comprehensive is Thot Sign List. Progress on encoding of Hieratic and Demotic is not as far advanced. Hieratic is historically derived from Hieroglyphs, and therefore MdC has traditionally been used for Hieroglyphic transliteration of Hieratic texts. However, this approach has significant limitations: Hieratic developed distinct paleographical features over its long history of use, and individual signs often exhibit variations that cannot be adequately captured by a single Hieroglyphic equivalent. The assumption of a simple one-to-one correspondence between Hieratic and Hieroglyphic signs obscures important scribal and chronological distinctions. The digitisation and encoding of Hieratic are currently in progress, undertaken by the Altägyptische Kursivschriften (AKU) project.[1] The AKU recently published its extensive paleographical database of Hieratic signs online, which documents the range of sign variants and addresses the methodological challenges of Hieratic transcription. As for Demotic, encoding schema like that of MdC does not yet exist, but work on one by the Demotic Palaeographical Database

<sup>58</sup> Everson 2009.

<sup>59</sup> “WebGlyph 2023.5.” WebGlyph, accessed December 22, 2023, <http://71.174.62.16/Demo/WebGlyph2/>.

<sup>60</sup> See “Towards a Font Architecture for Encoding Egyptian Hieroglyphs in Unicode,” Unicode Document L2/23-109, accessed December 22, 2023, <https://www.unicode.org/L2/L2023/23109-n5215-hieroglyphs.pdf>.

<sup>61</sup> Iglesias-Franjo & Vilares 2016.

Project (DPDP) at the University of Heidelberg is ongoing, and this work is published as part of their database. These projects (AKU and DPDP) will provide better encoding schemata of Hieratic and Demotic.

These editors and their encoding schemata of ancient Egyptian scripts are well-established. However, in the current state of digital humanities, the norm is to use only Unicode, the global standard of character encoding. JSesh uses Unicode internally but exports an image.<sup>62</sup> There are currently various attempts to make a hieroglyphic editor using Unicode, including one by the team of Al-Nasrawi.<sup>63</sup> Recently, Mark-Jan Nederhof published HieroJAX, which enables Unicode Hieroglyphs with square writing on the web by JavaScript but with the scope to use the control characters.<sup>64</sup>

With its comprehensive character encoding standard, Unicode enables the representation and manipulation of text from ancient scripts in digital environments. For example, combined Unicode blocks existed previously for Greek and Coptic, but the Unicode Consortium added a Unicode block just for Coptic between U+2C80 and U+2CFF. This facilitates encoding of Coptic texts, which is crucial for creating machine-readable corpora. Similarly, the Meroitic script has its place within Unicode, with characters allocated between U+10980 and U+1099F for hieroglyphs and between U+109A0 and U+109FF for cursive. These encodings are fundamental for developing NLP applications that can process these languages.

However, challenges remain. While Unicode has made significant strides, certain ancient scripts, such as Ancient Egyptian Hieroglyphs,<sup>65</sup> still lack a complete set of characters within the standard. The current set is not exhaustive compared to the repertoire available in specialist software like JSesh. Since the initial encoding proposal, significant progress has been made, including the addition of control characters for quadrat (square) writing and the expansion of the hieroglyphic character repertoire; however, full coverage remains an ongoing effort.<sup>66</sup> Furthermore, Hieratic and Demotic scripts are not yet encoded in Unicode, which limits the potential for a complete digital representation of all Ancient Egyptian scripts.

There has been some progress in Unicode, as evidenced by the inclusion of control characters for “quadrat/square writing” in Hieroglyphs and the addition of more Hieroglyphic characters. Still, the gap between Unicode and the JSesh set remains. For Old Nubian, the encoding is integrated within the Coptic Unicode block, but as the Old Nubian corpus is under construction, the practical application of these characters is still forthcoming.

Beyond Unicode, digitisation efforts continue with projects like the Coptic SCRIPTORIUM and the ongoing work to build a digital corpus for Old Nubian. These projects are pioneering the transformation of ancient texts into machine-readable formats. For the Meroitic language, digitisation efforts are in the nascent stage, as texts from resources like the REM need to be put into digital format. The Scripta project at Paris Science et Lettres University may currently be undertaking this with leading Meroitic linguistic researchers such as Claude Rilly.<sup>67</sup>

Unicode’s role in digitising ancient scripts is foundational, yet the work is incomplete. As discussed in the first section, additional encoding of Hieratic and especially Demotic is still needed. Paleographical databases such as AKU and DPDP are expected to play a leading role in standardising Hieratic and Demotic encoding. Overcoming the challenges of encoding these languages is a collaborative effort that requires ongoing research, technological development, and interdisciplinary cooperation. This work will undoubtedly expand the possibilities for NLP applications and bring new understandings of humanity’s linguistic heritage.

Encoding and creating fonts with Unicode presents one set of challenges; the input system presents another. To address some of the input challenges, TLA and Open Richly Annotated Egyptian Corpus (ORAEC)<sup>68</sup> are working to enable digital transcription in MdC; hieroglyphic Unicode is being attempted,

<sup>62</sup> “JSesh,” JSesh, accessed December 22, 2023, <https://jseshjsesh.qenherkhopeshef.org/>.

<sup>63</sup> Al-Nasrawi *et al.* 2014.

<sup>64</sup> “nederhof/hierojax: HieroJax JavaScript implementation of Ancient Egyptian in Unicode,” GitHub, accessed December 22, 2023, <https://github.com/nederhof/hierojax/>.

<sup>65</sup> Everson & Richmond 2007, Proposal to encode Egyptian Hieroglyphs in the SMP of the UCS.

<sup>66</sup> For the current state of Egyptian Hieroglyphs in Unicode, see “Towards a Font Architecture for Encoding Egyptian Hieroglyphs in Unicode,” Unicode Document L2/23-109, 2023, <https://www.unicode.org/L2/L2023/23109-n5215-hieroglyphs.pdf>.

<sup>67</sup> “Scripta,” PSL, accessed December 22, 2023, <https://psl.eu/en/scripta/>.

<sup>68</sup> “oraec/recommendations-encoding-hieroglyphs,” GitHub, accessed December 23, 2023, <https://github.com/oraec/>.

and conversion between MdC and hieroglyphic Unicode with quadrat writing control characters is available.<sup>69</sup> Keyman Desktop offers a Unicode keyboard for inputting hieroglyphs without control characters.<sup>70</sup> Miyagawa has made a prototype of an input system for Ancient Egyptian Hieroglyph Unicode, called HieroJIS, that does not use control characters.<sup>71</sup> This input system is based on Google Japanese Input. It enables square writing using ligature function, on a font made by Marwan Kilani. The entire suite can be seen at the website of SINUHE the Hierotyper.<sup>72</sup> Use of the Japanese input system for Hieroglyphs was also discussed earlier.<sup>73</sup> Djehuty<sup>74</sup> is another input system, created later by Kilani, that uses an open-source Chinese input technology. There are other various Unicode Hieroglyph input systems and editors available.<sup>75</sup> Andrew Glass and Mark-Jan Nederhof<sup>76</sup> are separately creating input systems for Egyptian Hieroglyphs in Unicode with control characters enabling square writing.

Complete versions of these input systems and fonts for control characters are expected to be available in the future. Coptic and Old Nubian are covered by the Keyman Desktop and Everson's keyboard layout.<sup>77</sup> Meroitic Unicode characters have no available input system so far, but this is also expected in the future.

## Making Machine-Readable Text Corpora

The advent of machine-readable text corpora has marked a significant milestone in the field of Natural Language Processing (NLP). Such corpora enable computers to process, analyze, and understand human languages. This is particularly relevant for ancient languages, where digital corpora can assist in tasks from linguistic analysis to text preservation.

To enable NLP for textual analysis, physical texts must first be converted to a digital format. This process often involves Optical Character Recognition (OCR) or Handwritten Text Recognition (HTR). Tools such as Transkribus and OCR4All are pivotal in this endeavor. These tools include neural network models such as Pylaia, Calamari, and Ocropy.<sup>78</sup> Notably, Barucci's 2022 and 2021 works focus on computational classification, while studies by Franken et al. 2013 and Elnabaway *et al.* 2018 provide significant insights specifically for OCR applications.

Attempts have been made to apply OCR to Hieratic texts, as exemplified by Julius Tabin's work on significant texts like the Papyrus Ebers, the Rhind Papyrus, and Papyrus Westcar.<sup>79</sup> It is important to differentiate OCR from image recognition. While related, the two are not identical. Image recognition has also been applied to Hieroglyphic texts, with at least three teams conducting research in this area.<sup>80</sup> This distinct approach addresses the unique challenges presented by Hieroglyphic script, further expanding the scope of digital text analysis in Egyptology and related studies.

Advances in multispectrum imaging techniques have significantly enhanced our ability to decipher previously unreadable texts, particularly those affected by faded ink, erosion, or other forms of deterioration. One notable application was the uncovering of hieroglyphic text on an Egyptian stele which was previously indecipherable due to wear and erosion<sup>81</sup>. Another was the 2020 work of Spoladore et al., which successfully revealed text that was invisible to the naked eye. Multispectrum imaging has also been employed in study of the Manichaean Kephalaia, housed in the Chester Beatty Library in Dublin, to overcome challenges posed by the manuscripts' aged and faded condition.<sup>82</sup> This innovative approach

<sup>69</sup> Glass *et al.* 2017, Glass *et al.* 2021, Nederhof *et al.* 2017, Nederhof *et al.* 2023, Nederhof *et al.* 2023, Richmond & Glass 2016, and so on.

<sup>70</sup> "Hieroglyphic keyboard," Keyman, accessed December 22, 2023, <https://keyman.com/keyboards/hieroglyphic/>.

<sup>71</sup> Miyagawa 2016.

<sup>72</sup> "SINUHE the Hierotyper," SINUHE the Hierotyper, accessed December 22, 2023, <https://somiagawa.github.io/SINUHE-the-Hierotyper/>.

<sup>73</sup> Minohara 2010.

<sup>74</sup> "MKilani/Djehuty," GitHub, (accessed December 22, 2023, <https://github.com/MKilani/Djehuty>).

<sup>75</sup> Al-Nasrawi *et al.* 2014.

<sup>76</sup> See Everson 2016 and Nederhof 2021.

<sup>77</sup> "Antinoou—A standard font for Coptic," Everttype, accessed December 23, 2023, <https://www.everttype.com/fonts/coptic/>.

<sup>78</sup> For the comparison of Ocropy and Tesseract models for Coptic, see Miyagawa et al. 2019.

<sup>79</sup> Tabin 2022.

<sup>80</sup> Franken & van Germert 2013, Elnabawy *et al.* 2018, and Aneesh *et al.* 2024.

<sup>81</sup> Spoladore *et al.* 2021.

<sup>82</sup> Gardner 2015: 9.

has opened new doors for the study and preservation of historical texts, including texts that were once thought irretrievably lost.

For Ancient Egyptian texts, particularly handwritten ones by 19th- and 20th-century Egyptologists, scholars like Nederhof are working to develop specialised OCR solutions.<sup>83</sup> Additionally, Google's Fabricius is an innovative project that experiments with OCR for Hieroglyphic inscriptions. These projects demonstrate the expanding scope of OCR technology in deciphering and digitizing ancient scripts for research. Miyagawa is currently utilizing Transkribus on Old Nubian text.<sup>84</sup>

A machine-readable text corpus is essentially a large and structured collection of texts that computers can readily analyze. These come in several formats, such as digital plain text, Text Encoding Initiative (TEI) XML, and JSON data. Each of these serves different aspects of NLP and computational linguistics. The versatility of these formats allows for a broad range of computational tasks, including but not limited to syntactic parsing, semantic analysis, and machine translation.

For instance, the TEI XML format is widely accepted as the standard for encoding machine-readable texts in the humanities. It is particularly suited to the complex structures of ancient texts, enabling documentation of their orthography, grammar, and semantic nuances. TEI XML files are used in the Coptic SCRIPTORIUM's multilayered corpus, where they support its rich annotation of linguistic and bibliographic metadata. This corpus has been a cornerstone for Coptic NLP, facilitating syntactic annotation and morphological parsing.

Furthermore, integrating corpora into NLP services, such as the Coptic NLP Service developed for the KELLIA project, exemplifies the utility of digital corpora. Users can obtain syntactic annotations and parsed XML data by inputting text to the service, which is critical for advancing NLP tasks.

Therefore, the creation of machine-readable text corpora for ancient languages supports NLP-related technologies and contributes significantly to the broader field of historical linguistics. Digitizing ancient texts and encoding them in universally recognised formats will ensure their longevity and accessibility, paving the way for future linguistic discovery.

## Digital Humanities and Open Science

The fusion of digital humanities with open science has significantly enhanced the study of ancient languages. Open science, especially open access to research, propels this field forward. Humanities research relies heavily on bibliographic data from historical texts. That data is now increasingly accessible through digital archives and platforms. Notable examples are the Europeana and Trismegistos platforms, along with the DigiVatLib, BodmerLab, and Chester Beatty digital archives. IIF standards promise to further simplify and advance the production and sharing of textual data.

The open science movement is also marked by increased open-access articles, to make research findings transparent and widely accessible. This trend is seen across various fields. While the humanities have been slower than other fields to adopt open science principles, there is a clear shift towards a more open and FAIR (Findable, Accessible, Interoperable, Reusable)<sup>85</sup> research environment. Initiatives like the Open Philology Project have facilitated the development of tools for OCR and HTR, as well as TEI editors for Latin and Greek, and platforms for digital editions. All of these contribute to a more interconnected digital research landscape.

These developments not only enhance research within scholarly circles but also open up resources to the general public. Digital technologies make primary sources and research results more accessible and allow more widespread engagement with historical materials. This accessibility promotes collaboration, thus enabling sophisticated and complex research that extends beyond individual efforts. Even within the humanities, collaborative research teams are increasingly necessary, particularly for handling the intricacies of ancient languages and texts.

The digital humanities are thus leading a paradigm shift in the study of ancient languages. Openness and the use of digital technologies are redefining how research is conducted, accessed, and utilised.

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<sup>83</sup> Nederhof 2015.

<sup>84</sup> Miyagawa 2024.

<sup>85</sup> Wilkinson et al. 2016.

## Conclusions

The exploration of Natural Language Processing (NLP) for ancient languages such as Coptic, Ancient Egyptian, Old Nubian, and Meroitic has opened new avenues in the digital humanities. The studies discussed in this presentation have highlighted the critical role of digital text corpora in advancing the computational analysis of these languages. Machine translation efforts, particularly the English-Coptic translation pilot study, have underscored the need for expansive, high-quality corpora to develop NLP tools.

Advancements in open science and the digital humanities have significantly contributed to the accessibility and collaborative potential of linguistic research. The increase in open-access articles and the push towards a FAIR research environment exemplify this progress. In the case of Coptic studies, digital resources like the Coptic SCRIPTORIUM have provided multilayered, tagged corpora that are invaluable in applying NLP to linguistic research.

However, there is a clear call for further interdisciplinary collaboration to address the limited size and scope of existing ancient-language corpora. The digital humanities community is encouraged to join forces to expand digital corpora, apply technologies such as OCR/HTR and IIF, and further the construction and enhancement of digital archives.

The insights gleaned from the current state of NLP and corpus linguistics for ancient languages suggest a bright future where linguistic treasures can be more fully understood and appreciated. Through collaborative interdisciplinary efforts, building on the foundational work of projects like the Coptic SCRIPTORIUM, researchers can pave the way for new discoveries in ancient studies.

In conclusion, while the field of NLP for ancient languages is still in its infancy, its potential to revolutionise our engagement with ancient texts is immense. By discussing the current state of NLP technology in relation to ancient scripts, this article sought to illuminate both the potential applications and the hurdles that must be overcome to fully realise this technology's promise for the field of ancient studies.

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# Sex and politics in Pharaonic Egypt: reading between the lines

Karol Myśliwiec

**Abstract:** Three tombs of Egyptian noblemen from the late 5th/early 6th Dynasty, located near the pyramid of Djoser in Saqqara, inspire some reflections concerning intimate relationships between the pharaoh and the families of his courtiers. Two of these mastabas, those of Merefnebef and Ny-ankh-nefertem, reveal some textual and iconographic features that may suggest a re-interpretation of the slightly earlier, unique “twins tomb” of Nyankhkhnum/Khnumhotep located south of the pyramid. Their later iconoclastic changes seem to be as important as the original reliefs and paintings.

**Keywords:** Old Kingdom, Saqqara, tombs of Merefnebef, Nyankhnefertem and Nyankhkhnum/Khnumhotep

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Most Egyptologists avoid the subject of sexual relations in Ancient Egypt. Their imagination seems to be infected by the modern term “pornography”, which was totally absent in Pharaonic times.<sup>1</sup> *Nolens volens*, those scholars accept even the most drastic episodes of Egyptian literature, like the *coitus* between Horus and Seth<sup>2</sup> or the romance between a pharaoh and an officer of the Egyptian army,<sup>3</sup> but any transformation of similar imagery into visual arts remains a taboo.<sup>4</sup> That is why, for instance, a large group of “erotic” figurines from Saqqara has never been properly published,<sup>5</sup> and the unique “erotic papyrus” had to travel between the storeroom and the exhibit of the Museo Egizio di Torino.<sup>6</sup>

One delicate, though important aspect of sexual behaviour in pharaonic Egypt has remained almost unknown until today, as both literary and iconographic records are discrete with respect to this matter. This focuses on the relationship between pharaohs and some noble women married to high officials of the royal court. Unusual relationships may, however, be deduced from the reliefs decorating the tombs of some late Old Kingdom noblemen in Saqqara.<sup>7</sup> Particularly diagnostic in this respect are three mastabas located in the direct vicinity of the Djoser pyramid.

<sup>1</sup> Vernus 2013: 108–118.

<sup>2</sup> Broze 1996: 90–100 ; Ćwiek 2021: 51–55.

<sup>3</sup> Ćwiek 2021: 56–57.

<sup>4</sup> Staehelin 1990: 110, n. 54.

<sup>5</sup> Martin 1987: 71–84: Cf. the group of similar figurines from Ptolemaic Athribis (Tell Atrib): Myśliwiec 1997; 1999; 2004: 63, 64, 72–74, 104, 112, 135 and figures between pages 46–54.

<sup>6</sup> Omlin 1973: 17–19.

<sup>7</sup> Myśliwiec 2010b: 71–91.

## Merefnebef (Fefi), an upstart vizier from early 6<sup>th</sup> Dynasty<sup>8</sup>

He was granted this high title late in his career,<sup>9</sup> probably for merits connected with the royal harem, as would be suggested by multiple representations of a quartet of female harpists, each of them called “his beloved wife”, and the title *jm3-c* (gracious of arm) (Fig. 1).<sup>10</sup>



Fig. 1. Tomb of Merefnebef (Fefi); banquet scene on the south wall. After Myśliwiec et al., *Merefnebef*, pl. XXII.

Numerous iconoclastic erasures and retouches found in the representations of the tomb owner’s male progeny, and in some legends labeling himself, prove that a conflict divided the family into two lobbies, each sympathising with one of two subsequent rulers. Erased on both parallel lateral walls of the doorway leading to the cult room is part of an inscription mentioning an anonymous king, in the epithet “*jm3hw hr nswt*” (honoured one by the king).<sup>11</sup> Although the name of the pharaoh is not mentioned, such an act of *damnatio memoriae*, may only concern one pharaoh, the one who was an object of outspoken negative emotions after the death of Teti, the alleged usurper named Weserkare.<sup>12</sup>

<sup>8</sup> Myśliwiec, Kuraszkiewicz et al. 2004a.

<sup>9</sup> Myśliwiec 2011: 651–663.

<sup>10</sup> Myśliwiec, Kuraszkiewicz et al. 2004a: 48 (n° –1), n. 18; 155–159 (n° 39–41); 173–174 (n° 50), Pls XXII–XXIII.

<sup>11</sup> Myśliwiec, Kuraszkiewicz et al. 2004a: 87 (1, 1a); 88 (53a), Pls XVIIa–b, XLIVc–d, XLV, XLVIc, XLVIII, h.

<sup>12</sup> Afifi 2013: 25–29.

Erased are also all effigies of Merefnebef's male progeny, except for the youngest son, namesake of the father. The Merefnebef-junior had "restored" a part of the decoration, replacing the original reliefs with a fishery scene showing himself with his wife.<sup>13</sup> Thus in fact he usurped the tomb of his father. All these changes reflect a conflict between Fefi's older son(s) and the cadet, evidently the victor. Undisturbed in his iconoclastic fervour, the latter removed, therefore, all allusions to his father's protector, including the (neutral in itself) word "king" found in the inscriptions, and the effigies of his brothers who doubtless belonged to the enemy lobby. Such changes would not have taken place without protection of a new, legitimate king, and this was most probably Pepi I.

If we assume this interpretation to be true, we may more easily explain some of the surprising architectural features of Fefi's tomb. An enlargement of the tomb, namely the hewing of a new, smaller cult chapel beside the main façade, is a case in point.<sup>14</sup> Would it have been intended for the youngest son? Even more unusual is the existence of a secondary, much smaller and simpler, cult chapel added to Merefnebef's mastaba at its opposite, eastern wall, presumably after the entrance to its main, western cult room was blocked with the collapsed western wall of the mastaba.<sup>15</sup> This collapse does not seem to have occurred accidentally, for instance as a result of heavy rains flowing down from the plateau of the pyramid. Such streams would have first destroyed the structure's eastern and lateral walls. Considering that the aftermath of the collapsed mudbrick wall was found overlying a regular, though low, stone wall paralleling the longitudinal border of the chapel's façade, one must not exclude that the catastrophe was inspired or even initiated by the young iconoclast, after which the competing lobby, faithful to the vizier's memory, constructed for him a new, modest cult place.

Such was the posthumous fate of a sybarite granted the title of "vizier" in a late phase of his career. The generosity of the king, based probably on Merefnebef's involvement in the pharaoh's intimate life, was doubtless rich in secrets. The following case is more explicit in similar matters.

## Nyankhnefertem (Temi)<sup>16</sup>

The posthumous neighbour of Merefnebef had never ascended to a comparable level of the king's favour, although he was visibly helped by his wife in building a close relation to the monarch. Erected slightly, doubtless not more than a generation later than the tomb of Merefnebef, his funerary structure is in many respects (size, architecture) a copy of that tomb. Its unfinished decoration betrays, however, essential differences between the families of the two courtiers.

Unlike the vizier, Nyankhnefertem was a monogamist. His wife and their multiple sons are presented in an octosegmented panorama that occupied the entire eastern wall inside the cult chapel. Imitating a similar, symmetrically constructed sequence of scenes found on the eastern wall in the façade of the vizier's tomb, where Fefi appears eight times alone,<sup>17</sup> each of Temi's eight effigies show the *pater familiae* in the company of his family members. The hierarchical accents, expressing the tomb owner's wishful thinking, are so precisely calculated in this large-sized scene, that one is included to consider it a kind of testament by Temi. The overemphasised position of the omnipresent "eldest son", counterbalancing that of the tomb owner's consort, is surprising. This inspires a "conjectural prosecution", in which iconographic details and iconoclastic retouches play the role of testimonies.

In seven segments of the octopartite "family panorama", the tomb owner is shown wearing a short apron with a projecting forepart, holding a high staff with a bottom-like rounded top, and a pleated handkerchief.<sup>18</sup> The only exception from this rule individualises his effigy in the second scene from the north, following a scene with the "eldest son" (Fig. 2).<sup>19</sup> In this exceptional case Temi is shown wearing a ceremonial, tightly fitting apron and holding a *hrp* sceptre. His companions are two boys (one nude, one wearing an apron), each labelled as "son, his beloved, Mereri". One of them is shown grasping the father's

<sup>13</sup> Myśliwiec, Kuraszkiwicz *et al.* 2004a: 141–146, Pls XXI, LXVI.

<sup>14</sup> Myśliwiec, Kuraszkiwicz *et al.* 2004a: 62–63 (Court 1B), Pls XI, XXIXa–b.

<sup>15</sup> Myśliwiec, Kuraszkiwicz *et al.* 2004a: 40–43, Pls VII, XXV.

<sup>16</sup> Myśliwiec, Kuraszkiwicz *et al.* 2010a.

<sup>17</sup> Myśliwiec, Kuraszkiwicz *et al.* 2004a: 70 (drawing 3), 83–86, Pls XXX–XXXII, XXXIV–XXXVI, XXXIX, XLI.

<sup>18</sup> Myśliwiec, Kuraszkiwicz *et al.* 2010a: 139–152, Figs 52–53, Pls LXX–LXXXVII.

<sup>19</sup> Myśliwiec, Kuraszkiwicz *et al.* 2010a: 147–148 (scene 4), Pls LXXVI–LXXXVII.

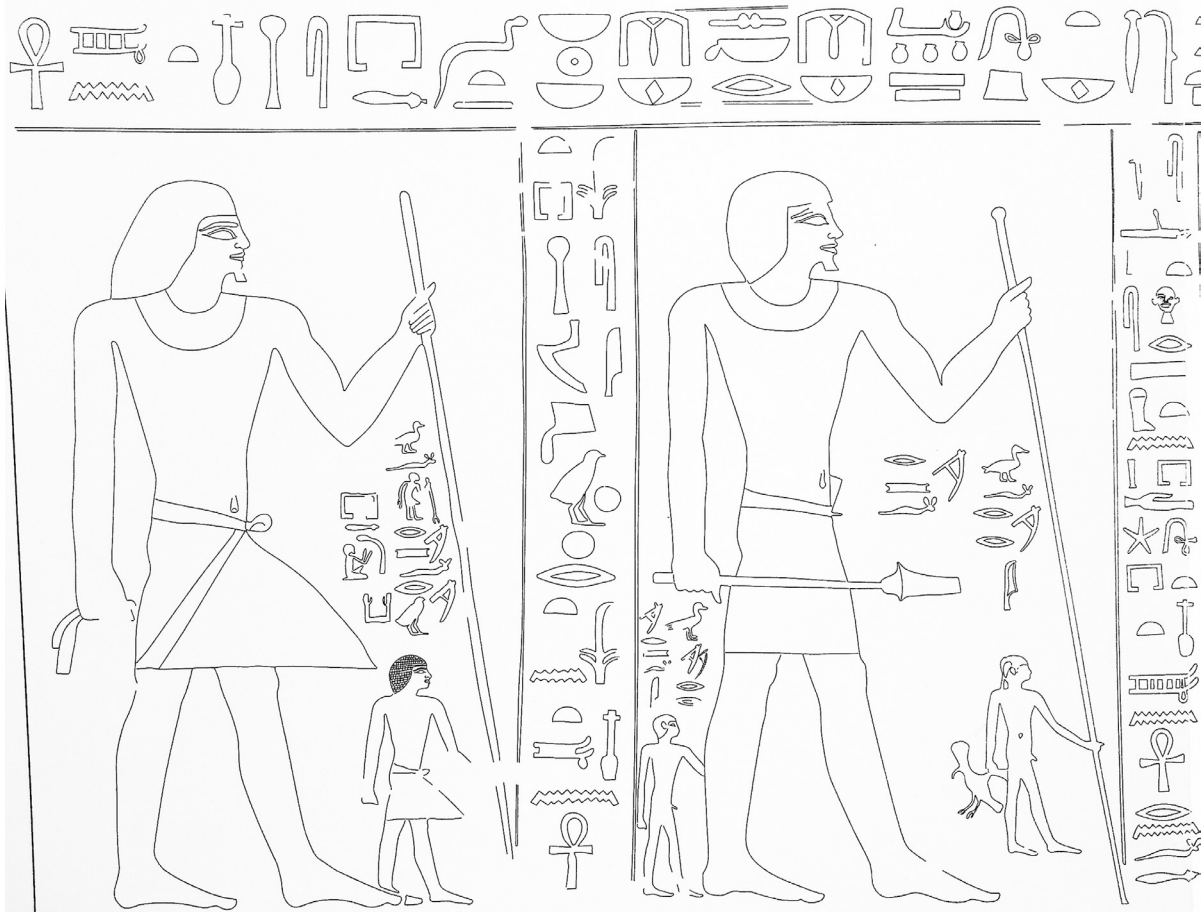


Foto 2. Tomb of Nyankhnepfertem (Temi); fragment of the “family panorama” on the eastern wall: tomb owner with his eldest son (a) and with two boys named Mereri (b). After Myśliwiec, Kuraszkiewicz et al., Fig. 51.

staff and holding a bird, *Upupa Epops*, while the other (younger or less important?) is shown embracing his father’s calf. Why is the tomb owner demonstrating this kind of exceptional reverence to his youngest sons?

The two Mereris are found again in some secondary inscriptions, added doubtless after Temi’s death, to the original parts of the wall decoration inside the chapel. Iconoclasts had erased a fragment of the central scene in the “family panorama”, where the tomb owner was originally depicted in the company of his wife and one of their sons. The head of the latter has been erased, and his name replaced with that of Mereri. Written with red ink, the new inscription is still discernible.<sup>20</sup>

A new inscription has also been added to some figures represented on the other walls in the chapel’s northern part. On the west wall, two of the four, otherwise anonymous, figures showing bearers of sacred oils received the name Mereri. In one of these cases, the name is completed with an epithet: “His son, of the Great House, Mereri”.<sup>21</sup> Although clumsily orthographed, this label generates a suspicion: Did one of the youngest sons pretend to be a child of the King?

Secondary inscriptions have also been added to the figures of offering bearers in a procession depicted on the chapel’s north wall.<sup>22</sup> The second (first after the “eldest son”) in a sequence of twelve men is here a Mereri, and his namesake occupies the fifth position. The label of the first one includes the epithet: *z3.f nj ht.f mrjj.f Mrrj* (his son, of his body, his beloved, Mereri). This occurrence of the title is unique in the part of the necropolis that has so far been unearthed by our mission.

Even if one of the two young Mereris just pretended to be a son of a pharaoh, the tomb owner officially respected him. This Mereri evidently had to fight for his rights after the death of Temi and was probably

<sup>20</sup> Myśliwiec, Kuraszkiewicz et al. 2010a: 145–146 (scene 2), Pls LXXII–LXXIII.

<sup>21</sup> Myśliwiec, Kuraszkiewicz et al. 2010a: 164–165 (scene 14), Pls XCIII–XCV, CIb–c; Myśliwiec 2019: Fig. 8c–d; 2023–2024.

<sup>22</sup> Myśliwiec, Kuraszkiewicz et al. 2010a: 176–181, n° 2 and 5, Fig. 57, Pls CIII–CIV, CVI, CIX–CXI; Myśliwiec 2019: 20–22, Fig. 9a–b; 2023–2024.

successful in doing so. He was able to make iconoclastic “renovations” in the decoration of Temi’s cult chapel. If his was the modest tomb of the vizier called Mereri, found within the monumental funerary complex of Ptahhotep, in the vicinity of Temi’s mastaba,<sup>23</sup> one might presume that he was even granted the title of vizier. The only well-preserved part of his tomb, a monumental false door, records a sequence of titles resembling that of vizier Merefnebef, another nouveau-riche in the company, perhaps even Mereri’s model.<sup>24</sup>

What about the other Mereri, void of any title, but omnipresent beside or close to the first one? Did he exist at all? Was he not just a symbolic double of the first one, a spiritual camouflage of a royal fatherhood? Whatever his nature, he became part of the quasi-royal object venerated by the Ny-ankh-Nefertum, whose political career was possibly facilitated by his wife’s sexual generosity.

If this kind of relations in the final phase of the Old Kingdom became so natural that it could be exhibited in the decoration of a tomb, it seems legitimate to look for the beginnings of its evolution in slightly earlier cultural phenomena.

### Nyankhkhnum/Khnumhotep<sup>25</sup>

Located south of the step pyramid and dated to the late 5<sup>th</sup> Dynasty (the end of Nyuserre’s reign/start of Menkauhor), the tomb of Nyankhnefertum and Khnumhotep is not a typical double burial place.<sup>26</sup> Its subterranean part has only one burial chamber, divided into two sections with a low stone wall. Neither the walls of this room, nor the two stone coffins, the remains of which were found by the excavators, bear any traces of sculpted or painted decoration. We ignore who (if anybody) was originally buried in this place.

Contrasting with the burial chamber is the cult place inside the mastaba, with its extremely rich and original relief decoration, sophisticated in its contents and form. The dualism and parallelism of the scenes belonging to the classical iconographic repertory of Old Kingdom funerary art is not only unique, but it also contains some unusual scenes expressing a sort of close, if not intimate relation between the two alleged tomb owners.<sup>27</sup> These features have animated a discussion focused on the interpretation of the relationship between the two men, both labelled as *irj. ˁnwt njswt, mḥnk.njswt* (manicurist of the king, confidante of the king). Generally accepted by most Egyptologists is the recent idea that they were twins.<sup>28</sup>

Nevertheless, some components of the sophisticated decoration, as well as the broader historical and cultural context, encourage continuation of the discussion. Important, first of all, are the two theophoric names emphasising two aspects of the demiurge Khnum. These names constitute a semantic entity, combining an active (Ny-ankh-Khnum: “the one who is life of Khnum”) and passive (Khnum-hotep: “Khnum is satisfied” or “Khnum is resting”) hypostasis of the Creator. The names thus complete each other, and their communion is emphasised with a link uniting them into one continuous word, an onomastic synthesis, a sort of semasiological ligature. This occurs in two important, if not emblematic places: a) the presentation of the tomb owner(s)’ family (**Fig. 3**);<sup>29</sup> b) on the door barrell under the lintel above the entrance to the rock-hewn chamber in the oldest part of the tomb (**Fig. 4a**).<sup>30</sup> The latter inscription contrasts with the double label decorating a similar barrell atop the entrance to another room which was added to the structure in a later phase (**Fig. 4b**).<sup>31</sup> The idea of expressing the owner’s duality was probably becoming increasingly important in the presentation of his nature.

A kind of confirmation of such imagery may be detected at the level of iconography. Whenever Nyankhkhnum and Khnumhotep are represented standing beside each other, they grasp each other’s hand. Even their statue repeats this scheme.<sup>32</sup> However, in every context one of them, always

<sup>23</sup> Myśliwiec 2019: 22–25, Figs 10–11; 2023–2024.

<sup>24</sup> Myśliwiec 2010b: 79–81.

<sup>25</sup> Moussa, Altenmüller 1977.

<sup>26</sup> Moussa, Altenmüller 1997: 21–24.

<sup>27</sup> Moussa, Altenmüller 1977: Taf. 72–73; 90–92.

<sup>28</sup> Evans, Woods 2016: 55–72; Ćwiek 2021: 61–63.

<sup>29</sup> Moussa, Altenmüller 1977: 41–43, Abb. 11, Taf. 29.

<sup>30</sup> Moussa, Altenmüller 1977: Taf. 50, 52–53, Abb. 23.

<sup>31</sup> Moussa, Altenmüller 1977: Taf. 18b, Abb. 7.

<sup>32</sup> Moussa, Altenmüller 1977: Taf. 16, 19a.

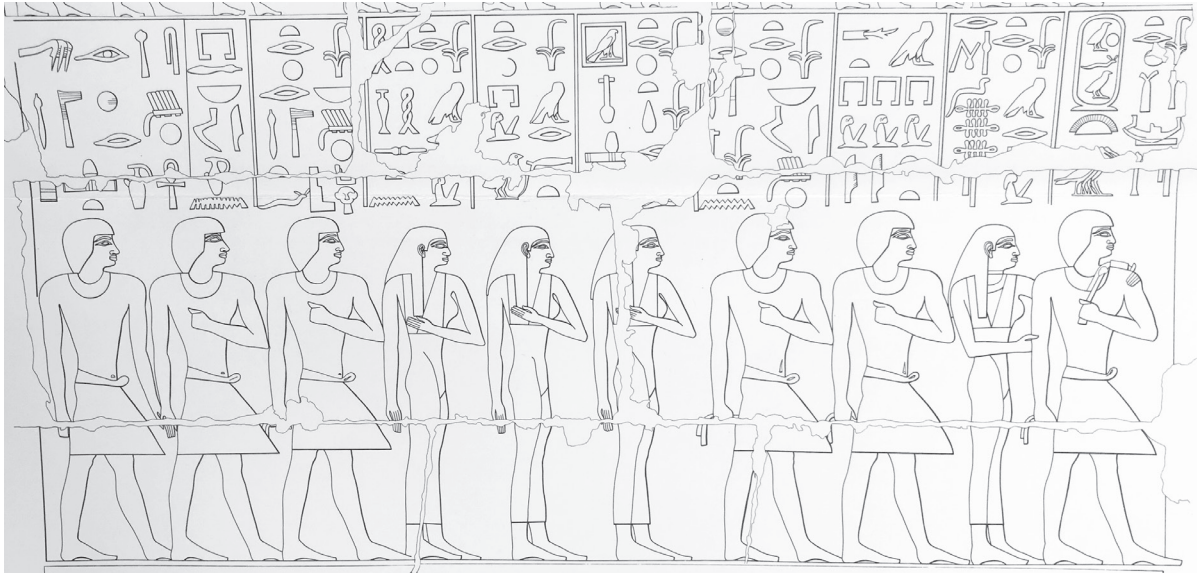


Foto 3. Tomb of Nyankhknum/Khnumhotep: the family of the tomb owner(s). After Moussa, Altenmüller, Nianchchnum und Chnumhotep, Abb. 11.

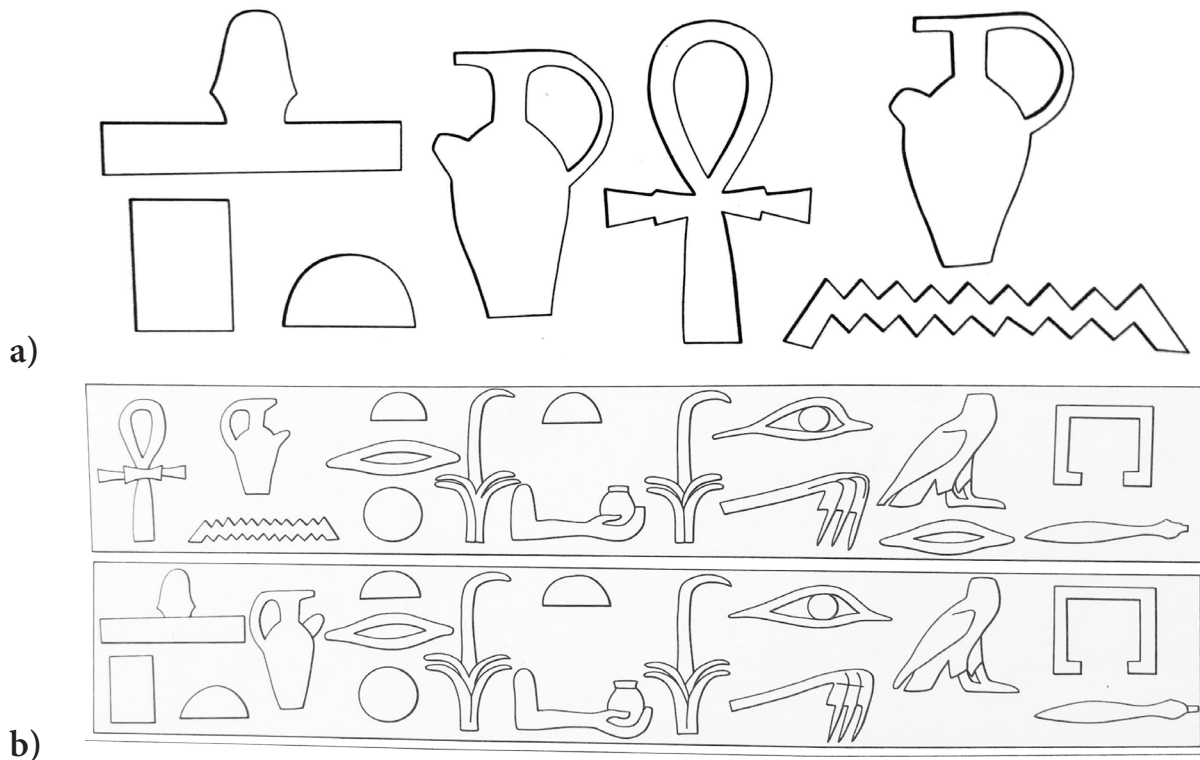


Foto 4. Tomb of Nyankhknum/Khnumhotep: inscriptions on two door barrels:

a) from the early phase of construction. After Moussa, Altenmüller, Nianchchnum und Chnumhotep, Abb. 23.

b) from the late phase of construction. After Moussa, Altenmüller, Nianchchnum und Chnumhotep, Abb. 7.

Nyankhknum, is shown as the active leader guiding his double.<sup>33</sup> In the scene portraying the family, where they appear as the youngest progeny, at the end of the sequence, the “leader” holds his other hand to the breast, thus resembling all the other children, while the other hand of his companion is freely pendent (Fig. 3).

<sup>33</sup> Moussa, Altenmüller 1977: 27.

Some of these features seem to have inspired the owner of a later tomb, that of Nyankhnefertem presented above, dated to the reign of Pepi I.<sup>34</sup> The two youngest “sons” of the tomb owner are namesakes, which may structurally be considered a simplified paraphrase of the onomastic duality based on the name of a god. Both are named Mereri, but one of them predominates with respect to his activity. He may have had a remarkable career, that of a vizier with his own tomb inside an earlier funerary complex belonging to the highest class of Egyptian nobility.<sup>35</sup> The two Mereris accompany the tomb owner, one of them holding a large *Upupa epops* and grasping his father’s long staff (**Fig. 2**). The secondary inscription labelling one of the two Mereris, possibly unveils a mystery: he was the son of a king, his mother being the wife of the tomb owner. Considering the privileged location of the “twins” unusual tomb, as well as the originality, abundance and exceptional fineness of its reliefs, it seems legitimate to suggest that the tomb owner, doubtless Nyankhkhnum, was also an individual with half-royal blood.

The main difference between the mastaba of the latter and the tomb of Temi is the perspective in which the tomb owner is presented. While the tomb of King’s (possibly Niuserre’s) child is excessively sophisticated, his alleged parents (**Fig. 3**) almost disappear in the abounding context of genre scenes. In this respect it contrasts with the modest sepulchre belonging to a middle-class courtier of a king from the beginning of the next dynasty. Temi expresses explicitly his satisfaction with being the “father” of a royal son, and in the same time he appears to be very sensitive at the emotions of his legitimate male progeny.<sup>36</sup> However, the precautions he undertook while creating the “family panorama” on a wall of his cult chapel, turned out to be vain when faced with reality. A conflict between the sons of his body and the boy of half-royal blood, resulted, among others, in iconoclastic retouches on the walls of his cult chapel.

The textual and iconographic dualism characterising the decoration of both mastabas, that of Nyankhkhnum and that of Nyankhnefertem, brings to mind a specific feature of funerary art from the late Old Kingdom. This is the popularity of “pseudo-groups”, double representations of one and the same person in Egyptian statuary.<sup>37</sup> This fashion, represented by a large group of double statues, even reached royal portraiture, its classical example being the double effigy of king Niuserre, approximately contemporaneous with the tomb of the “twins”.<sup>38</sup> If this type of imagery inspired the period’s funerary art in general, the tomb under discussion, an exclusive phenomenon, may have been conceived as a “pseudo-double-tomb”. The real and only person buried in this mastaba would then have been Nyankhkhnum: Khnumhotep may have played just the role of the latter’s imaginary shadow diverting attention from the genuine father of the tomb owner.

## Conclusions

The described cases emphasise the creative role of ancient Egyptian artists, who decorated tombs on behalf of tomb owners. The sculptors and painters did not copy nature, but created a “reality” according to the wishful thinking of the latter. This reality was, nevertheless, built, among other elements, with many details observed by the artist in nature.<sup>39</sup> Multiple retouches, sometimes drastically iconoclastic, made later on to the original works, prove that the tomb owner’s vision did not always satisfy his progeny, and that the reasons of the alteration were not only economic (inheritance) but also political.<sup>40</sup>

These specific “testaments” appear to be a mixture of reality and phantasy. Were it not the case, would an ichneumon or a genet not have been depicted as climbing a papyrus stem in order to reach a bird’s nest.<sup>41</sup> Even silly graphic jokes, mocking at the tomb owner, could be practiced by a craftsman, who alluded, for instance, to Temi’s sexual life. In the inscriptions labelling the scenes where he is accompanied by his wife, the hieroglyph having the shape of a sled (*tm*), occurring always in the tomb owner’s name, has been stylised into a phallus (hieroglyph *mt*), and the orientation of this sign purposefully reinversed.<sup>42</sup>

<sup>34</sup> Cf. notes 18–22.

<sup>35</sup> Cf. note 23.

<sup>36</sup> Myśliwiec 2010b: 79–84; 2010: 305–336; 2020–2022: 367–371.

<sup>37</sup> Eaton–Krauss 1995: 14–19; Ziegler 1999: 362–363.

<sup>38</sup> Wildung 1984.

<sup>39</sup> Evans, Woods 2016: 59–69.

<sup>40</sup> Myśliwiec 2020–2022; 2023–2024.

<sup>41</sup> Myśliwiec *et al.* 2004: 128–129, Pls XXI, LXIII–LXV; 2020–2022: 356, Abb. 7a.

<sup>42</sup> Myśliwiec 2011a: Figs 17–21.

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# Aegyptiaca in the Western Mediterranean. The appropriation of Egyptian amulets in ancient necropolis

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**Abstract:** This study examines the distribution and significance of Egyptian-style amulets in Phoenician-Punic necropoleis across the Western Mediterranean during the 1st millennium BC. Through comparative analysis of major funerary contexts in Carthage, Sardinia, Ibiza, and Cádiz, this research challenges traditional interpretations of these objects as mere “exotic prestige goods” acquired without cultural understanding. Instead, the consistent patterns of selective adoption demonstrate deliberate adaptation rather than random acquisition. Evidence of local workshop production in steatite, combined with the widespread integration of these amulets into burial practices across diverse Western Mediterranean communities, reveals processes of cultural transmission and acculturation. This study argues that Phoenician-Punic societies possessed substantive knowledge of Egyptian religious symbolism and actively adapted these protective elements to serve their own funerary needs, demonstrating agency in cross-cultural appropriation of magical and religious belief.

**Keywords:** Egyptian amulets, aegyptiaca, Phoenician-Punic culture, funerary practices, Western Mediterranean, cultural transmission, acculturation

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## Introduction

Egyptian civilisation was permeated by magical beliefs and practices, with amulets playing a central role in their ritual implementation. These objects served multiple functions: they were employed in medical treatments for bodily healing, used in religious contexts to invoke the protection of specific deities, and accompanied individuals through liminal moments such as birth and death. This study focuses on the latter context: the funerary sphere. We tend to think that objects deposited within tombs were deliberately selected rather than randomly placed, each serving either a practical or ritual function. Our analysis concentrates on one of the smallest yet most powerful artifacts found in burial contexts: amulets. While some amulets accompanied their owners throughout life, others were manufactured specifically for funerary purposes.<sup>1</sup> These objects typically took the form of recognisable divinities or symbols familiar to ancient Egyptian society. However, their use extended well beyond Egypt's territorial boundaries. Egyptian-style amulets have been discovered throughout the Mediterranean area: in regions proximate to Egypt, such as the Levant<sup>2</sup> and the Aegean,<sup>3</sup> as well as in more distant areas including the central

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<sup>1</sup> Quack 2022: 17.

<sup>2</sup> See Herrmann 1994; 2003.

<sup>3</sup> Apostola et al. 2021: 63.

Mediterranean islands,<sup>4</sup> the North African coast,<sup>5</sup> and the Iberian Peninsula.<sup>6</sup> Traditionally, scholars have interpreted these objects as prestige goods imported by Phoenicians and Greeks, valued for their “exotic” iconography and perceived magical properties but used without deep cultural understanding.<sup>7</sup> However, the predominant reuse of these amulets in funerary contexts merits closer examination. Given the importance of afterlife beliefs across Mediterranean cultures, this specific pattern suggests that Egyptian amulets were actively adapted to address the concerns of culturally distinct societies.

The circulation of Egyptian objects (known as *aegyptiaca*) across the Mediterranean occurred in several distinct phases. This paper examines the 1st millennium BC, a period characterised by the most remarkable quantity and quality of *aegyptiaca*. Our focus centres on Phoenician-Punic culture, which has received less scholarly attention than its Greek counterpart. This emphasis is further justified by contextual differences: while Egyptian amulets in Greek culture have been predominantly attested in sanctuary contexts, they appear primarily in funerary settings within Phoenician-Punic culture.<sup>8</sup> Given that funerary artefacts were selected for specific purposes, the presence of Egyptian-style amulets in tombs suggests that ancient societies possessed substantive knowledge of Egyptian religious and magical practices, particularly those concerning the soul’s survival in the afterlife.<sup>9</sup> Practical constraints preclude comprehensive coverage of all Phoenician cities; consequently, we have selected the most significant contexts in the Western Mediterranean as case studies. Through comparative analysis, we aim to present a more comprehensive understanding of Egyptian amulets’ uses across the Western Mediterranean region. This study addresses three central questions: Were these amulets employed for their apotropaic properties? Did Phoenician civilisation possess knowledge of their iconography and significance? How were these amulets adapted within Phoenician-Punic culture?

## Egyptian amulets and *aegyptiaca*: the difficulties to define small objects

To achieve a better understanding of amulets, we must begin by defining them. However, defining what constitutes an amulet has proven far from straightforward, particularly given the diversity of their contexts of use. While amulets are amongst the most common artefacts in Egyptological collections, the categorisation of an object as an “amulet” is frequently misunderstood. This confusion is especially prevalent in substantial collections, particularly those containing small statues of Egyptian divinities (also manufactured in faience) and jewellery (with scarabs commonly incorporated into rings and bracelets). Petrie was amongst the first Egyptologists to undertake a dedicated study of these small objects. His work on amulets from the University College London collection remains the principal reference in this field of research today.<sup>10</sup> He was the first Egyptologist to approach amulets as a distinct category and to demonstrate their value for studying Egyptian culture. Moreover, his work encompassed amulets belonging to other ancient cultures. Nevertheless, this study does not provide a general definition of amulets. Recently, Quack defined them as objects worn on the body (including placement within mummy wrappings), from which protection or healing through supernatural forces is expected. Indeed, the ancient Egyptian lexicon reveals the core intentions associated with these objects: the most common term *wḏj.w* derives from a root meaning “to be intact”, while *sḏ* (“protection”) is etymologically connected to the word for “knot”, suggesting the paradigmatic importance of knot-amulets in early Egyptian amuletic practice.<sup>11</sup>

Whilst the definition of Egyptian amulets may be relatively clear, the term *aegyptiaca* has played an altogether different role in scholarship. It refers to a multitude of objects displaying Egyptian or Egyptianising styles, whether manufactured in Egypt or imitated in external workshops<sup>12</sup> Consequently, researchers have typically focused exclusively on material from the closest regions: the Levantine and the Aegean.<sup>13</sup> In his recent study of Egyptian artefacts in the Levant, Ahrens suggests that, based on typology

<sup>4</sup> See Hölbl 1986; 2021.

<sup>5</sup> See Redissi 2015.

<sup>6</sup> See Gamer-Wallert 1978; Padró i Parcerisa 1982.

<sup>7</sup> López Grande 1991: 194.

<sup>8</sup> Apostola 2021: 63 ; Redissi 2011: 51.

<sup>9</sup> Redissi 2011: 51.

<sup>10</sup> See Petrie 1914.

<sup>11</sup> Quack 2022: 1–3.

<sup>12</sup> Redissi 2007: 106.

<sup>13</sup> Apostola et al. 2021: 62.

and hieroglyphic inscriptions, most objects from the Second Intermediate Period were transported to the Levant following their primary use in Egypt.<sup>14</sup> Regarding the Aegean, Apostola observes that the greatest quantity of *aegyptiaca* from the 8th to 6th centuries BC comprised Egyptian artefacts (scarabs, figurines, and amulets representing divine entities) alongside local imitations (faience vessels, anthropomorphic and zoomorphic figurines, and amulets). These latter objects were probably manufactured in faience workshops outside Egypt, in Rhodes or other parts of Eastern Greece.<sup>15</sup> These two examples demonstrate both the ambiguity of the definition of *aegyptiaca* and the limitations of this terminology.

In any case, Egyptian artefacts (including amulets, scarabs, and vessels in faience and stone) were extensively distributed throughout the Mediterranean region during Antiquity.<sup>16</sup> Traditionally, Egyptian amulets in external contexts have been regarded as “prestige” objects. In the Levant, the presence of Egyptian objects has been interpreted as evidence of gift exchange between Egyptian kings named on the objects and Levantine rulers, or even as archaeological proof of an alleged Egyptian “empire” in the Levant during the Middle Kingdom.<sup>17</sup> In the Aegean, given that most Egyptian amulets appeared in sanctuary contexts, they may have served as means of self-promotion by merchants or other social groups participating in cultural interactions across the eastern Mediterranean.<sup>18</sup> Even in the Western Mediterranean, *aegyptiaca* are either Egyptian or produced under Egyptian influence.<sup>19</sup> These objects, which arrived gradually through Phoenician trade networks, were likewise regarded as “exotic”.<sup>20</sup> Nevertheless, a significant difference in usage merits attention: while most Egyptian amulets in the Aegean are concentrated in votive deposits within sanctuaries, those in the Western Mediterranean appear predominantly in funerary contexts.<sup>21</sup>

## Mapping a phenomenon

The presence of amulets in Egyptian tombs increased from the New Kingdom onwards. Correspondingly, the typology of amulets gradually diversified. By the Third Intermediate Period, all the divinities of the Egyptian pantheon had their own representation in amuletic form.<sup>22</sup> This rise in both the number and variety of amulets partly explains why they also extended beyond Egyptian territory. Regarding the exportation of Egyptian objects beyond Egypt, several distinct phases can be identified. Relations between Egypt and the Levant were already notable from the late 4<sup>th</sup> millennium BC, and particularly from the early 3<sup>rd</sup> millennium BC, becoming increasingly intense during the 2<sup>nd</sup> millennium BC.<sup>23</sup> However, the 1<sup>st</sup> millennium BC proved most significant due to the quantity and quality of exported amulets. It was also during this period that Egyptian objects became widespread throughout the entire Mediterranean region.

To understand how these objects reached these territories, it is important to note that the 9<sup>th</sup> to 8<sup>th</sup> centuries BC correspond to the period of Phoenician colonisation. Through their commercial activities, Phoenicians played a major role in the diffusion of *aegyptiaca* across the Mediterranean.<sup>24</sup> These objects were directly connected to the metals trade, given that Phoenicians were the principal suppliers of precious metals and tin to Egypt. In exchange, they exported religious and magical objects throughout their new colonies.<sup>25</sup> From the Levantine region, Egyptian objects such as amulets (alongside figurines, alabaster pieces, jewellery, and scarabs) reached Phoenician cities across the Mediterranean. These artefacts were initially distributed to closer regions: the Levantine coast, Cyprus, and the Aegean. Subsequently, these objects also reached more distant regions, including Italy, North Africa, and the Iberian Peninsula.<sup>26</sup> It is particularly on these latter territories that this article focuses.

<sup>14</sup> Ahrens 2023: 152.

<sup>15</sup> Apostola 2021: 63.

<sup>16</sup> Redissi 2007: 106.

<sup>17</sup> Ahrens 2023: 151.

<sup>18</sup> Apostola 2021: 94.

<sup>19</sup> Redissi 2015: 58.

<sup>20</sup> López Grande 1991: 194.

<sup>21</sup> Redissi 2015: 58; Redissi 2011: 51; Apostola 2021: 63.

<sup>22</sup> Barcat 2019: 227.

<sup>23</sup> Ahrens 2023: 153.

<sup>24</sup> Redissi 2011: 51; Redissi 2007: 106.

<sup>25</sup> Redissi 2007: 106.

<sup>26</sup> Apostola *et al.* 2021: 63.

It must be considered that Egyptian amulets are defined by their relationship with their owner: they were made to be carried on the body and to remain close to the deceased.<sup>27</sup> Indeed, most amulets feature a perforation or suspension system on their upper part. Given that amulets were used in daily life, this system enabled the amulet to be worn on a necklace or bracelet. Nevertheless, this feature would not be necessary in the funerary context. Consequently, we may suppose that the same amulets worn during daily life accompanied their owner during the transition to the afterlife. This exemplifies how funerary contexts offer more precise information about the conditions of amulet use in particular. Given the specific relationship between amulets and their owners, the presence of Egyptian apotropaic objects in Phoenician tombs is intriguing. Egyptian amulets and scarabs constituted important elements of grave goods in Phoenician and Punic tombs.<sup>28</sup> However, one may ask whether they were attested in all tombs or merely in isolated examples. In other words, it remains unclear whether Egyptian amulets were integrated as part of Phoenician funerary rituals or whether they served as markers of social status. Through comparison of several significant Phoenician-Punic necropoleis in the western Mediterranean, we aim to address these questions.

## North Africa: Carthage

The most remarkable case in the Western Mediterranean is the city of Carthage. The study of the Phoenician-Punic necropolis at this site and the Egyptian objects found there was undertaken by Vercoutter and Cintas, followed more recently by Redissi.<sup>29</sup> Most of the artefacts were not significant Egyptian monuments such as sarcophagi or stelae, but minor objects such as amulets. Occasionally, these were the only objects placed in the tombs to protect the deceased: “*Les objets égyptiens sont si nombreux à Carthage que les archéologues qui fouillent le site, ont été obligés de se familiariser avec les noms des dieux du panthéon égyptien*”.<sup>30</sup> Indeed, most of the amulets represented Egyptian divinities or Egyptian symbols. Even Vercoutter in his introduction acknowledged that, as far as Egyptologists are concerned, the Egyptian amulets of Carthage are of limited interest, given that they date from the 26th dynasty or the Persian period and were manufactured using poor-quality techniques. Despite this initially negative assessment, he also admitted that they constituted the only material available for gaining a better understanding of Carthaginian culture.<sup>31</sup>

The Egyptian material most frequently attested in this necropolis comprises scarabs and scaraboids. It is also noteworthy that, in most tombs, the scarab is the only amulet attested close to the deceased, alongside the ritual pottery. Even in the most ancient tombs, which also contained the smallest quantity of material, there was usually a scarab in carnelian or stone.<sup>32</sup> The scarab was amongst the most widespread amulets in the Mediterranean area and consequently imitated by local productions. Its extensive distribution, both chronological and geographical, must be considered: it was manufactured from the First Intermediate Period until the Roman period in Egypt, its form being imitated in the Near East and throughout the rest of the Mediterranean basin. Its great popularity can be explained by the richness of its symbolism. In Egypt, the hieroglyphic sign of the scarab represented the phonetic value *kheper*, which translates as “to be created”, “to come into existence”, or “to become”.<sup>33</sup> It was therefore the symbol of rebirth, representing the sun which rises in the morning and is reborn each day.

In the Punic necropolis of Byrsa (7th to 6th century BC), archaeologists discovered approximately a hundred tombs. Amongst these, tomb D1 merits particular attention. It housed the skeleton of a young man wearing no fewer than 21 Egyptian-style amulets. The amulets have been dated to the second half of the 6th century BC and represent Egyptian divinities and symbols: a fragmentary *wadj*, five amulets in the shape of the *wedjat* eye, five *uraei*, four Ptah-Pataikos (two of which bear representations of Isis on their reverse), a prostrate lion, a ram, and a bull.<sup>34</sup> With the exception of the *wadj* amulet manufactured

<sup>27</sup> Barcat 2019: 223.

<sup>28</sup> Redissi 2011: 51.

<sup>29</sup> See Vercoutter 1945; Cintas 1945; Redissi 1991; 2011.

<sup>30</sup> Vercoutter 1945: 1–2.

<sup>31</sup> Vercoutter 1945: 1–2.

<sup>32</sup> Vercoutter 1945: 41.

<sup>33</sup> Andrews 1994: 50.

<sup>34</sup> Redissi 2011: 51–52.

in Egyptian faience, the other amulets were made in steatite, which suggests local production. Indeed, given the substantial quantity of amulets with Egyptian iconography in Carthage, the existence of a local workshop is an important consideration for research. This hypothesis is also supported by the iconography of these amulets: the symbolism corresponds to Egyptian magical and religious concepts that were adopted in the Levant and disseminated throughout the Mediterranean by the Phoenicians.<sup>35</sup> Taking the case of scarabs, whilst their form remains identical to that in Egypt, their inscriptions comprise Greek or Semitic signs rather than hieroglyphs.<sup>36</sup>

Despite their origin, the presence of *aegyptiaca* in Carthaginian tombs indicates that the local population possessed substantial knowledge of Egyptian funerary and religious concepts, particularly concerning the afterlife. This is not an isolated example, as other Phoenician-Punic necropoleis follow the same pattern.

## The central islands: Sardinia and Ibiza

The island of Sardinia was one of the principal Phoenician stopping points before reaching the Iberian Peninsula.<sup>37</sup> The museums of Cagliari and Sassari house significant collections of amulets in faience and steatite, most originating from the necropoleis of Tharros and Sulcis.<sup>38</sup> The study of objects with Egyptian iconography from Punic Italy was undertaken by Hölbl, who examined a substantial number of amulets and scarabs from Sardinian museums.<sup>39</sup> He distinguished several typologies based on their Egyptian or local manufacture, according to their material and inscriptions. Egyptian objects in Sardinia can thus be organised into three categories: imported Egyptian objects (such as alabaster vases with hieroglyphic inscriptions that were reused in western Phoenician necropoleis as cinerary urns), *aegyptiaca* (objects manufactured outside Egypt, such as scarabs in steatite), and Phoenician-Punic objects in which Egyptian influence is evident.<sup>40</sup> Belonging to this last category, the amulet-cases merit particular attention. These small cylinders contained rolled foil engraved with images relating to funerary rites. Whilst their form was typically Punic, the Egyptian influence is clear: the upper part represents the head of an Egyptian deity, such as the lioness goddess Sekhmet, the falcon god Horus, or the ram god Amun. The Egyptian influence on objects found in Sardinian necropoleis is not limited to amulets. Jewellery dated to the 7th to 6th centuries BC, probably manufactured in local workshops, must also be noted. Through their iconography and style, these pieces follow Syrian and Cypriot inspiration. However, some filigree earrings have no parallel in the East, but rather in the West, in sites such as Carthage and Cádiz.<sup>41</sup> This demonstrates the originality and independence of Sardinian colonies in relation to the Phoenician metropolis in the East.

The main Phoenician settlement was Tharros, situated in the Western part of the island on a narrow headland in the Gulf of Oristano. Considering the substantial number of Egyptian amulets found in the necropolis of Tharros, some researchers have suggested the existence of a local workshop in this city.<sup>42</sup> This hypothesis is supported by the fact that most of the amulets were made in steatite,<sup>43</sup> one of the principal materials used in the West for amulet production. Through new influences in the Mediterranean region, Punic Sardinia acquired a degree of independence from the original Eastern metropolis. Consequently, it appears that Egyptian influence arrived not only in Phoenician territory but also directly in their Western colonies.<sup>44</sup>

The other site was Sulcis, in the South of the island, which was also founded for commercial purposes. Most of the *aegyptiaca* were found in the necropolis and the Tophet, used for the burial of children. A significant number of Egyptian and Egyptianising amulets from Sulcis derive from well-documented tombs. However, the relationship between these amulets and their owners is difficult to establish: Punic

<sup>35</sup> Redissi 2011: 51–52.

<sup>36</sup> Vercoutter 1945: 41.

<sup>37</sup> Peckham 2014: 271.

<sup>38</sup> Redissi 1991: 96.

<sup>39</sup> It should also be noticed his recent study on the *aegyptiaca* from Sicily see Hölbl 2021.

<sup>40</sup> Hölbl 1986: 1–2.

<sup>41</sup> Peckham 2014: 272.

<sup>42</sup> Redissi 1991: 113.

<sup>43</sup> Hölbl 1986: 411.

<sup>44</sup> Hölbl 1986: 1.

tombs contained multiple burials, between 12 and 20, used over a considerable period. Consequently, the number of amulets per tomb cannot be determined. Nevertheless, their presence remains valuable for establishing which types of amulets were used in this necropolis. Amongst these amulets, *wedjat*, Ptah-Pataikos, Sekhmet, Harpocrates, Taweret, and Bes are attested. The substantial number of these amulets, together with their iconography, demonstrates that Egyptian elements were thoroughly adopted in this Western society.<sup>45</sup>

Another Western island where Egyptian culture is significant is Ibiza. Founded by the Phoenicians (*Ebusus*) around the 7th century BC, its port maintained contact with the central Mediterranean, particularly under Carthaginian influence. The city was occupied almost continuously until the end of the Roman Empire.<sup>46</sup> Ibiza played a significant role in the development of trade relations amongst Punic, Greek, and Etruscan societies.<sup>47</sup> This particular position in the Western Mediterranean explains the substantial number of Eastern objects. Ibiza is known as “the island of Bes” due to the large number of objects attested, especially coins and amulets, on which the image of this divinity is most frequently represented. Amulets of Bes appeared in Egypt from the 18th dynasty, usually associated with snakes and other protective animals. He was represented naked, dwarf-like with bandy legs, wearing tall plumes and resting his hands on his hips. In the Graeco-Roman period, he sometimes carried a round shield and a sword, as evidence of his protective qualities. Most of his amulets are made in faience, and occasionally in carnelian and steatite. These amulets were particularly worn in life by women and children, but they also served a protective purpose in the afterlife: like Taweret, they attended women during childbirth.<sup>48</sup>

Consequently, most objects representing Bes were found in one of the principal Phoenician-Punic necropoleis of Ibiza: Puig des Molins. This necropolis is exceptionally well documented and was in constant use from its foundation by the Phoenicians until the Roman period.<sup>49</sup> The amulets found in its tombs were diverse in typology, technique, material, and representation. The most numerous are representations of divinities: Isis, Wadjet, Hathor, and obviously Bes. Furthermore, the number of scarabs is also significant. They can be classified according to their typology: representations of humans (dwarves), body parts (such as eyes), anthropomorphic divinities (gods with the heads of falcon, ibis, dog, monkey), complete animals (cats, lions, hippopotami), or parts of them, as well as plants (papyrus) and Egyptian crowns.<sup>50</sup>

It appears that all Egyptian-style amulets from Ibiza have been found exclusively in funerary contexts, particularly in children’s graves. These objects seem closer to those within the sphere of influence of Carthage than to those of the Circle of the Straits around Gibraltar. However, chronology has been difficult to establish from archaeological context, given their extended period of use. Based on their iconography and material, some appear to have been manufactured in the Western Mediterranean. The 4th century BC coincides with a decrease in the number of Egyptian amulets in the West and with the establishment of Punic workshops to satisfy demand.<sup>51</sup> Nevertheless, Ibiza’s role as a redistribution centre in the Western Mediterranean was less significant than that of other mainland cities.

## The Iberian Peninsula: Cádiz

Our final case study focuses on one of the most ancient Phoenician foundations in the Western Mediterranean, as well as the most distant. The city of Cádiz (*Gadir*), in southern Spain, is situated on a peninsula attached to the mainland by a narrow sandbank. Even in Antiquity, the city was characterised by the adaptation and reinterpretation of Eastern divinities: the temple of the Phoenician goddess Astarte later became the temple of Venus, while the sanctuary of Baal-Hammon was subsequently identified as the temple of Heracles. Venerated under the name of Melqart, this constitutes the most prominent example of the syncretism that occurred between the Graeco-Roman Hercules and the Semitic divinity worshipped in Cádiz. The large number of bronze statues found in this temple must also be noted. Most represent Phoenician deities, notably Melqart, whose image adopts typically Egyptian iconography:

<sup>45</sup> Hölbl 1986: 54–56.

<sup>46</sup> Lipinski 1992: 222.

<sup>47</sup> López Grande 1991: 195.

<sup>48</sup> Andrews 1994: 39–40.

<sup>49</sup> Fernández, Padró 1986: 82.

<sup>50</sup> Fernández, Padró 1986: 95.

<sup>51</sup> Fernández, Padró 1986: 95.

he is represented as Osiris, with the *nemes* and the *atef*-crown. Melqart thus assumes a funerary role, assimilated to Osiris as a divinity who dies and is reborn. In Phoenician Tyre, the metropolis of both Cádiz and Carthage, the syncretism between Melqart and the Egyptian god Reshep was consolidated. This divinity would have arrived in Cádiz through Phoenician intermediaries.

However, the most compelling evidence of cultural interconnections in this city derives from its necropolis. Amulets, jewellery, and other grave goods have been discovered in the Phoenician-Punic necropolis from the late 19th century until today.<sup>52</sup> The most celebrated discovery comprised two large anthropomorphic sarcophagi representing a man (c. 450 BC, discovered in 1887) and a woman (c. 480 BC, discovered a century later in 1980). Due to their technique and style, they have been classified within the series of Sidonian anthropoid sarcophagi. Inside the sarcophagus of the woman, known as the “Lady of Cádiz”, grave goods relevant to our study were found: two pairs of bronze eyelashes, a scarab in chalcedony with Greek iconography, and five amulets in the shape of *uraei*.

Egyptian and Egyptianising amulets and figurines commonly formed part of burial assemblages from the 6th century BC onwards.<sup>53</sup> As in other Phoenician necropoleis in the Mediterranean, the most frequently attested amulets were scarabs, followed by the *wedjat* and the *uraeus*.<sup>54</sup> On the one hand, some objects belonging to the Punic world display clear Egyptian inspiration: for example, amulet cases with the heads of rams, lions, and falcons. On the other hand, the amulets exhibit typically Egyptian iconography: anthropomorphic deities, animal deities, body parts, plants (such as the *wadj*), or symbols of power (such as the white and red Egyptian crowns).<sup>55</sup> Almost all amulets attested in the necropolis of Cádiz have parallels in the Phoenician-Punic world: in the Levant, Malta, Carthage, Sardinia, Ibiza, and the Iberian Peninsula. However, their principal interest lies in their archaeological context. As commonly occurs in other Phoenician necropoleis in the Mediterranean, the archaeological reports from Cádiz are dated and did not devote particular attention to the context of these small objects. Recent archaeological work has therefore enabled a better understanding of these objects and the society that employed them in burials.

In 2013, the discovery of a Punic period tomb (5th century BC) yielded grave goods including gold, silver, and gilded bronze jewellery combined with scarabs and stone beads, as well as faience amulets of varied iconography.<sup>56</sup> We present several burials containing Egyptian-style amulets: Burial 38 belonged to a young adult male whose bones were in poor condition but nevertheless associated with numerous objects: 20 amulets in faience representing Seth, Bastet, Bes, Shu, Horus, and several *wedjat* and *uraei*. Burial 39, similar to the preceding, also belonged to an adult (undetermined sex) with a significant assemblage: several items of jewellery, including 2 gold earrings and 2 rings (one in gold with a scarab and the other in silver with an incrustation), as well as 5 amulets in faience representing Seth, Bes, Bastet, Horus, and two *wedjat*. Burial 40 presents a poor state of preservation but, associated with the deceased, were several items of jewellery, a *wedjat* in faience, and a set of gold amulets uncommon in this necropolis: they represent a Greek-style amphora, a flask with incrustations in vitreous paste, a rotating bead, a small plaquette, and a figure of Ptah-Pataikos. Finally, the deceased in Burial 41 was protected by 34 amulets in faience representing several divinities from the Egyptian pantheon: Amun, Bastet, Shu, Horus, Ptah, Thoth, as well as *wedjat*, *uraei*, and scarabs.<sup>57</sup>

This extraordinary discovery demonstrates the richness of the Phoenician-Punic necropolis of Cádiz in terms of both the quantity and quality of amulets found in the tombs. Moreover, this well-documented context enables further studies to establish the relationship between amulets and their owners. Several researchers believe that the amulets from the necropolis of Cádiz were also worn during the lifetime of the deceased.<sup>58</sup> Nevertheless, a certain evolution can be distinguished: while some burials contained no amulets, others contained significant numbers of gold, stone, and faience amulets with Egyptian iconography. These differences may indicate that, due to some form of socio-cultural change over the course of one generation, the population represented in these burials modified or partially adopted a new code of symbolic values in their ornaments.<sup>59</sup> According to this interpretation, the use of Egyptian amulets may correspond to a particular segment of society rather than to specific individuals.

<sup>52</sup> Barreiro Espinal 2018: 162.

<sup>53</sup> Jiménez Flores 2012: 350.

<sup>54</sup> Barreiro Espinal 2018: 167.

<sup>55</sup> Barreiro Espinal 2018: 167.

<sup>56</sup> Belizón *et al.* 2020: 1016.

<sup>57</sup> Belizón *et al.* 2020: 1024–1025.

<sup>58</sup> Ferrer Albeda 2019: 84; Barreiro Espinal 2018: 167; Jiménez Flores 2014: 142.

<sup>59</sup> Belizón *et al.* 2020: 1027.

## Conclusions

Egyptian amulets have often been dismissed as minor objects of secondary importance compared to monumental architecture or elite material culture. However, their sustained demand outside Egyptian territory and widespread presence in Western Mediterranean necropoleis demonstrate that they constitute valuable sources for understanding the transmission and adaptation of religious and magical beliefs across cultural boundaries. While Egyptian amulets can be interpreted as characteristic of Phoenician populations in Western cities, the central question remains whether their meaning was preserved, transformed, or fundamentally reinterpreted in these new contexts.<sup>60</sup> This study addresses this question through comparative analysis of major Phoenician-Punic sites – Carthage, Sardinia, Ibiza, and Cádiz – revealing consistent patterns of selection and deposition that indicate deliberate choice rather than random acquisition.

The most frequently attested amulets were scarabs and the *wedjat*, followed by representations of specific Egyptian divinities (particularly Bes, Ptah-Pataikos, and protective deities). This selectivity is significant: whilst the full range of Egyptian amuletic types was theoretically available through trade networks, only certain forms achieved widespread adoption. Furthermore, the scarab's association with transformation and rebirth, and the *wedjat*'s protective properties clearly resonated with Mediterranean afterlife concerns. Equally revealing is what was not adopted. Specifically, traditional Egyptian funerary amulets such as the *djed*-pillar, the *tit* knot, the heart, and the two-fingers amulet are conspicuously absent from Phoenician-Punic contexts. This pattern of selective absence and presence suggests neither complete assimilation nor superficial appropriation, but rather deliberate adaptation. The case of the *uraeus* exemplifies this reinterpretation: rather than invoking the Egyptian goddess Wadjet, it appears to have been valued as protection against dangerous serpents – a pragmatic recontextualisation of Egyptian symbolism within local concerns.

The question of cultural knowledge merits careful consideration. The widespread use of specific amulet types across geographically dispersed communities suggests transmission of shared understandings about their properties, even if this knowledge was partial or reinterpreted. Egyptian composite deities – combining human bodies with animal heads – differed markedly from the predominantly anthropomorphic Phoenician-Punic pantheon, yet were embraced rather than rejected. Their foreign origin may have lent them additional efficacy as mediators. We must consider that funerary rituals were not performed without understanding of potential effects, however adapted that understanding may have been.

One of the most persistent questions concerning Egyptian-style amulets relates to their production and dating. Can material serve as a dating criterion? From the late 5th and early 4th centuries BC, faience amulets imported from Egypt or the Levantine coast became rare and were replaced by locally produced steatite amulets. From the 4th to 3rd centuries BC, Punic amulets became stereotyped, losing much of the Egyptian influence in their iconography. Consequently, amulet production appears to have been simplified, with details merely incised.<sup>61</sup> Faience was amongst the most characteristic materials in Ancient Egypt, used particularly for amulet production. This choice derived from several factors: the ease of obtaining and working this material, given that amulets were created from moulds, but especially its symbolism. After firing, faience displayed a metallic glow on its surface, the colour of which depended on added components. It was therefore named “the brilliant one” and symbolised rebirth.<sup>62</sup> Conversely, steatite was chosen for Mediterranean amulets because of its malleability, without symbolic connotation.

Rather than viewing these amulets as “exotic prestige goods” used without comprehension, we should recognise them as evidence of acculturation – the active adaptation and reinterpretation of foreign elements to address local concerns.<sup>63</sup> While Phoenician-Punic communities lacked intimate familiarity with Egyptian theology, they demonstrated agency in selecting, adapting, and integrating specific protective elements into their own funerary practices. The consistent patterns observed across Western Mediterranean necropoleis reveal shared cultural transmission alongside local variation, demonstrating how religious and magical concepts traversed cultural boundaries while undergoing transformation.

<sup>60</sup> Hölbl 1986: 54.

<sup>61</sup> Redissi 1991: 111–112.

<sup>62</sup> Andrews 1994: 100.

<sup>63</sup> López Grande 1991: 199.

Although the quantity and quality of grave goods typically indicated social status in ancient societies, the presence of Egyptian-style amulets – predominantly of modest quality in faience and steatite – must be understood primarily through their magical and symbolic functions rather than their economic value.<sup>64</sup> These objects were employed for their apotropaic properties, reinterpreted from their original Egyptian context to serve Phoenician-Punic funerary needs.<sup>65</sup> Their deliberate placement in tombs underscores the genuine confidence that Phoenician-Punic communities invested in their protective powers.

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<sup>64</sup> Jiménez Flores 2012: 354.

<sup>65</sup> Jiménez Flores 2012: 364 ; López Grande 1991: 194–195.

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# ‘The only one of his kind’ – approaching ‘otherness’ in New Kingdom laudatory texts (ca. 1539–1077 BCE). Five Eighteenth Dynasty short case studies

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**Abstract:** The present contribution approaches the conceptualisation of ‘otherness’ in New Kingdom Egyptian laudatory texts (ca. 1539–1077 BCE) through the analysis of five Eighteenth Dynasty case studies, namely, the stelophore Chicago FMNH 88906, TT 84’s transversal hall stela, papyrus Cairo CG 58038, the *Great Hymn to the Aten*, and an inscription attested Panehesy’s Amarna tomb. Employing ‘alterity’ and ‘ontology’ as analytical frameworks, the study explores how these religious sources textually construct the Creator deity as an ontologically unique ‘Other’ whilst simultaneously depicting the emergence of diverse categories of created beings – deities, humans, and animals – who themselves exhibit both inter-group and intra-group differentiation. The analysis demonstrates that creation represents not merely cosmogonic rupture but also the birth of multiple ‘others’ organised within broader ontological structures. Through the examination of phraseological and lexicographical strategies attested in the above-mentioned diagnostic sources, this study identifies three distinct levels of ‘otherness’: 1) the communicational setting between worshipper and deity; 2) the Creator’s categorical uniqueness; and 3) the differentiation amongst created entities. The article concludes that an ‘otherness’-centred approach provides valuable insights into understanding both the nature of divine creative agency and the complex ontological landscape articulated in New Kingdom religious literature.

**Keywords:** Alterity; New Kingdom; Religious Texts; Ontology; Creator Deity

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## Introduction

The religious sources of the New Kingdom (ca. 1539-1077 BCE)<sup>1</sup> constitute a thought-provoking textual ensemble to study cosmogonic and cosmological aspects.<sup>2</sup> These laudatory texts<sup>3</sup> are highly informative

<sup>1</sup> Dates according to Hornung, Krauss, Warburton 2006: 490–495.

<sup>2</sup> The brief preliminary remarks offered in this contribution stem from the author’s ongoing doctoral research, which examines New Kingdom religious hymns’ explicit references to the Creator and creation. Such an epistemological endeavour gravitates around three short core interrelated questions: 1) Who creates? (The Creator’s multifaceted identity); 2) What is created? (The creation’s outcomes); and 3) How is it created? (The processes, mechanisms, and devices the Creator uses to achieve the creative task). Rather than regarding them as siloed questions, such a tripartite inquiry enables the study of creative topics in this *corpus* through a threefold lens, the Creator’s persona directly impacting his creative outcomes and his performance upon achieving the creative tasks. The present paper focuses mainly on the first and second analytical axes, more precisely, on the Creator’s ‘otherness’ which triggers the coming into existence of several distinct ontological ‘Others’.

<sup>3</sup> The sources under consideration comprise a heterogeneous *corpus* of laudatory textual productions, preserved across

in what concerns, on the one hand, the persona of the Creator<sup>4</sup> deity; and, on the other hand, the variety of beings and entities that come into existence through the acts performed by the former. The initial moment of the Cosmos – often textually referred to as the ‘First Time’ (*sp tpj*) – signifies an ontological rupture, as the pre-created undifferentiated matter is gradually individualised, opening the path to the formation of the distinct cosmic elements. As such, creation concurrently represents the emergence of the ‘Other’.<sup>5</sup>

Indeed, the Creator is herein presented as an ‘Other’ through various phraseological and lexicographical strategies that point to his seniority, uniqueness, and oneness. Not only is the supreme deity introduced as the first one to have come into existence<sup>6</sup> but such anteriority places him in an ontologically superior rank in relation to other beings, including other deities.<sup>7</sup> Moreover, the Creator’s ‘otherness’ might be alluded to in more absolute terms, with the deity being labelled as ‘the only (one) of his kind’ (*w<sup>c</sup> hr hrw=f*).<sup>8</sup> While being ‘Other’, the Creator is also the originator of multiple ‘others’, establishing different existential categories – such as deities, humans, and animals.<sup>9</sup> Even more so, the Creator determines inner distinctions within said groupings, which is suggested by mentions to the creation of a single individual,<sup>10</sup> as well as to the human group differentiation brought about through the Creator’s agency.<sup>11</sup> As such, these texts seem to ‘other’ the Creator, describing the deity as ontologically different from the ‘other’ entities and beings, who, in turn, do not constitute a homogenous whole, but a rather diverse and varied set, formed by different ontological categories who evidence both inter-group and intra-group variability and heterogeneity.<sup>12</sup>

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a wide range of material supports, whose primary aim is to praise deities—and, more exceptionally, human figures of royal authority. Although frequently introduced by formulae such as *dwj Xjn Y* or *rdj.t j3.w n X*, often followed by the expression *j.nd hr=k*, these compositions do not conform neatly to the modern dichotomy between “hymn” and “prayer”, since their content reveals a conceptual fluidity already acknowledged within the Egyptian evidence itself, where several lexemes—though semantically distinct—participate in a shared predicative dynamic of praise. Examples such as the Leiden Papyrus I 350 recto (temp. Rameses II) or the so-called *Great Harris Papyrus* (temp. Rameses III) highlight the formal and lexical diversity that, while resisting strict classificatory schemes, converge to a common laudatory purpose. Moreover, not denying the existence of more explicit “hymns” – emphasising the praised entity – as well as clear-cut “prayers” – i.e., texts focusing on the individual and personal issues of the worshipper – most texts exhibit a functional contiguity between the two. In the words of Kockelmann (2008: 4) – “Prayers can include large hymnical parts, as hymns on occasion show considerable similarities with prayers. The line between the two categories is fluid, and hence it can be difficult in some cases to decide whether an invocation is a hymn or a prayer”. While recognising the conceptual limitations inherent in any modern attempt at typological classification, “laudatory texts” can act as an operative label, pointing to a common mediating feature between humans and deities verifiable in these texts, notwithstanding their dissimilarities.

<sup>4</sup> Concepts such as ‘Creator’ or ‘Other’ are capitalised in the present article whenever they refer to an overarching ontological concept and category, i.e., differentiating from a mere use of the substantive ‘creator’ or the adjective ‘other’. It should be noted, nonetheless, that such an orthographic choice does not intend to reference any kind of monotheistic understanding of divine conceptualisation nor does it seek to single out an ‘individual’ deity, being, or entity.

<sup>5</sup> In fact, the Creation – which, in the New Kingdom, starts to be more commonly referred to as the ‘First Time’ (*sp tpj*) – corresponds to the moment when the ‘other’ as such is born. Conveyed through a diverse set of religious and textual motifs, sources addressing the Cosmos’ Genesis – including New Kingdom laudatory texts – account for the ontological rupture expressed in the transmutation from a single being – the Creator deity – to a plethora of ‘others’ that inhabit the world. Creation relies on the individuation, separation, and delimitation of realms, spaces, and beings, organised in ontological groupings (which is not to say that individuated beings and entities cannot partake into ontological similarities and communalities). However, these categories are not fixed and immutable. On the contrary, they are continuously subject to conceptual negotiations and change. Consequently, what is perceived as ‘other’ in these sources may vary synchronically and diachronically.

<sup>6</sup> See TT 41(6), 4 (temp. Ramesses I-Seti I).

<sup>7</sup> Vd. Cairo CG 58032, II.3 (temp. Amenhotep II).

<sup>8</sup> Cf. Leiden I 344 verso, III.6 (Ramesside).

<sup>9</sup> See TT 158 (5), 4 (temp. Ramesses III).

<sup>10</sup> E.g., TA 6, west side of the outer wall, 7 (temp. Akhenaten).

<sup>11</sup> Cf. Cairo CG 58032, IV.3; Great Hymn to the Aten, 8–10 (temp. Akhenaten).

<sup>12</sup> Nevertheless, it should be stressed that such an interpretation does not categorically exclude different multiple coetaneous possibilities of envisaging what ‘Other’ entails. In fact, the intrinsic *coincidentia oppositorum* that permeate the Egyptian (and other Antiquity contexts) epistemological architecture, make it possible to contemplate ‘other’ concurrently as ‘whole’ (see, for instance, Tatomir 2005). What is more, one should bear in mind that, even when belonging to the same group, different individuals do not necessarily possess an identical cognitive equipment; as noted by Sharifian (2011: 21), “Emergent properties of cognition at the group level supersede what is represented in the mind of each individual and arise from the interactions between the group members. Members of a cultural group may share some but not every aspect of their cultural cognition with other members, and the patterns are not exactly the same for all individuals across the cultural group.” Thus, while group-led understandings influence individual interpretations, one should not completely disregard individual agency when grasping the possible meaning(s) of a text or any other cultural product.

This paper will envisage the creative notions suggested in/by the New Kingdom laudatory texts from an ‘otherness’ point of view. The diverse ways the Creator summons an assortment of ‘others’ into existence in his capacity of ‘Other’ will be explored through a set of diagnostic selected sources. The analysis will consider not only the attested phraseology but also concepts such as ‘alterity’ and ‘ontology’, seeking to ponder on the usefulness and pertinence of ‘otherness’ as a conceptual tool to address Creator and Creation in this *corpus*<sup>13</sup> while aiming at a broader understanding of the nature and implications of such a concept in these texts. In other words, different textual, phraseological, and lexicographical strategies employed in New Kingdom religious hymns that individuate the Creator as an ‘other’, who subsequently propels the coming into existence of the complex and multilayered ensemble of ‘others’ (deities, humans, animals) that populate the cosmos will be considered.

As such, this paper presents a three-fold structure. The first part consists of an introduction to the theoretical framework and the conceptual apparatus the author is currently working with to address these textual sources from an ‘otherness’ angle. In a second moment, the communicational setting of texts belonging to this genre as inherently pointing to an interaction with an ‘other’ will be briefly touched upon. The third and core section is comprised of an analysis of excerpts attested in five Eighteenth dynasty laudatory texts<sup>14</sup> - the stelophore Chicago NHM 88906; TT 84’s transversal hall east wall stela; Cairo CG 58038; the *Great Hymn to the Aten*, and a composition engraved in the tomb of Panehesy in Amarna.<sup>15</sup> Said texts will be mobilised as case studies to determine how informative (or not) they might be in what ‘otherness’ is concerned. The article ends with a few preliminary remarks pondering on the adequacy of an ‘alterity/otherness’-centred look as a viable research avenue to study this textual ensemble.

## A Brief Conceptual Note - On ‘Alterity’ and ‘Ontology’

Before focusing on the New Kingdom religious texts *per se*, it might be pertinent to briefly consider two core concepts in understanding ‘other(ness)’ in the present paper: ‘alterity’ and ‘ontology’.

Etymologically, ‘alterity’ comes from the Latin word ‘alter’, meaning ‘other’ or ‘different’. The Oxford English Dictionary defines ‘Alterity’ as ‘the state of being other or different’, pointing to semantically related concepts such as ‘diversity’ and ‘otherness’.<sup>16</sup> Evidencing a rather arduous genealogy (*sensu* Foucault) to trace, ‘alterity’ has been employed by philosophers, anthropologists and ethnographers for at least a century.<sup>17</sup> More recently, Post/Decolonial and Media Studies have used the concept to address the status and nature of ‘others’. From the seminal work by Martin Buber, first published a hundred years ago,<sup>18</sup> ‘Alterity’ has been instrumental in addressing ethical concerns when dealing with and relating to the ‘other’,<sup>19</sup> as well as in challenging long-established dynamics of power and dominance in the context of colonialism, seeking to understand which bodies and communities have been ‘othered’, as well as questioning and challenging oppressive structures and fostering ethical and inclusive forms of representation and making space for alternative ways of being and knowing.<sup>20</sup> In social sciences’ literature ‘alterity’ has been mainly employed to address the encounters and interactions between different groups,

<sup>13</sup> The word ‘*corpus*’ is herein employed, referring to New Kingdom laudatory texts as an ensemble. In fact, it shall be recognized that even if New Kingdom hymns can be envisaged as a ‘*corpus*’ on the grounds of their formal/structural and subject-matter partial commonalities, the diversity of their supports, contents, dates, and contexts of production caution against assuming these texts were composed to create an intentionally coherent and unified set of sources. Hence, the term ‘*corpus*’ is used in this article for the sake of convenience. As such, the Latin term shall be here understood as a substitute for “New Kingdom hymns/laudatory texts”, in reference to New Kingdom hymnology as a whole and not merely to the five examples analyzed in this contribution.

<sup>14</sup> Such a chronological criterium was here chosen to present a cohesive set of case studies, given the short size of the present contribution. However, the same methodology can be applied to Ramesside texts and beyond. Moreover, phraseological parallels – both synchronic and diachronic – will be pointed out throughout.

<sup>15</sup> The transliterations and translations presented below were completed by the Author through the verification of the original text included in relevant publications, as no *in situ* observations were viable. Said publications are listed for each individual case.

<sup>16</sup> It also notes the word as ‘common after the mid 20<sup>th</sup> cent.’, particularly in critical and cultural theory (Oxford English Dictionary 2023, <https://doi.org/10.1093/OED/1782282050>).

<sup>17</sup> Examples include but are not limited to: Descola 2013; Ingold 2021; Kohn 2013; Pedersen 2011; Viveiros de Castro 2015.

<sup>18</sup> *Ich und Du*, first published in 1923. For a recent edition, see Buber 2022.

<sup>19</sup> See, for instance, Levinas 1961 and 1974.

<sup>20</sup> For a post-colonial understanding of ‘alterity’ see Spivak 2013.

communities and societies. ‘Alterity’ would thus be conceptualised as the opposite of ‘identity’, presenting a stark contrast between ‘us’ and ‘them’. However, intellectual contributions in the last decade - particularly emerging from Media Studies, embodied in a post/decolonial framework – have pointed out the existence of ‘Alterities within the Self’.<sup>21</sup> As such, ‘alterity’ is not necessarily the opposite pole of ‘identity’ – “Us” and “Them” do not correspond to essentialised categories but co-exist in a permanent dialectical dynamicity, mutually influencing each other and referring to complex social and cultural realities beyond a binary framework. Consequently, there is value in applying ‘alterity’ as a conceptual tool to address interactions and productions within the same community. This has been performed within religious studies, which consider the relationship between the believer and God as the/an ‘Other’.<sup>22</sup>

Recent years have seen the concepts of ‘alterity’ and/or ‘otherness’ enter into Egyptological studies. To mention but just a few examples, one can name Stauder’s chapter on the visual ‘otherness’ in New Kingdom’s Netherworld enigmatic texts<sup>23</sup> or Wasmuth’s article, which applies an alterity research approach to a specific case study concerning a private legal document from 7th century Assur mentioning Egyptians attacking their host’s house.<sup>24</sup> ‘Otherness’ has also been considered regarding Egyptian religion, most notably in a series of contributions gathered in an issue of *Studi e materiali di storia delle religioni* addressing, among other aspects, the impacts of Egyptian imperialism and contacts with neighbouring cultures and religious systems to the Egyptian pantheon.<sup>25</sup>

In sum, ‘alterity’ refers to encounter(s) but also to representation(s), knowledge, and cognition. Rather than merely framing contacts between individuals and groups from different cultural contexts, ‘alterity’ is instrumental in conceptualising all the ‘Others’ surrounding the ‘Self’. In other words, ‘alterity’ relates to thinking about ‘others’ and how their ‘being’ is constituted and therefore also the self. In that sense, ‘alterity’ is relevantly envisaged within an ‘ontology’-centred framework.

Briefly presenting it, ‘ontology’ refers to ‘[T]he investigation and theorisation of diverse experiences and understandings of the nature of being itself’.<sup>26</sup> First emerged within Philosophy as a branch of Metaphysics, works operating with an ‘ontology’ framework have appeared in several social sciences, such as anthropology and sociology, as well as religious sciences and computer and information science. Moreover, ‘ontology’ has been a critical concept in Ethnography and related disciplines, with several authors<sup>27</sup> exploring how individuals and communities, particularly beyond modern/Western modes of production and thought, understand and make sense of their reality. Ethnographic engagements often examine how ontologies are built and conceptualised, pinpointing beliefs, practices, and social organisations of studied communities. Alterity and ontology are thus interconnected concepts inasmuch as they allow one to ponder conceptions and conceptualisations on/of the ‘others’.

In Egyptological literature, several recent studies have approached different Egyptian realities from an ontological point of view. These include works on funerary archaeology,<sup>28</sup> hieroglyphic writing,<sup>29</sup> material culture production,<sup>30</sup> knowledge and cognition,<sup>31</sup> not ignoring the divine world and divine-human interactions,<sup>32</sup> and religious language.<sup>33</sup>

<sup>21</sup> See Bachmann-Medick 2017.

<sup>22</sup> Besides Levinas and Viveiros de Castro’s contributions, which also deal with religious aspects, insights on ‘alterity’ in religious studies might be found in various chapters of Stausberg, Engler 2016. However, it shall be noted that such an analytical effort has been made chiefly for monotheistic religions.

<sup>23</sup> Stauder 2020: 249–265.

<sup>24</sup> Wasmuth 2022: 139–183. For a cross-Mediterranean approach to interactions with ‘foreigners’ (namely in what concerns material culture) rooted in the ‘alterity’ concept, see Panagiotopoulos 2012: 51–60.

<sup>25</sup> The volume stems from a study day dedicated to Sergio Donadoni, titled “The gods of the others, the others and the gods: forms of acculturation and construction of difference in Egyptian religion”. See Betrò: 50–64; Buzi 2018: 15–22; Iannarilli 2018: 119–130; Meeks 2018: 109–118; Turriziani 2018: 91–108; Zivie-Coche 2018: 23–49.

<sup>26</sup> Scott 2013: 859.

<sup>27</sup> Including the ones mentioned in note 16.

<sup>28</sup> For instance, Pellini 2021: 551–563.

<sup>29</sup> E.g., Houston, Stauder 2020: 9–44.

<sup>30</sup> See Nyord 2017: 337–359.

<sup>31</sup> For instance, El Hawary 2018: 67–79.

<sup>32</sup> More recently, Matic’ 2023: 143–166, exploring sexual encounters between humans and deities, as well as between deities as statues.

<sup>33</sup> See Popielska-Grzybowska 2011: 680–683 and 2020: 20–22, 235–238, 281–283, 287–299.

The present contribution will envisage New Kingdom’s religious hymns via the ‘alterity-ontology’ theoretical binomial to ponder the diverse ways the ‘other(s)’ is/are constructed and thought about therein. Even, as it shall be seen, ideas and conceptualisations of ‘others-as-non-Egyptians’ are also attested in this *corpus*, this paper will preliminarily essay an ‘otherness’ look vis-à-vis New Kingdom religious hymnology, here somehow envisaged as a ‘Self’. It will be argued that, even though different created beings partake in what has been coined as ‘ontological solidarity’<sup>34</sup> – in the sense that they are all brought into existence by the Creator – they evidence nevertheless ontological differences, pertaining to distinct categories,<sup>35</sup> establishing ‘othered’ relations among them.

## Facing the ‘Other’ – Laudatory Texts as Communication with (an)Other

Alongside their diverse and complex content, laudatory texts are significant in what concerns their form and global setting. Even if the term ‘hymn’, coming from Greek, might present some conceptual transfer issues, worshipping divine/transcendent entities/beings is attested cross-culturally, not denying that manifestations of such praises are context and culturally specific.<sup>36</sup> More importantly, laudatory texts are a form of religious communication that enables the establishment of contact with an ‘Other’ beyond the human sphere and realm.

Egyptian hymns are often introduced by phraseological units that account for the interaction between a worshipper, who performs as a speaker, and a deity, acting as the receiver of the praise, such as *dw3 X jn Y* (‘worshipping X by Y’), *rdj.t j3.w n X* (‘to give praises by X’), or even *sn-t3 n Y* (‘to kiss the ground [= to bow] before Y’).<sup>37</sup> Notwithstanding their varied specific uses and functions – from the performance of liturgies to addressing petitions to deities, including texts pertaining to the funerary context<sup>38</sup> – laudatory texts are, by their definition, textual structure and situational setting, a communicative act between a ‘Self’ and an ‘Other’.

From a more emic and lexical point of view, it is essential to mention that the lexeme *ky* - ‘other’ or, perhaps more aptly ‘another (one)’<sup>39</sup> - (together with its respective feminine and plural forms), is indeed textually attested about the Creator in the *corpus* hereby considered. However, as will be noted, ‘otherness’ is phraseologically alluded to in several different ways in these texts, with lexemes and expressions that underline the Creator’s ontological uniqueness and distinctiveness – including *wc*,<sup>40</sup> *hw*,<sup>41</sup> and *jwty sn-nw=f*<sup>42</sup> – as well as a vast phraseology insisting on the differences between categories of beings and even intra-group distinctions, pointing to more ‘individualised’ identities.

<sup>34</sup> By Pascal Vernus (in French – “solidarité ontologique”; see Vernus & Yoyotte 2005: 22).

<sup>35</sup> For a hierarchy-centred perspective on living beings in ancient Egypt see Meeks 2012: 517-543.

<sup>36</sup> On this topic, see Luft 2018: 363-365.

<sup>37</sup> Vd. Allen 2001: 146-148; Assmann 1969: 3; Barucq 1962: esp. 48-55; Luft 2018: 368.

<sup>38</sup> The ‘literary’ nature - as opposed to ‘funerary’ and/or ‘liturgical’ - of Egyptian laudatory texts seems to be an unresolved issue within Egyptology. Whereas criteria such as ‘form’, ‘function’, ‘content’, ‘intentionality’ and ‘reception’ have been used to define ‘literature’ in ancient Egypt, and consequently to frame the hymnal texts within this term, the risk of a European/Western-based definition, based on criteria alien to the ancient Egyptians themselves have been pointed out. Ultimately, the distinction between ‘literary’, ‘funerary’, and/or ‘liturgical’ might not have been perceived or even intended by the ancient authors/scribes. For an overview of these and related issues see: Quirke 2004: 25-28; and Vernus 2010-2011: 19-145, as well as the various contributions in Loprieno 1996.

<sup>39</sup> Wb 5, 110.7-112.6; TLA Lemma ID 163760, <https://thesaurus-linguae-aegyptiae.de/lemma/163760>. Whereas a detailed analysis of this and every lexeme considered in the present paper would fall out of its scope, recent lexicographic advancements and further references can be browsed in the University of Basel’s *Wortdiskussionen* resources available online (see [https://daw.philhist.unibas.ch/fileadmin/user\\_upload/daw/Fachbereiche/aegyptologie/Forschung/Werkzeuge/Wortdiskussionen/Worte\\_2025.pdf](https://daw.philhist.unibas.ch/fileadmin/user_upload/daw/Fachbereiche/aegyptologie/Forschung/Werkzeuge/Wortdiskussionen/Worte_2025.pdf)).

<sup>40</sup> ‘One (of many), sole’ (Wb 1, 273.10-274.16; TLA Lemma ID 600041, <https://thesaurus-linguae-aegyptiae.de/lemma/600041>).

<sup>41</sup> ‘Oneness, uniqueness’ (Wb 3, 216.3-13; FCD 186; Wilson 1997, 710; TLA Lemma ID 113070, <https://thesaurus-linguae-aegyptiae.de/lemma/113070>). See also Popielska-Grzybowska 2020: 19, 25, 47, 128, 180, 200, 226, 309, 312.

<sup>42</sup> ‘(One who is) with no equal’ (LGG I, 163).

## Approaching ‘Otherness’ in New Kingdom Laudatory Texts (ca. 1539-1077 BCE) – Case Studies

Chicago FMNH 88906

The first text herein included dates from the early 18th dynasty and is attested in a stelophore belonging to a scribe called Amenhotep, currently in Chicago:

*sš Jmn-ḥtp dd=fj nb=j nb ntr.w Jmn nb nswt t3.wy Hr-3ḥ.ty ntr wr jr jry.wt w<sup>c</sup> nn hr ḥw=f*


The scribe Amenhotep, he says: “O, my Lord! Lord of the gods! Amun, Lord of the thrones of the Two Lands! Horakhty, the great god! Creator<sup>43</sup> of what has been done! **The sole one, (there is) no one of his kind!**<sup>44</sup>

The first lines of the hymnal composition inscribed on the stela praise Amun<sup>45</sup> as Lord and Creator. Furthermore, the deity’s oneness (*w<sup>c</sup>*) is articulated with a negative sentence (*nn hr ḥw=f*), emphasising the god’s ontological superiority and incomparability regarding every other being.<sup>46</sup> Described as the ‘sole one’, Horakhty is ‘othered’ by some sort of categorical isolation, in the sense that no other being takes part in the god’s nature, which distinguishes him from every other being that exists and that is, in fact, the fruit of his own creative activity. The relation and dialogue between ‘Creator’ and ‘Creation’ can therefore be understood as mediated by an ‘otherness’ lens.


TT 84 (8)<sup>47</sup>

Another fruitful phraseological strategy to present the Creator imbued with an existential alterity reinforcing his difference towards all other beings is to stress his ontological anteriority, presenting the god as the first being to ever come into existence. On a stela drawn in the east wall of TT 84’s hall, the high priest Meri worships Ra not only for his sovereignty over time but also for having come into being at the cosmic beginning:

*dw3 R<sup>c</sup> ḥft wbn=f r ḥpr.t ḥtp=f m<sup>c</sup> nḥ m-ḥt šms Wnn-nfr Wsjr ḥk3 jmntt jn s<sup>c</sup>h<sup>48</sup> pn 3ḥ<sup>49</sup> n nb=f mḥ-jb*

<sup>43</sup> The spelling in the group of signs  makes it difficult to assert categorically if the first eye-sign (D4) refers to a noun or a verbal form. Consequently, translations such as “He who made what has been made” or “He who performed what has been done” seem likewise fitting in interpreting the passage under consideration.

<sup>44</sup> Chicago FMNH 88906, 1-3. For the hieroglyphic text, see Vandier 1958: 159, fig. 4. Further translations and comments: ÄHG 116; Assmann 1995: 116.

<sup>45</sup> Assuming that, as the first deity mentioned in the text, Amun is the primary god of the stela, whereas the subsequently referenced Horakhty would constitute an attribute and/or an alternative way of addressing the former. It shall be noted, however, that the lack of any divine determinatives in the spelling of the deities’ names (, respectively) hampers the text’s global understanding and translation. Therefore, other translations such as the ‘hidden (one)’ or ‘Horus-of-the-Double-Horizon’ can also be posited.

<sup>46</sup> TT 192 (3) (temp. Amenhotep IV) – a text written in ‘crossword’ style, meaning it can be read both vertically and horizontally – offers two parallels for this phraseology. Horizontally, one can read *w<sup>c</sup> nn hr ḥw=f* (see TT 192 (3), line 6 [following The Epigraphic Survey 1980, pl.14-15]); vertically, this phrasal construction is further elaborated, with a supplementary text underlining the deity’s uniqueness, unequalness, and inequivalence, describing him as (...) *nn hr ḥw=f jwty sn-nw=f*, “(...) with no one of his kind, the one who has no equal” (TT 192 (3), column I). It shall be noted that *nn* is preceded by a lacuna, which could have been filled with the adjective *w<sup>c</sup>*, judging from the phraseological parallels. *Wa* combined with *hr ḥw=f* in the affirmative form is also attested in this *corpus* (see discussion on Cairo CG 58038 below), the same being true for the two elements mediated by *ky* (see commentary on the *Great Hymn to the Aten* below).

<sup>47</sup> TT 84 had a two-phase textual and decorative programme. Initially, the tomb was owned by Iamunedjeh, the king’s first herald, during Thutmose III’s reign. Later, the tumular space was used as the funerary dwelling of the high priest Meri, who was also the owner of TT 95 (PM I/1, 167). The excerpt here considered is part of the main text of the stela included on the east wall of the transversal hall, written during the second decoration of the tomb, having thus Meri as the worshipper.


<sup>48</sup> It is worth noticing how *s<sup>c</sup>h*, ‘noble, dignitary’ (Wb 4, 50-51.13; TLA Lemma ID 129120, <https://thesaurus-linguae-aegyptiae.de/lemma/129120>) is here determined with Gardiner’s A52, which often operates as the ending sign of the lexeme *s<sup>c</sup>h*, ‘mummy, form’ (Wb 4 51-52.15; FCD 214; TLA Lemma ID 129130, <https://thesaurus-linguae-aegyptiae.de/lemma/129130>) in New Kingdom sources. The first word is thus endowed with a graphic/visual element that factors the worshipper’s deceased condition.

<sup>49</sup> Phonetic complement written before the biliteral hieroglyph, rather than after ().

*m wp.t nb.t<sup>50</sup> pr.w-nbw pr.w-ḥd ᵚrf m ᵚ=f m ḥ.wt wᵚ.t whm(w)-nswt jkr mr.n=f tpj-ᵚ //ᵚ<sup>51</sup> t ḥm-ntr tpj  
Mrjj dd=f.j.nd ḥr[=k Rᵚ] nb [nh]ḥ wᵚ ḥr sp.w=f<sup>52</sup> ḥk3 d.t ḥpr m-b3ḥ nn sn-nw=fᵚḥ p.t smn s3tw ḥwn  
nfr pr m Nww ḫrr hrw n ms.t=f*

Worshipping Ra when he rises until it happens that he sets in life after following Wennenefer Osiris, ruler of the west, by this venerable one who is beneficial to his lord, the confidant in every task, the treasuries for gold and silver are combined through him as one thing, the excellent royal herald, whom he has loved before [the entourage(?)]. The high priest, Mery, he says: ‘Greetings to you, Ra, lord of the *neheh*-time, **sole one upon his occasions**, ruler of the *djet*-time,<sup>53</sup> **who came into being at the beginning without his equal**, who raised the sky and made the earth endure, beautiful child who came forth from the Nu<sup>54</sup>, runner on the day of his birth!<sup>55</sup>

In the above-quoted laudatory fragment, Ra, as a creator deity is presented as a unique entity for its particular connection to Time and temporality.<sup>56</sup> After being praised for its lordship over the *neheh*-time, he is described as the ‘sole one upon his occasions’, the last word being conveyed by the plural form of the lexeme *sp*, ‘event, occasion, time’;<sup>57</sup> then, his rulership over the *djet*-time is addressed introducing his ancestry quality, as the first being to have ever emerged, consequently evidencing a time-based solitude that renders him incomparable and distinctive, ‘without his equal’ (*nn sn-nw=f*)<sup>58</sup>. The ontological inequivalence between the solar Creator deity and the other beings conveys different temporalities.

<sup>50</sup> Written as  instead of the more common .

<sup>51</sup> Lacuna maybe to be restored with *snw*, ‘entourage’.

<sup>52</sup> *Contra* Assmann, who proposes the formula *wᵚ ḥr ḥw=f* (vd. STG 102), most probably due to its recurrence when referring to the praised deity’s uniqueness, as previously discussed. Despite the lexical and phraseological adequacy of such an expression in this (con)text, the *Urkunden* (Urk IV, 942, 12) clearly show the sign O48 (with the phonetic value *sp*), which appears to be corroborated upon the observation of the Epigraphic Survey Negative 2916 (available at <https://isac-idb.uchicago.edu/id/89358ecd-a7e9-4b36-a3fb-7f6dd9f0bf05>). In fact, a time-connoted lexeme such as *sp* would fit the textual excerpt’s time-centred phraseological sequence.

<sup>53</sup> Together with *nhh*, *d.t* is often linked to the notion of “Eternity” being repeatedly translated as such. Indeed, they might be understood as complementary terms, both encompassing the cosmic Time, corresponding to the Creator’s (eternal) lifespan (see Assmann 1995: 197). Such multilayered concepts are attested in a large number of Egyptian textual sources, across genres and times. Thus, their plausible meanings might have been disparate and subject to changes, both temporally and spatially (for a comprehensive study on these two lexemes and their uses in a diachronic perspective, see Servejean 2007). Notwithstanding a thorough epistemological exploration by many authors, the most consensual understanding of these terms posits that *nhh* summarises a cyclic temporal conception, linked to natural and repetitive phenomena, while *d.t* would convey a linear temporal progression, measured in durations, intervals and spans. Thus, whereas *nhh* would refer to “dynamic” constructions, *d.t* would cover “static” ones (Winand 2003: 32). To differentiate between the two terms, scholars have adopted diverse translational options, implying different interpretative avenues. Assmann (1974: 247–254; 1975: 56, 61–69; 1995: 80, 83, 178–179, 210; 2003: 111–112) understands *nhh* as “endless Time” and *d.t* as ‘invariable permanence’ or ‘endless duration’. The rationale according to which the former is linked to perpetual repetition, and the later to continuous progression is at issue in similar translations, such as “unendingness” or “continuity” for *nhh* and “everlastingness” for *d.t* (Kadish 2001: 405–409; Popielska-Grzybowska 2017a: 17–29 and 2020: 193). Writing in French, Loprieno (2003: 128–129) corroborates this perspective, rendering *nhh* as “éternité” and *d.t* as “durée.” Roeten (2004: 69–77) distances himself from this ‘eternity’-understanding, arguing that it is unlikely that Egyptians would recognise an ‘eternity’ in the flow of cycles, favouring the term “timeflow” instead; yet the author still subscribes to the common understanding of the terms as refers to them as ‘eternal recurrence’ (*nhh*) and ‘eternal sameness’ (*d.t*). As for Servajean (2007), the author claims that only *d.t* should be translated as ‘eternity’ (‘éternité’), advocating for *nhh* to be simply rendered simply as ‘time’ (‘temps’). Given the translational plethora adjacent to both lexemes, and considering that ‘they represent the sum of all conceivable units of time’ (Hornung 1992: 64–65), I have opted to refer to them merely by their inescapable temporal conceptualisation – *neheh*-time and *djet*-time – to avoid any misunderstandings (I have taken a similar approach elsewhere; see Borges Pires 2023a: 47–70).

<sup>54</sup> That is, the Primeval Waters.

<sup>55</sup> TT 84 (8), 1–3. Text: Epigraphic Survey Negative 2916, Urk IV, 942–943. Further references: STG 102; ÄHG 80. I would like to express my gratitude to Julianna Kitti Paksi for sharing her first-hand interpretation of this text with me.

<sup>56</sup> On the creation of time and the Creator’s temporal aspects in the New Kingdom laudatory texts, including his sovereignty over time and ontological precedence, see Borges Pires 2023a: 47–70.

<sup>57</sup> Wb 3, 435.1–439.5; TLA Lemma ID 854543, <https://thesaurus-linguae-aegyptiae.de/lemma/854543>.

<sup>58</sup> The expression *sn-nw=f* is also attested without the negative particle *nn*, namely with *jwty*, conveying a similar idea (for instance: *wᵚ wᵚw jwty sn-nw=f* in Cairo CG 58038, VIII.5 [temp. Amenhotep II]; *nn ḥr ḥw=f jwty sn-nw=f* in TT 192 (3), column I; TT 158 (5), x+3 [temp. Ramesses III]). Moreover, the expression *sn-nw=f* is also employed in reference to human differentiation, such as in *wpy jnw.w(=sn) wᵚ r sn-nw=f* (see commentary on CG 58038 below), and *ḥr wᵚ nb tnj.w sn-nw=f jm=sn* (vd. TT 158 (5), 4). *Sn-nw* is likewise attested with other suffix pronouns, including =*k* (cf. *nn sn ky wpw ḥr=k sn-nw=k pw* in Leiden I 344 verso, X.9 [Ramesside]), and =*s*, when praising the goddess Mut’s singularity (see *nn sn-nw=s wᵚt(y).t nmjt=s* in BM EA 194, V.46 [temp. Ramesses VI]).

In other words, alterity appears to be here temporally framed: what makes Ra such a unique (divine) individual is the circumstance that he emerged first, subsequently structuring the Cosmos. The Creator's initial existential solitude makes him substantially different from the other beings and entities, pertaining to a single-individual-formed ontological class – the Creator is a category of/on its/his own.

### Cairo CG 58038

Until now, only conceptualisations of the Creator's unique *persona* compared to the ensemble of other beings have been considered. The hieratic papyrus Cairo CG 58038 - dated from the reign of Amenhotep II and more commonly referred to as 'Papyrus Boulaq 17' - also includes such an ontologically overarching characterisation:

*w<sup>c</sup> w<sup>c</sup>.w jwty sn-nw=f*

The sole unique one,<sup>59</sup> the one who has no equal!<sup>60</sup>

However, it is important to highlight that the supreme deity can also be 'othered' within a given ontological class, namely, the one related to the divine realm. To put it another way, alongside explicit references to the Creator as unique with regards to the whole of beings, such an entity is likewise textually conceived as different from the other members of his ontological group, i.e. the deities. In another excerpt from the same source the praised deity is labelled as 'the only one of his kind among the gods':


*wr n p.t smsw n t3  
nb nty mn(.w) h.t {mn(.w) h.t} nb.t<sup>61</sup>  
w<sup>c</sup> hr hw=f<sup>62</sup> {mj}<sup>63</sup> m-m ntr.w  
k3 nfr n psd.t  
hry-tp ntr.w nb.w  
nb M3<sup>c</sup>.t<sup>64</sup> jt ntr.w  
jrj rmt.w km3<sup>c</sup> w.t  
nb nty km3 h.t-n-<sup>c</sup>nh  
jrj smw s<sup>c</sup>nh mnmn.t  
sh<sup>m</sup> nfr jrj.n Pth<sup>65</sup>  
hwn nfr n mrw.t  
dd.n=f ntr.w j3.w*

<sup>59</sup> Or perhaps 'the (only) one of the (only) ones'. Previous translations of the fragment include: 'Un qui demeure unique, sans son pareil' (HPEA 69); 'exalted one, alone, without likeness' (Foster 1995: 63); 'Der Eine Einzige ohne Gleichen' (ÄHG 87); and 'Der Eine, Einzige, ohne Seinesgleichen' (Luiselli 2004: 26).

<sup>60</sup> Cairo CG 58038, VIII.5 (temp. Amenhotep II). Textual editions: Grébaut 1874; Luiselli 2004; Mariette 1872: II, 11–13; further references: Assmann 1995, 120–128; ÄHG 87 [A–G]; HPEA 69; Erman 1923: 350–358; Foster 1995: 58–65; Roeder 1959–1961: 4–8; Römer 1987: 405–428; Scharff 1922: 47–54; Wilson 1950: 365–367.

<sup>61</sup> According to Luiselli (2004: 5), the second *mn(.w) h.t* must be a dictogram. Later attestations of the epithet are also known, even if with a slightly different phraseology, for instance, *tw t Jmn mn(.w) h.t nb.t* in papyrus Berlin 3055, VI.5 (see Assmann 1995: 127; Moret 1902: 67–68).

<sup>62</sup> For supplementary attestations of *w<sup>c</sup> hr hw=f* in New Kingdom laudatory texts see: BM EA826, 3 (temp. Amenhotep III); Leiden I 344 verso, III.6 (Ramesside); and possibly TT 30 (4), 5 (Ramesside).

<sup>63</sup> The original text clearly indicates *mj* before *m-m ntr.w* (; see Mariette 1872: pl. 11; Luiselli 2004: 44, tf. I). Nonetheless, the inclusion of the preposition *mj* in such a phraseological context triggers a puzzling interpretative issue, as its function and pertinence seem rather unclear. In fact, despite noting it on her hieroglyphic rendering of the text, Luiselli simply excludes it when transliterating the verse – *w<sup>c</sup> hr hw=f m-m ntr.w* – which the author translates as "Einzigartiger unter den Göttern" (Luiselli 2004: 1), following Assmann (ÄHG 87). Other translations corroborate this perspective: "unique en son espèce parmi les dieux" (HPEA 193); "unparalleled among the gods" (Foster 1995: 59).

<sup>64</sup> For the theological meaning of this epithet, see Assmann 1995: 120–127, particularly n. 108. Laudatory texts from the so-called 'personal piety' sphere (e.g., BM EA 589 in Assmann 1999: no. 150) clearly show that this epithet could be related to any deity. An example of an elegy of Amun-Ra where a link between the upmost deity of the New Kingdom and Maat is observed in the stela of Antef, owner of TT 164 (Chicago OIM 14053, 14–15; see Assmann 1999: no. 75). For a later textual composition exploring the connection between Amun-Ra and Maat, within the context of the offering of Maat ritual performed by the king/priest, see pBerlin 3055, XX.9–XXV.5 (Moret 1902: 139–144).

<sup>65</sup> Note the intertextuality with BM EA 551, 12 found in the tomb of Horemheb in Saqqara (temp. Tutankhamun/Ay), where *sxm* is replaced by *hwn* 'young man', a lexeme which also bears a solar connotation. It shall also be pinpointed that the expression *hwn nfr* is observable in the immediate subsequent verse of the except here concerned.

*jrj hry.w hry.w shd=f t3.wy*<sup>66</sup>  
*d3y hr:t m htp*

The great one of the sky, the eldest of the earth  
 Lord of everything that exists, firm in everything {firm in everything}  
**The only one of his kind among the gods**  
 The beautiful bull of the Ennead  
 Chief of all gods  
 Lord of Maat, father of the gods  
 Who made Humanity and created the (small) cattle,  
 Lord of everything that exists, who created the 'tree-of-life',  
 Who made the pastures to nourish the herd,  
 Beautiful power that Ptah made!  
 The young one, beautiful in love  
 To whom the gods give praise!  
 (The one) who creates those below and those above when he illuminates the two countries!  
 (The one) who crosses the distant sky in peace!<sup>67</sup>

Such a statement suggests that the Creator belongs to the 'deities' ontological category but remains nevertheless 'unique'. Thus, this phraseology seems to point to the conceptualisation of intra-group alterity, which is not built in terms of total 'Alienness' but operates within a negotiation of degrees of sameness and difference. The god's uniqueness does not prevent him from being considered part of the group of 'deities', nor does the fact that he is envisaged as belonging to such a category diminish his ontological singularity, which is rendered in the affirmative form, rather than in a negative sentence, as previously observed for Chicago NHM 88906.

In a different textual fragment of the same hymnal composition, the Creator's excellency is rendered by a phraseological construction built with the preposition *r* combined with the substantive *ntr* (god) and the adjective *nb*:

*hr:y-tp jr t3 mj-kd*  
*tnj shr:w r ntr nb*<sup>68</sup>

Overlord (and) Creator of the earth in its entirety,  
 who is more excellent in plans **than any (other) god!**<sup>69</sup>

Once again, the double condition of the Creator - who is a god but simultaneously a different (superior) god - seems to be at issue. Alterity is thus inferred not in reference to individuals of different categories but to demarcate ontological differences within the same group.

In fact, this papyrus touches not only on divine inner-group differentiation but also on a human one:

*3prj hry-jb wj3=f*  
*wd-md.wt hpr ntr:w*  
*Jtmw jr rhy:t*  
*tnj kd.w=sn jr nḥ=sn*  
*wpy jnw.w<=sn>*<sup>70</sup> *w<sup>c</sup> r sn-nw=f*

<sup>66</sup> This expression refers to Amun-Ra's constant renewal of Creation as a sun deity via his daily course over the earth (during the day) and the underworld (at night), a *topos* rooted in much earlier religious *corpora*, including the *Pyramid Texts* (see Popielska-Grzybowska 2017b: 362–370). The interpretation and significance of *hry.w hry.w* is still a subject of debate; whereas Barucq and Daumas (HPEA 193, n. i) translate it as 'Haut et Bas', clarifying that it means 'sky and earth', it remains possible that the expression refers to the beings that inhabit those cosmic levels, that is, the deities and the humans. Following that train of thought, *jrj hry.w hry.w* would express the structure 'anthropogeny+theogony', using a distinct phraseology and terminology other than *rmt.w* and *ntr.w*, respectively. Other translations of this passage include: 'who created the lower and upper heavens' (Foster 1995: 59); 'Der die Unteren und die Oberen erschafft' (ÄHG 87); and 'Der die unten Befindlichen und die oben Befindlichen erschafft' (Luiselli 2004: 2).

<sup>67</sup> Cairo CG 58038, I.4-II.1 (temp. Amenhotep II). For considerations on this passage in regard to the creation of animals see Borges Pires 2022: 111–117.

<sup>68</sup> Ostrakon IFAO 1225 (= 2282; = 1075), from Deir el-Medina, which includes a partial parallel of the laudatory composition registered in Cairo CG 58038 has (...) [*tnj shr:w ntr nb{.t}*], seeming highly unlikely that the preposition *r* was therein written mediating *shr:w nd ntr*.

<sup>69</sup> Cairo CG 58038, II.2–3.

<sup>70</sup> The added suffix pronoun (=sn) refers to *rhy:t*, as in the previous verse (*tnj kd.w=sn jr nḥ=sn*). Moreover, the inclusion

Khepri, (who is) in the middle of his bark  
 Who orders the gods to come into existence!  
 Atum, creator of the *rekhyt*-people  
**Who distinguishes their forms and makes their livelihood,  
 Who differentiates their characteristics, one from the other!**<sup>71</sup>

In addition to creating Humanity, here alluded to via the lexeme *rhy.t*,<sup>72</sup> the Creator is responsible for inner differentiations within the human group. Despite their commonality where the Creator's providing and sustaining abilities are concerned, Atum<sup>73</sup> is said to distinguish and differentiate the *rhy.t's kd.w* and *jnw.w*. The two lexemes partially share a semantic range that comprises concepts such as 'character(istic)' and 'nature', but the former can also be interpreted as 'form',<sup>74</sup> whereas the latter's root also comprehends the meaning of 'colour'.<sup>75</sup> Owing to *jnw*'s chromatic semantics, the last quoted verse has been interpreted as pinpointing to ethnic-racial differentiation,<sup>76</sup> with individuals/groups pertaining to different ethnicities sharing their dependence towards the Creator, whose agency is fundamental for their survival, while keeping their phenotypic diversity. However, due to the previously alluded polysemy of *jnw*, an alternative interpretation, in which the lexeme would refer to different (physical) features of individuals not necessarily narrowed down or limited to their (skin) colour is also possible.<sup>77</sup> Considering the verbs *tnj* and *wp(y)* relate both to a single human group – identified as *rhy.t* – and that no 'foreign'<sup>78</sup> lands or dominions are mentioned in the excerpt, the second option seems preferable, as it enables broader semantics, while reading *jnw* through a less charged load. Indeed, by employing such a lexeme, the author/scribe may have intended to convey human individual and/or group differentiation transcending skin colour or racial features, encompassing other external features. While racial/ethnic-centred inferences have been raised from parallel readings of the *Great Hymn to the Aten* – where such interpretations seem more consensual – not only the used lexeme, but also the whole context differs significantly from the one observable in Cairo CG 58038, as it shall be commented about in the following subsection.<sup>79</sup>

Nevertheless, bearing in mind recent theorisations on 'alterity' – which state that it is verified not exclusively in interactions featuring individuals from different communities but also within a given

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of the said pronoun in a similar passage from the Great Hymn to the Aten discussed below (*jnm.w=sn stnw stny=k h3sty.w*) endorses such an addition. See Luiselli 2004: 11, 18.

<sup>71</sup> Cairo CG 58038, IV.2–3.

<sup>72</sup> Scholars have interpreted the lexeme *rhy.t*, differently, putting forward explanations that include 'pure spirits', 'present generation', 'mortals', 'living men', and 'rational beings'. However, more geographic as well as religious-based notions have also been advocated ('Delta people'; 'foreign rebels'; 'Seth's followers'; for an overview of the different ways this lexeme has been understood, see Griffin 2018: 10–19.). For long, the most consensual understanding regarding the identity of the *rhy.t*-people would connote them to a lower social status, being often translated as 'common folk', 'subjects (of the king)', 'populace', and related words (Wb 2, 447.9–448.2; TLA Lemma ID 95820, <https://thesaurus-linguae-aegyptiae.de/lemma/95820>; see also Griffin 2018: 16). Nonetheless, in his work dedicated to the textual, iconographic, and material attestations of the *rhy.t*-people, Griffin (2018) argues that the sources that support such a social/class understanding of the latter are sparse, thus undermining a sociological rendering of this lexeme. As for its geographic connotations, the scholar suggests that the word might indeed have been used to designate the people of Lower Egypt, but that by the beginning of the Middle Kingdom this identification had probably been lost and/or forgotten, and the lexeme started to be employed to refer to the whole Egyptian population. In that sense, the word would gradually be closer to *rmṯ* conveying the meaning of 'people' in general. See also Borges Pires 2022: 15; 2023b: 1039–1046.

<sup>73</sup> Albeit falling outside the present article's scope, it shall be noted that the cited text assigns theogony to Khepri, while attributing anthropogony to Atum. Tentative explanations for the rationale behind such a creative task division between two different (solar) deities will be explored elsewhere.

<sup>74</sup> Wb 5, 75.3–77.1; FCD 282; TLA Lemma ID 162430, <https://thesaurus-linguae-aegyptiae.de/lemma/162430>.

<sup>75</sup> Wb 1, 52.10–18; FCD 13; TLA Lemma ID 22570, <https://thesaurus-linguae-aegyptiae.de/lemma/22570>.

<sup>76</sup> Racial/coloured understandings of this verse have been transparent in previous translations, namely: 'qui distingue leurs races et les fait vivre/qui différencie leurs peaux l'une de l'autre' (HPEA 69); and 'der ihr Wesen unterscheidet, ihren Lebensunterhalt erschafft,/(und) <ihre> Farben trennt, den einem vom andern.' (Luiselli 2004: 11).

<sup>77</sup> Assmann (ÄHG 87) and Foster (1995: 61) seem to align with this perspective – 'ihre Wesensart unterscheidet und ihren Lebensunterhalt schafft / ihre Eigenschaften trennt, den einer von andern' and 'distinguished their natures, made them alive / made their features differ one from the other', respectively.

<sup>78</sup> It shall be noted, nonetheless, that 'ethnic otherness' is not necessarily equivalent or synonym to 'foreign(ness)'. In fact, 'ethnicity' is a somewhat elusive concept, grounded in socio-cultural constructs, with different perceptions and resonances over time and space (on ethnicity in ancient Egypt and various theoretical and methodological approaches in Egyptology see, among others: Baines 1996: 339–384; Ejsmond 2025: 10–20; Matić 2020; Moreno García 2018: 1–17; Riggs, Baines 2012; and Smith 2018: 113–146).

<sup>79</sup> See discussion about the *Great Hymn to the Aten* below.

collective – questioning that the above-quoted excerpt refers to ethnic-racial differentiation does not equate to undermine how ‘alterity’ is here at issue. On the contrary, it seems clear that rather than simply taking the lead on human emergence, the lauded deity is said to produce ‘otherness’ within the human collective, generating different groups/individuals distinguishable by their ‘forms’, ‘features’, and/or ‘characteristics’. Albeit their differences, all of them are blessed by the Creator’s ceaseless zeal and care in providing them with sustenance and life. Alterity is here built in a continuum of sameness and difference: on the one hand, all individuals are labelled as *rxy.t* and are granted the Creator’s everlasting support; on the other, though, they exhibit non-identical features. The shared ‘human’ identity does not exclude ‘otherness’ within it.

### *Great Hymn to the Aten*

As previously mentioned, the Amarna hymnology is also prone to alterity/otherness *topoi*, first of all due to conceptualisations of the Aten himself. In the so-called *Great Hymn to the Aten*,<sup>80</sup> the sun-disk deity is portrayed as an ‘other’ par excellence, being introduced with the late Egyptian definite article *pA* and, as such, not as ‘a god’, but rather as ‘the god’. Additionally, Aten’s uniqueness is further detailed through a negative construction employing the adjective *ky* (‘other’)<sup>81</sup> and the expression *hr hw=f*. Together, these phraseological elements appear to textually display Aten as the ultimate ‘alter’:

*p3 ntr w<sup>c</sup> nn ky hr hw=f km3=k t3 n jb=k jw=k w<sup>c</sup>.tj m rmt.w mnmn.t w.t nb(.t) nty nb hr t3 smw hr rd.wy nty m h hr p3(y)w m dn<sup>h</sup>.w=sn h3s.wt h3rw K3š t3 n(y) Km.t rdj= k s nb r s.t=f jr=k hr(y). t=sn w<sup>c</sup> nb hry-r wnm=f hsb h<sup>c</sup>=f ns=w wpw m md.wt kd=sn m-mjt.t jnm.w=sn stnw stny=k h3sty.w jrr=k h<sup>c</sup>py m dw3.t jn=k sw r mr(j)=k r s<sup>c</sup>nh rhy.t mj jrr=k sn n=k nb=sn r-3w wrd(w) jm=sn p3 nb n t3 nb wbn(w) n=sn p<sup>c</sup> Jtn n hrw 3 š.f.t h3s.wt nb(.t) w3.t jr=k nh=sn rdj.n=k h<sup>c</sup>py m p.t h3y=f n=sn jrr=f hnw hr dw.w mj W3d-wr r thb 3h.wt=sn m dmj=sn*

**The sole god, there is no one else of his kind! You create the land in accordance with your desire, you being alone: the Humanity, all the herds and cattle; everything that exists upon the earth, that walks on feet, and everything that flies with their wings; the foreign lands of Khariu and Kush, (as well as) the land of Egypt! You set every man in his place, and you provide everything they need! Everyone has their own food, and his lifetime is measured. Their tongues are different in their speeches as well as their appearance. Their skins (colours) are distinct for you differentiate the foreign people/ the hill-dwellers.** You trigger a flood when you are in the Duat, and you bring it in accordance with your desire, to make the *rekhyt*-people live because you made them for you, being their Lord of Totality, who tires himself for them! The Lord of all lands, who shines for them, the Aten of the day, great in prestige. As for the far-away lands, you make them live. You made so that a flood from the sky descends for them. You make the waves beat on the mountains, as a Great-Green to irrigate their fields when they touch it!<sup>82</sup>

The various entities and beings created by this unique persona do not partake in his ‘nature’, but they all share the commonality of inhabiting the land brought into existence by the sun disk. Yet, this shared identity does not hinder the conceptualisation of different groups in a series of encompassed binomials, all co-existing within the cosmic structure.

Given the particular features of Atenism, the ontological category of deities is occupied by a single individual – Aten himself. Consequently, the principal existential demarcation mentioned in the above-

<sup>80</sup> Written in hieroglyphic and engraved on the western wall of the tomb of Ay in Amarna (TA 25).

<sup>81</sup> The use of the lexeme *ky* in negative sentences as a device to emphasise the Creator’s ontological singularity and utmost otherness – precisely due to his incomparability to any ‘other(s)’ – is profusely attested in Ramesside laudatory texts, with different phraseologies: *nn ky hpr hr-h3.t=f r jr<.t> kj.w* (TT 41 (6), 4); *nn jr.w ky hn<sup>c</sup>=k* (TT 106 (3), 26–27); *nn wn ky wpw hr=k sn-nw=k pw* (Leiden I 344 verso, X.9); *nn ky ntr hn<sup>c</sup>=f dd=f kj.w=f* (Leiden I 350 recto, IV.9–10); *nn jry ky hr-s3 jr.n=k* (TT 373 (1), 9). One could posit that, as the lexeme *ky* (‘another’) implies the existence of more than one member in each category, only through its negation could the deity’s existential oneness be put forward, as an entity belonging to a single-member category, i.e., the own Creator. I would like to express my gratitude to one of the anonymous reviewers for pointing out this issue.

<sup>82</sup> *Great Hymn to the Aten*, 7–10 (temp. Akhenaten). Textual editions: Davies 1908: 29–31, pl.XXVII, XLI; Grandet 1995: 97–152; Sandman 1938: 93–96. Further references: ÄHG 92; Foster 1995: 102–107; Hoffmeier 2015: 218–220; Litchheim 2006: 96–100; Murnane 1995: 113–116; Wilson 1950: 369–371.

quoted excerpt separates humans from animals. Notice, however, that while anthropogenic collective is rendered by a single lexeme – *rm̄t* –, zoogony, on the contrary, is articulated with more complex phraseology.<sup>83</sup> One faces two levels of alterity here: the first individuates two ontological groups; the second details inner differences that distinguish sub-groups of one of them. One could argue that ‘Otherness’ is hinted at here to both inter-group and intra-group extents.

Another compelling aspect lies in the fact that this differentiation is also spatial as well as geographical – which may be framed within the universalist views embodied in the New Kingdom’s thought, and that is due, among other factors, to the political and territorial expansion that was taking place at that particular historical moment. Thus, the land brought into existence by the Creator deity is marked by a fundamental distinction between the *ḥ3s.wt* – a lexeme whose semantic scope includes ‘foreign lands’<sup>84</sup> – and *t3 n Km.t* i.e., ‘Egypt’. Furthermore, the *ḥ3s.wt* do not constitute a homogenous group. On the contrary, two different territories compose it – Kharu (in the Levant) and Kush (in Nubia). Moreover, such a spatial arrangement is matched with disparities among the human collective. It is interesting to observe that not only does the deity create human beings, but he also differentiates them, namely in linguistic terms, and perhaps even in social ones, given that ‘every man’ is assigned ‘his place’. As for phenotypic differences, it is worth noticing that, contrarily to what was previously commented regarding CG 58038, the lexeme used in this excerpt is *jnm* – ‘skin (of a human); hide (of an animal); skin colour’<sup>85</sup> – and not *jnw*.<sup>86</sup> Furthermore, while in the hymn dedicated to Amun-Ra the human distinctions lay on individuals pertaining to a common group – *rhy.t* – in the laudatory composition praising Aten three different geographies are explicitly mentioned, Egypt standing in opposition to the other two (i.e., Kharu and Kush). As such, if a racial/ethnic understanding in the priorly considered CG 58038’s fragment can be challenged, it can be suggested that the inclusion of an unequivocally ‘skin/coloured-imbued’ lexeme herein, together with the overall phraseological context, seem to indicate that if not clear-cut ethnicities, at least different external/phenotypical features observable in individuals coming from various provenances, are at issue. As such, although they have been presented as paralleled – the Aten’s hymn being used as an argument in favour of a racial/coloured understanding in the praise to Amun-Ra – a closer reading of the two excerpts evidences significant lexical, phraseological, and contextual differences. Nevertheless, the two texts agree on the supreme deity’s continuous provision of humans, regardless of their different features, origins, and possible phenotypical features – both Amun-Ra and Aten nurture them and ensure their survival.

Whereas *ḥ3s.wt* introduces non-Egyptian geographies, the word *ḥ3sty.w* in symmetrical opposition and complementary to/with the *rx̄y.t* invites equating the possibility of human distinctions within the Egyptian space, especially considering the polysemy of the word, whose semantics also comprise ‘hill/desert-dwellers’,<sup>87</sup> i.e., residing in territories not necessarily conceptualised as ‘extra-Egyptian/foreign’. As such, it could also be suggested that both *rhy.t* and *ḥ3sty.w* are here to be interpreted as two different human groups, both belonging to the *rm̄t* category mentioned at the beginning of the excerpt, when the human-animal distinction is alluded to. Belonging or not to the same human ontological class, the *rhy.t* and the *ḥ3sty.w* are presented in a differentiation paradigm, suggesting a geo-ecological alterity – whereas the former are enlivened by a flood coming from the Duat that is, the underworld (one could think of the Nilotic flood itself), the latter are granted life by a ‘flood which is poured down by the sky’, arguably referring to the rain.

Therefore, this hymnic atenist fragment provides a complex picture of successive categories engaging in an ‘otherness’ dialectics among them, through a set of distinctions and identifications (**fig. 1**), all of which are the product of Aten’s creative task.

As such, if the creatures partake in an ‘ontological solidarity’ – all emerging from the same god – their author experiences and exhibits a specific and non-comparable nature.

<sup>83</sup> For zoogonic observations on this text, see Borges Pires 2022: 117–120.

<sup>84</sup> Wb 3, 234.7-235.21; TLA Lemma ID 114300, <https://thesaurus-linguae-aegyptiae.de/lemma/114300>.

<sup>85</sup> Wb 1, 96.14-20; TLA Lemma ID 27420, <https://thesaurus-linguae-aegyptiae.de/lemma/27420>. See also Myśliwiec 2006: 225–238.

<sup>86</sup> Cf. Comments on CG 58038 above.

<sup>87</sup> Wb 3, 236.1-2; TLA Lemma ID 114320, <https://thesaurus-linguae-aegyptiae.de/lemma/114320>.

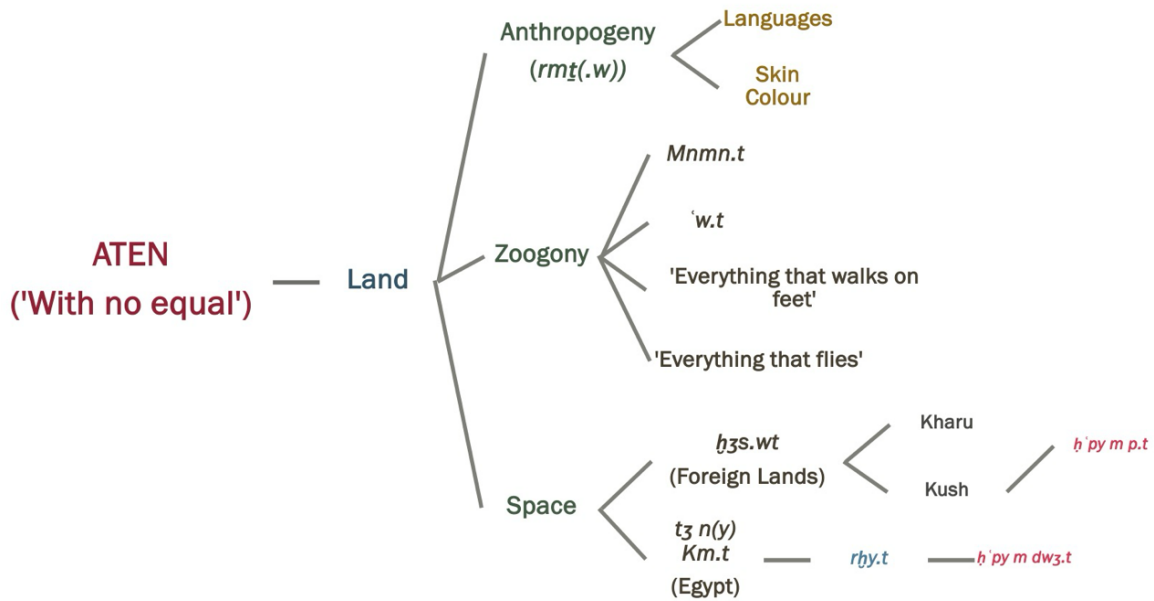


Fig. 1. 'Otherness' diagram in the *Great Hymn to the Aten* (7-10)

TA 6, external wall, western register

This contribution's final short case study is also an Amarnian text and chosen here as it concerns a different level of ontological demarcation: the individual. In the western register of the external wall of Panehesy's tomb (TA 6), the tomb's owner praises Aten<sup>88</sup> for having created him and, more importantly, for having raised him to a specially favoured social condition:

*jn b3k tpy n jtn m pr jtn m 3h.t-jtn P3-nhsy m3<sup>c</sup>-hrw dd=f j3w n=k p3y[=j] ntr kd[=j] p3 š3 n=j nfrw p3 shpr=j rdj.n=j <sup>c</sup>kw jr hr.t=j m k3=f p3 h3k3 jr wj m rmt.w rdj šbn=j hsy.w=f rdj rh.wj jr.t nb[.t] stn kwj m pht[y] rdj wsr=j wn=j nmh kwj hw [nb hr sn(-t3) n.t hpr k]wj m hsy n jr[=sn?]*

By the First Servant of Aten in the house of Aten in Akhetaten, Panehesy, he says: 'Praises to you, [my] god, who built [me], the one who commanded me in beauty, the one who caused me to come into existence, gave me food and took care of me with his *ka!* The ruler, who made me among the humans, who associated me with his favourites, who made so that every eye<sup>89</sup> knew me, distinguishing me in strength! He made me powerful after having been humble! All (my) contemporaries are kissing the earth [= bowing down] because I have become a favourite of [their?] Creator!<sup>90</sup>

Albeit self-identifying as a member of the human group (*rmt*), Panehesy presents himself as a 'not-like-the-others' individual, drawing attention to his particular social status<sup>91</sup> and expressing his gratitude towards a god who enabled him to rise the social ladder, and transition to a state of abundance and power after having figured among the least privileged members of society. Later in the text, the topic of different social-economical echelons is resumed and reinforced:

*ntr jr wr.w kd nmh.w Bw n fnd.w nb[.w] sst [jm=f]*

(The) god, who made the great ones and built the humble/poor ones! The air/wind of every nose<sup>92</sup>, who breathes through him!<sup>93</sup>

<sup>88</sup> Or Akhenaten, according to Assmann (see ÄHG 234).

<sup>89</sup> That is, 'everyone'.

<sup>90</sup> TA 6, external wall, western register, 6–12 (temp. Akhenaten). Textual editions: Davies 1905: 29–30, pl.VII, XXVII; Sandman 1938: 24. Further references: Assmann 1995: 186; ÄHG 234.

<sup>91</sup> A similar idea is conveyed in a slightly older stela, currently in the Kunsthistorisches Museum in Vienna, in which Merira praises Ra-Atum not only for having created him but also for elevating him to the highest rank among humans (see Vienna 5815, 2–3; temp. Amenhotep III).

<sup>92</sup> Just as previously noted for 'every eye' (*jr.t nb.t*), 'every nose' (*fnd nb*) arguably relates to the entire Humanity.

<sup>93</sup> TA 6, external wall, western register, 18–19.

Once more, alterity is conveyed by individual differentiation within a larger group – in this case, the human one. Moreover, as previously discussed, inner distinctions do not obliterate commonalities, namely, the fact that both the *wr.w* and the *nmḥ.w* are created by the same deity,<sup>94</sup> and are both supplied with air, for the praised god is ‘the air of every nose’. Such a *topos* of human-based distinctions – including age and social-leaning – would be continued and further developed in Ramesside times.<sup>95</sup>

### *Final Remarks*

New Kingdom laudatory texts constitute a significantly diverse set of sources, evidencing a high level of lexicographical and phraseological variability, which goes hand-in-hand with spatial and temporal differences. Moreover, the materiality of the support in which a given text is inscribed is also influential, and the agency of the text’s ‘author’/scribe should not be disregarded either. As such, the overall picture is much more complex than the one presented in this contribution, as it refers to a multi-folded and hyphenated reality with permeable and imprecise borders, both in which the non-oppositional binomial ‘identity/alterity’ is concerned. However, it might be pertinent at this stage to summarise a few key points, to better ponder the adequacy of ‘otherness’ as a research tool to address this *corpus*.

Firstly, it is worth emphasising that the rupture represented by Creation also corresponds to the emergence of the ‘Other(s)’ as a conceptual category, with ontological consequences. Nonetheless, the coming into existence of the ‘other’ does not equate to the appearance of a total ‘alienness’. In fact, as proposed by Turk, ‘alterity’ and ‘alienness’ are conceptually distinct: whereas the latter is said of something or someone belonging to a complete ‘strange’ or ‘foreign’ context, the former solely means ‘partial strangeness’, meaning the ‘other one of the two’ (or more), not necessarily belonging to an irrevocable extraneous ontological realm.<sup>96</sup> In this regard, it is worth mentioning that religious hymns of the New Kingdom appear to integrate all cosmic elements – be they strictly Egyptian or not – within a common system of conceptualisation(s) that places everyone and everything under the Creator’s activity and deeds without undermining the existence of fundamental differences between the various beings and entities. Deities, humans, animals, and others share their created condition, existing in a common world in an ‘ontological solidarity’, which somehow resonates with Descola’s concept of the ‘society of nature’.<sup>97</sup> Notwithstanding their belonging to the same Cosmos, their inter and intra-group distinctions appear to be as decisive and determinant as their similarities. Ontologies seem to operate here in a permanent (re) negotiation between sameness and difference.

Thus, the second out of three ‘grammars of alterity’ theorised by Baumann and Gingrich<sup>98</sup> – ‘encompassment’ – seems particularly fruitful to address alterity in this *corpus*, as it relates to a “hierarchised sub-inclusion of others’ who are envisaged as ‘part of us’.<sup>99</sup> Such a perspective aligns with the recurrent concept transparent in the studied texts that articulates a common world, acting as the dwelling place of different kinds of beings who are somehow framed within hierarchical ontologies that structure and punctuate the Cosmos as a whole. While the ontological demarcation between the Creator deity – who ‘has no other’ – and all the ‘others’ is critical, defining his highest-ranking position and predicating a strong interdependence between him and his creatures, the distinctions between different categories of beings seem no less fundamental.

As a device that allows one to simultaneously apprehend what is different and what is equal, it seems clear that applying concepts such as ‘otherness’ and ‘alterity’ does not have to be restricted to interactions between individuals pertaining to different communities. On the contrary, such a conceptual

<sup>94</sup> However, it shall be pointed out that different lexical roots are used to introduce the creation of the two human groups: whereas the *wr.w* are said to come into existence via a *jr*-act, the *nmḥ.w* result from a *kd*-action.

<sup>95</sup> Papyrus Leiden I 344 verso, a sizeable hieratic hymnal composition worshipping Amun, is particularly relevant on this front (see *jr:n=k wr:w km3.n=k ḥꜥ(3).w*, ‘You made the adults and created the children’ [V.10-11]; *ntk ḥnmw n ḥr(.w) nb.w ntk /// pꜥ.t rḥy.t*, ‘You are Khnum of/to every face! You are [the Creator?] of the *pat*-people and the *rekhyt*-people!’ [X.7].

<sup>96</sup> Turk 1993: 173–197.

<sup>97</sup> Cf. Descola 2005.

<sup>98</sup> In the introduction of their edited volume, Baumann and Gingrich propose three ‘grammars of alterity’: *segmentation*, pointing to alterity as context-dependent (e.g., an ‘enemy’ can turn into a ‘friend’ and vice-versa); *encompassment*, defined ‘by a hierarchised sub-inclusion of others who are thought, from a higher level of abstraction, to be really “part of us”’; and *orientalisation*, which envisages ‘self’ and ‘other’ ‘by negative mirror imaging’ (vd. Baumann, Gingrich 2004, esp. x-xi; see also Bachmann-Medick 2017).

<sup>99</sup> Baumann, Gingrich 2004: x-xi.

and theoretical apparatus reveals itself quite valuable to study relationships established within a single context.

As such, ‘otherness’ – rooted in ‘alterity’ and ‘ontology’ analytical paradigms – might be a useful research tool to address both formal and content aspects relating to New Kingdom laudatory texts. In fact, at least three levels of ‘otherness’ can be identified in this *corpus*. The first one is given by these texts’ very communicational situation, in which the worshipper faces and interacts with a praised (Creator) deity. Secondly, ‘otherness’ is also paramount to understanding the Creator’s ontological uniqueness and the stark contrast between the supreme deity and every other being, the former receiving epithets such as ‘the sole one’ and thus being framed as someone to whom ‘no one’ is similar. Finally, ‘otherness’ is detected between ‘Creator’ and ‘Creatures’ but also among these last ones. In addition to the emergence of different ontological categories (comprised namely of deities, humans, and animals), intra-group differences are also propelled by the Creator, who is said to distinguish ‘faces’, ‘languages’, and ‘individuals’ of a same group, which is likewise noticeable in later New Kingdom sources.<sup>100</sup> In sum, there is value in envisaging this and other religious-literary *corpora* through an ‘otherness’-centred lens, furthering the analysis of the multiple aspects and dimensions they unfold.

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<sup>100</sup> See, for instance, TT 158 (5), 4: *ntk km3 jr.w=sn m hr.w nb tnj.w sn-nw=f jm=sn*, ‘You are the creator of their forms, each face distinct from the other [= lit. ‘His second’] (temp. Ramses III).

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# Application of two models of square grids to the analysis of proportions in Old Kingdom reliefs of standing human figures from the Memphite necropolis

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**Abstract:** The objective of this paper is to establish how Old Kingdom tomb decorators determined human body proportions on flat surfaces. Two models of square grids, whose structure is based on rules of geometry, were used to study this question. This tool was selected due to the rules of composition and decoration of walls employed by Egyptian decorators and their practice of using parallel and intersecting guidelines to achieve their goals. Consequently, application of square grids improves the chances of interpretation of the results that would closely correspond with the intentions of the decorators. This method was tried and tested by the author, but the research was limited to analysis of Old Kingdom representations of seated individuals from Memphite Necropolis tombs. The study presented in this article analyses a group of 34 representations of standing figures that the author regards as representative of this type of images.

**Keywords:** reliefs, human body proportion in art, hypothetical square grid, Memphite Necropolis, Old Kingdom Egypt

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The characteristic manner of representation of reality on flat surfaces in Egyptian art<sup>1</sup> was based on two geometric figures, the square and the rectangle. For this reason, each wall prepared for decoration was divided into vertical and horizontal sectors corresponding with these figures. The same geometric organisation was adopted for depiction of the most characteristic features (so-called aspects) of the objects represented on flat surfaces – without application of perspective or actual proportions.<sup>2</sup> This two-dimensional manner of representation of an object is easiest to reconstruct with the Cartesian coordinate system based on the  $x$  and  $y$  axes. It seems highly likely that Egyptians used a corresponding, but very simplified and less accurate system of axes, to facilitate the decoration process. Owing to the fact that the decoration was made in vertical and horizontal bands, the registers of the decorated surfaces were situated directly next to each other. The surfaces also penetrated each other and formed a more or less regular network consisting of invisible crossing lines.

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<sup>1</sup> Schäfer 1974: 80–159, 163–166; Robins 1994: 1–30.

<sup>2</sup> Brunner-Traut 1974: 428–429; 1990: 12.

The earliest guidelines come from Fifth Dynasty tombs.<sup>3</sup> Decorators used them mainly as a technical tool for drawing the same motif or human figures multiple times.<sup>4</sup> In the case of human representations depicted vertically, the artists used horizontal guidelines which crossed key body parts (hairline, neck, armpits, elbows, buttocks, knees and sporadically top of the head and calves). The vertical line that was sometimes used crossed the central part of the figure and by intersecting the horizontal lines, it formed a basic system of coordinates with the other ones (*Achsenkreuz*).<sup>5</sup>

The initial application of square grids for the same purpose is dated to the mid-Twelfth Dynasty.<sup>6</sup> Comparative analyses of representations with preserved guidelines, conducted, among others, by Gay Robins, suggest that human body proportions in depictions dated to the Eleventh and first half of the Twelfth Dynasty corresponded with those characteristic of the Old Kingdom, particularly from the Fifth and Sixth Dynasties.<sup>7</sup> The principles of use of square grids were established in the so-called early system between the second half of the Twelfth Dynasty and the end of the New Kingdom.<sup>8</sup> Starting from the Third Intermediate Period, the number of square modules in the grid increased.<sup>9</sup> Nevertheless, the manner of application of intersecting guidelines in the process of decoration was quite similar in both systems.

A number of scholars have attempted to reconstruct human body proportions with hypothetical grids with a constant subdivision system. Erik Iversen was one of the first to use hypothetical grids consisting of 256 square modules for this purpose.<sup>10</sup> In his research he noticed, for example that in all periods ancient decorators determined human body proportions on flat surfaces by means of a constant, mechanically copied model of grids consisting of squares of a constant size. Iversen claimed that the decorators also used square grids to establish the location of anatomical details of the face.<sup>11</sup> Application of the 256-module model of hypothetical square grids, proposed by Iversen, also laid the foundations for the method introduced by Roland Tefnin. He presented a manner of application of the hypothetical square grid as a measurement tool for comparative iconographic analysis of facial features in two-dimensional New Kingdom representations of pharaohs.<sup>12</sup> He mainly indicated differences in their locations among the analysed images and suggested that this method could help to establish the chronology of anepigraphic representations.

Robins was another scholar who recognised the important role of hypothetical square grids in the research on human body proportions in Egyptian art.<sup>13</sup> However, she did not believe it was appropriate to draw any far-reaching conclusions regarding body proportions in Egyptian art solely on the basis of

<sup>3</sup> Schäfer 1919: Pl. 107; Fisher 1924: 16–17, Pls 53, 55; Saleh 1977: Pl. 17; Robins 1994: 64–69, Figs 4: 1–4: 3. Until the mid-Twelfth Dynasty the main horizontal lines lay in similar locations in relation to selected body parts to those in the Old Kingdom.

<sup>4</sup> Robins 1994: Figs 4: 3–4: 5; Wenzel 2007: 344–353.

<sup>5</sup> Fisher 1924: Pl. 55; Robins 1994: 64; Kuraszkiewicz 2021: Figs 7, 13.

<sup>6</sup> Robins 1994: 70–76, Figs 4: 8 – 4: 10. Intersecting lines which formed grids in the Old Kingdom were used to emphasise the shape of rippling water (Wild 1953, II: Pl. 119). They were also identified in the area of the wall surface where offering lists were recorded (Iversen 1975: Pl. I: I).

<sup>7</sup> Robins 1994: 244–254. She also concludes that the square grids that can be found in the representations from the Old Kingdom should mostly be associated with Saite copyists. Such grids can be seen, e.g. on the stelae from the pyramid of Djoser at Saqqara (Firth, Quibell 1935: Pls 15, 16). According to Robins, they are examples of practical exercise made by the copyists from the Twenty-fifth or Twenty-sixth Dynasties, who took inspiration in the art of earlier periods (Robins 1994: 169–170; Morkot 2003: 85–88). However, the square grids found on the representations of Akhetotep in his tomb at Saqqara (Fifth Dynasty) are probably examples of work of New Kingdom copyists (Radtke 2020b: 168–178). For practical exercise made by copyists and copying as a method of work of decorators, see Robins 2001: 60–62; Lashien 2010: 81–84; Kanawati 2011: 483–496; Bács 2020: 148–151.

<sup>8</sup> Robins 1994: 164–169, 259, Figs 4: 11, 5: 7, Pl. 5: 1. The proportions were altered in the Amarna period (Robins 1994: 121–123; Yasuoka 2021: Tab. 2). Literature terms it the ‘second grid system’ (Yasuoka 2021: 266).

<sup>9</sup> Robins 1994: 160–169. According to Robins, the new principles of grid application that shaped the so-called later system began to be used from the Twenty-fifth Dynasty (see the chapel of Amenirdis at Medinet Habu), and not from the Twenty-sixth Dynasty as it was believed earlier (Mackay 1917: 83; Iversen 1975: 75).

<sup>10</sup> Iversen hypothesised that one, constant canon of human body proportions was observed in Egyptian art. In order to prove his hypothesis, he used hypothetical square grids to compare the representation of Amenhotep III from tomb KV22 with a portrait of a non-royal person from the Old Kingdom (Iversen 1975: 55, Pls 4, 12).

<sup>11</sup> Iversen 1976: 135–148. He used hypothetical square grids to compare the location of anatomical details of the face in representations of Amenhotep II from tomb KV 35 and depictions of the god Ptah from the temple of Seti I at Abydos. According to Iversen, the constant location of facial features in these two representations dated to different periods was evidence for one canon and a constant model of hypothetical grids in Egyptian art.

<sup>12</sup> Tefnin 1983.

<sup>13</sup> Robins 1994: 60–63.

hypothetical reconstructions and arbitrarily defined grid models.<sup>14</sup> At the same time, she admitted that the method proposed by Tefnin was a promising one and could be applied in practice on condition that a 25-module (5x5) grid should be used instead of the 256-module one.<sup>15</sup>

The method proposed by Tefnin raised interest among other scholars as well. Its principles were exploited, among other things, for analysis of facial proportions in a representative group of two-dimensional, anepigraphic Eighteenth-Dynasty portraits of rulers dated on the basis of preserved cartouches.<sup>16</sup>

The method proposed in this paper is a modification of Tefnin's concept<sup>17</sup> as well as of Robins' research<sup>18</sup> and was earlier used for analysis of seated representations from tombs built in the Old Kingdom.<sup>19</sup> For this reason, the issues discussed here should be treated as an expansion of earlier research, which includes another category of images from the same period. This study, like the previous one, focuses on measurements of distances between main parts of the human body with two models of square grids. The fundamental principle of the proposed method defines the square grid as a measurement tool. However, it is not the objective of this study to reconstruct the preserved guidelines.

This is a comparative study which focuses on Second to Sixth Dynasty tomb reliefs and the analysis is mainly inspired by the results of work conducted by Robins.<sup>20</sup> The group of reliefs discussed in this paper is much bigger than the one she described. Another difference from Robins' and Tefnin's research is that this analysis does not use drawings but high quality photographs and a dedicated graphic software. This technique delivers more accurate and reliable results than manual techniques.<sup>21</sup> The detailed comparative analysis should also identify changes in the proportions of the main body parts in human representations on flat surfaces carved by the workshops located within one region (Memphite necropolis) in the defined period. Apart from that, the proposed, less effort-consuming method makes it possible to include a bigger group of representations than before, increasing the chances of correct identification of the intentions of the Egyptian decorators.

Tefnin focused on representations from the times when square grids were in use, hence the term 'hypothetical square grids' is relevant. In addition to that, he did not only try to reconstruct the methodology of application of the square grid in decorators' work, but, above all, was the first to describe the rules of its application as a tool to establish distances between constant measurement points. On the other hand, Robins also used 'hypothetical' square grids to analyse representations from the Second, Third and Fourth Dynasties,<sup>22</sup> that is, a period when not even a simple system of coordinates (*Achsenkreuz*) was used. The models that she proposed function mainly as constant matrices for comparative analysis of human body proportions in Egyptian art on the basis of constant rules. She also associated the grids and the range of their applications with Egyptian rules of wall composition and decoration.<sup>23</sup> Although the method used by Robins is fully justified, the term 'hypothetical' square grids raises doubts. The method described in this paper is also used to measure Old Kingdom reliefs and the rules of construction of the grids, especially Grid I, are based on the preserved guidelines. Nevertheless, the manner of taking measurements and their interpretation are closer to metrics<sup>24</sup> than historical metrology,<sup>25</sup> which significantly limits the use of the term 'hypothetical square grid' as understood by Tefnin and Robins.

<sup>14</sup> In this context, Robins expresses her criticism of Iversen's hypotheses and questions his subdivision of the hypothetical square grid into 256 square modules (Robins 1994: 35, 44–56).

<sup>15</sup> Robins 1984: 37. According to Robins, it is possible to prove application of such a model of square grids by ancient decorators.

<sup>16</sup> Radtke 2021a; 2021b.

<sup>17</sup> Tefnin 1983. The similarity of the method was already discussed in: Radtke 2011: 160–162; 2021a: 27, 35–36.

<sup>18</sup> Radtke 2021a: 11–13.

<sup>19</sup> Radtke 2020a; 2020b.

<sup>20</sup> Robins 1994: 228–244.

<sup>21</sup> The inaccuracies in Tefnin's analysis are connected with his method, that is, using photography to reduce manually drawn representations to the same dimensions (Tefnin 1983: 167, Figs 3–14). Robins also mentions potential errors and amount of effort required in analysis of manually drawn representations (Robins 1994: 61–62).

<sup>22</sup> Robins 1994: Figs 10: 1–10: 15.

<sup>23</sup> Robins 1994: 60–63.

<sup>24</sup> Metrics deals with measurement practicalities, i.e. technical aspects of measurement taking, 'methods of measurement, principles of the functioning of measuring instruments' (Suchodolski 1966: 278).

<sup>25</sup> Historical metrology deals with 'research into the value and origin of systems of measurement used prior to the introduction of the metric system' (Sobol (Ed.) 1995: 472).

## 1. Description of the Measurement Method

First of all, it must be emphasised that the manner of application of the grids is the same in the case of each representation, and the main principles of taking measurements and interpretation of the results draw upon fundamental rules of measurement science.<sup>26</sup> The grid used by Tefnin was characterised by constant dimensions and subdivision into 256 square modules. He assumed that two vertices in his grid always overlap with defined constant points.<sup>27</sup> In the method described below both square grid models also overlap with constant points, but as opposed to the principles adopted by Tefnin, the length of the square side depends on the changing distance between these points.<sup>28</sup>

The following principles have been adopted for this analysis:

- The square side length (the measurement tool), and consequently its size, is variable and depends on the distance between its constant points (grid vertices) in each analysed representation.
- The constant points of the two square grids used in the study are:
  - Grid I – the hairline (intersection of lines A and B) and the point marked at the junction of the neck with shoulders, that is, the intersection of lines A and B1 (**Fig. 1a**);
  - Grid II – the hairline (intersection of lines A and B) and the intersection of line A running from the hairline with vertical line B2, marked at the soles of the feet.
- The smallest element of the grid, that is, the square module, is the main measurement unit.
- The measurements are taken from the top of the representation downwards, that is, from the hairline towards the soles of the feet, and are expressed as the number of square modules.
- The square grid is overlaid with computer software on good-quality photographs of the representations which are preserved well enough to mark the following points:
  - the hairline;
  - the junction of the neck with shoulders;
  - the soles of the feet.
- The state of preservation is good enough to identify at least eight out of ten measurement points listed in **Tables 2–5**.
- Owing to variable quality of the photographs, the state of preservation of the analysed reliefs (mainly damaged details) and quality of the workmanship, the possible measurement error was estimated at (+/-) 0.1 square modules.

Two different grids (Grid I and Grid II), which differ in terms of the number of square modules (the smallest grid elements) were overlaid on each of the representations listed in **Table 1**. The constant points in both grids are determined in the same places, in accordance with the principles presented above.

The sizes and subdivision of the grids are established on the basis of the following criteria:

- Grid I – the length of the side of the smallest grid element (square module) is defined by the distance between the hairline and the junction of the neck and shoulders. At the same time, these two points are two vertices of a square module as vertical line A and horizontal lines B and B1 cross them. The number of square modules in the grid depends on their sizes and the distance between the constant points of the grid, that is, the hairline and the soles of the feet (**Fig. 1b, c**).

If guidelines appear on the surfaces of Old Kingdom representations, they are mostly found crossing the hairline<sup>29</sup> and very often the junction of the neck with shoulders.<sup>30</sup> Consequently, the length of the square side of Grid I corresponds with actual distances between the two parts of the body, which Egyptian decorators used as reference when they created representations with application of guidelines. One of the assumptions of this study is that this distance is the reference in the analysis of different parts of the body.

Apart from the constant points mentioned above (the hairline, the junction of the neck with shoulders), the measurements with Grid I and Grid II (**Tables 2–5**) are taken at points where the original Old Kingdom guidelines were often found, that is, armpits, elbows, junction of the thigh and buttock and knees. The original guidelines less often crossed other measurement points, that

<sup>26</sup> Radtke 2021a: 11–13.

<sup>27</sup> Tefnin 1983: 166–167.

<sup>28</sup> Tefnin used photographic methods to change the size of the analysed representations so that the vertices of the square grid consisting of identical elements overlapped with the two constant points marked on the surface of the representation.

<sup>29</sup> Fisher 1924: Pl. 55; Robins 1994: 64, Figs 4: 1–4: 3.

<sup>30</sup> Wenzel 2007: Fig. 2, 17–22.

is, the chest at the level of nipples, the lumbar part of the back, the navel, the most protruding part of the buttock and the ankle, and were not marked as carefully as the ones listed above.<sup>31</sup> However, these parts of the body can be measured precisely with Grid I and Grid II in the analysed representations.

- Grid II – the square grid is determined on the basis of the defined constant points (the hairline and the soles of the feet) and divided into 324 (18x18) square modules (**Fig. 1d**). It should be added that the height of a standing human figure measuring 18 square modules (the distance between the hairline and the soles of the feet) is associated with the so-called early grid system<sup>32</sup> and actual grid application by ancient decorators at least from the mid-Twelfth Dynasty.<sup>33</sup> The rules of application and subdivision of this grid correspond with those employed by Robins for analysis of body proportions in Old Kingdom representations.

Thirty-four randomly-selected standing human representations carved in relief are included in the analysis. They all come from or are located (*in situ*) on walls of tombs at the Memphite necropolis. In terms of style and composition (formal criteria) they can be regarded as characteristic and representative of the period spanning the Second to the Sixth Dynasty (**Table 1**). Another fundamental criterion was a good state of preservation of the relief, which means that the constant measurement points mentioned above can be identified on their surfaces and the two square grids can be applied for measuring the representations. The measurement values for these depictions are listed in **Tables 2–5**. The most common values are marked green and the differences from these values reaching (+/-) 0.1 of the measurement unit (square module) are marked red.<sup>34</sup>

## Analysis of Measurement Results and Their Interpretation

### *Comparison of locations of preserved guidelines and lines in Grid I and Grid II – general evaluation of the criteria adopted for the study*

The original guidelines have not been preserved on any of the analysed reliefs, but examination of the decoration in tombs of Nikauhor<sup>35</sup> and Metjetji<sup>36</sup> suggests that some human representations were created with application of guidelines and a simplified system of coordinates *Achsenkreuz* (Metjetji).<sup>37</sup> There are guidelines in the tomb of Mereruka, but they were used to mark geometric elements of the decoration or other objects.<sup>38</sup>

The original guidelines have been preserved partially only in some representations in the tombs of Nikauhor and Metjetji, consequently, it is difficult to establish the degree to which they overlap with guidelines in Grid I and Grid II. Theoretical foundations of Grid I, whose structure is based on the constant locations of two most frequently used guidelines in the Old Kingdom, are closer to the principles of the work of the ancient decorator than those of Grid II. For this reason, the measurements taken with Grid I are regarded as more reliable in this study. Thus, apart from those based on analysis of the few preserved guidelines, additional conclusions can be drawn on the basis of analysis of the grids, whose construction follows similar rules to those employed for Grid II. These assumptions are proven correct by the results described below.

In a representation of dancers from the tomb of Nikauhor,<sup>39</sup> not included in this analysis, the preserved guidelines cross the top of the head and the junction between the chin and neck. A brief analysis of this representation with Grid I shows that three lines of this grid overlap with the three original guidelines that divide the images of the dancers into three equal parts. Therefore, we could hypothesise that the head played an important role in establishing proportions of the whole body in this tomb. However, in two reliefs of Nikauhor examined with Grid I the proportions of the head to the height of the body

<sup>31</sup> Robins 1994: 64, Figs 4: 2–4: 4; Wenzel 2007: Figs 1–2, 14, 17–20, 22.

<sup>32</sup> Robins 1994: 70–86.

<sup>33</sup> Robins 1994: Figs 4: 8–4: 10.

<sup>34</sup> The allowance for deviation reaching (+/-) 0.1 of the length of the measurement unit is mainly associated with the possibility of the measurement error described in the basic principles of the method.

<sup>35</sup> Quibell 1909: Pl. LXVI: 1.

<sup>36</sup> Louvre Museum, Paris, E 25507–25549 (*Louvre Museum*).

<sup>37</sup> Ziegler 1990: 32–34, 126, 148; Wenzel 2007: 348, 356, Fig. 15.

<sup>38</sup> *The Mastaba of Mereruka* 1938, I: Pl. II; II: 202, 204, Pls 200B, 201A.

<sup>39</sup> Wenzel 2007: Fig. 15.

differ and the head is significantly smaller in representation no. 17 than in no. 18 (this is based on the measurement of the ankle, Grid I, no. 17 – 7.3 sq. mod.; no. 18 – 7.7 sq. mod.).<sup>40</sup> As a result, the lines of Grid I cannot be used to divide the reliefs, as with the representations of the dancers, into three equal parts. Key information regarding the method of establishing proportions of the analysed representations of Nikauhor is delivered by the measurements taken with Grid II. They are comparable in both reliefs, which means that probably unpreserved guidelines or other tools were used by the decorators. The whole representation of the most important scene on the wall and the same dimensions of the two standing figures as well as equal distances between different parts of the body seem to have been the superior goal of these artists.

The results of measurements of the four representations of Metjetji taken with both grids differ from those of Nikauhor's depictions. Although the decorator groups that worked in these two tombs drew lines which could indicate the dimensions of the head in different places, the results of measurements with Grid I in the case of representations of Metjetji and the dancers from the tomb of Nikauhor are very similar. Perhaps the decorator who authored the small scene in Nikauhor's tomb employed the rules of determination of body proportions that became standard by the time the more recent tomb of Metjetji was carved. The results of measurements of Metjetji's portraits with both models of square grids reflect advanced standardisation of these representations.

Analysis of the representations of Metjetji reveals similar measurements values of the elbow of the arm stretched down along the body. This point is intersected by one of the three original lines, which is also visible in some other preserved, but not analysed images from the tomb of this official.<sup>41</sup> In all the representations of Metjetji analysed with Grid I (**Figs 6–8**) the line crossing the elbow of the arm stretched down along the body as well as two other ones, that is, crossing the junction of the neck with shoulders and the upper part of the knee, divide the silhouette into three equal parts. Notably, the locations of these three lines of Grid I overlap with the original guidelines in this tomb.<sup>42</sup> Application of Grid I also shows constant relations between the dimensions of the heads as well as the distances between the hairline and ankle in all the representations of Metjetji. Analysis with Grid II confirms most of the conclusions listed above, but the differences between the measurements of his depictions, particularly of the knees and the most protruding part of the buttock, are bigger than in the case of Grid I.

Comparison of the locations of the original guidelines and the lines made with Grid I and Grid II leads to a conclusion that the principles of construction of both grid models and the manner of interpretation of the data correspond with the methods and range of the application of guidelines by ancient artists. Consequently, analysis with these grids increases the chances of arriving at further conclusions that indicate actual intentions of the decorators

### *General conclusions from the analysis of the representations with Grid I and Grid II*

A general analysis of the results of measurements taken with Grid I leads to a few important conclusions. First of all, the representations carved during the Sixth Dynasty (Kagemni, Mereruka, Qar/Pepynefer, **Table 1: cat. nos 26–34**) are characterised by similar or identical locations of certain parts of the body, that is, the chest at the level of nipples, the elbow of the arm stretched down along the body, and ankles. This regularity, or schematic system of depiction of human figures, is probably a consequence of the application of horizontal guidelines situated at constant or similar levels. Some similarities can also be observed in representations situated on the same walls of mastabas which come from the times preceding the Sixth Dynasty (e.g. representations from the tomb of Khufukhaf, **Table 1: cat. nos 7–8**). However, in this case, the precision and reproducibility in the determination of human body proportions was a result of the experience and quality of workmanship, as well as individual methods of work on the banded (linear) wall decoration. The differences between measurement values of standing human figures carved before the Sixth Dynasty (Grid I) suggest that their proportions were not determined according to regularly followed (uniform) principles.

<sup>40</sup> A big difference in the proportion of the head to the height of the silhouette was also detected by measurements taken with Grid I of another two representations from Nikauhor's chapel, situated in the niche of his wife, Sekhemhathor (*The Met 2* – right portion of the west wall).

<sup>41</sup> Wenzel 2007: Fig. 17, 18; Louvre Museum, Paris, E 25507–25549 (*Louvre Museum*).

<sup>42</sup> Cf. n. 39. Robins also mentions the division of the human body into three equal parts with these guidelines in the Old Kingdom (Robins 1994: 64).

Analysis of the results of measurements taken with Grid II indicates a few significant similarities among the representations. They are mainly connected with identical or very similar location of the upper part of the knee in portraits dated to the second half of the Fifth and the Sixth Dynasty. In the analysed group this is observed in the representations from the tombs of Nikare, Ptahhotep, Kagemni, Mereruka, Qar/Pepynefer (**Table 1: cat. nos 19–21, 26–34**). Some similarities among these images can also be seen in the location of the elbow and ankles.<sup>43</sup> Of note, the locations of the most protruding part of the buttock in the analysed representations carved between the second half of the Fourth and the first half of the Fifth Dynasty demonstrate considerable variability. The locations of this part of the body in reliefs dated to the late Fifth and the Sixth Dynasty are much more similar than in earlier images, and a vast majority of the values fall between 8.1 and 8.3 sq. mod.

The results suggest that during the Sixth Dynasty the manner of representation of standing human figures on flat surfaces shifted significantly towards standardised depictions in comparison with earlier periods. This is mainly illustrated by similar proportions of the head in a great majority of funerary portraits,<sup>44</sup> as well as the same or very similar measurement values for the junction of the neck with shoulders, the chest at the level of nipples and the most protruding part of buttocks. This schematic system solidified and was reproduced in subsequent periods<sup>45</sup> but, as indicated by a brief analysis of later representations, it was not one and only generally adopted standard. The measurement values for a randomly selected representation from a Twelfth-Dynasty tomb with one of the earliest preserved square grids are very similar to those from the Sixth Dynasty.<sup>46</sup> However, the measurement values also randomly selected of painted representations from Eighteenth-Dynasty Theban tombs are definitely different from those of the Sixth-Dynasty reliefs.<sup>47</sup> These differences are confirmed, above all, by analysis of Theban representations with visible overlay of original square grids.<sup>48</sup> Importantly, in most of the New Kingdom tombs listed in footnotes, that is, those of Userhat, Sennefer, Suemnut, and Nakht, the measurement values for the distance between the hairline and the soles of the feet (Grid I) reach 8.4–8.5, which corresponds with the values characterising the analysed Sixth-Dynasty reliefs. Archaisation visible in relics of the Twenty-sixth Dynasty should be considered separately in this analysis.<sup>49</sup> This phenomenon can be seen in most human figures from the tomb of Mentuemhat,<sup>50</sup> and especially in their heads, which display the same proportions as figures in Sixth Dynasty tombs (**Figs 2–3**)<sup>51</sup>.

<sup>43</sup> The same or similar location of the ankle in most of the analysed representations is directly connected with the shape and size of the foot, as well as the appropriate, that is, consistent with the constitution of this part of the body, distance between the ankle and the ground. Nevertheless, the conclusions drawn on the basis of measurements taken of representations dated mainly to the Sixth Dynasty, first with Grid I and then Grid II, indicate particular accuracy in the location of the ankle.

<sup>44</sup> Similar sizes of heads are indicated by the measurement values of the distances between the hairline and ankles (Grid I). In most representations of Kagemni, Mereruka and Qar/Pepynefer (**Table 1: cat. nos 26–34**) these distances reach a value of 8.4 square modules.

<sup>45</sup> Early Middle Kingdom tomb decorators made schematic copies using guidelines and then square grids, of decoration programs, including human animal representations, which could be found on the walls of Old Kingdom tombs (cf. Freed 1997: 154–155; Jaroš-Deckert 1984: 118–127; Robins 1990: 39–45; 1994: 64–86; Wildung 2003: 74–76; Woods 2017: 15–30). Apart from that, the proportions of the human body in representations from the Eleventh and the first half of the Twelfth Dynasty corresponded to the ones characteristic of the Old Kingdom – mainly the Fifth and Sixth Dynasties. The horizontal lines in the period until the mid-Twelfth Dynasty were distributed identically to the lines from the Old Kingdom (Robins 1994: 70–73). Copying of decorations, their exploitation for ideological purposes and references to Old Kingdom style were common practices in the New Kingdom, Third Intermediate Period and Late Period (cf. n. 7 and Fazzini 1997: 114–115; O'Connor 1983: 189; Romano 1983: 103–115; Russmann (Ed.) 2001: 41–44; Morkot 2003: 89–90, 95–99).

<sup>46</sup> Tomb of Sarenput II (QH 31) at Qubbet el-Hawa, corridor, left side, wall before first niche.

<sup>47</sup> Representations from tombs of: Userhat (TT56), the transverse chamber, west side, north wall, Sennefer (TT96), the burial chamber, north wall, left side, as well as the burial chamber, north wall, right side.

<sup>48</sup> Representations from tombs of: Nakht (TT52), the transverse chamber (west), north side), Suemnut (TT92), the transverse hall, west wall, as well as the transverse hall, east wall.

<sup>49</sup> For archaism in the funerary representations of Mentuemhat and during Twenty-fifth–Twenty-sixth Dynasty, see Lesko 1971–1972; Der Manuelian 1994: 185–188; Russmann 1994; 1997; Morkot 2003: 77–79; Pischikova 2008: 83; Ketchley 2011–2012.

<sup>50</sup> See Tomb TT 34, el-Assasif, Cleveland Museum of Art, 1949.492 (*Cleveland Museum of Art 1*) and 1951.280 (*Cleveland Museum of Art 2*).

<sup>51</sup> Some scholars claim that certain scenes in the funerary decoration of Mentuemhat are copies of funerary representations made during the Fifth and Sixth Dynasties (Lesko 1971–1972: 85). The iconography of human portraits, including the apparel, indicates stylistic parallels to the Old and Middle Kingdom (Lesko 1971–1972: 87; Russmann 1997: 28), as well as to the New Kingdom, especially to the Eighteenth Dynasty (Der Manuelian 1994: 18, 21; Morkot 2003: 90).

### *Conclusions from Detailed Analysis of the Data*

Considering the adopted methodology and manner of interpretation of the data, we should pay attention both to the differences and similarities between the values of measurements of various parts of the body when two or more representations from the same tomb are compared.

The body proportions from two representations on the 'false door' in the tomb of Sher (Second Dynasty, **Table 1: cat. nos 1–2**) display significant differences. However, the sizes of the heads are similar (Grid I, measurement of the ankle), which, in the context of very similar iconographies of their faces, might suggest intentional actions of the decorators.

The measurement values of the representations from the tomb of Irery (Fourth Dynasty, **Table 1: cat. nos 5–6, Figs 4–5**) show considerable variety, which indicates that they were not carved according to a consistent pattern for determining body proportions.

Two directly neighbouring representations from the tomb of Khufukhaf (Fourth Dynasty, **Table 1: cat. nos 7–8**) show heads of the same size,<sup>52</sup> even though the heights of the two figures differ. The locations of the chest, the most protruding part of the buttock and knees (Grid I and Grid II) were of considerable importance for preserving similar body proportions in these two representations. However, the decorator seems to have paid less attention to situate the junction of the buttock with the thigh in similar locations. Analysis of the measurement values for the two portraits suggests that the decorator used guidelines or other auxiliary methods to determine general proportions of the human body.

Despite the fact that the three analysed representations from the tomb of Mersiankh III (Fourth Dynasty, **Table 1: cat. nos 9–11**) are situated directly one next to another, their proportions and locations of most parts of the body differ. The most similarities can be found among the measurement values for the junction of the buttock and the thigh, as well as the upper portion of the knee (Grid I and Grid II). However, all the similarities among these portraits based on the analysis of measurements taken with Grid I should rather be regarded as accidental, mainly because they do not correspond with measurements taken with Grid II. It seems that the decorator did not pay much attention to accuracy in preserving comparable proportions, which means he did not use guidelines or other similar tools.

Analysis of the measurement values for the representations from the tomb of Nihetepkhnum (mid-Fifth Dynasty, **Table 1: cat. nos 14–15**) might lead to similar conclusions, as in the case of the representations from the tomb of Mersiankh III, namely, the locations of most parts of the body also show significant variability.

The measurement values according to Grid I of the two analysed representations from the tomb of Nikauhor and Sekhemhathor (Fifth Dynasty, **Table 1: cat. nos 17–18**) indicate differences between the images in the locations of the elbow, the most protruding part of the buttock and the ankle. However, these two images are characterised by the same or very similar measurement values according to Grid II. The marked similarities in the locations of the other parts of the body, that is, the junction of the neck and shoulders, the chest at the level of nipples, the lumbar part of the back, the navel, the junction of the buttock and the thigh, as well as the knee, might suggest that they were determined with corresponding guidelines. It appears that the dimensions and patterns of the proportions of the analysed figures were not two separate elements of the decoration, but rather essential ingredients of the general composition of the wall.<sup>53</sup>

The most notable results in both representations from the tomb of Nikare (Fifth Dynasty, **Table 1: cat. nos 19–20, Figs 1a, 1b**) are very similar locations of the junction between the neck and shoulders, the elbow, the lumbar part of the back and the ankle (Grid I and Grid II). In both reliefs, overlaid with Grid II, the junction of the buttock and thigh as well as the upper part of the knee are in the same respective locations. However, application of Grid I demonstrates some discrepancies in the locations of these two parts of the body, but these values exceed the adopted measurement error of  $\pm 0.1$  square modules only slightly. The high rate of reproducibility of the measurement values suggests that the decorators resorted to a method which helped to establish similar body proportions in both representations.

<sup>52</sup> This is demonstrated by the same measurement values for the distances between the hairline and ankles, that is, 4.7 square modules (Grid I).

<sup>53</sup> Cf. the description of these representations in section: *Comparison of locations of preserved guidelines and lines in Grid I and Grid II – general evaluation of the criteria adopted for the study.*

The analysed representation of Ptahhotep (Fifth Dynasty, **Table 1: cat. no. 21**) is characterised by a relatively small head, and the measurements, especially those taken with Grid I, are most similar to the ones from the tomb of Khufukhaf (Fourth Dynasty, **Table 1: cat. nos 7–8**). Nevertheless, the similarities seem accidental and might be caused by some diversions in the determination of body proportions by the decorator or by an unidentified measurement defect (e.g. incorrect location of the camera lens). Other causes of these irregularities are less likely since the relief presents good quality, accuracy of composition and detailed elaboration of iconographic elements. More conclusive information might be delivered by comparative analysis of these results with measurements of other representations of standing silhouettes from this tomb.

In the portraits from the tomb of Metjetji (Fifth or early Sixth Dynasty, **Table 1: cat. nos 22–25, Figs 6–8**) elbows are depicted in the same locations (Grid I and Grid II) and heads are of similar sizes.<sup>54</sup> The conclusions listed above<sup>55</sup> and analysis of measurement results strongly suggest that guidelines were employed to determine the dimensions and proportions of the main parts of the body in representations of Metjetji. The clear division of these images into three parts indicates that certain patterns were followed, and that the decorators of this tomb used them consistently for carving human bodies on flat surfaces.

Analysis of two reliefs from the tomb of Kagemni (Sixth Dynasty, **Table 1: cat. nos 26–27**) with Grid I reveals differences between the values of measurements of the most protruding part of the buttock, the junction of the buttock and the thigh, as well as the ankle. These differences mainly result from the fact that the decorator carved the head too big in the representation from Room II, wall F (**Table 1: cat. no. 26**).<sup>56</sup> In the case of application of Grid II, significant differences are observed only in the location of the lumbar part of the spine. The similarity of the results of analysis with Grid II might mean that the decorators of the tomb of Kagemni applied constant principles of determination of human body proportions. The study should be expanded to include more representations to verify this hypothesis and draw final conclusions.

All the analysed representations from the tomb of Mereruka (Sixth Dynasty, **Table 1: cat. nos 28–32**) are characterised by a high degree of similarity in the values of measurements of most parts of the body. Apart from representation no. 31, the reliefs overlaid with Grid I show the same value in the case of the ankle. This shows that the decorators used the head as the key body part in determination of body proportions. Other results that should be emphasised include identical or very similar values of measurements of the chest at the level of nipples, the elbow, the lumbar part of the back, the navel, as well as minor differences between the portraits in the location of the most protruding part of the buttock (0.2 square modules). As far as application of Grid II is concerned, differences among the four representations were observed only in the locations of the lumbar part of the back (differences do not exceed 0.4 square modules) and the upper part of the knee (0.3 square modules). Therefore, it could be concluded that the reproducibility of body proportions was achieved by application of the same pattern by the decorators. It was probably based on a system of simple, but well-defined relations between the guidelines used for planning and making decoration.

The same conclusions can be drawn as a result of analysis of measurement values of representations from the tomb of Qar/Pepynefer (Sixth Dynasty, **Table 1: cat. nos 33–34**). The only slight (0.3 square modules) discrepancy is connected with the locations of ankles in Grid I. Despite the relatively poor quality of these representations and differences in the finishing of iconographic details, their considerable similarity in body proportions is not accidental and is probably associated with the adopted method of work based on schematic and accurate (reproducible) rendering of human depictions on flat surfaces.

<sup>54</sup> The measurement values for the distances between the hairline and the ankle reach 8.5–8.6 square modules (Grid I).

<sup>55</sup> Cf. section *Comparison of locations of preserved guidelines and lines in Grid I and Grid II – general evaluation of the criteria adopted for the study*.

<sup>56</sup> This hypothesis is supported by comparison of the measurement value of the distance between the hairline and the ankle (Grid I) in representation no. 26 (7.2 square modules) with other values of measurements of this distance in representations from the tomb of Kagemni and other analysed representations from the Sixth Dynasty – this distance almost always reaches 8.4 square modules (see tombs of Mereruka, Qar/Pepynefer, **Table 1: cat. nos 28–34**). It should also be stressed that the measurement value of 7.2 square modules of this distance is the lowest of all the analysed images. This might indicate that the decorator made a mistake when he determined the proportions (size) of the head.

## Summary

The conclusions from the analysis of measurement results of standing figures from the Old Kingdom coincide in several important aspects with those referring to the seated figures earlier studied by the author.<sup>57</sup> The analysis of the preserved tomb decoration shows that application of guidelines, including crossing lines, to establish human body proportions on flat surfaces (seated and standing representations) was rare in the Old Kingdom. Such a conclusion is justified by the considerable differences in the measurement values of standing figures found in the same tombs – this is particularly notable in the case of decoration made during the Fourth Dynasty until the mid-Fifth Dynasty (e.g. Mersiankh III, Nihetepkhnun). On the other hand, analysis of measurement results of representations from both groups (seated and standing figures) dated to the second half of the Fifth and the Sixth Dynasty indicates that from this period the process of creation of human representations on flat surfaces became more schematic (standardised and reproducible) and more accurate than before. This is one of the reasons why most reproducible measurement values, marked green and red in the tables (measurements taken with Grid II), are recorded mainly in the case of representations made during the Sixth Dynasty – Qar/Pepynefer (8 out of 10 measurements are marked either colour), Mereruka (8 measurement values are marked either colour in 3 out of 5 analysed reliefs) and Kagemni (6 or 7 out of measurements are marked either colour). The head played a special role in the determination of constant proportions of the human body on flat surfaces in this period.<sup>58</sup> This is mainly indicated by repeated measurement values of the distances between the hairline and the ankle taken with Grid I. As indicated by a brief analysis of more recent standing representations, this system of establishing body proportions, characteristic of the Sixth Dynasty, was used in later times, but it was not a generally adopted standard. Nevertheless, it might have been an important step in the process of organising human body proportions by ancient artists on the basis of the square grid. This possibility is also suggested by the measurement data of seated representations acquired by the same method.<sup>59</sup> The similarities of conclusions from the analysis of the two separate groups of representations confirm the practical nature of studies on human body proportions with the two proposed complementary grid models and justify their application in comparative metric analyses<sup>60</sup> of representations carved on flat surfaces.

Another important issue must be considered in the discussion on the guidelines used for wall decoration in the Old Kingdom. Due to the characteristic manner of representation of human figures in Egyptian art, decorators were required to use such solutions which would enable them to establish correct human body proportions in the context of the visualised scene. This means, e.g. that persons standing next to each other should be characterised by corresponding body constitution and pose, as well as the same location of the main body parts. A different solution would definitely disturb the visual harmony of the representation and breach the principles adopted for decoration on flat surfaces. The same conclusion applies to a great degree to human silhouettes of different heights standing next to each other. Although the proportions of the three silhouettes from the tomb of Mersiankh III standing one next to another differ significantly if measured with hypothetical grids (**Table 1: nos 9–11**), a random observer does not notice that. The observer would first notice that the silhouettes differ in height, and then their body proportions would seem identical or very similar.

The decorators most likely regarded the general context and contents of the represented scene as more important than accurate reflection of human body proportions. However, the guidelines preserved on the walls of Fifth and Sixth Dynasty tombs indicate that a more accurate planning of proportions was becoming more and more important. Apart from the horizontal lines, vertical ones appeared.<sup>61</sup> The latter changed or expanded the possibility to manage the proportions on the decorated surfaces. The application of the intersecting lines was very likely a significant step towards introduction of a systematic solution based on square grids in the mid-Twelfth Dynasty.<sup>62</sup>

<sup>57</sup> Cf. n. 19.

<sup>58</sup> The importance of head proportions is indicated by the preserved guidelines on surfaces of human representations in tombs from the Fifth and Sixth Dynasties (Kuraszkiewicz 2021: Fig. 7; Robins 1994: Figs 4: 1, 4: 3). This is directly connected with establishing the locations of lines B and B1 in the research on human body proportions with Grid I described in this paper (cf. **Fig. 1: a–c**).

<sup>59</sup> Radtke 2020a: 544.

<sup>60</sup> The principles, scope and practical application of metric analysis are outlined in Radtke 2021a: 10–13, 35–41.

<sup>61</sup> Cf. the tomb of Ikhy/Meri (Kuraszkiewicz 2021: Figs 7, 13).

<sup>62</sup> Cf. n. 6.

Table 1.

No.	Chronology (dynasty/ reign)	Type of representation/ Provenance	Name of the tomb owner	Museum, inv. no.	Basic references (chronology)/ Source of illustration
1-2.	Second Dynasty/ Sened, Peribsen	Two representations on a stela from mastaba B3 ('false door')/Saqqara	Sheri	Museum of Egyptian Antiquities, Cairo, CG 1384	Cherption 1989: Pls 22, 23; <i>The Griffith Institute Archive</i>
3.	Late Third Dynasty	Relief from the niche of the door leading to the funerary chapel/Probably north Saqqara	Aaakhti	Louvre Museum, Paris, B1	Cherption 1989: 55-56; O'Neil (Ed.) 1999: 189-190, cat. no. 18; <i>Arte e Historia 2</i>
4.	Third Dynasty/ Djoser	Wooden panel from mastaba S-2405/Saqqara	Hesire	Museum of Egyptian Antiquities, Cairo, CG 1427	Quibell 1909: Pl. XXIX: 2; Quibell 1913
5-6.	Fourth Dynasty	Relief on the door of the tomb (5), representation on a limestone panel (6)	Irety	British Museum, London, EA 1168 EA 1169	Robins 1994: 14, Fig. 1: 14; Russmann (Ed.) 2001: cat. no. 7; <i>The British Museum 1; The British Museum 2</i>
7-8.	Fourth Dynasty/ Khufu	Reliefs from mastaba G 7140/Giza	Khufukhaf	<i>In situ</i>	Cherption 1989: Pl. 16; Cherption 1999: 107, Fig. 65
9-11.	Fourth Dynasty/ Khafre	Representations of Hetepheres II (9), Mersiankh III (10), Nebemakhet (11), mastaba G 7530-40, main chamber, west wall/Giza	Mersiankh III	<i>In situ</i>	Dunham, Simpson 1974; <i>Digital Giza 1</i>
12.	Fourth Dynasty	Block depicting Niankhwadjet, from the frame of the false door niche of her husband Mery/Saqqara, north of the Step pyramid	Mery	Metropolitan Museum of Art, New York, X.179	Hayes 1953: 88-89, Fig. 48; Smith 1942: 510-515, Fig. 3; <i>The Met 1</i>
13.	Fourth Dynasty/ the late reign of Khufu to mid-reign of Khafre	Relief from mastaba G 2110/Giza	Nefer	Museum of Fine Arts, Boston, 07.1002	O'Neil (Ed.) 1999: cat. no. 79; <i>Museum of Fine Arts Boston; Digital Giza 2</i>
14-15.	Mid-Fifth Dynasty(?)	Reliefs from the mastaba ('false door')/Giza	Nihetepkhnun	<i>In situ</i>	Cherption 1989: Pls 6-7
16.	Fifth Dynasty(?)	Relief from a wooden false door/Saqqara	Ika	Museum of Egyptian Antiquities, Cairo, JE 72201	Cherption 1989: 115, Pl. 28; <i>The Global Egyptian Museum</i>

No.	Chronology (dynasty/ reign)	Type of representation/ Provenance	Name of the tomb owner	Museum, inv. no.	Basic references (chronology)/ Source of illustration
17-18.	Fifth Dynasty/ Userkaf or Niuserre	Reliefs from chapel QS915, west wall/ Saqqara, north of the Step pyramid	Nikahotep	Metropolitan Museum of Art, New York 08.201.2a-g	Hayes 1953: 102-103, Figs 58-59; Cherpion 1989: 47, 51, 70; <i>The Met 2</i>
19-20.	Fifth Dynasty/ Niuserre or later	Reliefs from the mastaba ('false door')/Saqqara or Giza	Nikare	Cleveland Museum of Art, Cleveland, 1964.91	Berman, Boháč 1999: 130-132; <i>Cleveland Museum of Art 1</i>
21.	Fifth Dynasty/ Djedkare- Isesi	Relief from mastaba D 64/ Saqqara	Ptahhotep	<i>In situ</i>	Cherpion 1999: 110-111; Cherpion 1989: Pl. 42;
22-25.	Fifth or early Sixth Dynasty/ Unis	Reliefs from the façade of the mastaba/probably Saqqara	Metjetji	Royal Ontario Museum, Toronto, 953.116.1/ Ägyptisches Museum zu Berlin, 32190/ The Nelson-Atkins Museum of Art, 52-7/1-2	Kaplony 1976: 26-44, nos 5-8; O'Neil (Ed.) 1999: 408-413, cat. nos 151-154; Brovarski 2010: 85-139
26-27.	Sixth Dynasty/ Teti	Reliefs from mastaba LS10/ Saqqara, Room II, wall F (26), Room VIII, north wall (27)	Kagemni	Museum of Fine Arts Boston, New York, 35.753/ <i>In situ</i>	Bissing 1911, Pl. V; <i>Museum of Fine Arts Boston 2</i> ; <i>The Griffith Institute 2</i>
28-32.	Sixth Dynasty/ Teti	Reliefs from mastaba LS10/Saqqara, façade, left part of the entrance (28), façade, right part of the entrance (29), Chamber A13, north wall, right part of the wall with a niche (30), Chamber A13, pillar 3, west side (31), Chamber A13, pillar 3, north side (32)	Mereruka	<i>In situ</i>	<i>The Mastaba of Mereruka 1938</i> , II: Pls 159, 179; Division of Research Documentation, Archive of the Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences;
33-34.	Sixth Dynasty/ Pepi I	Reliefs from mastaba/ Giza	Qar/ Pepynefer	British Museum, London, EA 1319	Cherpion 1989: Pl. 48; <i>The British Museum 1</i>

Table 2.

Part of the body		Number of the representation in Table I																		
		1		2		3		4		5		6		7		8		9		
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
		Measurement values of different parts of the body in Grid I and Grid II (measurement unit – square module)																		
Junction of the neck with shoulders		1	1.7	1	1.8	1	1.8	1	2	1.8	1	2.3	1	2.1	1	1.9	1	1.8	1	2.1
Armpits		2	3.9	2	3.5	2	3.3	1.9	3.8	1.7	4	1.8	3.8	1.9	3.9	1.8	3	1.9	4	4
Chest at the level of nipples		2.1	4	2.3	4.2	3.4	4.1	2.1	4.2	1.9	4.4	2	4	2.2	4	2.2	4	2.2	4.3	4.3
Elbow of the arm stretched down along the body		-	-	3.5	6.1	-	-	3.3	6.1	2.9	6.5	3.1	6	3.3	6	3.3	5.8	-	-	-
Lumbar part of the back		3.7	7	3.9	7.1	3.7	6.4	3.5	6.4	3.3	7	3.4	7	3.4	7	3.6	-	-	3	6.4
Navel		3.8	7.1	4.2	7.9	-	-	3.6	7	3.4	7.5	3.8	7.3	-	-	3.5	-	-	3.5	7.2
Most protruding part of the buttock		4.5	8.4	4.8	8.9	4.7	8	5.3	8	3.7	8.5	4.1	8.2	4.4	8	4.4	8	3.8	8	8
Junction of the thigh and buttock		4.7	9	5.1	9.4	5	8.2	-	9	4	9	4.5	8.9	4.7	8.6	4.7	8.5	4.2	9	9
Upper part of the knee		6.4	11.5	6.4	12	-	-	6.4	11	5.5	12	5.9	12	6.5	11.9	6.4	11.8	5.5	11.9	11.9
Ankle		9.3	17	9.3	17	10.3	17	8.8	17.1	7.7	17.1	8.5	17	9.4	17	9.4	17	8	16.8	16.8

Table 3.

Part of the body		Number of the representation in Table I																		
		10		11		12		13		14		15		16		17		18		
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
Junction of the neck with shoulders		1	2.3	1	2.2	1	2.1	1	2	1.8	1	1.8	1	2.2	1	1.9	1	2.3	1	2.3
Armpits		1.8	4	1.8	4	1.5	3.2	1.8	3.8	1.7	3.5	1.9	3.3	1.8	3.5	1.8	4	1.8	4	4
Chest at the level of nipples		2.1	4.4	2.1	4.5	1.8	3.9	2.1	4.4	2.3	4	2.2	4.4	2.2	4.3	2	4.7	2	4.6	4.6
Elbow of the arm stretched down along the body		2.9	6	2.9	6	2.9	6	3	6	3.4	6.1	2.9	6.1	3.4	6.3	2.5	6.3	2.9	6.3	6.3
Lumbar part of the back		3.2	6.5	3.1	7	3.1	6.5	3.4	7	4	6.7	3	6	3.8	7	3.2	7	3.2	7	7
Navel		3.4	7	3.4	7.5	-	-	3.8	7.7	4.3	7.1	-	-	3.9	7.5	3.4	8	3.5	8	8
Most protruding part of the buttock		3.8	8.4	3.8	8.8	3.7	8	4.3	8.7	4.8	8.1	3.8	7.9	4.3	8.5	3.8	8.8	4	8.8	8.8
Junction of the thigh and buttock		4.1	9	4.1	9.1	4.1	9	4.6	9.1	5.3	9	4.2	8.5	4.6	8.9	4.2	9.2	4.3	9.2	9.2
Upper part of the knee		5.5	12	-	-	5.5	11.1	5.9	11.8	7.2	12	5.5	11.4	6	12	5.3	12.2	5.4	12.3	12.3
Ankle		7.8	17	7.7	17	8.2	17	8.4	17	10	17	8.2	16.9	8.8	17	7.3	17	7.7	17	17

Table 4.

Part of the body		Number of the representation in Table I																	
		19	20	21	22	23	24	25	26	27	Measurement values of different parts of the body in Grid I and Grid II (measurement unit – square module)								
		I	II	I	II	I	II	I	II	I	II	I	II	I	II				
Junction of the neck with shoulders		1	1.9	1	1.9	1	1.8	1.9	1	2	1.9	1	2	1	2	1	2	1	2
Armpits		2	3.8	2	3.8	1.9	3.3	1.5	3.1	1.6	3.4	1.8	3.5	1.6	3.5	1.8	3.5	1.8	3.6
Chest at the level of nipples		2.1	4	2.3	4.3	2.2	3.9	3.8	2.1	4.1	3.8	2.1	4	2.1	4	2.1	4.3	2.1	4.2
Elbow of the arm stretched down along the body		3.3	6.3	3.4	6.3	3.4	6	6.1	3	6.1	6.1	3	6	3	6	2.9	6	3	6
Lumbar part of the back		3.5	7	3.6	6.9	3.6	6.5	6.5	3.5	7	6.5	3.7	6.4	3.5	6.5	3.2	6.5	3.3	6.8
Navel		3.8	7.3	4.1 (?)	7.4 (?)	4.2	7.5	7	3.8	7.5	7	3.4	7.2	3.8	7.6	3.7	7.5	3.8	7.6
Most protruding part of the buttock		4.3	8	4.5	8.3	4.5	8.2	8	4.2	8.5 (?)	4.3	8	8.5	4.2	8.3	4	8.2	4.2	8.3
Junction of the thigh and buttock		4.6	8.8	4.8	8.8	4.8	8.4	8.8	-	-	4.7	8.8	9.3	4.5	9	4.2	8.9	4.4	9
Upper part of the knee		6.2	11.8	6.4 (?)	11.8	6.4	11.8	11.8	5.9	12	11.8	6.2	12.2	5.8	12	4.8	11.9	5.7	11.9
Ankle		9.3	17	9.4	17.1	9.4	17	17	8.5	17.2	17	8.6	-	8.6	17	7.2	17	8.4	17

Table 5.

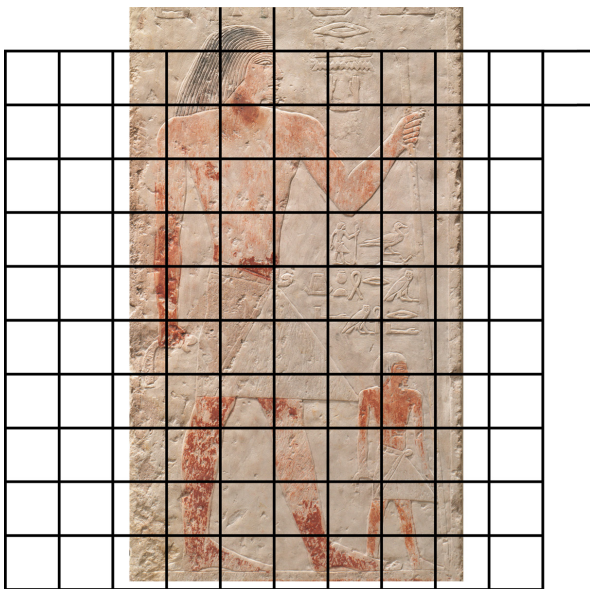
Part of the body		Number of the representation in Table I													
		28	29	30	31	32	33	34	Measurement values of different parts of the body in Grid I and Grid II (measurement unit – square module)						
		I	II	I	II	I	II	I	II	I	II	I	II	I	II
Junction of the neck with shoulders		1	2	1	2	1	2	1	2	1	2	1	2	1	2
Armpits		1.8	3.5	1.8	3.5	1.9	3.6	1.9	3.6	1.8	3.5	1.5	3.2	1.5	3.2
Chest at the level of nipples		2.1	4.1	2.1	4.1	2.2	4.2	2.1	4.1	2.1	4.1	2	4	2	4
Elbow of the arm stretched down along the body		3	6	3	6.1	3	6.1	3.1	6.1	3.1	6.1	3	6	3.1	6.1
Lumbar part of the back		3.4	6.5	3.4	6.5	3.5	6.8	3.5	6.9	3.9	6.9	3.3	6.5	3.4	6.5
Navel		3.7	7.2	3.6	7.2	3.7	7.2	3.7	7.2	3.7	7.2	3.5	7.1	3.6	7.1
Most protruding part of the buttock		4.1	8.2	4	8.2	4.3	8.3	4.3	8.3	4.3	8.3	4	8.1	4	8.1
Junction of the thigh and buttock		4.4	8.8	4.3	8.7	4.6	8.9	4.8	9.1	4.6	9	4.2	8.4	4.2	8.4
Upper part of the knee		5.7	11.8	5.7	11.8	5.2	11.8	5.3	11.9	5.7	11.8	5.8	11.9	5.9	11.9
Ankle		8.4	17.1	8.4	17	8.4	17	7.9	17	8.4	17	8.4	17	8.7	17.1



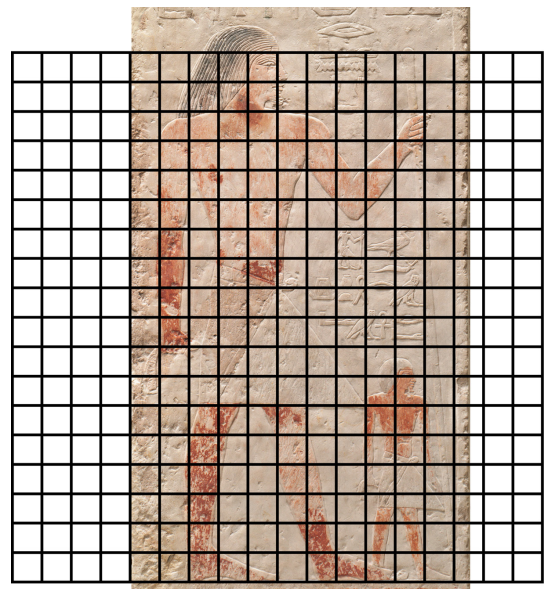
a)



b)



c)



d)

Fig. 1. Representation of Nikare, the 'false door' from his mastaba, Saqqara; Cleveland Museum of Art, 1964.91 (photo based on: *The Cleveland Museum of Art 1*)



**Fig. 2.** Representation of Mentuemhat with overlaid Grids I and II, tomb TT 34, el-Assasif, Twenty-fifth–Twenty-sixth Dynasty; Cleveland Museum of Art, 1949.492 (photo based on: *The Cleveland Museum of Art 2*)



Fig. 3. Representation of Mentuemhat with overlaid Grids I and II, tomb TT 34, el-Assasif, Twenty-fifth–Twenty-sixth Dynasty; Cleveland Museum of Art, 1949.492 (photo based on: *The Cleveland Museum of Art 2*)

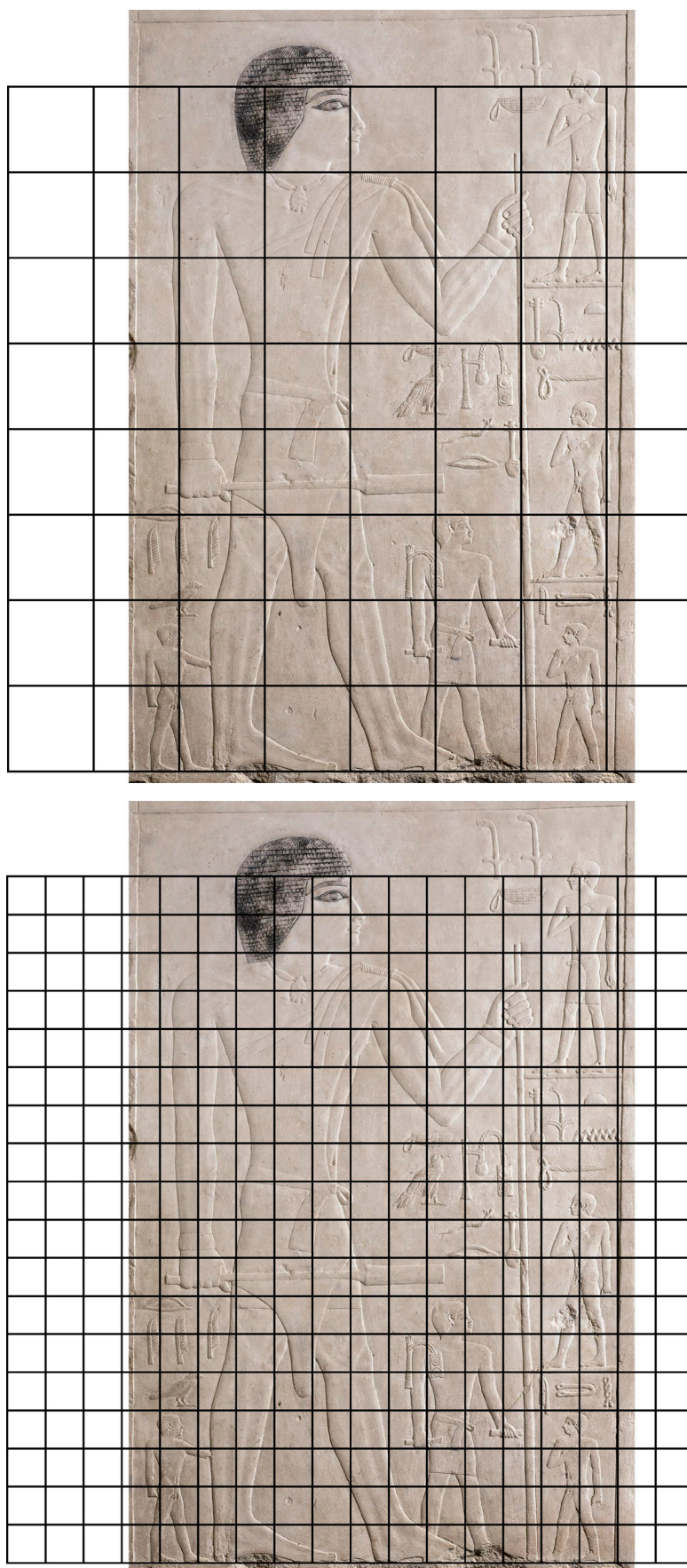


Fig. 4. Representation of Iriy with overlaid Grids I and II (cat. no. 5), relief on the door of the tomb of Iriy and Inet, Saqqara or Giza; British Museum, London, EA 1168 (photo based on: Russmann (Ed.) 2001: 72)

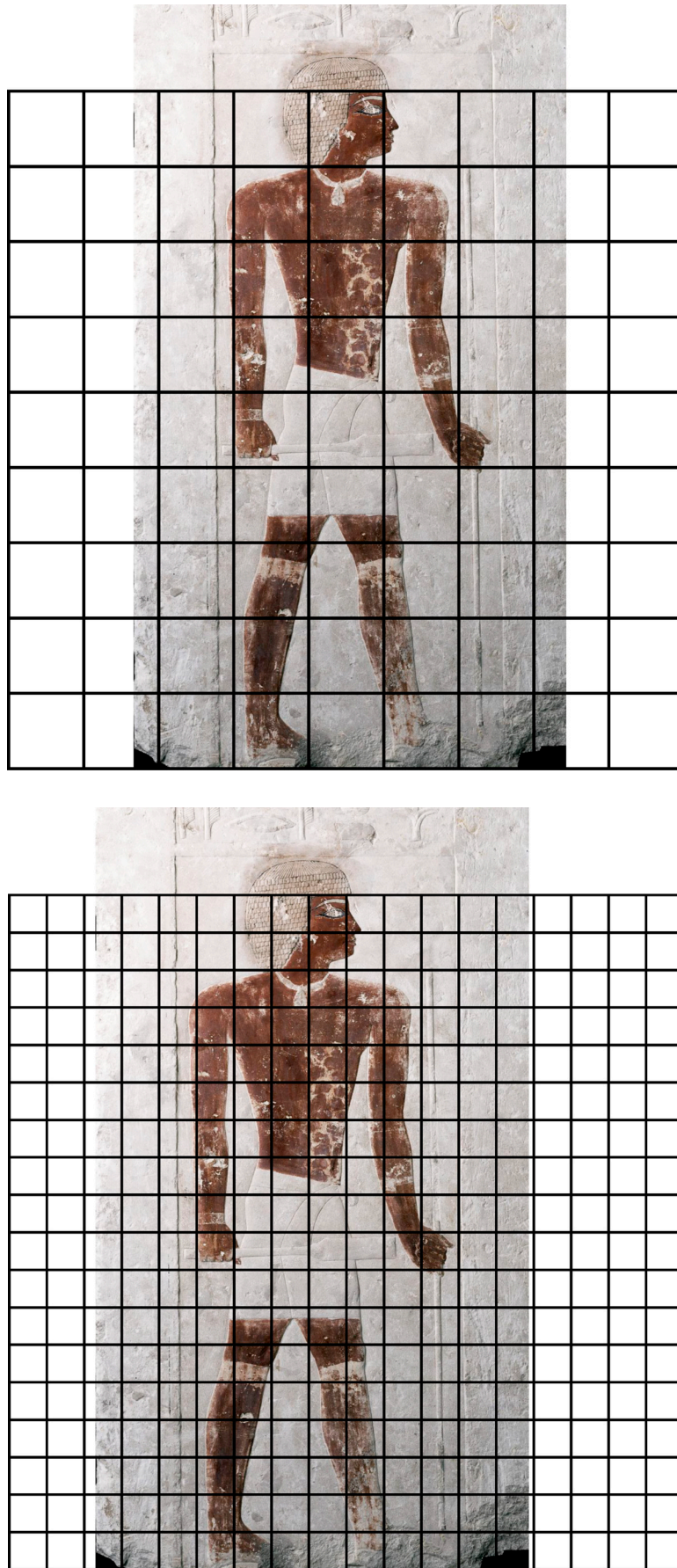


Fig. 5. Representation of Iriery with overlaid Grids I and II (cat. no. 6), relief from the tomb of Iriery and Inet, Saqqara or Giza; British Museum, London, EA 1169 (photo based on: *The British Museum 2*)

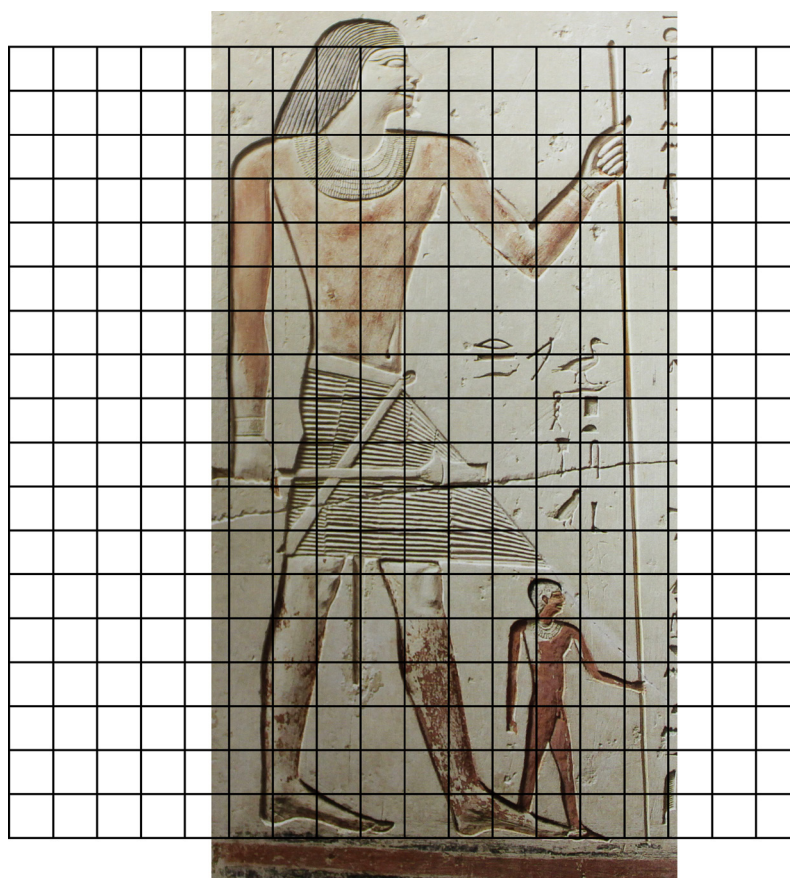
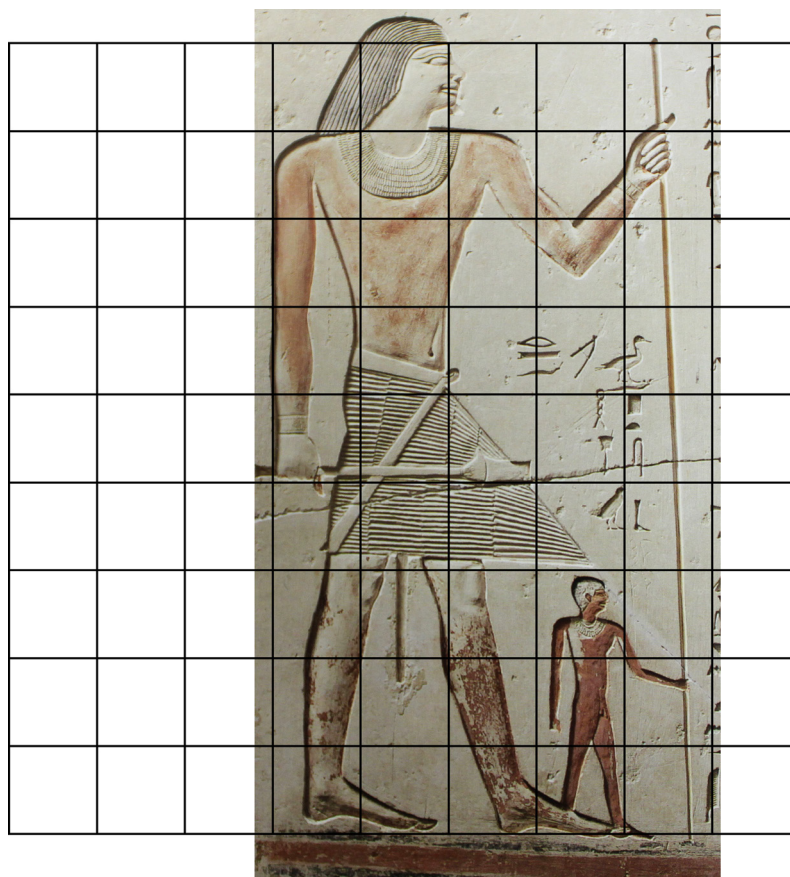


Fig. 6. Representation of Metjetji with overlaid Grids I and II (cat. no. 17), relief from the tomb façade, Saqqara(?); Royal Ontario Museum, Toronto, 953.116.1 (photo based on: O'Neil (Ed.) 1999: 410)

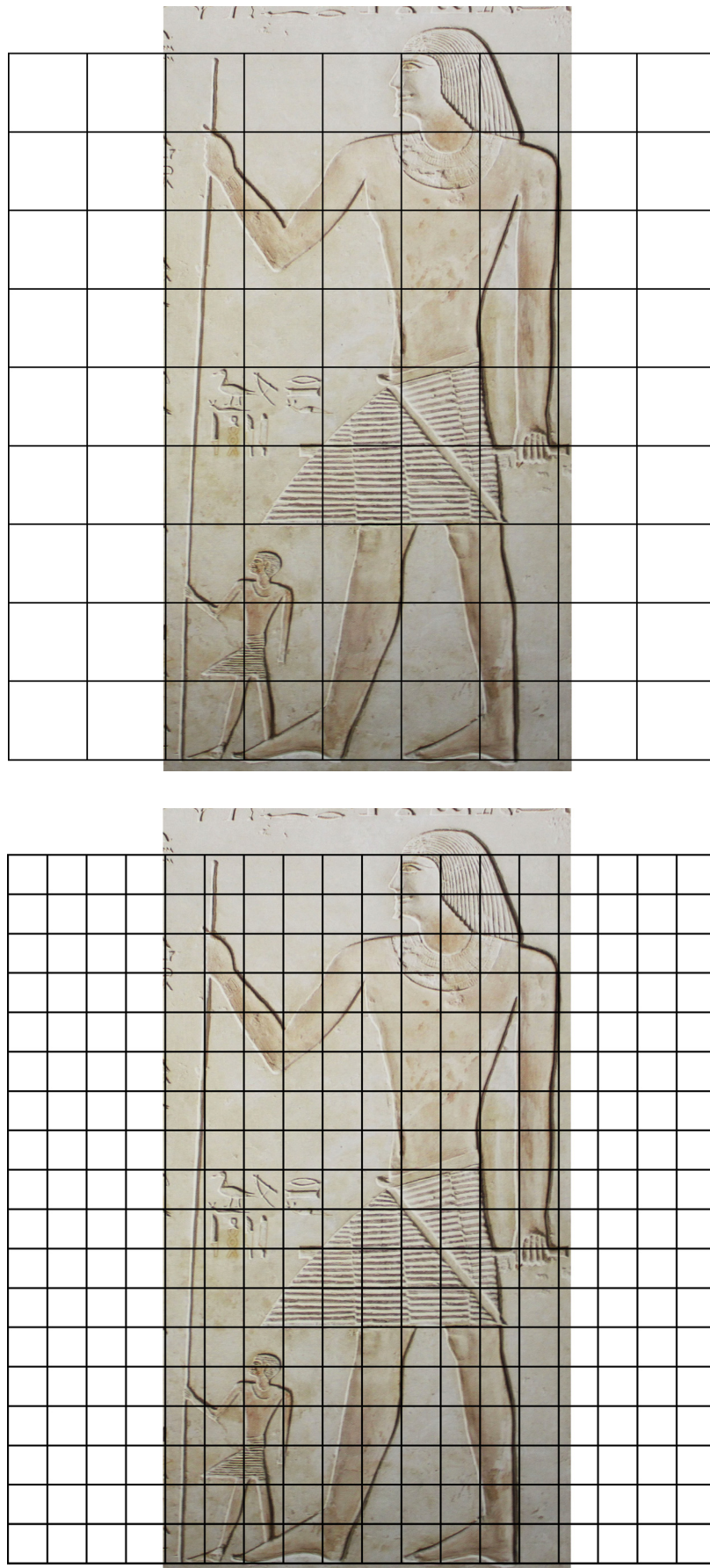


Fig. 7. Representation of Metjetji with overlaid Grids I and II (cat. no. 18), relief from the tomb façade, Saqqara(?); Ägyptisches Museum zu Berlin, 32190 (photo based on: O'Neil (Ed.) 1999: 411)



Fig. 8. Representation of Metjetji with overlaid Grids I and II (cat. no. 20), relief from the tomb façade, Saqqara(?); The Nelson-Atkins Museum of Art, Kansas City, 52-7/2 (photo based on: O'Neil (Ed.) 1999: 413)

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# Ordering ordure: a *stemmatic* approach to excrement spell CT 184<sup>1</sup>

Joel SAMS

**Abstract:** This paper presents a computer-assisted version of Greg’s Method for producing *stemma* and applies it to excrement spell CT 184, enabling the reconstruction of some aspects of the lost intermediary stages of its transmission. Although *stemma* construction itself by this method proves highly objective, how best to interpret the individual textual changes thereby revealed in terms of scribal practice remains necessarily more subjective. The use of a *stemma* is shown to provide a rigorous external framework for testing such interpretations, allowing some hypotheses to be recognised as improbable and ruled out, while others are more strongly supported. Ultimately, every surviving witness emerges as the collective product of an extended tradition rather than an isolated, individual performance.

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## 1. Introduction

Coffin Text Spell 184 (henceforth CT 184) belongs to a genre of texts known to Egyptologists as ‘excrement spells’ (Willems 2014: 132) or ‘reversal spells’ (Landborg 2021: 261), wherein it is made absolutely clear that the deceased will not be ingesting or otherwise interfering with any excrement that might be made available to them in the divine realm, since they enjoy access to a much more fitting divine food supply. There is no definitive corpus of these spells (Frandsen 2011: 25-26). Robinson (2007: 151-51, 158-60) found 66 Coffin Texts in which the words *hs* ‘faeces,’ *wsšt* ‘urine,’ and *hṭp kʿ* ‘ka-satisfaction’<sup>2</sup> occur; regarding the two continuous sequences of these spells that he studied, one from Bersha (CT 184-CT 195) and the other from Asyut (CT 191-CT 211), he found that these spells were mainly inscribed near the deceased’s feet and legs.

Landborg (2021: 261, n.5) provides an up-to-date bibliography of the scholarly discussion that has surrounded this spell genre: as she observes, excrement spells “have been discussed extensively elsewhere, mainly focusing on their peculiarity, function, and meaning”. Kadish (1978-1979) opened the discussion of this genre by focusing particularly on CT 173, in which the deceased vehemently verbally rejects the faeces offered to them as a netherworldly food supply. Borrowing from the anthropological research of Douglas (1966), Kadish (1978-1979: 211, 217) interpreted that spell as a strategy for the deceased to demonstrate, of their own free will, their commitment to a divinely ordered universe. Subsequently, the rhetorical strategies of the dialogue found in the excrement spell genre were analysed systematically and in great depth by Topmann (2002).

This article’s objective is not so much to shed new light on CT 184 specifically, and certainly not on excrement spells in general, but simply to demonstrate the value of applying a particular text-critical

<sup>1</sup> I am extremely grateful to Prof. Joanna Popielska-Grzybowska, Dr. Roland Enmarch, and Dr. Charlotte Sargent for reading earlier versions of this article and offering stimulating comments that informed and improved the final result. Very many thanks indeed, also, to my two anonymous reviewers for their generous and highly helpful notes.

<sup>2</sup> Morenz (1997: 64) interprets *hṭp kʿ* ‘*kʿ*-satisfaction’ as an antiphrastic euphemism that refers to excrement.

methodology when exploring the text history of a work that survives in multiple copies. For this reason, I hope that the reader will forgive the paper's rather light engagement with these scholars' work.

The text-critical methodology outlined in this paper is more fully explored and critically assessed in my forthcoming PhD thesis. This methodology employs a version of the method of Greg (1927) (§4) to plausibly reconstruct traditions for short works with at least 4 surviving witnesses. It aims to minimize the need for subjective philological assessments when constructing the *stemma*'s topology, and provides the broadest possible evidence base for making such assessments when polarizing its variants (i.e. establishing the direction in which textual changes flowed across the *stemma*).

In my thesis, I use this methodology to analyse the traditions of short Book of the Dead spells. In the present paper, I illustrate its use through a straightforward worked 'toy' example: de Buck's published witnesses for CT 184 (CT III, 79-84). Having generated a *stemma* for CT 184, I then demonstrate how reconstructing a series of hyparchetypes, at various points on the *stemma*, can act as a forcing function for developing and testing hypotheses about the ancient scribal practices of the people who transmitted CT 184's tradition. This helps to establish the limits of what can actually be inferred about scribal practice for a given work. I hope that this spell's brevity, and its small witness corpus as published in the widely available volume CT III, will make it easy for interested readers to assess the methodology's usefulness.

Within Egyptology, text-critical approaches, centred in Göttingen, initially concerned themselves more with exploring textual variation within witness corpora than with reconstructing archetypes (Sherbiny 2017: 587). Schenkel (1978: 11-13) explains the value of textual criticism in illuminating the processes that produced the living transmission of a work: he argues that the changes introduced by scribes are interesting in their own right, not simply distortions that should be eliminated in order to reconstruct an autograph (something he considers a rather less interesting pursuit). Works exemplifying the Göttingen approach, to borrow the list given by Sherbiny (2017: 587) are Schenkel 1978, Rößler-Köhler 1979, and Sledzianowski 1976.

Subsequently, interest in textual criticism spread to Tübingen, where scholars took a more classical/biblical philological approach under the influence of Jürgen Zeidler (Sherbiny 2017: 587), including the reconstruction of the archetype (e.g. Zeidler 1999). For an example of this approach applied to CT spells, including the reconstruction of archetypes and the creation of critical editions, see Jürgens 1995.

Zeidler's comments about Rößler-Köhler's (1979: 167-210) inclusion of clear scribal errors in her critical apparatus for BD 17 nicely highlights the contrast between Göttingen's transmission-centric approach versus Tübingen's archetype-centric one: Zeidler (1999: I, 63) considers their inclusion superfluous "weil sie dem Leser keinen Informationsgewinn für das Textverständnis bieten können".

This paper, with its focus on text history rather than archetype recovery, stands firmly in the transmission-centric camp.

It is best to read this article with a copy of CT III, 79-84 to hand. For convenience, I refer to the witnesses using the *sigla* used in de Buck's CT publications and adopted by Willems (1988). Coffins B9C, B1L, B3Bo, B15C, and B4C are from Bersha; coffin T1L is from Thebes.<sup>3</sup>

## 2 B3Bo's text of CT 184

To provide an overview of CT 184's content without anticipating the results of the analysis that follows, it seems best to give a transliteration and translation of its text as it appears on coffin B3Bo (which has the fewest textual omissions and lacunae within the witness corpus) and to offer a brief interpretation.

### CT III

79a-e	-	-
79f	<i>NN tn nwr pw sšn[ti]</i>	This NN is the <i>Sšnti</i> heron
79g	<i>ir(w) gš</i>	who acts as a migratory bird,
79g	<i>nr(w) ḥḥ</i>	who terrifies a million!
79h	<i>bwtꜣs sp 2</i>	Her abomination (twice):

<sup>3</sup> For more information and references for these objects, see Willems (1958: 19-34).

79i	<i>nī wnmꜣs</i>	she will not eat (it)!
80a	<i>bwtꜣs pw ḥs</i>	Her abomination is excrement!
80b	<i>nī wnm NN tn ḥs</i>	This NN shall not eat excrement;
80c-d	<i>nī wnmꜣs ḥtp k³</i>	she shall not eat ‘ <i>k³</i> -satisfaction’;
80e	<i>nī ḥmwꜣs imꜣf</i>	she shall not demolish it.
80f	<i>nī ṛꜣs nꜣf m ṽwꜣs</i>	She shall not go up to it with her arms,
80g	<i>nī ḥndꜣs ḥrꜣf m rdwꜣs</i>	she shall not tread upon it with her feet,
80h	<i>nī smꜣꜣs nꜣf m ḏb ṽwꜣs</i>	and she shall not make contact with it with her fingers.
81a	<i>ḥḥꜣt irꜣf m iꜣst</i>	“Then on what will you live,
81b	<i>sṽmꜣt irꜣf m iꜣst</i>	and with what will you wash (it) down?”
81c	<i>ḥrꜣsn nṽrw</i>	they, the gods, say.
81d-e	<i>iw t n NN tn m sḥt ḥtp</i>	Bread belongs to this NN in the Marsh of Hetep,
81f	<i>bḥyꜣs m sḥt iṽrw</i>	and she shall have abundance in the Marsh of Rushes
81g	<i>nbtꜣs m nnt nwt(?)</i>	with her basket of Nut’s rush
82a	<i>snd twn</i>	and snd-bag(?) of twn-plant.
82b	<i>nī ks.n NN tn snꜣs itꜣs gb</i>	This NN is not bowing to kiss her father Geb;
82c	<i>nī swr.nꜣs m ṣwt ḥr[t ...A40]</i>	nor is she drinking as the feather which is on [...<A GOD>].
82d	<i>rdi(w) nꜣs ṽḥw m snw nk</i>	It was following copulation that <i>ṽḥ</i> -power was given to her;
82e	<i>ṽwt ib m snw iwt ib</i>	following orgasm, bliss,
83a	-	-
83b	<i>(n) ntt NN tn is nw[r] pwy</i>	because this NN really is this heron
83b	<i>ḥr wṽrt ṽḥt nt pt</i>	at the Akhet’s bank of heaven.
83c	<i>i.p³[...]<i>ꜣs ḥr gs imn(t) n pt</i></i>	Just as she took off beside the West of heaven,
83d	<i>ḥn[n]<i>ꜣs ḥr gs iṽbt n pt</i></i>	so she alights beside the East of heaven:
83e	<i>ḏꜣꜣs pt mr rꜣ</i>	she shall cross heaven like Ra,
84a	<i>smꜣꜣs tṽ mr ḏḥwti</i>	and she shall make landfall like Thoth:
84b	<i>NN tn wꜣ imꜣsn</i>	this NN is one of them.

(79f)

Regarding the *nwr*-bird, Wb. 2, 223.5 and *TLA* (*s.v.* *nwr*) suggest that it might be a heron, with *TLA* suggesting a derivation from the root verb *nwr* “tremble”. van der Molen (2000: 209) also takes *nwr* as meaning heron, as does Dahms (2020: 110, n.n): though the latter argues for distinguishing it from the *nw*-bird (a desert bird of some species, found in B4c’s text here instead of *nwr*), a distinction which this article accepts. The heron is identifiable with the sun-god (Pinch 2002: 117), whose celestial path is shared by the deceased at the end of this spell.

As for the word *sṣnti*, I have followed Willems (1996: 183), Barguet (1986: 384), and Carrier (2004: I, 451) in declining to translate the term, since its meaning is uncertain. Faulkner (2004: I.154, n.2) suggests that *sṣnti* “could mean ‘belonging to the lotus’”. Sherbiny (2017: 119-120), however, discussing the *zṣnt*-boat in CT VII, 259a [CT 1030], observes that “the floral or plant determinative is never attested with the words derived from the root *zṣn* in the Coffin Texts except for three certain occurrence of the lotus flowers in the plural *zṣnw*” (none of which occurs in CT 184), and considers a derivation from the root *zṣn* (“weave, plait, braid”) or *zṣnt* (“papyrus stalk”) likelier. Willems (1996: 183) observes the connection of the *sṣnt* structures in various CT spells with the provision of offerings (especially bread), and with the action of ascension: key themes in CT 184. An association between the word *sṣnti* and the heron, without the need for the word *nwr*, seems to have developed at some point, since the (New Kingdom) BD 84’s *snti*-bird is a heron in its vignettes (Quirke 2013: 197).

## (79g)

I have followed Faulkner (2004: I.154, n.3), Barguet (1986: 384), and Carrier (2004: I, 451) in taking *gš* as referring to a migratory bird, an identity which again fits well with the cyclic solar path taken by the deceased in this spell. In CT 404, *gšgš* is the name of the Marsh of Rushes' gatekeeper. In the (admittedly New Kingdom) Litany of Ra, *gšy* is a designation of the sun-god (Leitz 2002 VII, 330; CT V, 181i). Both identifications are consistent with this spell's content, where the deceased enjoys abundance in the Marsh of Rushes (CT III, 81d-82a) and adopts a solar flightpath like Ra (83b-84b).

## (79h-80d)

The deceased is characterised as utterly rejecting the option of eating excrement.

## (80e)

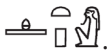
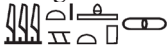
*hmw* “demolish” perhaps implies ‘vigorously eat’ (Faulkner 2004: I.154, n. 6; Gracia Zamacona 2024: 111); it certainly implies ‘unmake’. It thus bridges between the themes of not eating excrement and not disrupting it (80f-h).

## (81a-c)

Unspecified gods ask the deceased how she will sustain herself, since she refuses to consume excrement.


## (81d-82a)

To answer their question, the deceased is characterized as gathering and consuming food in the Marsh of Hetep and having abundance (*b'h(i)*: van der Plas and Borghouts 1998: 86) in the Marsh of Rushes.

B3Bo determines *hṭp* with a seated god (A40): . This is the divine figure Hetep (“the satisfied one”), whom the deceased lives as in CT 467, becomes in CTs 464-466, and proceeds alongside in CT 468. B4C may preserve the variant from which B3Bo’s “Marsh of Hetep” derived:  *sht hṭp* “Marsh of Offering”. The Marshes of Offering(s) and Rushes have contrasting functions: whereas the Marsh of Offering(s) functions as a “place of rest”, the Marsh of Rushes functions as a “place of passage” (Hays 2004: 181).

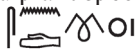


The verb *b'h(i)* in *b'hyꜣs m sht iꜣrw* is attested from the Pyramid Texts as meaning both ‘to have abundance’ and ‘to be flooded’ with water or sunlight (Wb. I, 449.1, 448.11,13). With the latter meaning, it thus both answers the question (81b) “and with what shall you wash (it) down?”, and it references the purification of the deceased in the Marsh of Rushes before their ascension into the sky (Hays 2004: 181). The inundation of the Marsh of Rushes is well attested from the Pyramid Texts (Hays 2004: 182), with the dawn itself being considered a solar inundation (Pinch 2002: 137-138).



## (81g)

 *nnt nwt*<sup>4</sup> “Nut’s rush”: taking D12 as O49, giving *nwt*, “Nut”. For similar orthographies, see *TLA* (s.v. nn.t). Most witnesses read simply *nnt* “rush”.


## (82a)

van der Molen (2000: 711) and van der Plas and Borghouts (1998: 304) describe *twꜣ* as an unspecified plant species.

Regarding  *snd* in B3Bo: van der Plas and Borghouts (1998: 259) take *snd* as a type of garment. CT 728 (CT VI, 358-362) associates the deceased’s resurrection with cloths of various weaves, apparently including a robe of *snd*-cloth (CT VI, 360j). Faulkner (2004: I.155, n.8), on the strength of the  (D12?) determinative in , postulates that in CT 184 “the ‘cloth’ may be in the form of a round bag”, paralleling PT 342’s *kꜣr* “sack” (discussed further below: §8.5.3). I have adopted Faulkner’s translation of *kꜣr* here, with which Barguet (1986: 385) and Carrier (2004: I, 451) concur.

<sup>4</sup> CT III,81, n.2 suggests, regarding  (D12), that “probably  was meant”.

## (82b-c)

B3Bo determines whatever was in its lacuna with  (A40): this is a unique reading within this witness corpus (see also §5.2.1). Other witnesses have the deceased specifically not drinking *m šwt ḥrt mw* “in/as the *šwt* which is on the water”.

The meaning of *šwt* in this phrase is not immediately clear, and indeed the various available options have some conceptual overlap (Popielska-Grzybowska 2020: 191).

One might take the *m* as an *m* of predication and read “nor does she drink as a shadow that is over the water”, understanding *šwt* as a component of the self. Frandsen (2011: 28) reads “in the shadow spreading over the water” after Derchain (1978: 63, n.33), who argues that *šwt* refers to the shadow under a tree where the deceased might get a drink of water. Certainly CT 161 uses *šwt* to refer to an area shaded by two turquoise sycamores in the eastern Akhet, which the spell locates in the middle of the Marsh of Rushes (CT II, 388q).

As a body part, the *šwt* is the “side of chest, half of rib-cage” (Walker 1996: 276). One could also, therefore, take *šwt* as a ‘side’ of Geb, i.e. the riverbank: the earth next to and above the water. Barguet (1986: 385) takes this approach: “je ne boirai pas d’eau au bord (?) d’une mare (à canards)”. Faulkner (2004: I, 154) and Carrier (2004: I, 450) interpret the *šwt* here as a “plume” on the water. The manner of the deceased’s rejuvenation in CT 6 (CT I, 17a-18b, B3Bo), following their planting of a feather at the Akhet during the festivals of the new moon’s first (*psḏntiw*) and second (*ʾbd*) days, offers a parallel that supports this interpretation:

I.16c	<i>wrw(i) ʾbd n kʳ pt</i>	Twice great are the <i>ʾbd</i> -festival of the sky’s height,
I.16c-d	<i>psḏntiw sfḥ.t(w) ḏbʿ ḥrꜣt</i>	and the <i>psḏntiw</i> -festival when the finger on you is released! <sup>5</sup>
I.17a	<i>dr(w) dʳwt[ꜣt]</i>	Your decay has been driven out
I.17b	<i>ḏr srdtꜣt šwt r ʾḥt</i>	since you planted the feather at the Akhet,
I.17c	<i>r bw nt(i) rḥw tn im</i>	at the place where those who know you are.
I.17d	<i>snkꜣt mtꜣt spdt</i>	You shall suckle on your mother Sopdet,
I.17e	<i>mnʿtꜣt is imt ʾḥt</i>	your nurse in the Akhet,
I.18a-b	<i>pʾg ist ḥrꜣt sšpꜣs tn</i>	while Isis squats over you to enlighten you...

Following Keys’s (1925: 8, 1977: 282) identification of the feather representing the waxing moon, Willems (2005: 210-212) convincingly argues that CT 6’s feather refers specifically to the new moon’s crescent falling into the western horizon, where it “is only visible a short while at the beginning of the night, just before it sets”,<sup>6</sup> and furthermore that *šwt* also refers to the new moon in CT 335 and CT 156 (along with its BD descendents 114 and 116). If one also takes CT 184’s *šwt* as referring to the new moon, then one can read it as saying that the deceased, at the point of speaking, is not still stuck to the ground (“kissing Geb”) or in the water (“drinking like a feather”) in the West (CT III, 82b-c), but will ultimately rise again in the East along a solar-lunar trajectory (CT III, 83e-84b).

## (82d-e)

In this spell, Frandsen (2011: 28) sees Akh-hood substituting (*m snw*) for carnality, and rejoicing (*ʾwt ib*) substituting for lust (*iwt ib*), suggesting a connection between carnal desire and the rejected excrement. However, *m snw*, both here and in the Coffin Texts generally, is often well translated as “following” (Carrier 2004: I, 450-451; Nyord 2009: 426-27; Barguet 1986: 385 n.29; Gilula 1969: 122). Nyord (2009: 426-27) also analyses *iwt ib* as referring to the moment of conception rather than to lust, an interpretation consistent with the interpretation of *iwt ib* as “orgasm” adopted by other scholars (TLA *s.v. jw.t-jb*; Barguet 1986: 385; Pinch 1994: 124). Given this spell’s identification of the deceased with the solar creator god, their Akh-hood presumably stems from the copulation and orgasm that produces their daily rebirth at dawn.

<sup>5</sup> Seth’s finger, removed to release the new moon (Willems 2005: 210, esp. n. 16). Following Kees (1977: 282) and Willems (2005: 209, n.12) in redividing I.16c-d to observe the parallelism between *ʾbd n kʳ pt* and *psḏntiw sfḥ.t(w) ḏbʿ ḥrꜣt*.

<sup>6</sup> See also Nyord (2003: 80-84) for further discussion on the identity of the feather as the waxing moon in CT spells 6, 9, 8, and 156.





(83b)

The spell returns to its beginnings, identifying the deceased again with the cosmic bird rising above the Akhet. Van der Molen (2000: 89) notes that in the Coffin Texts *w'rt* can refer to the “bank of a river” as well as the “border of [a] desert plateau”, and can also have a “celestial meaning”.

(83c-84b)

Having journeyed from the West to the East through the Duat, the deceased will then go forth on her daily solar circuit, crossing heaven like the sun (= Ra) and making landfall like Thoth, being assimilated with both of these gods. Thoth here could be the solar boat's navigator or the moon (Pinch 2002: 209-210). As the moon, Thoth “is accompanied in the sky at night by the deceased as stars” (Lesko 1972: 6).

(83e-84a)

*mr* “like”, in each case spelled , seems to derive from the Old Kingdom orthography  (*Wb.* 2, 36.9). The other non-lacunose witnesses read *mi*:  (B4C, T1L, B1L) and  (B9C).

### 3. Some text-critical terminology

Textual criticism has developed an extensive technical vocabulary. I tried (unsuccessfully) to keep this article as jargon-free as possible but the following terms proved too useful to avoid. For the reader's convenience, I have defined them here in one place.

- A **work** is a “distinct intellectual or artistic creation”, as opposed to its expression (Madison *et al.* 1998: 12). For example, CT Spell 184 is a work, while the version of it that appears on coffin B3Bo is an *expression* of the work.
- A **witness** is an *existing* expression of a work (Andrews 2015). For example, the expression of CT 184 on coffin B3Bo is a witness to the work that we call CT 184. For brevity and simplicity, when discussing a particular work, I falsely equate its witnesses with the physical objects upon which those witnesses appear. I thus call T1L, B3Bo, B4C, B9C, B15C, and B1L the “witnesses” of CT 184, even though the ‘existing instances’ of that spell really cover only certain portions of those objects.
- An **exemplar** is a manuscript that was transcribed to produce another manuscript: the transcriber may have visually inspected that manuscript, or have had it dictated to them (Haugen and Haverling 2017). Most of the exemplars used to transmit a work will not have survived.
- By contrast, a **hyparchetype** is “a lost state of the text” from which a group of witnesses can be inferred to have derived (Haugen 2015). The number of hyparchetypes in a chain or stemma does not indicate the number of exemplars actually involved in transmitting the tradition, because each **edge** (see below) that connects them may represent more than a single generation of copying (Schenkel 1978: 28). Hence the hyparchetype of a witness does not mean the same thing as its immediate exemplar.
- A **tradition** comprises all the witnesses that have transmitted a work (Haugen *et al.* 2015). For the purposes of this article, CT 184's tradition is taken to be the witness corpus published in CT III, 79-84.
- A **variation place** is a place in a work's text where more than a single reading exists within the tradition.
- Trovato (2014: 56) terms a variant **monogenetic** “that as a rule cannot be made independently by several scribes”. I find it conceptually useful to distinguish between a **likely-monogenetic** variant (whose definition mirrors Trovato's, here) and an **actually-monogenetic** variant, by which I mean a variant that *really never* was independently produced within the tradition.
- Trovato (2014: 55) terms a variant **polygenetic** “that several copyists could have made independently of each other”. Similarly, I find it useful to distinguish between a **likely-polygenetic** variant (whose definition mirrors Trovato's, here) and an **actually-polygenetic** variant: a variant that *really* was independently produced within the tradition.
- A **type-2 variation place** is a variation place where exactly two variant readings are attested, and each is attested by at least two witnesses. For example, in CT 184, at CT III, 84a, the witnesses B9C, B1L, and B3Bo read *ḏhwī* “Thoth”, while B4C and T1L read *spdt* “Sopdet”. Type-2 variation places are particularly useful for reconstructing a tradition's genealogy: often, analysing just the corpus's type-2 variation places lets its genealogy be reconstructed (Greg 1927: 42). As Greg (1927: 22) explains:

If we have a variant AB: CD, then one or other reading must differ from that of the archetype, and one or other group must be genetic; there can be no question of all four manuscripts being independently derived. Different forms of type-2 [variation places] will divide up our collection in different ways, and these divisions will correspond to the ramifications of the family tree.

- A **complex variation place** is a variation place where more than two variants are attested across the corpus (Greg 1927: 18). For example, in CT 184, at CT III, 82b, witnesses B9C and T1L read *it gb* “... father, Geb”, B1L and B15C read *it*̄*i gb* “...my father, Geb”, and B3Bo and B4C read *it*̄*s gb* “...her father, Geb”.
- I use the term **local type-2 variation place** to refer to a variation place which is type-2 for a given subset of witnesses, even when the variation place for the corpus as a whole is complex.
- A **polarized variation place** is a variation place with variant readings whose properties indicate that one reading *likely* derived from another. For instance, generally (but not necessarily), a clearly erroneous variant will derive from a clearly correct one, not *vice versa*. Most variation places are not polarized.
- A **latent error** is “a reading that is not manifestly wrong, but which a comparison with other witnesses (...) would reveal to be very probably not original” (Trovato 2014: 97). A variation place that includes a latent error will therefore be polarized.
- A **chain**, following the terminology of Salemans (2000: 5), is a topology that asserts genealogical relationships between witnesses, but unlike a *stemma* (see below) it does not make any assertions about the direction of the flow of textual transmission, or that flow’s point of origin (i.e. the location of the ‘archetype’: see below). Chains consist of **nodes** and **edges**: terms borrowed from graph theory (Peust 2012: 209). The nodes represent **witnesses** (extant copies of the text) and **hyparchetypes** (inferred intermediate states of the text). The edges are lines joining the nodes together: these represent the flows of textual transmission from node to node. My chains also include boxes in the middle of each edge that I call **edge notes**: these boxes list local type-2 variation places whose textual content changed along that edge.
- A *stemma* is a chain that includes assertions about the direction of textual transmission and the origin-point of the transmission. On a *stemma*, the direction of textual transmission usually flows from the highest node downward. The highest node of a *stemma* usually represents the **archetype**.
- The **archetype** is the origin-point of the textual transmission on a *stemma*. Greg’s method analyses the distribution of polarized variation places on a chain to locate the archetype, thereby transforming the chain into a *stemma*.
- The **autograph** is the text of the work as written by the original author. Because the earliest copies of a work so rarely survive, the autograph rarely equates to the archetype, which will generally already include non-authorial readings (Haugen and Roelli 2016). It follows that a work need not necessarily derive from a single *autograph* in order for a *tradition* to derive from a single *archetype*.
- **Contamination** is “the confluence of readings from more than one exemplar”: the result of someone using more than a single exemplar to produce a version of a work (Bein and Haverling 2015).
- *Lectio difficilior* means the “more difficult reading”. Given a set of competing readings at a variation place, and all else being equal (which it rarely is), the more difficult reading is likeliest to be the original one, while the others are likely to be attempts at making the passage easier to understand, and may be deliberate glosses or accidental banalizations (Trovato 2014: 117-18).

#### 4. Greg’s method versus the common-error method

Peust (2012) introduced Greg’s method into Egyptology, deploying a version of it to check the previously produced *stemma* of *Sinuhe*’s tradition. Peust (2012: 209-211) outlines clearly how Greg’s method differs from the more traditional common-error method adopted generally within Egyptology, and provides an excellent introductory bibliography for those interested in exploring Greg’s method further. (Likewise, Schenkel (1978) provides a clear explanation of what the common-error method is, and how to apply it to ancient Egyptian material.)

To briefly contrast the two methods here, the common-error method, unfortunately often called the ‘Lachmannian’ method of textual criticism,<sup>7</sup> uses only polarized variation places to construct a *stemma*.<sup>8</sup> Since most variation places do not show any clear polarization (§4.2), this greatly limits the number of data that can contribute to its construction. Greg’s method<sup>9</sup> has an advantage in this regard, because it separates a *stemma*’s construction into two stages: (1) constructing a chain using *every topologically-indicative* variation place; and (2) using *every polarized variation place*, together with relevant text-external evidence, to establish the likeliest direction of transmission within this chain. This approach lets much more of a tradition’s attested textual variation inform *stemma* production. (Peust 2012: 211, 217-18, 212) This makes Greg’s method especially useful for analysing rather short works (such as CT 184): an area where the more traditional common error approach, as Schenkel (1978: 23) observes, can struggle.

#### 4.1. What variation places are genealogically significant?

Convinced by the arguments of Salemans (2000: 58), Peust (2012: 215-17) used a set of carefully selected type-2 variants to build his stemma. However, most practitioners of Greg’s method, myself included, use “all [or] most occurring variants” for chain-building (Salemans 2000: 33).<sup>10</sup>

Specifically, my methodology builds chains by analysing the distribution of all *local* type-2 variation places, without drawing any distinction between ‘significant’ and ‘insignificant’ ones. My thesis will include a detailed defence of this approach’s validity. The reason for its *necessity*, however, at least when analysing the short BD spells that constitute my PhD research’s main focus, is quite straightforward. As Greg (1927: 43) noted, for some works, “variation [will have] advanced to such a point, that practically all [variation places] are of complex type.” This observation holds true for many BD spells which, as von Lieven (2016: 52) remarks, often have strikingly mutable texts. Using only strict type-2 variation places would thus produce *stemmata* whose structures were supported by too few data to be truly convincing, particularly given the frequency with which contamination appears within BD spell traditions.

#### 4.2. The danger of ignoring apparently genealogically insignificant textual variation

Restricting oneself to a “rigorous selection of significant variants” (Peust 2012: 215) assumes:

- That one can reliably determine in advance the characteristics of genealogically significant variation within a particular work.
- That the majority of the textual variation has nothing of value to offer. Salemans (1999: 118-19), an admittedly extreme example, considers “perhaps one out of a hundred variants” genealogically informative.

Recent studies have suggested that neither of these assumptions may be warranted. Andrews (2016: 532, 538, 525) not only found that philologists “fared surprisingly poorly” at identifying genealogically significant variation, but also concluded that supposedly “‘insignificant’ variation is really not that insignificant at all”, thereby corroborating the prior findings of Schmid (2004: 140-41), Blake and Thaisen (2004: 525), and Spencer et al. (2004).

Andrews and Macé (2013: 517-18), processing the genealogies of 7 works, found that about 60% of the textual variation in them was genealogically significant, and suggested that “even the most trivial changes, taken in aggregate, have some text-genealogical significance that should not be discounted.” The methodology introduced here employs exactly such an ‘aggregate’ approach. Andrews and Macé (2013: Figs. 10-16) also found that the proportions of actually-monogenetic and actually-polygenetic variation

<sup>7</sup> Unfortunately-termed because Karl Lachmann neither invented nor used it (Trovato 2014: 23, 83).

<sup>8</sup> For an “at once rigorous and concise illustration (...) of the logical and statistical foundations of genealogical-reconstructive criticism”, Trovato (2014: 68) recommends Maas (1958). This English translation of Maas’ *Textkritik* is equivalent to the third German edition of that work. (Regarding the fourth and final German edition of *Textkritik*, Maas (1960) notes in its foreword that it differs significantly from the third edition only in “das Literaturverzeichnis und das Register”.)

<sup>9</sup> I adopt the term ‘Greg’s method’ after Peust (2012: 211) to describe the text-critical methodology outlined by Greg (1927).

<sup>10</sup> Within Egyptology, Rößler-Köhler (1979: 41) introduced the use of *Zusatzdeviationen*, “supporting deviations”: variant readings which seem insignificant by themselves, but which in combination can become significant. The use of *Zusatzdeviationen* subsequently became a standard practice for Egyptological textual criticism (Zeidler 1999: 1:34). The methodology introduced here could be considered as one that maximizes the usefulness of *Zusatzdeviationen* when building *stemmata*.

varied greatly, across 9 different categories, between the 7 traditions analysed. This again highlights the difficulty of trying to predict the relative genealogical significance of particular sorts of variation places by generalizing from past experience.

## 5. Setup for constructing CT 184's chain

### 5.1. Collation

My methodology requires a computer-readable collation. For the purposes of this example, a straightforward transliteration (Table 1) that does not track orthography suffices to group the spell's 6 witnesses sufficiently distinctly that I can justify leaving the question of the significance of orthographic variation to my thesis.<sup>11</sup>

Table 1. Collation for CT spell 184 (= CT III, 79-84)

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
<b>III.79.a</b>	-	<i>hsf</i>	-	-	-	-
2	-	<i>hr</i>	-	-	-	-
3	-	<i>wh't</i>	-	-	-	-
<b>III.79.b</b>	-	-	-	-	<i>tm</i>	-
5	-	-	-	-	<i>wnm</i>	-
6	-	-	-	-	<i>hs</i>	-
7	-	-	-	-	<i>m</i>	-
8	-	-	-	-	<i>hrt ntr</i>	-
<b>III.79.c</b>	-	-	-	-	<i>tm</i>	-
10	-	-	-	-	<i>šm</i>	-
11	-	-	-	-	<i>shd</i>	-
<b>III.79.d</b>	-	-	-	-	<i>shm</i>	-
13	-	-	-	-	<i>m</i>	-
14	-	-	-	-	<i>mw</i>	-
15	-	-	-	-	<i>l'w</i>	-
<b>III.79.e</b>	-	-	-	-	<i>prt</i>	-
17	-	-	-	-	<i>m</i>	-
18	-	-	-	-	<i>hrw</i>	-
<b>III.79.f</b>	-	-	-	-	-	<i>wsir</i>
20	<i>ink</i>	<i>ink</i>	<i>NN</i>	[...]	<i>NN</i>	<i>NN</i>
21			<i>tn</i>	[...]	<i>pn</i>	<i>tn</i>
22	<i>nwr</i>	<i>nwr</i>	<i>nwr</i>	[...]	<i>nwi</i>	<i>nw</i>
23	<i>p[.]</i>	<i>Pw</i>	<i>pw</i>	[...]		<i>pw</i>
24	[ ? ]			[...]	?	?
25	<i>sšnti</i>	<i>sšnti</i>	<i>sšn[.]</i>	[...]	<i>sšnt(i)</i>	<i>sš[...]</i>
<b>III.79.g</b>	<i>ir</i>	<i>ir</i>	<i>ir</i>	[...]	<i>ir</i>	[...]
27	<i>gš</i>	<i>Gš</i>	<i>gš</i>	[...]	<i>gš</i>	[...]
28	<i>nr(w)</i>	<i>nr(w)</i>	<i>nr(w)</i>	[...]	<i>nr(w)</i>	[...]

<sup>11</sup> At the current stage of my PhD research, shared orthographic features appear to predict genealogical relationships between witness texts less clearly than shared phonemic features. This suggests that a hieroglyphic (or hieratic) text's orthographic features mutate faster in transmission than its phonemic ones. One might indeed expect factors such as the space available on a textual support and individual scribal preferences to condition orthographic variation more easily than phonemic variation.

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
29	<i>hh</i>	<i>hh</i>	<i>hh</i>	[...]	<i>hh</i>	[...]
III.79.h	<i>bwt</i>	<i>Bwwt</i>	<i>bwt</i>	[...]	<i>bwt</i>	[...]
31	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	<i>NN</i>	[ <i>NN</i> ]
32		-	-	[...]	<i>pn</i>	[ <i>tn?</i> ]
33	<i>sp</i>	-	<i>sp</i>	[...]	<i>sp</i>	[...]
34	<i>2</i>	-	<i>2</i>	[...]	<i>2</i>	[...]
III.79.i	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	<i>ni</i>	[...]
36	<i>wnm</i>	<i>Wnm</i>	<i>wnm</i>	[...]	<i>wnm</i>	<i>wnm</i>
37	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	<i>zf</i>	<i>NN</i>
III.80.a	<i>bwt</i>	<i>Bwt</i>	<i>bwt</i>	[...]	<i>bwt</i>	<i>bwt</i>
39	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	<i>NN</i>	<i>NN</i>
40	-	-	-	[...]	<i>pn</i>	-
41	<i>pw</i>	<i>Pw</i>	<i>pw</i>	[...]	<i>pw</i>	-
42	<i>hsw</i>	<i>hs</i>	<i>hsw</i>	[...]	<i>hsw</i>	-
III.80.b	-	-	<i>ni</i>	[...]	-	-
44	-	-	<i>wnm</i>	[...]	-	-
45	-	-	<i>NN</i>	[...]	-	-
46	-	-	<i>tn</i>	[...]	-	-
47	-	-	<i>hsw</i>	[...]	-	-
III.80.c	-	-	<i>ni</i>	[...]	<i>ni</i>	<i>ni</i>
49	-	-	<i>wnm</i>	[...]	<i>wnm</i>	<i>wnm</i>
50	-	-	<i>zs</i>	[...]	<i>zf</i>	<i>zs</i>
III.80.d	<i>htp k<sup>3</sup></i>	<i>htp k<sup>3</sup>w</i>	<i>htp k<sup>3</sup>w</i>	[...]	<i>htp k<sup>3</sup></i>	<i>htp k<sup>3</sup></i>
III.80.e	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	<i>ni</i>	<i>ni</i>
53	<i>hmy</i>	<i>hmy</i>	<i>hmw</i>	[...]	<i>sm<sup>3</sup></i>	<i>sm<sup>3</sup>{i}</i>
54	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	<i>NN</i>	<i>NN</i>
55	-	-	-	[...]	<i>pn</i>	<i>tn</i>
56	<i>im</i>	<i>im</i>	<i>im</i>	[...]	<i>im</i>	<i>im</i>
57	<i>zf</i>	<i>zf</i>	<i>zf</i>	[...]	<i>zf</i>	<i>zf</i>
III.80.f	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	-	<i>ni</i>
59	<i>r</i>	<i>r</i>	<i>r</i>	[...]	-	<i>r</i>
60	-	-	-	[...]	-	-
61	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	-	-
62	<i>n</i>	<i>N</i>	<i>n</i>	[...]	-	<i>n</i>
63	<i>zf</i>	<i>zf</i>	<i>zf</i>	[...]	-	<i>NN</i>
64	-	-	-	[...]	-	<i>tn</i>
65	<i>m</i>	<i>M</i>	<i>m</i>	[...]	-	<i>m</i>
66	<i>wi</i>	<i>wi</i>	<i>wi</i>	[...]	-	<i>wi</i>
67	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	-	<i>zs</i>
III.80.g	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	-	-
69	<i>hnd{wi}</i>	<i>hnd{i}</i>	<i>hnd</i>	[...]	-	-
70	<i>zi</i>	<i>zi</i>	<i>zs</i>	[...]	-	-
71	<i>hr</i>	<i>hr</i>	<i>hr</i>	[...]	-	-
72	<i>zf</i>	<i>zf</i>	<i>zf</i>	[...]	-	-

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
73	<i>m</i>	<i>M</i>	<i>m</i>	[...]	-	-
74	[...]	<i>tbwti</i>	<i>rdwi</i>	[...]	-	-
75	<i>≠i</i>	<i>≠i</i>	<i>≠s</i>	[...]	-	-
<b>III.80.h</b>	-	-	<i>ni</i>	[...]	-	<i>ni</i>
77	-	-	<i>smʒ</i>	[...]	-	<i>s[...]</i>
78	-	-	<i>≠s</i>	[...]	-	[...]
79	-	-	<i>n</i>	[...]	-	[...]
80	-	-	<i>≠f</i>	[...]	-	[NN]
81	-	-	-	[...]	-	[tn]
82	-	-	<i>m</i>	[...]	-	[...]
83	-	-	<i>ḏbʿw</i>	[...]	-	[...]
84	-	-	<i>≠s</i>	[...]	-	[...]
<b>III.81.a</b>	<i>ʿnh</i>	<i>ʿnh</i>	<i>ʿnh</i>	[...]	<i>ʿnh</i>	[...]
86	<i>≠k</i>	<i>≠k</i>	<i>≠t</i>	[...]	<i>≠k</i>	[...]
87	<i>ir</i>	<i>ir</i>	<i>ir</i>	[...]	<i>ir</i>	[...]
88	<i>≠f</i>	<i>≠f</i>	<i>≠f</i>	[...]	<i>≠f</i>	[...]
89	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>m</i>	[...]
90	<i>išst</i>	<i>išst</i>	<i>išst</i>	[...]	<i>išst</i>	[iš]s[t]
<b>III.81.b</b>	<i>wnm</i>	<i>Wnm</i>	<i>sʿm</i>	[...]	-	-
92	<i>≠k</i>	<i>≠k</i>	<i>≠t</i>	[...]	-	-
93	<i>ir</i>	<i>ir</i>	<i>ir</i>	[...]	-	-
94	-	<i>≠f</i>	<i>≠f</i>	[...]	-	-
95	<i>m</i>	<i>M</i>	<i>m</i>	<i>m</i>	-	-
96	<i>išst</i>	<i>išst</i>	<i>išst</i>	<i>išs[t]</i>	-	-
<b>III.81.c</b>	<i>ḥr(w)</i>	<i>ḥr(w)</i>	<i>ḥr(w)</i>	[.]r(w)	<i>ḥr(w)</i>	<i>ḥr(w)</i>
98	<i>≠sn</i>	<i>≠sn</i>	<i>≠sn</i>	[...]	<i>≠sn</i>	<i>≠sn</i>
99	<i>nṯrw</i>	<i>nṯrw</i>	<i>nṯrw</i>	[...]	-	<i>nṯrw</i>
100	<i>r</i>	<i>R</i>	-	[...]	<i>r</i>	<i>r</i>
101	<i>≠i</i>	<i>≠i</i>	-	[...]	<i>NN</i>	<i>NN</i>
102	-	-	-	[...]	<i>pn</i>	<i>tn</i>
<b>III.81.d</b>	<i>ʿnh</i>	<i>ʿnh</i>	-	[...]	-	-
104	<i>≠i</i>	<i>≠i</i>	-	[...]	-	-
105	<i>m</i>	<i>M</i>	<i>iw</i>	[...]	<i>iw</i>	<i>iw</i>
106	<i>t</i>	<i>T</i>	<i>t</i>	[...]	<i>t</i>	<i>t</i>
107	-	-	<i>n</i>	[...]	<i>n</i>	<i>n</i>
108	-	-	<i>NN</i>	[...]	<i>NN</i>	<i>NN</i>
109	-	-	<i>tn</i>	[...]	<i>pn</i>	<i>tn</i>
<b>III.81.e</b>	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>m</i>	<i>m</i>
111	<i>šḥt</i>	<i>šḥt</i>	<i>šḥt</i>	[...]	<i>šḥt</i>	<i>šḥt</i>
112	<i>ḥtp</i>	<i>ḥtp</i>	<i>ḥtp</i>	[...]	<i>p</i>	<i>ḥtp</i>
113	<i>A40</i>	<i>A40</i>	<i>A40</i>	[...]	-	-
<b>III.81.f</b>	<i>b[ʿh]y</i>	<i>bʿhy</i>	<i>bʿhy</i>	[...]	<i>bʿht</i>	<i>bʿht</i>
115	-	-	-	[...]	-	<i>nt</i>
116	( <i>≠i?</i> )	<i>≠i</i>	<i>≠s</i>	[...]	<i>NN</i>	<i>NN</i>

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
117	-	-	-	[...]	<i>pn</i>	<i>tn</i>
118	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>m</i>	<i>m</i>
119	<i>sh̥t</i>	<i>sh̥t</i>	<i>sh̥t</i>	[...]		<i>sh̥t</i>
120	<i>ɪʀw</i>	<i>ɪʀw</i>	<i>ɪʀw</i>	[...]	<i>ɪʀw</i>	<i>ɪʀ[w]</i>
<b>III.81.g</b>	-	-	-	[...]	<i>ɪw</i>	[...]
122	<i>nb[t]</i>	<i>Nbt</i>	<i>nbt</i>	[...]	<i>nbt</i>	[...]
123	<i>ɛ̥i</i>	<i>ɛ̥i</i>	<i>ɛ̥s</i>	[...]	<i>NN</i>	[ <i>NN</i> ]
124	-	-	-	[...]	<i>pn</i>	[ <i>tn</i> ]
125	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>ɪm</i>	[...]
126	‘	‘	-	[...]	-	[...]
127	<i>ɛ̥i</i>	<i>ɛ̥i</i>	-	[...]	-	[...]
128	<i>n</i>	<i>(n?)</i>	-	[...]	<i>nt</i>	[...]
129	<i>nnt</i>	<i>Nnt</i>	<i>nnt</i>	[...]	<i>nn{O49}(t)(?)</i>	[...]
130	-	-	<i>niwt(t)</i>	[...]	<i>O49</i>	[...]
<b>III.82.a</b>	-	-	-	[...]	<i>ɪw</i>	[...]
132	<i>snd</i>	<i>Snd</i>	<i>snd</i>	[...]	<i>rdw</i>	[ <i>sk?</i> ]
133	-	-	-	[...]	-	<i>n</i>
134	-	<i>ɛ̥i?(Z1)</i>	<i>ɛ̥i?(Z1)</i>	[...]	<i>ɛ̥i</i>	<i>NN</i>
135	-	-	-	[...]	-	<i>tn</i>
136	-	-	-	[...]	<i>ɪm</i>	<i>ɪm</i>
137	-	-	-	[...]	<i>nw?</i>	<i>n</i>
138	<i>tw̥n</i>	<i>Tw̥n</i>	<i>tw̥n</i>	[...]	<i>tw̥nt</i>	<i>tw̥n</i>
<b>III.82.b</b>	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	<i>ni</i>	<i>ni</i>
140	<i>ks</i>	<i>Ks</i>	<i>ks</i>	<i>ks</i>	<i>ks</i>	<i>ks</i>
141	<i>.n</i>	<i>.n</i>	<i>.n</i>	<i>.n</i>	<i>.n</i>	<i>.n</i>
142	<i>ɛ̥i</i>	<i>ɛ̥i</i>	<i>NN</i>	<i>ɛ̥i</i>	<i>NN</i>	<i>NN</i>
143	-	-	<i>tn</i>	[..]	<i>pn</i>	<i>tn</i>
144	<i>sn</i>	<i>Sn</i>	<i>sn</i>	[ <i>sn</i> ]	<i>n</i>	<i>n</i>
145	<i>ɛ̥i</i>	<i>ɛ̥i</i>	<i>ɛ̥s</i>	-	-	-
146	<i>it</i>	<i>it</i>	<i>it</i>	<i>it</i>	<i>it</i>	<i>it</i>
147	-	<i>ɛ̥i</i>	<i>ɛ̥s</i>	<i>ɛ̥i</i>	-	<i>ɛ̥s</i>
148	-	-	-	-	-	<i>n</i>
149	<i>gb</i>	<i>Gb</i>	<i>gb</i>	<i>g[.]</i>	<i>gb</i>	<i>gb</i>
<b>III.82.c</b>	<i>ni</i>	<i>ni</i>	<i>ni</i>	[...]	<i>ni</i>	<i>ni</i>
151	<i>swr</i>	<i>Swr</i>	<i>swr</i>	[...]	<i>swr</i>	<i>swr</i>
152	<i>.n</i>	<i>.n</i>	<i>.n</i>	[...]	<i>.n</i>	<i>.n</i>
153	<i>ɛ̥i</i>	<i>ɛ̥i</i>	<i>ɛ̥s</i>	[...]	<i>NN</i>	<i>NN</i>
154	-	-	-	[...]	<i>pn</i>	<i>tn</i>
155	-	<i>Mw</i>	-	[...]	<i>mw</i>	<i>mw</i>
156	-	<i>M</i>	<i>m</i>	[...]	<i>m</i>	<i>m</i>
157	<i>šwt</i>	<i>Šwt</i>	<i>šwt</i>	[...]	<i>šwt</i>	<i>šwt</i>
158	<i>hrt</i>	<i>hrt</i>	<i>hr[.]</i>	[...]	<i>hrt</i>	<i>hr[.]</i>
159	<i>mw</i>	<i>Mw</i>	[...]	[...]	<i>mw</i>	[...]
160	-	-	<i>ɛ̥i?</i>	[...]	-	[...]

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
<b>III.82.d</b>	<i>rdi(w)</i>	<i>rdi(w)</i>	<i>rdi(w)</i>	[...]	<i>rdi(w)</i>	[...]
162	<i>n</i>	<i>N</i>	<i>n</i>	[...]	<i>n</i>	[...]
163	<i>ɛi</i>	<i>ɛi</i>	<i>ɛs</i>	[...]	<i>NN</i>	[ <i>NN</i> ]
164	-	-	-	[...]	<i>pn</i>	[ <i>tn</i> ]
165	<i>ʒh</i>	<i>ʒh</i>	<i>ʒhw</i>	[...]	<i>ʒh</i>	[...]
166	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>m</i>	[...]
167	<i>snw</i>	<i>Snw</i>	<i>snww</i>	[...]	-	[...]
168	<i>nk</i>	<i>Nk</i>	<i>nk</i>	[...]	<i>nk</i>	[...]
<b>III.82.e</b>	<i>ʒwt ib</i>	<i>ʒw[t] ib</i>	<i>ʒwt ib</i>	[...]	<i>ʒwt ib</i>	[ <i>ʒwt</i> ] <i>ib</i>
170	<i>m</i>	<i>M</i>	<i>m</i>	[...]	<i>m</i>	<i>m</i>
171	<i>snw</i>	<i>Snw</i>	<i>snww</i>	[...]	<i>snw</i>	<i>snw</i>
172	<i>iwt</i>	<i>iwt</i>	<i>iwt</i>	[...]	<i>iwt</i>	<i>iwt</i>
173	<i>ib</i>	<i>ib</i>	<i>ib</i>	[...]	<i>ib</i>	<i>ib</i>
<b>III.83.a</b>	-	-	-	[...]	<i>h̄tp</i>	<i>h̄tp</i>
175	-	-	-	[...]	<i>ib</i>	<i>ib</i>
176	-	-	-	[...]	<i>m</i>	<i>m</i>
177	-	-	-	[...]	<i>snw</i>	<i>snw</i>
178	-	-	-	[...]	<i>wnm</i>	<i>wnm</i>
179	-	-	-	[...]	<i>t</i>	<i>t</i>
<b>III.83.b</b>	<i>n ntt</i>	<i>n ntt</i>	<i>(n) ntt</i>	[...]	<i>(n) ntt</i>	<i>h̄r ntt</i>
181	<i>ink</i>	<i>ink</i>	<i>NN</i>	[...]	<i>NN</i>	<i>NN</i>
182	-	-	<i>tn</i>	[...]	<i>pn</i>	<i>tn</i>
183	<i>is</i>	<i>is</i>	<i>is</i>	[...]	-	-
184	<i>nwr</i>	<i>Nwr</i>	<i>nw[r]</i>	[...]	<i>nwi</i>	<i>nw</i>
185	<i>p□w□y</i>	<i>Pw</i>	<i>pw̄y</i>	<i>pw</i>	<i>pw</i>	<i>pw</i>
186	-	-	-	-	?	?
187	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>
188	<i>wʹrt</i>	<i>Snbw</i>	<i>wʹrt</i>	<i>wʹrt</i>	-	-
189	<i>ʒht</i>	<i>ʒht</i>	<i>ʒht</i>	<i>ʒht</i>	<i>ʒht</i>	<i>ʒhwt</i>
190	<i>nt</i>	<i>Nt</i>	<i>nt</i>	<i>n[.]</i>	<i>nt</i>	<i>nt</i>
191	<i>pt</i>	<i>Pt</i>	<i>pt</i>	[...]	<i>pt</i>	<i>pt</i>
<b>III.83.c</b>	<i>pʒ</i>	<i>i.pʒ{i}</i>	<i>i.pʒ[.]</i>	[...]	<i>i.pʒ</i>	<i>pʒ</i>
193	-	-	-	[...]	-	<i>.n</i>
194	<i>ɛi</i>	<i>ɛi</i>	<i>ɛs</i>	[...]	<i>NN</i>	<i>NN</i>
195	-	-	-	[...]	<i>pn</i>	[...]
196	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>	[...]	-	[...]
197	<i>gs</i>	<i>Gs</i>	<i>gs</i>	[...]	-	[...]
198	<i>iʒbt</i>	<i>imnti</i>	<i>imnt</i>	[...]	-	[...]
199	<i>nt</i>	-	<i>n</i>	[...]	-	[...]
200	<i>pt</i>	<i>Pt</i>	<i>pt</i>	[...]	-	[...]
<b>III.83.d</b>	<i>h̄nn</i>	<i>h̄nn</i>	<i>h̄nn</i>	[...]	<i>h̄nn</i>	[...]
202	<i>ɛi</i>	<i>ɛi</i>	<i>ɛs</i>	[...]	<i>NN</i>	[ <i>NN</i> ]
203	-	-	-	[...]	<i>pn</i>	[ <i>tn</i> ]
204	<i>h̄r</i>	<i>h̄r</i>	<i>h̄r</i>	[...]	<i>h̄r</i>	[...]

	<b>B9C</b>	<b>B1L</b>	<b>B3Bo</b>	<b>B15C</b>	<b>T1L</b>	<b>B4C</b>
205	<i>{m}(gs)</i>	<i>{m}(gs)</i>	<i>gs</i>	[...]	<i>gs</i>	[...]
206	<i>imnt</i>	<i>i<sup>3</sup>bt<sup>i</sup></i>	<i>i<sup>3</sup>bt</i>	[...]	<i>imnt i<sup>3</sup>bt</i>	[..]ti
207	<i>n</i>	<i>N</i>	<i>n</i>	[...]	<i>n</i>	<i>n</i>
208	<i>pt</i>	<i>Pt</i>	<i>pt</i>	[...]	<i>pt</i>	<i>pt</i>
III.83.e	<i>d<sup>3</sup>y</i>	<i>d<sup>3</sup>y</i>	[d] <sup>3</sup>	[...]	<i>d<sup>3</sup></i>	<i>d<sup>33</sup></i>
210	-	-	-	[...]	<i>.n</i>	-
211	<i>≠i</i>	<i>≠i</i>	<i>≠s</i>	[...]	<i>NN</i>	<i>NN</i>
212	-	-	-	[...]	<i>pn</i>	<i>tn</i>
213	<i>pt</i>	<i>Pt</i>	<i>pt</i>	[...]	<i>pt</i>	<i>pt</i>
214	<i>mi</i>	<i>mi</i>	<i>mr</i>	[...]	<i>mi</i>	<i>mi</i>
215	<i>r<sup>c</sup></i>	<i>r<sup>c</sup></i>	<i>r<sup>c</sup></i>	[...]	<i>r<sup>c</sup></i>	<i>r<sup>c</sup></i>
III.84.a	<i>sm<sup>3</sup></i>	<i>sm<sup>3</sup></i>	<i>sm<sup>3</sup></i>	[...]	<i>sm<sup>3</sup></i>	<i>sm<sup>3</sup></i>
217	<i>(≠i?)</i>	<i>≠i</i>	<i>≠s</i>	[...]	<i>NN</i>	<i>NN</i>
218	-	-	-	[...]	<i>pn</i>	-
219	<i>t<sup>3</sup></i>	<i>t<sup>3</sup></i>	<i>t<sup>3</sup></i>	[...]	-	-
220	<i>mi</i>	<i>mi</i>	<i>mr</i>	[...]	<i>mi</i>	<i>mi</i>
221	<i>d<sup>h</sup>wt<sup>i</sup></i>	<i>d<sup>h</sup>wt<sup>i</sup></i>	<i>d<sup>h</sup>wt(i)</i>	[...]	<i>spdt</i>	<i>spdt</i>
III.84.b	<i>ink</i>	<i>ink</i>	<i>NN</i>	[...]	-	-
223	-	-	<i>tn</i>	[...]	-	-
224	<i>w<sup>c</sup></i>	<i>w<sup>c</sup></i>	<i>w<sup>c</sup></i>	[...]	-	-
225	<i>im</i>	<i>im</i>	<i>im</i>	[...]	-	-
226	<i>≠sn</i>	<i>≠sn<sup>i</sup></i>	<i>≠sn</i>	[...]	-	-

## 5.2 Normalisation

I normalise my collation before running it through the automated portions of my methodology in order to maximize its usefulness for *stemma* construction. Table 2 lists the normalizations applied to the collation. I normalize as follows:

### 5.2.1. Specific readings

A variant found in only one witness-called a specific reading-usually offers no genealogical information unless it clearly derived from, or produced, a more widely attested variant. In such cases, purely for the purposes of automatically finding potentially genealogically significant variation places, I normalize the specific reading to match that variant.

### 5.2.2. Omissions

Since one cannot tell from an omission what text it replaced (or if, indeed, the available readings represent later insertions), an omission found in only one witness never contains genealogically meaningful information. For this reason, my collations mark omissions with either - or --.

-- indicates an omission shared by at least two witnesses and which therefore is potentially genealogically significant (eg. *CT* III, 81b). - indicates an omission that cannot provide genealogically significant information, either because only one witness has it (e.g. *CT* III, 79a), or because every witness but one has it (e.g. T1Ls reading in *CT* III, 80f).

### 5.2.3. Lacunae

Similarly, a lacuna (which the collation marks as [...]) cannot provide genealogically meaningful information unless its length clearly fits only one variant reading or excludes others. In such cases, one can relatively safely associate a lacuna with a particular reading.<sup>12</sup> On the same basis, one can safely normalize a partially preserved word where only one attested variant could conceivably match its surviving portion.

<sup>12</sup> See for example the observation in *CT* III, 79 n.1: "The length of the lacuna requires *N* or *N tn*."

#### 5.2.4. Gendered language describing the spell's protagonist

Gendered language describing the spell's protagonist also needs normalizing when this simply reflects the gender of the inscribed object's owner, since such variation is highly unlikely to be genealogically meaningful. As a standard practice I normalize all protagonist pronouns to male, because, given the predominantly male ownership of mortuary literature, this entails less editing work than normalizing all pronouns to female.

#### 5.2.5. First and third person protagonists

On the other hand, it does not always immediately appear obvious whether one should collapse the distinction between a first and third person protagonist, or a protagonist referenced by name rather than by pronoun. Conversions between first and third person protagonists could have occurred on multiple branches of a spell's tradition, for example. In practice, this question normally resolves itself fairly quickly: witnesses that share protagonist pronouns or NNs (or, indeed, gender) but otherwise have little in common probably do not belong together.

Table 2. Normalizations applied to the collation

<i>row</i>	<i>Witness</i>	<i>reading</i>		<i>normalization</i>
21	B3Bo	<i>tn</i>	→	<i>pn</i>
21	B4C	<i>tn</i>	→	<i>pn</i>
23	B9C	<i>p[.]</i>	→	<i>pw</i>
24	B9C	<i>[ ?]</i>	→	<i>[...]</i>
25	B3Bo	<i>sšn[...]</i>	→	<i>sšnti</i>
25	T1L	<i>sšnt(i)</i>	→	<i>sšnti</i>
25	B4C	<i>sš[...]</i>	→	<i>sšnti</i>
26	B4C	<i>[...]</i>	→	<i>ir</i>
27	B4C	<i>[...]</i>	→	<i>gš</i>
28	B4C	<i>[...]</i>	→	<i>nr(w)</i>
31	B3Bo	<i>≠s</i>	→	<i>≠f</i>
31	B4C	<i>[NN]</i>	→	<i>NN</i>
32	B4C	<i>[tn?]</i>	→	<i>pn</i>
35	B4C	<i>[...]</i>	→	<i>ni</i>
37	B3Bo	<i>≠s</i>	→	<i>≠f</i>
39	B3Bo	<i>≠s</i>	→	<i>≠f</i>
46	B3Bo	<i>tn</i>	→	<i>pn</i>
50	B3Bo	<i>≠s</i>	→	<i>≠f</i>
50	B4C	<i>≠s</i>	→	<i>≠f</i>
54	B3Bo	<i>≠s</i>	→	<i>≠f</i>
55	B4C	<i>tn</i>	→	<i>pn</i>
61	B3Bo	<i>≠s</i>	→	<i>≠f</i>
64	B4C	<i>tn</i>	→	<i>pn</i>
67	B3Bo	<i>≠s</i>	→	<i>≠f</i>
67	B4C	<i>≠s</i>	→	<i>≠f</i>
69	B9C	<i>hnd{wi}</i>	→	<i>hnd</i>
69	B1L	<i>hnd{i}</i>	→	<i>hnd</i>
70	B3Bo	<i>≠s</i>	→	<i>≠f</i>
75	B3Bo	<i>≠s</i>	→	<i>≠f</i>
77	B4C	<i>s[...]</i>	→	<i>sm<sup>3</sup></i>
80	B4C	<i>[NN]</i>	→	<i>NN</i>
81	B4C	<i>[tn]</i>	→	<i>pn</i>
85	B4C	<i>[...]</i>	→	<i>'nh</i>
86	B3Bo	<i>≠t</i>	→	<i>≠k</i>
86	B4C	<i>[...]</i>	→	<i>≠k</i>

<i>row</i>	<i>Witness</i>	<i>reading</i>		<i>normalization</i>
87	B4C	[...]	→	<i>ir</i>
88	B4C	[...]	→	<i>ɸ</i>
89	B4C	[...]	→	<i>m</i>
90	B4C	[iʃs[t]	→	<i>iʃst</i>
92	B3Bo	ɛ̄	→	<i>ɛ̄k</i>
96	B15C	iʃs[t]	→	<i>iʃst</i>
97	B15C	[.]r(w)	→	<i>ħr(w)</i>
98	B15C	[...]	→	<i>ɛsn</i>
102	B4C	<i>tn</i>	→	<i>pn</i>
109	B3Bo	<i>tn</i>	→	<i>pn</i>
109	B4C	<i>tn</i>	→	<i>pn</i>
114	B9C	<i>b[ʰ]y</i>	→	<i>bʰy</i>
120	B4C	<i>iʳ[w]</i>	→	<i>iʳw</i>
122	B9C	<i>nb[t]</i>	→	<i>nbt</i>
122	B4C	[...]	→	<i>nbt</i>
123	B3Bo	ɛ̄s	→	<i>ɸ</i>
123	B4C	[NN]	→	<i>NN</i>
124	B4C	[tn]	→	<i>pn</i>
132	T1L	<i>rdw</i>	→	<i>r(w)dw</i>
132	B4C	[rdw?]	→	<i>r(w)dw</i>
134	B1L	ɛ̄i? (Z1)	→	<i>ɛ̄i</i>
134	B3Bo	ɛ̄i? (Z1)	→	<i>ɛ̄i</i>
135	B4C	<i>tn</i>	→	<i>pn</i>
137	T1L	<i>nw?</i>	→	<i>n</i>
138	T1L	<i>twnt</i>	→	<i>twnw</i>
143	B3Bo	<i>tn</i>	→	<i>pn</i>
143	B4C	<i>tn</i>	→	<i>pn</i>
144	B15C	[sn]	→	<i>sn</i>
145	B3Bo	ɛ̄s	→	<i>ɸ</i>
147	B3Bo	ɛ̄s	→	<i>ɸ</i>
147	B4C	ɛ̄s	→	<i>ɸ</i>
149	B15C	<i>g[.]</i>	→	<i>gb</i>
153	B3Bo	ɛ̄s	→	<i>ɸ</i>
154	B4C	<i>tn</i>	→	<i>pn</i>
158	B3Bo	<i>ħr[.]</i>	→	<i>ħrt</i>
158	B4C	<i>ħr[.]</i>	→	<i>ħrt</i>
159	B3Bo	[...]	→	<i>mw</i>
159	B4C	[...]	→	<i>mw</i>
161	B4C	[...]	→	<i>rdi(w)</i>
162	B4C	[...]	→	<i>n</i>
163	B3Bo	ɛ̄s	→	<i>ɸ</i>
163	B4C	[NN]	→	<i>NN</i>
164	B4C	[tn]	→	<i>pn</i>
166	B4C	[...]	→	<i>m</i>
168	B4C	[...]	→	<i>nk</i>
169	B1L	<i>ʳw[t] ib</i>	→	<i>ʳwt ib</i>
169	B4C	[ʳwt] <i>ib</i>	→	<i>ʳwt ib</i>
182	B3Bo	<i>tn</i>	→	<i>pn</i>
182	B4C	<i>tn</i>	→	<i>pn</i>
184	B3Bo	<i>nw[r]</i>	→	<i>nwr</i>
184	T1L	<i>nwi</i>	→	<i>nwi/nw</i>

<i>row</i>	<i>Witness</i>	<i>reading</i>		<i>normalization</i>
184	B4C	<i>nw</i>	→	<i>nw/nw</i>
185	B9C	<i>p(w)y</i>	→	<i>pw y</i>
190	B15C	<i>n[.]</i>	→	<i>nt</i>
192	B1L	<i>i.p<sup>3</sup>i</i>	→	<i>i.p<sup>3</sup></i>
192	B3Bo	<i>i.p<sup>3</sup>[.]</i>	→	<i>i.p<sup>3</sup></i>
194	B3Bo	<i>≠s</i>	→	<i>≠f</i>
198	B1L	<i>imnti</i>	→	<i>imnt</i>
202	B3Bo	<i>≠s</i>	→	<i>≠f</i>
206	B1L	<i>i<sup>3</sup>bti</i>	→	<i>i<sup>3</sup>bt</i>
209	B3Bo	<i>[d]<sup>3</sup></i>	→	<i>d<sup>3</sup></i>
211	B3Bo	<i>≠s</i>	→	<i>≠f</i>
212	B4C	<i>tn</i>	→	<i>pn</i>
217	B3Bo	<i>≠s</i>	→	<i>≠f</i>
221	B3Bo	<i>dhwt(i)</i>	→	<i>dhwti</i>
223	B3Bo	<i>tn</i>	→	<i>pn</i>
226	B1L	<i>≠sni</i>	→	<i>≠sn</i>

## 6. Determining the order of analysis

Like Peust (2012: 213), I find it best to place witnesses incrementally onto the chain. I prefer proceeding in chronological order for all witnesses under 60% lacunose (a percentage determined through experimentation), starting with the earliest 4 witnesses and then adding witnesses one by one. For my BD spells, where I generally have about 20 witnesses, I have found, like West (1973: 15), that this maximizes my chances of spotting contamination. Once all witnesses under 60% lacunose are fitted onto the chain, I locate the positions of the more lacunose witnesses, again in order of increasing lacunosity.

The dates that Willems (1988: 20-21, 33, 70, 74-75, 160) offers for CT 184's witnesses, combined with B15C's lacunosity, dictate starting with T1L, B3Bo, B4C, and B9C (late 11th Dynasty to Amenemhat II); then adding B1L (Senusret II-III); and finally fitting B15C (Amenemhat II or slightly earlier) onto the chain.

## 7. Constructing the chain

### 7.1. Locating the earliest 4 witnesses on the 'starter topology'

The 'starter topology' for this methodology always takes the same shape (Fig. 1), since when one compares the type-2 variation places from 4 witnesses without attempting polarization, one can infer only that one pair is textually more similar to each other than to the other pair, and *vice versa*. The first task, therefore, is to separate the first four witnesses into two pairs, based on the available type-2 variation places.

To do this, I have the computer read through the first 4 witnesses' texts and return every variation place where type-2 variation occurs.<sup>13</sup> Table 3 shows all the type-2 variation places thereby exposed. One does not need to assess the relative significance of individual variants at all to see that coffins T1L and B4C clearly pair with each other, and that B3Bo and B9C clearly pair with each other: the aggregate variant distribution overwhelmingly favours this division. Accordingly, the witnesses receive their places on the starter topology, and the exposed variant distribution is registered on it as 'edge notes' (Fig. 1).

<sup>13</sup> My thesis will include all code written to achieve this. My code as it currently stands is available to view at <https://github.com/j-rms/egyptology-with-emacs/blob/main/textual-criticism/bakenseshat.py>: the function for returning a table of type-2 variation places for the first four witnesses is named `t2_weighting_by_quartets_stripped_unweighted`.

Nevertheless, the pairing of T1L with B4C, and B3Bo and B9C, is not quite perfect:

- B4C and B3Bo both read *nī smʹ* (76-77) and *ʹf* (147) where T1L and B9C both have omissions;
- T1L and B3Bo both read *i.pʹ* where B4C and B9C both read *pʹ*.

*i.pʹ* vs. *pʹ* is a good example of likely-polygenetic variation, since two copyists could easily have decided independently to remove the Old Egyptian *i* augment from *pʹ* in order to modernize the text.<sup>14</sup> The presence of *nī smʹ* and *ʹf* in B4C and B3Bo, and their absence in T1L and B9C, might have resulted from contamination, or it might simply mean that the archetype lies somewhere along edges A or B.

But one need not yet decide why this minority of textual variants contradicts the aggregate distribution. Instead, one simply records them as edge notes on the topology using ‘?’ to indicate that the explanation for these variants has yet to be found.

Table 3. Type-2 variants in T1L, B4C, B3Bo, and B9C

	T1L	B4C	B3Bo	B9C
32	<i>Pn</i>	<i>pn</i>	-	-
68	-	-	<i>nī</i>	<i>nī</i>
69	-	-	<i>hnd</i>	<i>hnd</i>
71	-	-	<i>hr</i>	<i>hr</i>
72	-	-	<i>ʹf</i>	<i>ʹf</i>
73	-	-	<i>m</i>	<i>M</i>
76	-	<i>nī</i>	<i>nī</i>	-
77	-	<i>smʹ</i>	<i>smʹ</i>	-
92	-	-	<i>ʹk</i>	<i>ʹk</i>
93	-	-	<i>ir</i>	<i>ir</i>
95	-	-	<i>m</i>	<i>M</i>
96	-	-	<i>išst</i>	<i>išst</i>
113	-	-	<i>A40</i>	<i>A40</i>
114	<i>bʹht</i>	<i>bʹht</i>	<i>bʹhy</i>	<i>bʹhy</i>
124	<i>pn</i>	<i>pn</i>	-	-
132	<i>r(w)dw</i>	<i>r(w)dw</i>	<i>snd</i>	<i>Snd</i>
136	<i>im</i>	<i>im</i>	-	-
137	<i>n</i>	<i>N</i>	-	-
144	<i>n</i>	<i>N</i>	<i>sn</i>	<i>Sn</i>
147	-	<i>ʹf</i>	<i>ʹf</i>	-
154	<i>pn</i>	<i>Pn</i>	-	-
155	<i>mw</i>	<i>Mw</i>	-	-
164	<i>pn</i>	<i>Pn</i>	-	-
174	<i>htp</i>	<i>htp</i>	-	-
175	<i>ib</i>	<i>ib</i>	-	-
176	<i>m</i>	<i>M</i>	-	-
177	<i>snw</i>	<i>Snw</i>	-	-
178	<i>wnm</i>	<i>wnm</i>	-	-
179	<i>t</i>	<i>t</i>	-	-
183	-	-	<i>is</i>	<i>is</i>
185	<i>pw</i>	<i>Pw</i>	<i>pwy</i>	<i>pwy</i>
186	ʹ	ʹ	-	-
188	-	-	<i>wʹrt</i>	<i>wʹrt</i>
192	<i>i.pʹ</i>	<i>pʹ</i>	<i>i.pʹ</i>	<i>pʹ</i>
212	<i>pn</i>	<i>Pn</i>	-	-
219	-	-	<i>tʹ</i>	<i>tʹ</i>

<sup>14</sup> Vernus (1996: 161–63, 167) observes the ancient Egyptians’ general willingness to modernise textual works, and specifically for the Coffin Texts finds “une tendance à la modernisation, qui tend, mais de manière partielle, à remplacer les termes ou les tours trop archaïques”.

	T1L	B4C	B3Bo	B9C
221	<i>spdt</i>	<i>spdt</i>	<i>ḏḥwti</i>	<i>ḏḥwti</i>
224	-	-	<i>wʿ</i>	<i>wʿ</i>
225	-	-	<i>im</i>	<i>im</i>
226	-	-	<i>≠sn</i>	<i>≠sn</i>

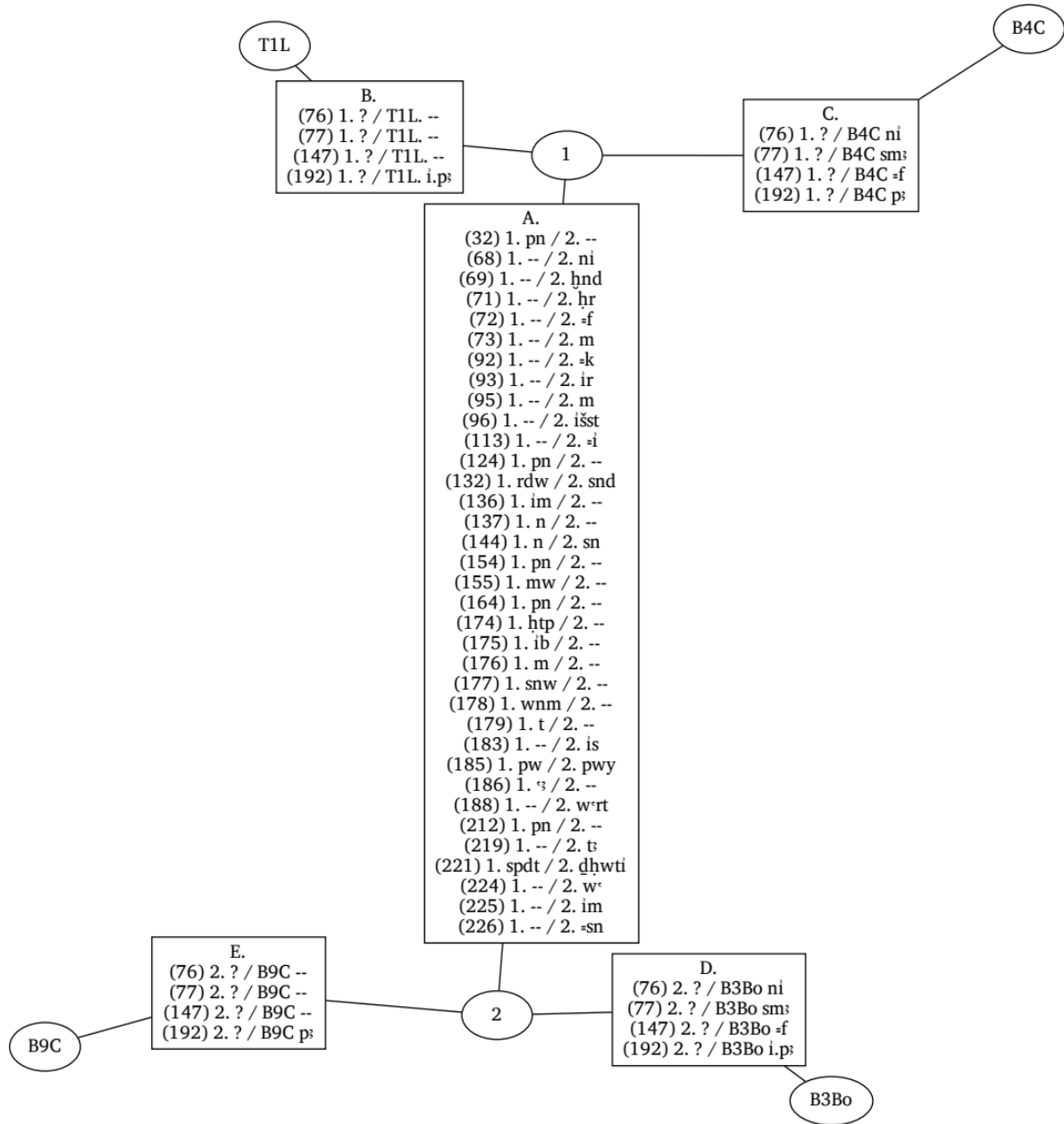


Figure 1. Starter topology

### 7.2. Incrementally adding witnesses

I impose the same restrictions as Peust (2012: 212) does regarding the positioning of witnesses on the chain. These restrictions produce dichotomic chains: i.e. chains that contain only bifurcations. Such an artificial structure does not, in fact, impose unjustified assumptions on the material, because it can introduce false complexity only at local levels within the chain, in the form of edges produced without a credible number of variant readings to support them. Such edges can simply be contracted once all witnesses have been added: this then produces a chain that properly represents the distribution of textual variation across the corpus. (Peust 2012: n. 13)

## 7.3. Adding B1L

Next, B1L is added to the list of witnesses for the computer to analyse, and it again searches their texts to find every variation place where local type-2 variation occurs (i.e., every row where at least two witnesses read X, and at least two witnesses read Y).<sup>15</sup> This exposes many new relevant variation places (Table 4), all of which pair B1L with B9C. The previously exposed variation places also overwhelmingly support pairing these two witnesses. Integrating B1L into the chain therefore requires inserting a node along edge E from which B1L can bud, and updating the edge notes accordingly (Fig. 2: ignore B15C's position for now).

Table 4. New type 2 variants exposed by adding B1L

	<b>T1L</b>	<b>B4C</b>	<b>B3Bo</b>	<b>B9C</b>	<b>B1L</b>
20	<i>NN</i>	<i>NN</i>	<i>NN</i>	<i>ink</i>	<i>ink</i>
21	<i>pn</i>	<i>Pn</i>	<i>pn</i>	-	-
24	?	?	-	[...]	-
31	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
37	<i>≠f</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
39	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
48	<i>ni</i>	<i>ni</i>	<i>ni</i>	-	-
49	<i>wnm</i>	<i>wnm</i>	<i>wnm</i>	-	-
50	<i>≠f</i>	<i>≠f</i>	<i>≠f</i>	-	-
51	<i>htp kʒ</i>	<i>htp kʒ</i>	<i>htp kʒw</i>	<i>htp kʒ</i>	<i>htp kʒw</i>
54	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
67	-	<i>≠f</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
70	-	-	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
75	-	-	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
91	-	-	<i>s'm</i>	<i>wnm</i>	<i>wnm</i>
94	-	-	<i>≠f</i>	-	<i>≠f</i>
101	<i>NN</i>	<i>NN</i>	-	<i>≠i</i>	<i>≠i</i>
102	<i>pn</i>	<i>pn</i>	-	-	-
103	-	-	-	<i>'nh</i>	<i>'nh</i>
104	-	-	-	<i>≠i</i>	<i>≠i</i>
105	<i>iw</i>	<i>iw</i>	<i>iw</i>	<i>m</i>	<i>m</i>
107	<i>n</i>	<i>N</i>	<i>n</i>	-	-
108	<i>NN</i>	<i>NN</i>	<i>NN</i>	-	-
109	<i>pn</i>	<i>pn</i>	<i>pn</i>	-	-
123	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
126	-	[...]	-	‘	‘
127	-	[...]	-	<i>≠i</i>	<i>≠i</i>
142	<i>NN</i>	<i>NN</i>	<i>NN</i>	<i>≠i</i>	<i>≠i</i>
143	<i>pn</i>	<i>Pn</i>	<i>pn</i>	-	-
145	-	-	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
153	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
163	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
180	<i>(n) ntt</i>	<i>hr ntt</i>	<i>(n) ntt</i>	<i>n ntt</i>	<i>n ntt</i>
181	<i>NN</i>	<i>NN</i>	<i>NN</i>	<i>ink</i>	<i>ink</i>
182	<i>pn</i>	<i>Pn</i>	<i>pn</i>	-	-
194	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
205	<i>gs</i>	[...]	<i>gs</i>	<i>{m}(gs)</i>	<i>{m}(gs)</i>

<sup>15</sup> In my code, the function `added_type_2_locs` provides the report shown in table 4 for a given subset of witnesses: here, T1L, B4C, B3Bo, B9C, and B1L. The function `next_wit_report` lists every local type-2 variation place for a given subset, not just the newly exposed variation places.

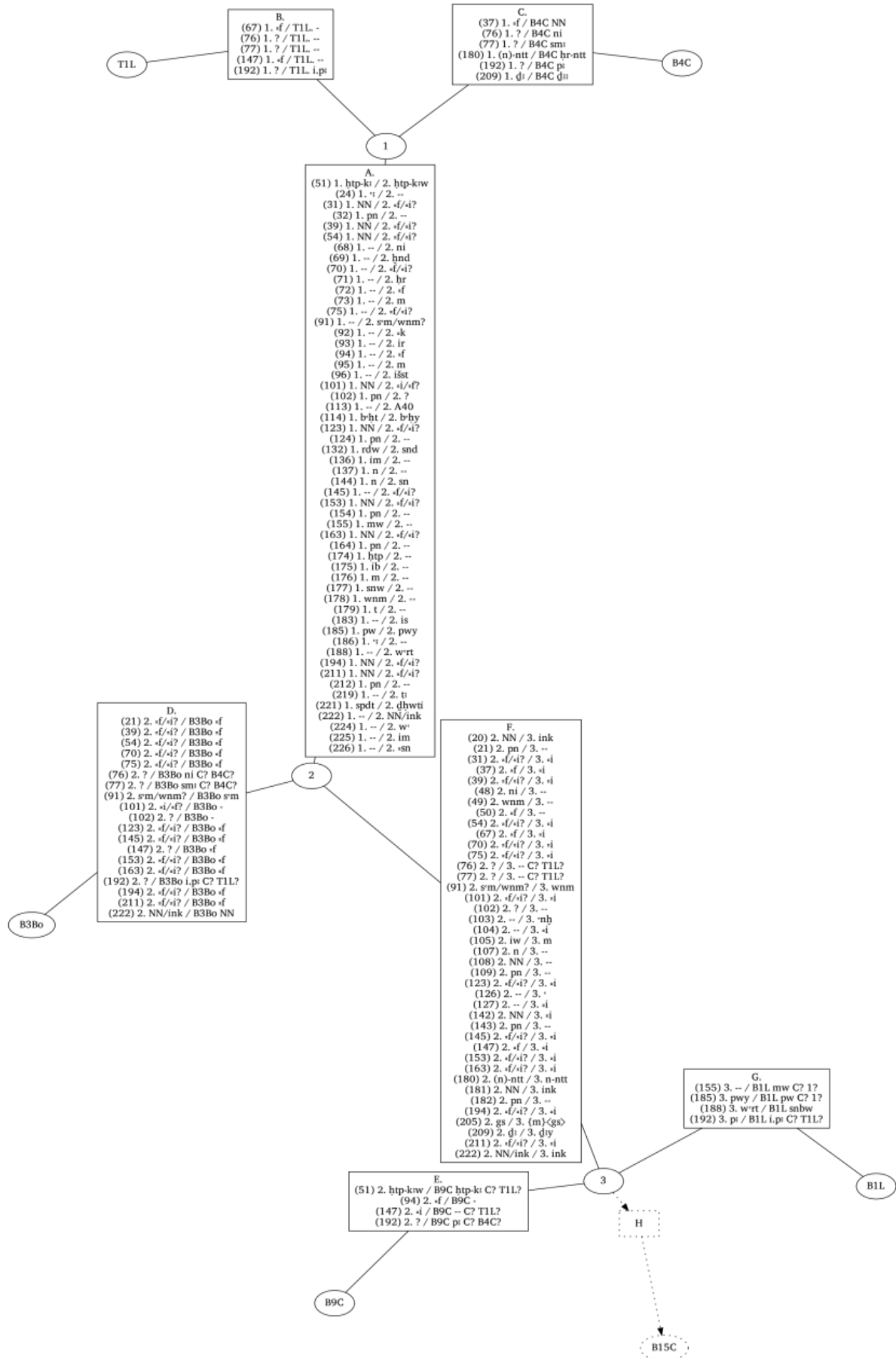


Figure 2. Adding B1L and B15C

	T1L	B4C	B3Bo	B9C	B1L
209	<i>d<sup>3</sup></i>	<i>d<sup>33</sup></i>	<i>d<sup>3</sup></i>	<i>d<sup>3</sup>y</i>	<i>d<sup>3</sup>y</i>
211	<i>NN</i>	<i>NN</i>	<i>≠f</i>	<i>≠i</i>	<i>≠i</i>
222			<i>NN</i>	<i>ink</i>	<i>ink</i>

## 7.4. Adding B15C

Next, B15C is added to the list of witnesses under consideration. The computer again builds a list of every variation place where local type-2 variation occurs. Unsurprisingly, adding this highly lacunose witness exposes no new type-2 variation places. The previously exposed ones offer enough data to connect it with node 3, but not to pair it more precisely with B1L or B9C. Fig. 2 shows the resulting chain. B15C's uncertain and imprecise placement is indicated by dotted lines.

## 8. Polarising the chain and locating the archetype

All the witnesses have now been located on the chain, with all potentially genealogically indicative textual variation registered along its edges. To convert the chain into a *stemma*, the archetype's position must be located by first establishing the polarization of the registered textual variation, and then finding the point on the chain from which that polarization emanates. If one edge of the chain shows a clear bidirectional flow of textual variation, for example, then the archetype must lie along that edge.

### 8.1 Edge B: 1 - T1L

#### 8.1.1. Archetypal first person pronouns in T1L's text

Significantly, T1L's text has a third person protagonist except for one phrase where the protagonist suddenly speaks in the first person: *iw rdw=i im nw twn{t}* "my plants there are of *twn*-plant" (CT III, 82a). CT spells in which the deceased proactively pursues their objectives, particularly as an "active solar deity", "are very often formulated in the first person singular" (Willems 2019: 241-42). Since CT 184's protagonist matches this description, it seems likely that this stray first person pronoun has indeed slipped through from an original first person text.<sup>16</sup> Assuming transmission from third person exemplars, one would not expect stray first person pronouns to survive long, and one might thus assume that T1L must lie close to the archetype; indeed, the witness textually closest to T1L—namely, B4C—reads *NN tn* instead.

But is this assumption safe? Might it assume less to take B4C and T1L's texts as two independent first-to-third person conversions, with node 1 retaining a first person text?

Excrement spell CT 195 immediately follows CT 184 in both T1L and B4C, though within different wider contexts (Lesko 1979: 104, 27). The variant distribution in CT 195 strongly suggests that in that spell, T1L and B4C indeed contain independent third-to-first person conversions:

- In CT 195 (CT III, 113i), in the verse paralleling CT 184's "on what will you live?" (81a), B4C has a second person suffix pronoun *≠k*, whereas T1L changes this to *NN pn*: *'nh=k ir≠f m išt* → *'nh ir≠f NN pn m išt*.
- In 113d, T1L uses *NN pn* whereas B4C uses *≠s*.
- In 113h, they place *NN pn/tn* at different points in the phrase.
- At 113l and 113m, T1L's text again does not convert an implicit *≠i* into the third person, whereas B4C's does so.
- At 113p, B4C uses an *≠s* suffix pronoun where T1L reads *NN pn*.
- In 114j, T1L again converts the second person suffix pronoun into the third person (*≠k* → *≠f*) while B4C retains the second person (*≠k* → *≠t*).
- Immediately after this, in 114k, the situation is reversed: B4C uses *NN [tn]* where T1L reads *≠k*.

<sup>16</sup> The unsystematic conversion of first person texts into the third person is a recognized phenomenon within the CT corpus (Vernus 1996: 166).

- In 114l, T1L again retains *≠k* while B4C emends to *≠s*.

The fact that in CT 195 these two witnesses' texts handle their third person conversions quite differently supports the hypothesis of two independent conversions. If CTs 184 and 195 were transmitted as a block into T1L and B4C, then their largely similar treatment of the first-to-third person conversion in CT 184 may therefore just be a coincidence.

Indeed, in CT 184, in addition to T1L's leftover first person pronouns mentioned above, T1L and B4C do handle their first-to-third person conversions slightly differently:

- In 79i, T1L uses *≠f* while B4C uses *NN*.
- In 80a and 84a, T1L reads *NN pn* while B4C just reads *NN*.
- In 81f, T1L uses a direct genitive (*b'ht NN pn*) whereas B4C uses an indirect genitive (*b'ht nt NN tn*).
- In 82b, T1L does not convert an implicit *≠i* (*\*ni ks.n NN pn n it(≠i) gb*) to the third person, whereas B4C does.<sup>17</sup>





These differences, across both spells, strongly suggest that pronoun usage should not be taken as genealogically meaningful for T1L and B4C. This finding increases the chances that the same applies to B3Bo's third person text, which contains very different pronoun choices from T1L's or B4C's.

No strong basis exists, therefore, for taking any of CT 184's hyparchetypes (nodes 1, 2, or 3) as having a third person text. Note, however, that the remaining textual variation, after removing pronouns from consideration, still overwhelmingly supports the established topology (Fig. 3). (This helpfully illustrates the value of using every available type-2 variation place, rather than trying to anticipate what sorts of variation ought to be meaningful in a given context.)

### 8.1.2. Two omissions with unclear directionality



- T1L totally omits 80f-h: a list of 'ways not to interact with excrement'. This could represent a deletion of text, or an addition if the archetype lies along edge B. Such lists occur as a matter of course in excrement spells. Therefore, if edge B does contain the archetype, then an editor somewhere along that edge could easily have extended the spell by borrowing such a list from elsewhere.
- T1L omits *ntrw* in *hr(w)≠sn ntrw r≠i* "...they, the gods, say to me" (CT III, 81c). While this looks like an accidental omission, we could equally understand *ntrw* as a clarificatory emendation along edge B.





### 8.1.3. Four difficult readings

- T1L reads *sh̄t p* "Marsh of Buto" instead of *sh̄t h̄tp* "Marsh of Hetep" (CT III, 81e). A reading of *sh̄t p* is certainly not senseless: Buto was an exceedingly marshy area. CT 157 declares Buto Horus's realm, and its paratext associates it with provisioning (Wilson 1955: 236; CT II, 326b). In B1Bo's text of excrement spell CT 202, the Lords of Buto are the interlocutors who quiz the deceased about how they intend to eat (CT III, 128n), while in CT 905 they quench his thirst (CT VII, 111a-b). Moreover, themes of provisioning and/or solar ascent, which are typical for excrement spells, are often associated with Buto (CT I, 229d, 277a; CT II, 170d, 196c; CT III, 205d,<sup>18</sup> 372e, 380b, 399a/d; CT IV, 383g; CT V, 110c, 142b, 196f, 198d, 208j; and CT VI, 95i, 102c, 287k; CT VII, 32h, 111a, 125h/j, 208j).
- At 83c-d, T1L reads *i.p<sup>3</sup> NN pn h̄nn NN pn hr gs imnt i<sup>3</sup>bt n pt* "this NN took off, and this NN shall alight beside the West and East of heaven". All other witnesses have the simpler structure of the deceased taking flight at one end of the sky (usually West), and alighting at the other (usually East). T1L's reading might therefore represent the archetypal reading. However, it could also indicate an attempted recovery from accidentally omitting *imnt* earlier in the phrase. A very plausible explanation, however (as my first reviewer pointed out) is it represents the result of copying from an exemplar that used a split column arrangement to parallel these two phrases.
-  (X1) appears to have become  (O49) in  "rush" (CT III, 81g). B3Bo's reading  "Nut's(?) rush" suggests that its copyist also saw a character that looked like an O49 sign. B4C is lacunose, and so cannot be consulted for comparison.


<sup>17</sup> For the omission of the first person suffix pronoun in writing, see Allen (2014: §5.3) and Gardiner (1957: §34).

<sup>18</sup> Which occurs immediately after an excrement spell.

- In 79f-g, in the phrase *ir gš* “who acts as a migratory bird”, the non-lacunose Bersha witnesses determine *gš* with  (G38), making it unambiguous that they are talking about a bird (*Wb.* 5, 208.2). T1L, however, uses an A2 determinative, thus: . While Faulkner (2004: I, 154) considers this a textual error, and Carrier (2004: I, 451) does not register it as a significant variant, one can squeeze some sense out of it:

*TLA* (s.v. *gš*) defines *gš* as a body of water when it appears in BD 64: it is spelled as   in both of p.Nu’s versions of this spell (Lapp 1997: Plates 36.16, 61.33). Quirke (2013: 155, 158) interprets this as “reeds” (i.e. *g(?)š*: *Wb.* 5, 156.8-12). *g(?)š*’s spelling in T1L, however, seems more reminiscent of the word  . *Wb.* 5, 156.5-6 defines this as meaning pouring out an ointment, or pouring corn into a pot or into the beak of a goose. Though *Wb.* 5, 156.5-6 does not indicate any Middle Egyptian attestations, taking *g(?)š* as meaning “outpouring” (i.e. the inundation) makes contextual sense for both CT 184 and BD 64. T1L’s A2 determinative might thus suggest vomiting out the inundation.

#### 8.1.4. A straightforward corruption?


- *tnw* “*tnw*-plant” appears as  *tnw{t}* (CT III, 82a), with plural strokes (Z2) apparently becoming an X1 bread loaf. In the 12th Dynasty the middle stroke of hieratic Z2 becomes quite small and sometimes disappears, under which circumstances it looks quite like hieratic X1 (compare the two signs on AKU-PAL: <https://aku-pal.uni-mainz.de/graphemes#id=1460&mdc=X1|Z2>).

#### 8.2. Edge C: 1 → B4C

B4C is strongly suspected of taking at least some of its spells from Theban manuscripts (Sokolova 2017: 86). It is unsurprising, therefore, that its copy of CT 184 looks much more similar to T1L’s text than to the texts of the other Bersha witnesses.

Two of B4C’s readings suggest clarificatory emendation: (*n*) *ntt* “because” → *hr ntt* “because” (CT III, 83b) and modernizing Old Egyptian *i.pʹ NN* to Middle Egyptian *pʹ.n NN* (CT III, 83c). The absence of *pn pw hsw* (CT III, 80a) looks like an omission, and its reading of *skw(?)* rather than *rdw* (CT III, 82a) looked like a corruption to Faulkner (2004: I.155, n.8) (and is not registered as a significant variant by Carrier (2004: I, 451)). Edge C’s readings thus offer clearer support for a polarization of 1 → B4C than vice versa.

#### 8.3. Edge D (2 - B3Bo)

As remarked above (§2, 83e-84a), an archaic  *mr* “like” instead of *mi* (CT III, 83e-84a) appears twice in B3Bo. That no other witnesses contain this variant, and that the variant is archaic, increases the odds of B3Bo coming near the archetype.

B3Bo also contains a phrase not found in any other witnesses: *ni wnm NN tn hs* (CT III, 80b) “this NN shall not eat excrement”. This phrase splits up the thought couplet<sup>19</sup> found in all other witnesses: *bwt-s pw hs ni wnm-s htp kʹ* (CT III, 80a,c-d) “this NN’s abomination is excrement; she shall not eat ‘kʹ-satisfaction’”. In B3Bo and all other witnesses, an equivalent couplet reappears in each excrement spell following CT 184,<sup>20</sup> but no witness, including B3Bo, includes an equivalent of 80b to convert the couplet into a tercet.

CT III, 80 n.1 observes, of the line in which 80b appears in B3Bo: “[line 381] - the first line on the bottom - precedes l.382, but it must be read between l.382 and l.383. It was perhaps added later.” The need to insert an omitted passage could have provoked B3Bo’s copyist to extend their exemplar’s text to create verse 80b. Line 381’s noteworthy position at the start of the coffin’s bottom might also have motivated

<sup>19</sup> A ‘thought couplet’, the “basic unit of composition” for ancient Egyptian literature, consists of “two lines of verse that form a coherent thought, in which the second line mirrors, complements, contrasts with, or expands upon the first”. The second line may be an adjunct rather than an independent statement. (Allen 2015: 2).

<sup>20</sup> Namely CT 185 (CT III, 84e-g); CT 186 (CT III, 85 c-e); CT 187 (CT III, 87f-h); CT 188 (CT III, 92c-e).

the insertion of the owner's name there. In any case, the muddling of this part of B3Bo's copy of CT 184 suggests that verse 80b's existence likelier derives from that muddle rather than from the archetype.

Writing a whole line out of order suggests that somebody whose work contributed to B3Bo's text did not always transcribe especially reliably. This person was not necessarily the immediate copyist, the person who wrote the words onto B3Bo's surface: there is also the possibility that B3Bo's exemplar was already muddled at this point. Either way, however, this increases the chances that B3Bo's other omissions (of *rzi* at 81c and *mw* at 82c) reflect lapses of attention rather than archetypal readings.

No basis exists, therefore, to take any of these readings from B3Bo as archetypal except for *mr*, and just possibly also *nnt nwt(?)* "Nut's(?) rush" (81g, discussed below: §8.5.3).

#### 8.4. Edge F: 2 → 3

As well as their shared first person protagonist (probably of no genealogical relevance: §8.1.1), B1L, B15C, and B9C share various readings that differentiate these witnesses from B3Bo, and that suggest a polarization of 2 → 3:

- Omission: *hṭp kʾ* "excrement" instead of *ni wnmzi hṭp kʾ* "I shall not eat excrement" (CT III, 80c-d).
- Simplification: *wnm* "eat" instead of *s'm* "wash down" (CT III, 81b) (taking *s'm* as the *lectio difficilior*).
- Clarification: *nhzi m t* instead of *iw nzi t* (CT III, 81d).
- Clarification: *nbtzi m z'i n nnt* instead of *nbtzi m nnt* (CT III, 81g) (though this could be an omission running in the opposite direction, in which case it would argue for a polarization of 3 → 2).
- Clarification: *n ntt* instead of (*n*) *ntt* (CT III, 83b).
- Modernization: *mr* → *mi* (CT III, 83e-84a) (assuming that node 2 indeed had the archetypal archaic *mr* that survives in B3Bo).

A polarisation of 2 → 3 seems likelier than not. This in turn would mean that edges E, G, and H all flow downstream from node 3. Such a polarization is what one might expect, given that B9C, B1L, and B15C are the youngest of the witnesses—though nothing necessarily stops a younger witness preserving an older version of the text.

Assuming, as seems likely, that these readings at node 3 are emendations rather than archetypal, then this implies an editor or editors taking an adaptive rather than an authoritative approach to their material (Macé and Baret 2006: 93), i.e. modifying the text to suit its current readership's requirements rather than trying to exactly preserve or reconstruct the original text.

#### 8.5. Edge A: 1 ← A → 2

A large number of omissions occur along edge A that differentiate node 1 from node 2:

##### 8.5.1. Changes with unclear directionality


- Node 2 omits *ʿ* on both occasions where node 1 has *nwi pw ʿ* "this great heron" (CT III, 79f, 83b). This almost certainly indicates a deliberate edit; but was it a deletion (A → 2) or an addition (A → 1)? Either seems possible.
- Node 2 reads *s'm/wnmzk irzfm išst* where node 1 has an omission (CT III, 81b). This could represent either an addition or a deletion.
- Node 2 omits node 1's reading of *hṭp ib m snw wnm t* (CT III, 83a). Again, this could represent either an addition or a deletion.
- Node 2 reads *ni smʾ* where node 1 reads *ni hmw/hmy* (CT III, 80e). The directionality of this change is again unclear.
- The presence of *NN pn w' imzsn* "This NN is one of them" (CT III, 84b) at node 2, and its absence at node 1, could represent an accidental deletion (given the frequency with which CT (and indeed BD) witnesses end prematurely), or it could represent a clarification or literary improvement.
- Node 2 reads *wrt* where node 1 has an omission (CT III, 83b). This again could represent either a deletion or an addition.
- T1L has a shorter version of 82b than B4C and B3Bo: it reads *ni ks.n NN pn n it gb* "this NN does

not bow to father Geb”. B4C reads *ni ks.n NN tn n it-s n gb* “This NN does not bow to her father, to Geb”. By contrast, B3Bo reads *ni ks.n NN tn sn-s it-s gb* “This NN does not bow so that she can kiss her father, Geb”. Every witness except T1L and B4C includes *sn-s/sn-i* in this phrase.

T1L and B4C could have the more archetypal reading here if one takes *sn-s/sn-i* as a clarificatory addition to make clear that bowing to Geb would involve one’s mouth touching the earth in the same way that it would involve touching the water in the following line (see §2, 82b-c). Alternatively, its absence in T1L and B4C could simply represent an accidental deletion in node 1’s text.

## 8.5.2. Changes supporting $A \rightarrow 1$




### 8.5.2.1. *mr* “like” in B3Bo

As remarked above (§2, 83e-84a), an archaic  *mr* “like” instead of *mi* (CT III, 83e-84a) appears twice in B3Bo. This may represent node 2’s reading before its modernization to *mi* along edges F and A, or this modernization could have occurred along edge D, if the archetype actually lies along edge D. Either interpretation implies a polarization of  $A \rightarrow 1$ .


### 8.5.2.2. *Sopdet* vs. *Thoth*

*spdt* “Sopdet” appears instead of *Thoth* at 84a in T1L and B4C.

A possible parallel for the substitution of *Thoth* is CT 1103 (CT VII, 429b). *dhwti* “Thoth” performs judgement in this verse in the Bersha witnesses published in CT VII, but copies of this text from Beni Hasan and Kom el-Hisn<sup>21</sup> read *ntr* “the god” (Silverman 1989: 42-43) instead. Silverman notes, however, that the directionality of this substitution is not known. Bersha was the “major necropolis of the Hare Nome”, of which *Thoth* was the patron deity (Hoffmeier 1996: 49): this might suggest that *Thoth* replaced *Sopdet* in CT 184 when the spell reached Bersha. However, deliberate substitutions to honour local deities do not seem to have been a common practice, and indeed *Thoth* rarely plays a larger-than-normal role in surviving copies of Coffin Texts from Bersha (Billson 2010: 25-26).<sup>22</sup>

A much more convincing parallel, with clear directionality, is the substitution of *Thoth* with *Sopdet* in CT II, 324b. Here, as Faulkner (2004: I.135, n.9) points out, *Thoth* was definitely the original reading, since the sentence refers to him in his capacity as Moon god.<sup>23</sup> In this case, the confusion must have occurred due to the similar appearance of *Sopdet* and *Thoth*’s names when the latter’s is written with an X2 loaf, as is occasionally found on Middle Kingdom coffins (Gardiner 1957: 531):  *spdt* “Sopdet” (B9C) vs.  *dhwti* “Thoth” (B2Bo, B4Bo, B2P). This very likely also explains the *Thoth/Sopdet* variation in CT 184, even though none of its surviving witnesses now preserve a  spelling for *Thoth*.

In the CT corpus, *Sopdet* is strongly associated with ascent into the sky, and on one occasion the deceased unites sexually with her (CT V, 385b). However, in CT 184, T1L and B4C have the deceased *sm’ mi spdt* “unite like *Sopdet*” whereas the other witnesses read *sm’ t’ mi/mr dhwti* “make landfall like *Thoth*”. On no other occasion in the CT corpus does the deceased specifically emulate *Sopdet*.

In the Pyramid Text excrement spell PT 210 (§130d), Ra and *Thoth* are juxtaposed in their travels across the sky by all 4 of the published witnesses: *dbn (wnis)|pt mr r’ hnz (wnis)|pt mr dhwtj* (Allen 2017: 322) “Unis goes round heaven like Ra; Unis traverses heaven like *Thoth*”. In both Unis and Pepi II’s copies of this phrase, the *r* in *mr* is made explicit by a phonetic complement:  : a similar orthography could explain B3Bo’s *mr* variant (§8.5.2.1). Moreover, this line of PT 210 occurs immediately after the deceased has rejected excrement and demanded to share Ra and *Thoth*’s food, drink, and transport. The similarities to CT 184’s ending are striking.

These factors strongly suggest a polarization of *dhwti*  $\rightarrow$  *spdt*: *Thoth* is the archetypal reading, *Sopdet* a secondary corruption, and B3Bo reflects an earlier orthography of *mr* inherited from the archetype. By extension, *sm’* “unite” is probably a corruption of *sm’ t’* “make landfall”.

T1L and B4C’s reading of *sm’ NN mi spdt* is, therefore, a latent error that was present in node 1’s text

<sup>21</sup> Sherbiny (2017: 16) observes that while these texts contain parallel material from one of the *Book of the Two Ways*’ sections, they should not be taken as an instance of the work called the *Book of Two Ways*.

<sup>22</sup> Nor, as Gracia Zamacona (2021: 203) points out, is it safe to assume the reverse: that *Thoth*-heavy Coffin Texts likely originated in Bersha.

<sup>23</sup> Carrier (2004: I, 324b) does not register *Sopdet* as a significant variant.









and not in node 2's. The archetype cannot therefore lie on edges B or C, and edge A must flow into node 1.



### 8.5.3. One, maybe two changes supporting $1 \leftarrow A \rightarrow 2$

Node 1 reads *iw rdwꜣi im nw twn* “my plants there are of *twn*-plant” where node 2 reads *snd twn* “and *snd*-bag(?) of *twn*-plant” (CT III, 82a). This looks like a partial deletion and corruption:  $A \rightarrow 2$ .

Faulkner (2004: II.199, n.1) notes that *twn* appears in PT §513 and §557.

PT 319, §513d reads *srd (wnis)| ḥsbd ꜥg (wnis)| twn šmꜣw* “Unis grows lapis-lazuli; Unis plants Upper-Egyptian *twn*-plant.” A phrase similar to this could explain the variation between node 1 and 2's text of 82a:<sup>24</sup>

-  *srd* in Unis's text became  *iw rd...* in T1L's text: the folded cloth (S29) was mistaken for a reed leaf, and the quail chick was introduced when someone emended *i(w) rd* → *iw rd*. By contrast in B9C/B1L/B3Bo, the *r* of *srd* became an *n*, resulting in  *snd* “*snd*-bag(?)”.
- *ḥsbd* and *ꜥg* have been deleted in both versions of the text.
-  in Unis's  *twn šmꜣw* “Upper-Egyptian *twn*” became  in B3Bo/B9C,  in B4C, and  in T1L.

Given T1L's odd orthography for  *nn{O49}<t>* “rush” (CT III, 81g) and B3Bo's reading of  *nnt nwt(?)* “Nut's(?) rush”, it is conceivable that CT 184's archetype gave longer names for both plants in 81g-82a: something like *nbtꜣi m nnt nwt srdꜣi twn šmꜣw* “...with my basket made of Nut's rush, and I shall grow Upper-Egyptian *twn*-plant”.

In any case, 82a's changes along edge A seem bidirectional, since the process by which *srd* could become *iw rd* and *snd* is quite straightforward, whereas *iw rd* cannot easily become *snd*, or *vice versa*. This phenomenon, where neither of two variants is archetypal, but both variants derive from the archetypal variant, is called ‘diffraction’ (Trovato 2014: 120-22).

Phrases 83b-c might contain another example of diffraction. Node 2 seems to have a *nwr* “heron” taking off from the *wꜣrt ꜥḥt* “Akhet's desert plateau” (following Carrier's (2004: I, 453) translation of *ꜥḥt*), while the witnesses on node 1 have *nw*- (B4C) and *nwi*- (T1L) birds taking off simply from *ꜥḥt* “the Akhet”. As discussed above (§2, n.79f), if Dahms (2020: 110, n.n) is correct, then the *nw*-bird is a desert bird of some species, whereas the *nwr* “heron” is certainly not. One might therefore expect an archetypal reading where a *nw*-bird took off from a *wꜣrt*, with the desert plateau getting lost by node 1, and the *nw*-bird getting wrongly emended to *nwr* by node 2. Of course, if one takes *wꜣrt* as a riverbank rather than a desert plateau (both are possible meanings: van der Molen 2000: 89), then the suspected diffraction vanishes: a heron takes off from a riverbank in the Akhet, and a desert bird takes off simply from the Akhet.

### 8.5.4. Polarising edge A: $1 \leftarrow A \rightarrow 2$

Reasonable support exists for taking edge A, and *only* edge A, as bidirectional. This means that the archetype likeliest lies somewhere along it. The resulting polarized chain, i.e. the *stemma*, is shown in Fig. 3.

## 9. Exploring scribal practice by reconstructing hyparchetypes

The *stemma* shows a tradition with two widely divergent branches, with an archetype lying somewhere along edge A. However, the lack of clear polarization for most of the textual changes along that edge, and the fact that neither branch of the tradition clearly indicates 82a's archetypal reading, make it impossible to reconstruct an especially precise archetypal text.

<sup>24</sup> The structure of the whole couplet (CT III, 81g-82a) also seems to parallel PT 342 (§557a-b): *iw ꜥꜣr n NN m twn nbt nt NN m nnt* “the sack of NN is made of *twn*-plant and the basket of NN is made of rush”.

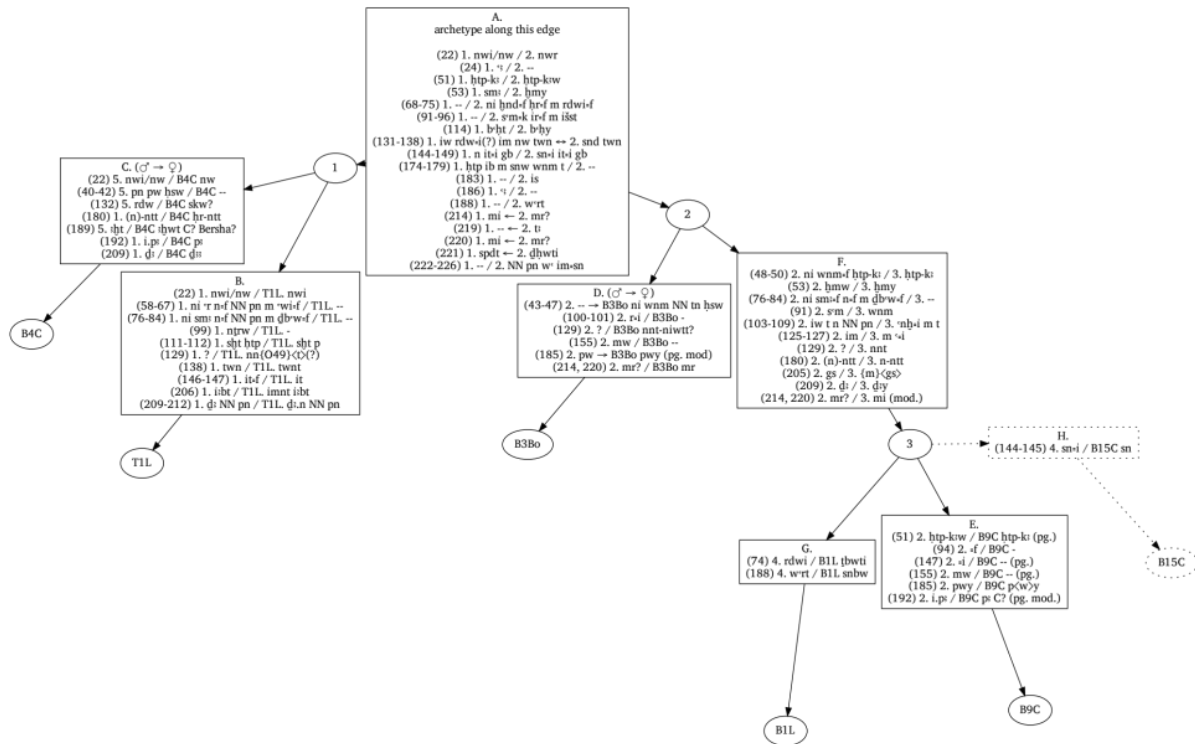


Figure 3. The polarized chain (stemma)

Much more can be inferred about the text’s states at nodes 1, 2, and 3, however. Approximating the texts of these nodes (simply by reversing the textual changes listed in the relevant edge notes), then comparing the results with neighbouring nodes and witnesses, can highlight interesting aspects of the tradition’s transmission and contextualize the characters of individual witnesses. Particularly, variation places that themselves lack clear polarisation can now be examined in the light of the polarised chain, and hypotheses about the scribal practices that produced their variation can be generated and tested.

9.1. Node 1’s text (→ T1L, B4C)

Node 1 had a first person text, since T1L and B4C represent independent conversions into the third person.

79a-e

79f	<i>ink nwi/nw pw ʔ sšnt(i)</i>	I am this great <i>Sšnti nwi/nw</i> -bird:
79g	<i>ir gš/g(ʔ)š</i>	who acts as a migratory bird / makes the outpouring,
79g	<i>nr(w) ḥḥ</i>	who terrifies a million!
79h	<i>bwtʔi sp 2</i>	My abomination (twice):
79i	<i>ni wnmʔi</i>	I shall not eat (it)!
80a	<i>bwtʔi pw ḥs</i>	Excrement is my abomination:
80b	-	-
80c-d	<i>ni wnmʔi ḥtp kʔ</i>	I shall not eat <i>kʔ</i> -satisfaction;
80e	<i>ni smʔi imʔf</i>	I shall not join with it!
80f	<i>ni rʔi nʔf m wiʔi</i>	I shall not go up to it with my arms,
80g	-	-
80h	<i>ni smʔi nʔf m db wʔi</i>	nor shall I make contact with it with my fingers.
81a	<i>nhʔk irʔf m išst</i>	“Then upon what shall you live?”
81b	-	-
81c	<i>ḥr(w)ʔsn ntrw rʔi</i>	they, the gods, say to me.

81d-e	<i>iw nzi t m sht htp</i>	Bread belongs to me in the Marsh of Offering:
81f	<i>b'htzi m sht i'rw</i>	and my abundance is in the Marsh of Reeds.
81g	<i>iw nbtzi im nt nn(t)</i>	My basket there is of rush(?);
82a	<i>iw rdwzi im nw tw n</i>	my roots there are of tw n-plant.
82b	<i>ni ks.nzi n it(zi) gb</i>	I am not bowing to my father, Geb,
82c	<i>ni swr.nzi mw m swt hrt mw</i>	nor am I drinking water as the feather which is on the water.
82d	<i>rdi(w) nzi ih m snw nk</i>	It was following copulation that <i>ih</i> -power was given to me,
82e	<i>swt ib m snw iwt ib</i>	following orgasm, bliss,
83a	<i>htp ib m snw wnm t</i>	and following the eating of bread, satiation.
83b	<i>(n) ntt ink nw/nwi pw<sup>3</sup></i> <i>hr iht nt pt</i>	For I am this great <i>nw/nwi</i> -bird at the Akhet of heaven:
83c-d	<i>i.pzi hr gs imnti/imnt n pt</i>	Just as I took off on the western side of heaven/beside the West of heaven,
	<i>hnnzi hr gs i'btii/i'bt n pt</i>	so I alight on the eastern side of heaven/beside the East of heaven:
83e	<i>d<sup>3</sup>/d<sup>3</sup>zi pt mi r'</i>	As I cross heaven like Ra,
84a	<i>smzi mi spdt</i>	so I shall make landfall like Sopdet.

(79b-e)

T1L has paratext here, but both B4C and B3Bo lack it: all else being equal, it would assume less not to take it as archetypal, as this would require it to have been independently cut along edges A and B. The attachment of some paratext to the spell along edge C could therefore be another indication of adaptive editing (§8.4). The known ease with which paratext was added and deleted in copies of Coffin Texts, however, means that adaptive editing should not be invoked too strongly here: two independent deletions of paratext are entirely conceivable.<sup>25</sup>

T1L's paratext reads as follows:

79b	<i>tm wnm hs m hrt ntr</i>	Not eating excrement in the god's realm,
79c	<i>tm sm shd</i>	not going inverted,
79d	<i>sh m m mw i'w</i>	having power over water and wind,
79e	<i>prt m hrw</i>	and coming forth by day.

(79f)

T1L reads *nwi* while B4C reads *nw*: *contra* van der Molen (2000: 207), these are not necessarily the same bird as *nwr* "heron": if Dahms (2020: 110, n.n) is correct, then the *nw*-bird is a desert bird of some species.

All the non-lacunose witnesses except for T1L read *nwi/nw/nwr pw*, here. T1L's text omits the *pw*, and reads *NN pn nwi<sup>3</sup>* "This NN is the great *nwi*-bird". *pw*'s deletion here could have been motivated by a wish to reduce the number of demonstratives in the sentence after *ink* had become *NN pn*.<sup>26</sup> However, if it was the same copyist who omitted *pw* that did not notice his exemplar's unconverted first person pronoun (82a), then it may assume less to take *pw*'s absence as an accidental omission. B4C retains *pw*, and reads *wsir nn tn nw pw<sup>3</sup>* "This great *nw*-bird is this Osiris NN".

(79g)

Since B4C is lacunose here, it is unclear whether node 1 shared T1L's reading (*g<sup>(i)</sup>š*: §8.1.3) or node 2's reading (*gš*).

<sup>25</sup> Willems (2018: 15, esp. n. 28) observes that the transmission of a CT spell's paratext "often diverges from the transmission of the main text", with titles in particular often being secondary additions, unique, or omitted entirely.

<sup>26</sup> I am grateful to Roland Enmarch (personal communication) for suggesting this explanation.

(79i-80a)

B4C is lacunose at the start of these phrases, but seems to read *[ni] wnm NN bwt NN* “NN shall not eat NN’s abomination!”, omitting *pn pw hsw*. As no other witness omits *pn pw hsw* (or just *pw hsw*, for the first person witnesses), B4C can hardly reflect node 1’s reading.

(80f-h)

This couplet exhibits parallelism where the first line explains the second line’s (lack of) action. It describes a chain of causation: as the deceased never lifts their arms toward the excrement, it is physically impossible for them to touch it.

T1L omits these two verses: this increases its focus on the theme of feeding. However, T1L’s various difficult non-archetypal readings and more minor omissions, that seem typical of copying errors, increase the chances that its omission of 80f-h simply reflects another copying error. Moreover, the equivalent two lines of the spell that follows CT 184 in T1L - namely CT 195 (CT III, 113g-h) - are not deleted. This implies that, if T1L’s omission represented a conscious decision, then the motivation for that decision did not extend to the following spell.

B4C reads *ni ‘r.n NN tn m ‘wiʒs* (80f) “this NN does not rise up with her arms”. The introduction of a *ni sdm.nʒf*, altering *ni ‘rʒi nʒf* → *ni ‘r.n NN tn*, suggests that the copyist took the *ʒf* as referring to the deceased, and changed it to *ʒs*. This suggests a momentary lapse of attention, and perhaps, if their immediate exemplar was already in the third person, that it contained an error produced by an implicit *ʒi* pronoun: *ni ‘r(ʒi) nʒf* → *ni ‘r.nʒf* → *ni ‘r.n NN tn*. This somewhat increases the chances that implicit *ʒi* pronouns were actually a feature of node 1, and were transmitted (rather than created) along edge B for T1L’s copyist(s) to deal with them (§8.1.1: 82b, 113l-m).

Again (§8.3), errors such as these (if they are errors) were not necessarily introduced by the immediate copyists of the manuscripts in which they are attested: Sokolova (2017: 83-84) gives several examples of CT spell copyists reproducing clear errors quite precisely from their exemplars.<sup>27</sup>

(81c)

T1L omits *ntrw* in this line. The result makes grammatical sense, and could be interpreted as an accidental or deliberate omission. Across the excrement spell genre, quite a range of different interlocutors question the deceased about how they intend to feed themselves. This suggests that posing this question is more important thematically than the interlocutors’ exact identities. In many cases, their identities are left quite vague. CTs 184, 186 and 187 just have “gods” question the deceased; CTs 197, 198, and 199 call them “those yonder”. And, like T1L’s copy of CT 184, CTs 173, 174, 190, and 192 describe them simply as “they”.

(81d)

*iw nʒi t*: transferring this into the third person required moving the dative: *iw nʒi t* → *iw t n NN pn*. This implies that the conversion process was not entirely mechanical along edges C and B (more accurately: it required a more complex algorithm than “recognize the pronouns and substitute *NN pn*”).





This finding contextualises the earlier observation that T1L’s text’s copyist(s) let through a first person pronoun (82a) and missed an implicit *ʒi* (82b) (§8.1.1). Maybe these slips, in close proximity of each other, indicate a momentary lapse of attention, perhaps brought on by contending with the difficult orthography of *twn* “*twn*-plant” (82a). On the other hand, since B4C’s text also shows its copyist(s) contending with implicit *ʒi* pronouns (80f-h), these slips may reflect the work of more than a single copyist.

(81e)

As argued above (§8.1.3), T1L’s reading, *ʒht p*, “the Marsh of Buto”, makes compelling sense. In 81f, the second line of this couplet, T1L reads *iʒrw* rather than *ʒht iʒrw*. This seems to locate the *iʒrw* “rushes” in *ʒht p* “Buto’s Marsh”, whereas in all other witnesses (and the archetype) the couplet refers to the two adjacent (Allen 2005: 436) otherworldly locations of the Marsh of Offering(s) and the Marsh of Reeds.


<sup>27</sup> Where such an error appears in tandem with handwriting that suggests lapsed attention, it is tempting to assume that the immediate copyist has indeed created the error; yet an inattentive copyist would also be likelier to transmit such errors from their exemplar without noticing and correcting them. In such cases, a text-critical approach can help differentiate between these two possibilities: is the error attested elsewhere, and do other witnesses in *relevant portions of the stemma* also show difficulties with the transmission at the point that the error occurs? A text-critical approach can thus help the material philologist to better appreciate the character of the ‘individual performance’ displayed on a given manuscript.

The excrement spells CTs 173, 216, and 1011, along with PT 210, from which these three spells derive “in whole or part” (Hays 2004: 191-92), each contain a couplet that corresponds quite closely to 81d-e. Each of these couplets first locates the deceased’s *sh* “booth” in the Marsh of Rushes, and then his *’gb* “flood/abundance” in the Marsh of Offering(s)/Hetep. Parts of CT 581’s text (CT VI, 580-581) also parallel PT 210’s, including the phrase *sh=i m ’gb b’ht=i m sht htp* (581i-j) “my booth is in plenty, my abundance is in the field of Hetep”. These parallels further increase the probability that T1L’s difficult (and certainly interesting) reading is not archetypal.

Given T1L’s various other omissions and difficult readings which can be understood as corruptions, the best explanation that I can think of for its reading of “Buto” here involves two textual generations of copying: first, an accidental partial omission, transforming  *htp* to  *p*; then, an emendation of  *p* to  *p* “Buto”. Such a correction of an earlier omission would reduce the probability that T1L’s immediate copyist was responsible for many, if any, of T1L’s various omissions, such as this one.

*p* “Buto”, like *spdt* “Sopdet”, is thus a latent error.

(81g)

B4C is largely lacunose here, preserving only *NN tn*. T1L reads  *nn{O49}(t)* “rush” as discussed above (§8.5.3).





(82a)


As argued above (§8.1.3), T1L’s *twnt{t}* probably represents a copying error and the witnesses derived from node 2 also seem to preserve a corrupt reading of this verse. B4C is partially lacunose here, but shows evidence of yet another confused variant reading: regarding *rdw n NN tn* “the roots of this NN”, Faulkner (2004: I.155, n.8) observes that it “seems to have confused *rwd and sk*.” That this verse was so prone to mutation within the tradition suggests that the archetypal reading, whatever it was, was far from plain to its interpretive community.

(82d)

T1L reads *m nk* “through copulation” rather than *m snw nk* “following copulation”. As a specific reading this cannot be taken as genealogically indicative, but as B4C is lacunose here, it is not immediately clear whether the *m snw nk* → *m nk* mutation occurred along edge A (in which case B4C would share it) or along edge C (in which case it would not). Since T1L contains various other omissions that B4C does not, it seems more parsimonious to include *m nk* among that group, and thus to prefer a reading at node 1 of *m snw nk*.

(83b)

B4C reads *hr ntt*: a clarificatory emendation. T1L’s orthography , for *’ht*, seems to derive from a spelling typical of the *Pyramid Texts*, that used  (N18) rather than  (N27) (Gardiner 1957: 487, 489). However, N18, perhaps fittingly given this spell’s provisioning theme, has become  (X4), a bread sign. Since N18 and X4 are again quite similar in hieratic, no secure basis exists for preferring scribal creativity over a copying error.

B4C reads  *’hwt nt pt* “the provisions of heaven”. Since both T1L and B3Bo read *’ht*, *’hwt* can hardly be archetypal. Conceivably the *’hwt* variant may have been inspired by someone seeing polysemy at work in the X4 bread sign seen in T1L, if T1L’s archaic orthography is actually archetypal, here.

(83c-d)

The polarised *stemma* indicates that T1L’s reading, discussed above (§8.1.3), is indeed not archetypal and thus cannot have been node 1’s reading. B4C’s *imnti* and *’bt*i** could represent node 1’s reading, or they could have been produced along edge C. There is thus no secure reconstruction for these verses for node 1.

(83e)

T1L reads *d<sup>3</sup>.n NN pn pt mi r* “as this NN has crossed heaven like Ra”. Node 1 probably did not have *d<sup>3</sup>.n*, since all other (non-lacunose) witnesses have *sdm=f* forms of this verb.

## 9.2. Reconstructing node 2's text (→ B3Bo, node 3)

79a-e	-	-
79f	<i>ink nwr pw</i>	I am this <i>Sšnti</i> heron:
79g	<i>ir gš</i>	who acts as a migratory bird,
79g	<i>nr(w) hḥ</i>	who terrifies a million!
79h	<i>bwtʔi sp 2</i>	My abomination (twice):
79i	<i>nī wnmʔi</i>	I shall not eat (it)!
80a	<i>bwtʔi pw ḥsw</i>	My abomination is excrement:
80b	-	-
80c-d	<i>nī wnmʔi ḥtp kʔ</i>	I shall not eat <i>kʔ</i> -satisfaction:
80e	<i>nī ḥmyʔi imʔf</i>	I shall not demolish it:
80f	<i>nī rʔi nʔf m wʔi</i>	I shall not not rise up to it with my arms;
80g	<i>nī ḥndʔi ḥrʔf m rdwiʔi/tbwtiʔi</i>	nor shall I trample upon it with my legs/sandals/soles;
80h	<i>nī smʔi nʔf m db wʔi</i>	and nor shall I make contact with it with my fingers.
81a	<i>ʔnhʔk irʔf m išst</i>	“Then upon what shall you live?
81b	<i>s mʔk irʔf m išst</i>	and with what will you wash (it) down?”
81c	<i>ḥr(w)ʔsn ntrw rʔi</i>	they, the gods, say to me.
81d-e	<i>iw nʔi t m šḥt ḥtp</i>	Bread belongs to me in the Marsh of Hetep:
81f	<i>b ḥyʔi m šḥt iʔrw</i>	and I shall have abundance in the Marsh of Rushes
81g	<i>nbtʔi m nnt(+O49?)</i>	with my basket made of rush(+O49?)
82a	<i>snd twn</i>	and a <i>twn</i> -plant sack.
82b	<i>nī ks.nʔi snʔi itʔi gb</i>	I am not bowing to kiss my father, Geb,
82c	<i>nī swr.nʔi mw m šwt ḥrt mw</i>	nor am I drinking water as the feather that is on the water.
82d	<i>rdi(w) nʔi ʔḥ m snw nk</i>	It was following copulation that <i>ʔḥ</i> -power was given to me,
82e	<i>ʔwt ib m snw iwt ib</i>	following orgasm, bliss.
83a	-	-
83b	<i>(n) ntt ink is nwr pw</i> <i>ḥr wʔrt ʔḥt nt pt</i>	For I really am this heron at the Akhet's bank of heaven!
83c	<i>i.pʔi ḥr gs imnt n pt</i>	Just as I took off beside the West of heaven,
83d	<i>ḥnnʔi ḥr gs iʔbt n pt</i>	so I alight beside the East of heaven:
83e	<i>dʔyʔi pt mi rʔ</i>	I shall cross heaven like Ra,
84a	<i>smʔi tʔ mi dḥwti</i>	and I shall make landfall like Thoth:
84b	<i>ink wʔ imʔsn</i>	I am one of them.

(79f)



On this branch of the tradition, the bird is consistently *nwr* “the heron”, rather than being a *nw*-or *nwi*-bird, and it is not referred to as *ʔ* “great”. Since an identical omission of *ʔ* also occurs at 83b, a conscious deletion (A → 2) or addition (A → 1) seems very likely.

(80b)

B3Bo includes *nī wnm NN tn ḥsw* “This NN shall not eat excrement” here, but no other witness includes it. In order for it to be archetypal, edges A and F would have had to have cut it independently: it is therefore likeliest an addition along edge D.

(80e)

Rather than refusing to *smʔ* “unite” with the excrement (as in node 1), the deceased refuses to *ḥmy* “demolish” it. Node 2's text thus displays a more potentially aggressive relationship with the excrement than node 1's. This variant may therefore suggest an editorial attitude to the spell's transmission, regardless of whether its polarization ran *ḥmy* → *smʔ* or vice versa. Yet it could also

simply suggest a patch of hard-to-read hieratic, where it was unclear whether to read  (Aa1+G17, *hm* in *hmy*) or  (O34+U2, *sm'*). In both cases where unclear hieratic has previously been suggested as an explanation (§8.4, 82a; §9.1, 83b), the affected witness was T1L, which derives from node 1.

*hmy* is the *lectio difficilior* here, being a somewhat rarer word than *sm'* in the CT corpus (van der Plas and Borghouts 1998: 227, 253). Moreover, *sm'* occurs twice elsewhere in node 1's text (80h, 84a): this could have conditioned its reappearance at 80e. These factors increase the chances that node 2 has the archetypal reading here of *hmy*, “demolish”.

(80f)

As argued above (§9.1, 80f-h), node 2's negated *sdm=f*, most likely with future sense (Allen 2014: §18.13), is likeliest the archetypal reading.

(80g)

*rdwi* “legs” is attested only in B3Bo. B1L has *tbwti=i* “sandals/soles”. B9C and B15C have lacunae covering this word. As both *rdwi* and *tbwti* are specific readings, we have no solid basis to choose which to prefer.

(80f-h)

Node 1 does not include 80g. Node 2's reading, which includes 80f, 80g, and 80h, survives in B3Bo.<sup>28</sup> This tercet shows strong parallelism, but the presence of 80g obscures the chain of causation that seems so clear in node 1's version of 80f-h.

80g might therefore represent an addition. Similar phrases appear reasonably often in spells of this genre (CTs 173, 189, 190, 192, 193, 199). Such an insertion, whether drawn specifically from one of these spells or just from a memorized understanding of “how this part of an excrement spell should go”, would constitute an example of “interference between compositions” (Worthington 2012: 15).<sup>29</sup> Alternatively, the absence of 80g at node 1 might represent a deletion that accidentally or deliberately created the chain of causation between 80f and 80h discussed above.

(81b)

This phrase does not appear in node 1. Its inclusion produces quite a literary effect, as it not only creates a couplet exhibiting heavy parallelism (81a-b), but it also sets up parallel contrasts between *nh* “live” and *t* “bread”, and *s'm* “wash down” and *b'hy* “inundate”.

Of the witnesses that include this phrase, only B3Bo reads *s'm* “wash down”; the witnesses derived from node 2 read *wnm* “eat”. *wnm* occurs far more frequently than *s'm* in the CT corpus (van der Plas and Borghouts 1998: 69, 245). *s'm* seems likelier to be the archetypal *lectio difficilior*.

(81c)

B3Bo's text did not convert *r=i* into *r=f* or *r NN pn* here, but instead omitted the phrase. This may indicate a wish to streamline the text or to avoid confusion with the particle *r=f*; but positing a straightforward accidental omission seems reasonable, given the seemingly accidental transposition of lines 381 and 382 of B3Bo's text (§8.3).

(81d-e)

The Marsh of Satisfaction has become the Marsh of Hetep (see §2, 81d-e).

(82b)

The presence of *sn=i* “in order for him to kiss” makes a clear parallel between mouth touching earth (=Geb, 82b), and mouth touching water (82c). This reading could be taken as a literary improvement, but equally its omission at node 1 could be taken as an accidental deletion.

(82c)

B3Bo omits the first *mw*: “so he does not drink from the side that is upon the [...]”. B9C reads *ni swr.n=i šwt hrt mw* “so I do not drink the *šwt* that is over the water”, omitting *mw m*. Given how many textual changes separate these witnesses along edge F, we can reasonably take the shared omission of *mw* as actually-polygenetic.

<sup>28</sup> 80g is included in all non-lacunose witnesses except T1L and B4C, while 80h is included by B4C and B3Bo. Both 80g and 80h must therefore have been present in node 2.

<sup>29</sup> Worthington (2012: §1.2.3) offers a stimulating discussion of the ways in which texts memorized with various degrees of precision can act as sources of contamination in a tradition.

(83a)

The absence, in node 2, of *hṯp ib m snw wnm t* “satiation following the eating of bread”, produces a couplet (82d-e) that focuses solely on the deceased’s cosmic conception. His rebirth then follows immediately in 83b. As such, it is tempting to take the absence of 83a either as archetypal, or as a deliberate omission in node 2 made to improve the text. (If the former, then it follows that the presence of 83a’s text at node 1 must itself represent a deliberate addition.) A third option would be to take 83a’s absence at node 2 as an accidental omission that accidentally produced a literary effect.

(83c)

Node 2 has *wʿrt ʿḥt* “Akhet’s bank” rather than just *ʿḥt* “Akhet”. The presence of *wʿrt* here is consistent with its association with heavenly ascension as attested in other CT and PT spells.<sup>30</sup> It could therefore be taken as archetypal or an example of interference between compositions.

(84b)

This verse not only clarifies that the deceased follows the same path as Ra and Thoth and deepens their identification with them, but it also ends the spell with a clear conclusion by providing the synthesis to 83e’s thesis and 84a’s antithesis. Taken as an addition it constitutes a literary improvement; but one could also, again, interpret this as an accidental omission at node 1.

### 9.3 Reconstructing node 3’s text (→ B1L, B9C, B15C)

79a-e	-	-
79f	<i>ink nwr pw</i>	I am this <i>Sšnti</i> heron:
79f-g	<i>ir gš</i>	who acts as a migratory bird,
79g	<i>nr(w) ḥḥ</i>	who terrifies a million!
79h	<i>bwtʿi sp 2</i>	My abomination (twice):
79i	<i>nʿi wnmʿi</i>	I shall not eat (it)!
80a-d	<i>bwtʿi pw ḥsw ḥṯp kʿ</i>	My abomination is excrement, ‘ <i>kʿ</i> -satisfaction’:
80e	<i>nʿi ḥmyʿi imʿf</i>	I shall not demolish it!
80f	<i>nʿi ʿrʿi nʿf m ʿwiʿi</i>	I shall not not rise up to it with my arms;
80g	<i>nʿi ḥndʿi ḥrʿf m ṯbwtiʿi/rdwiʿi</i>	nor shall I trample on it with my sandals/soles/legs.
80h	-	-
81a	<i>ʿnhʿk irʿf m išt</i>	“Then upon what shall you live?
81b	<i>sʿmʿk irʿf m išt</i>	and with what will you wash (it) down?”
81c	<i>ḥr(w)ʿsn ntrw rʿi</i>	they, the gods, say to me.
81d-e	<i>ʿnhʿi m t m šḥt ḥṯp</i>	I shall live on bread in the Marsh of Hetep
81f	<i>bḥyʿi m šḥt iʿrw</i>	and I shall have abundance in the Marsh of Reeds,
81g	<i>nbtʿi m ʿi n nnt</i>	with my basket on my arm for rushes,
82a	<i>snd tw n</i>	and a <i>tw n</i> -plant sack.
82b	<i>nʿi ks.nʿi snʿi iṯi gb</i>	I am not bowing to kiss my father, Geb,
82c	<i>nʿi swr.nʿi mw m šwt ḥrt mw</i>	nor am I drinking water as the feather that is on the water.
82d	<i>rdi(w) nʿi ʿḥ m snw nk</i>	It was following copulation that <i>ʿḥ</i> -power was given to me,
82e	<i>ʿwt ib m snw iwt ib</i>	following orgasm, bliss:
83a	-	-
83b	<i>(n) ntt ink is nwr pw</i> <i>ḥr wʿrt ʿḥt nt pt</i>	For I really am this heron at the Akhet’s bank of heaven!
83c	<i>i.pʿi ḥr gs imnt n pt</i>	Just as I took off beside the West of heaven,

30 See PT 421 (§751b); PT 513 (§1167-1168); PT \*730; CT 190 (CT III, 98k, 98n-p) (another excrement spell); CT 205 (CT III, 144d-145d) (a spell for not going inverted); CT 278 (CT IV, 23-25); and CT 287 (CT IV, 38g-j) (which associates the *wʿrt* specifically with the Akhet). *wʿrt* is associated with the receipt of water in PT 519 (§1201d) and CT 226 (CT III, 257c-258a).

83d	<i>hnn=i hr gs i'bt n pt</i>	so I alight beside the East of heaven:
83e	<i>d'yi pt mi r'</i>	I shall cross heaven like Ra,
84a	<i>sm'i t' mi d'hwti</i>	and I shall make landfall like Thoth:
84b	<i>ink w' im=sn</i>	I am one of them!

(79a)

B1L includes the paratext *hsf hr(i) wh't*, which Mueller (1972: 121) takes as “repelling the pot carrier”: Frandsen (2011: 28) suggests that the pot contains faeces. As only B1L contains this paratext, we have no solid grounds to consider it part of node 3 (see n.24, above).

(79h)

B1L has *bwwt=i* “My abominations!” rather than *bwt=i sp 2*.

(80a-d)

An omission has transformed *bwt=f pw hsw ni wnm=f htp k'* “His abomination is excrement: he shall not eat *k'*-satisfaction” into *bwt=i pw hsw htp k'* “My abomination is excrement, ‘*k'*-satisfaction”’. This could have happened via an accidental omission, but since it also creates a clear thought couplet out of 80a-d and 80e, we could also take it as conscious streamlining.

(80h)

The omission of this verse again creates a clear thought couplet out of 80f-g that shows considerable parallelism and juxtaposes arms and feet. If this is not an accidental deletion, then this classifies as a sophisticated editorial choice.

(81d-e)

At node 2, this line read *iw t n NN pn m sht htp* “Bread for this NN is in the Marsh of Hetep”. Node 3’s reading, rather than simply describing the location of NN’s sustenance, has the deceased answer their interlocutors’ question more directly, to some extent throwing their words back at them (*nh=k ir=f m isst* “then upon what shall you live?” ... *nh=i m t* “I shall live on bread...”), further heightening the parallelism between these lines. This again suggests a sophisticated editor.

(81g)

The changes to this line clarify the image that it evokes. Previously, it had just read *nbt=f m nnt* “with his basket made of rush”. Now, the reader can imagine the deceased carrying the basket, and the *n* might help to foreground a reading of the basket as *storing* collected rush (perhaps edible rush tubers: Darby 1977: 1:441) rather than being made of rush.

(83c-d)

Node 3’s two witnesses which are not lacunose here, B1L and B4C, have quite different readings of this couplet. B1L changes *imnt* → *imnti* and *i'bt* → *i'bti*, so that it reads “I took off on the western side of heaven, and I shall alight on the eastern side of heaven.” (B4C appears to have independently done the same.) B9C changes *i.p'i* → *p'i*, “I shall take off...”, and reverses *imnt* and *i'bt*. This alters the couplet to describe the deceased’s ongoing journey: taking off from the East and alighting in the West. Both these changes could be taken as indicating editors making conscious textual changes, though an accidental reversal of *imnt* and *i'bt* is also plausible: either way, East is the direction from which we see usually celestial objects rise out of the horizon, and West the direction into which we see usually celestial objects set. (The sense of the archetypal reading is presumably that the deceased takes off in the West, travels across the undersky, and alights in the Eastern Akhet to rise again.)

(84b)

B1L’s text changes *im=sn* → *im=sn i* “one of the two of them”, increasing the precision of the verse’s expression.

## 10. Conclusion

As this paper has hopefully demonstrated, the process of constructing a chain according to Greg’s method (§5-7) is quite objective, so long as one uses every available variation place rather than only those that seem significant on the basis of predetermined criteria. The process of polarising the chain to

produce a *stemma* (§8) is also reasonably objective if clearly polarised variation places exist at relevant points on the chain.

However, trying to divine which of various hypotheses about scribal practice best explains a given textual change (§9) is a far more subjective process. The less information that one has to work with, the more subjective one's interpretations will necessarily be. As such, the production and frequent consultation of a *stemma* offers serious advantages to anyone wishing to make statements about scribal practice in ancient Egyptian mortuary texts. Even when the main focus is on a specific copy of a work rather than its tradition, a *stemma* can provide a useful and relatively objective context within which to ground one's analysis of the exact words that appear on the physical manuscript, tomb wall, etc.. Specifically, one can use the *stemma* to test the robustness of inferences drawn about the nature of the scribal practices responsible for various features of a given manuscript's text. Knowing the polarization of a textual change can help mark certain hypotheses as highly unlikely (e.g. that most of T1L's difficult readings are archetypal) and indicate that others are highly probable (e.g. that T1L's *p* "Buto" was an emendation of <ht>*p*).

Hypotheses about scribal practice become more convincing when they can explain a cluster of textual changes. For example, taken together, the various changes made along edge F seem quite suggestive of thoughtful copyists adopting an adaptive editorial approach to the spell, particularly when it came to heightening parallelism and clarifying the text's imagery. Again, this conclusion relies on having a *stemma* that shows a polarisation of  $2 \rightarrow F \rightarrow 3$ . By contrast, it is much harder to characterize the scribal practices that produced the textual variation along edge A. Because that edge is bidirectional, one can often not tell with much certainty whether a textual change represents an omission or an addition. Nor is it easy to determine whether omissions represent copying errors or intentional cuts.

Hypotheses regarding the effects of potential external factors on the tradition, such as oral traditions running in parallel to textual transmission, could also be tested by examining the changes along the *stemma*'s edges. Support for a parallel oral tradition interacting with the written one, for example, could be found in changes that are better explained by mishearing or misremembering, than by miscopying.

Ultimately, a *stemma* renders somewhat visible the efforts of the many copyists who contributed to a tradition and whose work has not survived as physical manuscripts. Text-critical approaches, such as the one presented here (and in my forthcoming PhD thesis), can show how their efforts coordinated with each other and with those of the immediate copyists whose manuscripts have survived. Such approaches highlight how any individual witness within such a tradition is far more of a collective than an individual scribal performance, regardless of how many scribal hands are palaeographically discernible upon its writing surface.

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# The function of the false-door as a portal from life to the afterlife (and back) in the private elite tombs of the Old Kingdom

Renata G. Tatomir

**Abstract:** A substantial body of scholarship has addressed the symbolic and functional significance of private elite tombs associated with the central administration elite of the Old Kingdom. Work building upon mainstream Egyptological interpretations of the funerary text corpora reveals that both the rock-cut and mastaba tomb types—defined by their bipartite structure, comprising an above-ground chapel and an underground burial chamber, as well as by their ritual function—fulfilled a fundamental purpose: to mediate the deceased’s passage from the transient domain of physical existence to the eternal realm of the afterlife, as articulated within the ancient Egyptian ontological framework. Hence, the present study re-examines the false door not merely as a decorative element originating in the secular architectural component of the royal palace gate, but rather as a *ritual and ontological threshold* mediating the deceased’s transition from the visible to the invisible realm. Within this complex mechanism of immortality, the false door—westward oriented and installed in the offering chamber of the tomb—functioned as a liminal device that, as understood at first glance, allowed the *kʿ* (viewed from a modern, etic perspective in the sense of the vital animating force) to traverse between the world of the living and that of the dead in both directions. Thus, we might say that, from an emic perspective—that of the ancient Egyptian conceptual universe—the false door embodied the *coincidentia oppositorum*, i.e., the meeting point of life and death, visibility and invisibility, matter and spirit. Its material form, inscriptions, and iconography could point to the ancient Egyptian understanding of being (*hpr*) as continuous transformation and manifestation across ontological boundaries.<sup>1</sup>

Ultimately, this paper situates the false door as both a portal of being and a mnemonic monument – a structural embodiment of the Egyptian negotiation between mortality and permanence. It utilises complementary scientific disciplines that could help to reach a more nuanced and methodologically sound understanding of the role and significance of false doors within the broader context of Egyptian funerary ideology and religious belief. Thus, it employs an interdisciplinary methodology grounded in Egyptology, anthropology, philosophy, and ultimately, observations based on quantum tunnelling theory, to reveal how this architectural feature functioned as a vital agent in mediating between lived experience, collective memory, and the metaphysics of existence.

**Keywords:** false-door, kA, portal, private elite tomb, afterlife, Old Kingdom, mastaba

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*How concrete everything becomes in the world of the spirit when an object, a mere door, can give images of hesitation, temptation, desire, security, welcome and respect. If one were to give an account of all the doors one has closed and opened, of all the doors one would like to reopen, one would have to tell the story of one’s entire life.*  
(Gaston Bachelard, *The Poetics of Space*, Beacon Press, 1994 (1964), 224)

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<sup>1</sup> Landborg: 2014.

## Methodology of research

The study of ancient Egyptian funerary culture, particularly its material and conceptual artifacts, demands a methodology that transcends disciplinary boundaries. This paper employs an interdisciplinary approach, grounded in Egyptology but extending into history, archaeology, anthropology, the history of religions, philosophy, and last but not least, quantum tunnelling theory.

Central to this methodology is the critical distinction between *emic* (insider, culturally specific) and *etic* (outsider, cross-culturally analytical) perspectives, a framework essential for avoiding anachronistic interpretations,<sup>2</sup> aiming ultimately at reconciling the ancient Egyptian's own conceptual universe with modern analytical frameworks of ritual and symbolism. This dialectic is particularly pertinent when analysing a concept as fundamental as the door, which operates simultaneously as a tangible architectural feature and a profound metaphysical symbol. The *emic* perspective reconstructs the inner logic of Egyptian funerary thought—wherein the *k3* (“the only category related to representations among those describing man's nature<sup>3</sup>) was an aspect of being whose presence manifests itself in the afterlife and operates as both subject and agent of transformation, as a reminder of the deceased's presence<sup>4</sup>—while the *etic* approach interprets ancient Egyptian concepts through comparative theories of liminality<sup>5</sup>, materialised memory, and embodiment.<sup>6</sup> This dual methodology allows for a nuanced reading of funerary materiality: the door, the threshold, and above all, the false door, as intersections of visible and invisible worlds, bridging the phenomenology of death with the archaeology of memory, as “an ever-present reminder of the deceased's eternal presence.”<sup>7</sup>

Thus, the *kA* can be interpreted from an *etic* perspective as a ‘meta-person’—a transcendent aspect constituting the very ‘condition of possibility’ of individual existence. As Nyord convincingly argues, this framework provides a coherent explanation for the multifaceted roles attributed to the *k3* in Old and Middle Kingdom sources, from its ritual invocations to its ontological significance in funerary and royal contexts.<sup>8</sup>

By integrating these complementary perspectives, the present research approaches the ancient Egyptian funerary paradigm as a dynamic ritual ecology. Funerary texts, material installations, and architectural features are treated not as static representations but as ritual acts in textual and material form, in the sense articulated by Mark Smith, for whom Egyptian funerary compositions operate not as narrative descriptions of the afterlife, but as performative rituals of transformation.<sup>9</sup> Such an interpretative stance aligns with Phillipa Browne's emphasis on presentification—the recognition that both human and deceased (and divine) participants in ritual are defined not by belief alone, but by ritual activation of the corporeal performance of transformation.<sup>10</sup>

From an *etic*, analytical standpoint, the ancient Egyptian false door can be understood as a symbolic and performative interface through which social memory, ritual practice, and cultural identity were materially enacted. As Meskell has argued, material culture in mortuary contexts operates as a “mnemonic device,”

<sup>2</sup> A theme explored in Nyord's work on Middle Kingdom funerary texts, which emphasises the performative and embodied dimensions of the deceased's transformation. Nyord 2019: 1–23 (4–7).

<sup>3</sup> Bolshakov 1997: 123. For a summary of the history of scholarly opinions about the essence of the *kA* see Bolshakov 1997: 123–132.

<sup>4</sup> Browne 2019: 91.

<sup>5</sup> Exemplified by doorways and by false doors specifically. Browne 2019: 91. Accetta 2016 (regarding the Egyptian temple doorways); Wiebach 1981 (regarding the false doors). The notion of liminality is particularly pertinent to the study of Egyptian temples and tombs, which functioned as transitional zones mediating between distinct realms of existence. These sacred architectures embodied points of passage—thresholds—where the divine and human, the living and the dead, the cosmic and the terrestrial could intersect and interact. Browne 2019: 91. Spence 2007a: 383–84; Hartwig 2013: 165; Harrington 2013: 86.

<sup>6</sup> Meskell tagged it a “multivalent signifier, since it embodies both material and immaterial aspects”. 2003:41.

<sup>7</sup> Meskell 2003: 41.

<sup>8</sup> Nyord 2019: 23.

<sup>9</sup> Smith 2017: 104–105.

<sup>10</sup> Browne's perspective on presentification is taken from Nyord's (2019: 55) who follows Vernant (1996: 340) and considered as a “crucial notion” that she describes as follows: according to this premise, the tomb owner—through a representation ontologically continuous with their being—serves as the recipient of offering-related actions and is directly affected by them. The offerings, associated practices, and participants together constitute a relational network that includes the deceased as an active node within it. Although transformed by death and the subsequent rituals into an altered ontological state, the tomb owner remains capable of limited participation in the world of the living through these ritual and material interactions. 2019: 47.

situating remembrance and identity within structured landscapes of memory.<sup>11</sup> Likewise, the ancient Egyptian false door functioned as a tangible locus where the living engaged in acts of commemoration and reciprocal exchange with the dead, activating and maintaining the deceased's social presence.

Often translated as “vital force” or “spirit–double”, the Egyptian concept of the deceased's *k3*, who was believed to pass through the false door of the tomb and back after death, exemplifies this need for an integrated approach. As Rune Nyord argues, modern Egyptological interpretations of the *k3* often project etic, Western philosophical distinctions (e.g., body/soul dualism) onto an emic ancient Egyptian concept that functioned quite differently within its native cultural and ritual context.<sup>12</sup> Hence, for the ancient Egyptian, the *k3* was not similar to the modern concept of the “soul” to be saved at all; rather, it was viewed as a sustained aspect of the person, requiring continual nourishment and a point of interface with the living—a role for which the false door was perfectly designed.

Furthermore, following Mark Smith's pivotal reassessment, we must treat funerary texts not as literal, coherent maps of the afterlife but as ritual compositions.<sup>13</sup> Their mythological allusions are performative and situational, designed to effect transformation and provide power in specific ritual moments, not to describe a consistent cosmology. This view liberates us from seeking a single “Egyptian belief” about the afterlife and allows us to appreciate the varied, context–dependent symbolic functions of doors and gates within these texts.

Hence, this paper analyses the ancient Egyptian false door through this dual lens: first, by examining the door as a universal human archetype of liminality and transition (an etic approach), and second, by investigating its specific emic function within the Egyptian funerary paradigm, particularly as a conduit for the *k3* and a focal point of ritual practice.

The approach is informed by the theoretical distinction between *emic* and *etic* categories, as articulated in cultural anthropology. The *emic* dimension seeks to reconstruct the meanings and functions attributed to the false door within the internal logic of ancient Egyptian cosmology, textual expression, and ritual performance. The *etic* dimension, conversely, interprets these practices through contemporary analytical paradigms—phenomenological, semiotic, and structuralist—that enable a comparative and critical understanding of the data.

Such a dual framework allows for a reflexive dialogue between ancient conceptual systems and modern interpretive lenses. The *emic* reconstruction relies heavily on philological analysis of hieroglyphic inscriptions, iconography, and architectural contexts—particularly the offering chambers of Old Kingdom mastabas—where the false door appears as the nexus between the *k3*'s nourishment and its ontological passage. The *etic* analysis, meanwhile, situates these findings within broader theoretical debates about materiality, embodiment, and ritual agency.

Meske's notion of “memory's materiality” provides an important heuristic for understanding how funerary architecture participated in the construction and perpetuation of social memory.<sup>14</sup> Their framework suggests that the false door, like other memorial architectures, mediated between lived social relationships and posthumous identities.

The integration of these perspectives permits a nuanced understanding of the false door as both ritual mechanism and semiotic medium. The study also incorporates comparative and philosophical reflections on liminality, derived from Arnold van Gennep's theory of rites de passage and Victor Turner's concept of the betwixt and between, to explore the threshold's role in mediating transformation. Through this interdisciplinary synthesis, the research aims to move beyond a purely descriptive Egyptological approach, instead framing the false door as a key to interpreting the Egyptian conception of continuity between life and afterlife—a conception that, from an emic viewpoint, constitutes the very essence of being.

Last but not least, from an etic perspective, the logic underlying this Egyptian conception of permeability across ontological boundaries parallels, in a metaphorical yet illuminating sense, the principle of quantum tunnelling in modern physics. In quantum mechanics, a particle encountering a potential energy barrier that exceeds its classical energy may still “pass through” by means of its wave–like nature – its probability amplitude extending into and beyond the barrier.<sup>15</sup> The Egyptian false door, as a ritual and cognitive construct, enacts an analogous process of threshold permeation: the deceased does

<sup>11</sup> Van Dyke, Alcock 2003: 8; Meske 2003: 41.

<sup>12</sup> Nyord 2019: 4–7.

<sup>13</sup> Smith 2017.

<sup>14</sup> Meske 2003: 49.

<sup>15</sup> For an in–depth explanation of quantum tunnelling, see Razavy 2013; Tepanyan 2025.

not “climb over” the wall between life and death but passes through it by virtue of a transformed state of being, enabled by ritual agency and symbolic structure.<sup>16</sup>

## The concept of the *door*

From the earliest stages of human consciousness, when the first humans—initially as solitary beings and later as members of organised groups—became aware of both the terrestrial world and the celestial sphere above, the need to adapt to and respond to the unknown dimensions of existence led to the search for ways to structure and regulate space. Within this process, the *door*—and its expanded architectural counterpart, the *gate*—emerged as one of the most fundamental spatial and interdimensional elements. Its primary function has always been to mark, mediate, and facilitate the passage between distinct domains, both physical and conceptual. From an anthropological perspective, corroborated by archaeological evidence, one might assert that the notion of the door or gate is as old as humankind itself.

As human consciousness evolved—progressing from instinctive awareness to reflective thought—individuals and societies began to perceive boundaries that extended beyond tangible, physical space. From approximately the fourth millennium BCE onward, as complex civilisations arose, the door and gate acquired additional layers of figurative and symbolic meaning. They came to signify not merely architectural transitions, but also metaphysical, cognitive, and spiritual thresholds—points of passage between realities of differing ontological status.

This expanded understanding endowed the door/gate with a dual and dialectical nature, giving rise to a series of complementary oppositions: outside and inside, above and below, known and unknown, life and death, sacred and profane, visible and invisible, light and darkness, human and divine, corporeal and spiritual. In religious and mythological contexts, doors and gates thus mediated the communication between the worlds of the living and the dead, the human and the supernatural—whether conceived as the realms of deities, ancestors, or other transcendent entities.

In a broader philosophical and psychological sense, the door or gate functions as a universal symbol of transition, liminality, and transformation. It demarcates thresholds not only in space but also in consciousness. The idea that every form of passage—whether physical, existential, or metaphysical—requires a marked point of transition has remained a constant feature of human thought. Consequently, the door/gate may be regarded as a persistent archetype within the Jungian collective unconscious: a symbolic structure expressing humanity’s enduring preoccupation with crossing, transformation, and the reconciliation of opposites.

From the earliest human shelters to the monumental gates of ancient temples, from mythological “gates of the underworld” to the doors of perception,<sup>17</sup> in philosophical reflection, and even to contemporary fictional representations such as interdimensional “stargates” (the SF *Star Gate* franchise), this symbol continues to express the human desire to move beyond boundaries—physical, psychological, and spiritual alike. The door or gate, together with its inherent threshold, thus constitutes not merely an architectural element but a universal symbol of mediation and transformation. In this sense, it may be regarded, in Jungian terms, as an archetype of the collective unconscious:<sup>18</sup> a structural form embodying the perennial human experience of transition between opposites—between the known and the unknown, the visible and the invisible, the profane and the sacred.

In the early twentieth century, Arnold van Gennep provided an essential anthropological framework for understanding such processes of transition through his seminal theory of the *rites de passage*:<sup>19</sup> initiation, marriage and death. He identified three distinct yet interrelated phases—*séparation*, *limen*, and *agrégation*—corresponding to separation from a previous state, passage through a transitional or liminal phase, and reintegration into a transformed condition.<sup>20</sup> During the *liminal* stage (*limen*, meaning “threshold”), the individual or group occupies an ambiguous, indeterminate position, suspended between

<sup>16</sup> Browne 2019; Meskell 2003; Nyord 2019.

<sup>17</sup> Blake 1790; Huxley 1954.

<sup>18</sup> In Jung’s view, in their broader meaning, the archetypes of the collective unconscious are the psycho-physical patterns existing in the universe, given specific expression by human consciousness and culture. Cambray, Carter 2004: 43. They have a dual nature, existing both in the psyche of a human individual and the world at large. Aziz 1990: 54.

<sup>19</sup> Van Gennep 1909 (1981).

<sup>20</sup> Eriksen 2019: 21–22

two states of being and belonging to neither. It is precisely this phase that reveals the structural and symbolic importance of the threshold—the door as both a physical and metaphysical boundary. Hence, in Van Gennep's anthropological studies of religion, regardless of the specific cultural framework, the notion of the door is intrinsically associated with the concept of liminality and the *rites de passage*. The author conceptualises the act of crossing boundaries and other forms of territorial transition as a fundamental structural process, emphasising the door as a symbolic and physical manifestation of the threshold – a borderline between two distinct existential or social states:

“Precisely: the door is the boundary between the foreign and domestic worlds in the case of an ordinary dwelling, between the profane and sacred worlds in the case of a temple. *Therefore, to cross the threshold is to unite oneself with a new world* (Tatomir's emphasis). It is thus an important act in marriage, adoption, ordination and funeral ceremonies. (...) Consequently, I propose to call the rites of separation from a previous world, *preliminal rites*, those executed during the transitional stage *liminal* (or threshold) rites, and the ceremonies of incorporation into the new world *postliminal rites*”.<sup>21</sup>

He concludes the chapter on “The Territorial Passage” with the following remark:

“In order to understand rites pertaining to the threshold, one should always remember that *the threshold is only a part of the door* (Tatomir's emphasis) and that most of these rites should be understood as direct and physical rites of entrance, of waiting, and of departure—that is, as rites of passage”.<sup>22</sup>

Hence, in Van Gennep's anthropological studies of religion, regardless of the cultural frame of reference, the notion of the door is intrinsically connected to the concept of liminality and to his *rites de passage*. The author describes the phenomenon of crossing borders and other forms of territorial transition, emphasising the structural understanding of the door as a symbolic borderline. In an interdisciplinary comparative sense, this transition of a border/threshold may be viewed through the paradigm of quantum mechanics, where the act of “crossing the threshold of a door” resembles the process of *quantum tunnelling*.<sup>23</sup> More precisely, when a particle possessing finite spatial dimensions encounters a potential energy barrier and it lacks the classical energy to surmount it, the particle behaves as a wave rather than as a classical particle in its presence (i.e., the particle's wave function—which represents the probability of its location—extends into and beyond a potential energy barrier). Thus, through the propagation of its associated wave packet state, the particle can penetrate and, with a certain probability, traverse the barrier, similar to a person “walking through” a wall instead of climbing over it.<sup>24</sup> Hence, in both cases—ritual and physical—the act of transition implies not only transformation, permeability, and the redefinition of boundaries between distinct states of existence or consciousness, but also a reconfiguration of the individual's relationship to reality. This metaphorical parallel also suggests *the transition from one state/plane of existence or level of reality to another*, analogous to the transition from life to death.

Almost seven decades later a new development of this approach was made when Victor Turner stressed the liminal or threshold stage, called the “betwixt and between”.<sup>25</sup> In that phase there are no more social structures and the individual does not belong anywhere. It was in this particular state of liminality the door and threshold came into action and even give the process its name. At the level of the human mind, it is believed that the door has transformational powers in the sense that on crossing the threshold and entering another space/realm, the individual is considered to have already been transformed. Thus, the door is viewed as a connection between various kinds of areas and situations. The relationship between

<sup>21</sup> Van Gennep 1960: 20. The author uses the Latin term *limen* which means “threshold” as “transition between”.

<sup>22</sup> Van Gennep 1960: 25.

<sup>23</sup> In physics, *quantum tunnelling*—also referred to as *barrier penetration*—is a quantum mechanical phenomenon whereby a particle, such as an electron or atom, traverses a potential energy barrier that it could not overcome according to the principles of classical mechanics, owing to its apparent lack of sufficient energy to surmount it.

<sup>24</sup> This occurs because particles behave as waves, with their wave function (representing their probability distribution) extending into and sometimes through the barrier, allowing a finite probability of the particle appearing on the other side. For an in-depth explanation of quantum tunnelling, see Razavy 2013; Tepanyan 2025.

<sup>25</sup> Turner 1974a; 1974b.

the door and transformational rites resides in the fact that the former is the border between sides, as either a physical or a social boundary between two spaces. “Transcending the threshold means abandoning one space and entering another”,<sup>26</sup> a fact with major consequences. As a result, the transforming rites approach of the threshold and door is almost universal and cross-cultural.<sup>27</sup>

To some thinkers, this process points at the non-physical, mental schematic expression of our visible world – i.e., the idea of the symbol: “[...] it is about experiencing this world symbolically” [...] “Symbols are the cause and continuity of [spiritual] life. You begin to experience the world symbolically and realize that everything around you is a front or a sign of a greater reality”.<sup>28</sup> Bringing the spiritual dimension onto the material plane of archaeology and anthropology, the symbol reveals itself as the common element that crosses human cultures throughout prehistory and history. Thus, for Anthropologist Clifford Geertz symbolism is essential to the process of forming of cultures. He defines the culture as “a system of inherited conceptions expressed in symbolic forms by means of which people communicate, perpetuate, and develop their knowledge about and attitudes toward life”.<sup>29</sup> Symbols are present in our life at all levels and on all its dimensions, from profane rituals to the sacred ones, from daily routines and habits to religious manifestations. Because “Ritual is rule-governed action, which is repeated on special occasions. It may sometimes be regarded as sacred and part of religion, but at other times may be seen as secular. [...] Although knowledge of ritual is handed down from one generation to the next, it may also undergo change in its form and effects. It can be studied as part of biocultural evolution.”<sup>30</sup>

In this regard, as a symbol of starting, opening, and exiting, moving from one state of being to the next, the door represents change, metamorphosis and acts as an interface. It denotes the beginning of something new yet also symbolizing the end of something else. Yet, doors come in various sizes and forms, the most common ones being the gate and the portal. Of these two types, the “portal” has a much broader significance with reference to either past or future. The term has been around for centuries, being referred to as early as 1595 by Shakespeare in *Richard II* (Act 3, Scene 3):

“See, see, King Richard doth himself appear, as doth the blushing discontented sun from out the fiery portal of the east.”<sup>31</sup>

In its simplest form the word ‘portal’ just means a gateway, but often a gateway to somewhere quite different than just the next room or street. The *Oxford Reference Dictionary*<sup>32</sup> defines a portal as: “A doorway or gate etc, especially a large and elaborate one.” Along with their thresholds, doors and its variants are viewed as starting points of transgression.

In the logic of the above, one might say that whatever the level of approach – literally or figuratively, materially or spiritually – buildings without at least one door/gate can hardly exist. The door (or its equivalents, such as: gate, portal etc.) is a fundamental part of any structure meant to separate, cover, protect and/or hide someone and/or something considered important inside it. Therefore, door can be viewed as a *sine-qua-non* element of our habitat. Doors can be found everywhere: in buildings, rooms, vehicles, and airplanes, with the function of restricting or enabling entry, while serving as a barrier between an internal environment and the outside world. Thus, the space of either natural shelter used as a dwelling by humans,<sup>33</sup> or a man-made building with the same end must contain an element to delimit and hence emphasize the difference of perception and meaning in relation to its opposite, the outer space, to what that inner covered space and its destination are not.<sup>34</sup>

Passing from the outside to the inside of a building (or of any kind of space) and vice versa, regardless of its function and destination – civil, religious or funerary, is done through an entry/exit area delimited by a door/gate, i.e., the doorway. Doorways are construction and architectural components that allow us

<sup>26</sup> Eriksen 2019: 22.

<sup>27</sup> Eriksen 2019: 22.

<sup>28</sup> Hederman 2007: 7.

<sup>29</sup> Geertz 1973: 89.

<sup>30</sup> Parkin 2015: 717.

<sup>31</sup> Shakespeare 1894: 110–111.

<sup>32</sup> Pearsall, Trumble 1996: 1155.

<sup>33</sup> Or even by any kind of species.

<sup>34</sup> “Situated on the border with inside and outside, gates, doors and portals carry information on indoor state of affairs and communicate it with the outer space” (Giorgadze 2008: 25).

access between spaces, and they exist in a variety of sizes and types. Moreover, human subjectivity makes each of us perceive in a different way the contact we have with a door/gate and the moment when we transition through the space marked by it.

Throughout history and humans' relationship with the door/gate, the latter has acquired a certain power over human perception of spatial segments and one's performed actions which involve transition, entry and exit through a door/gate – the doorway/gateway.

The door implies a threshold and the action of passage and crossing different types of boundaries.

According to architectural philosopher Simon Unwin, one of the architect's most powerful and expressive instruments is the door, which can influence people's perceptions, movements, and social interactions.<sup>35</sup> Although not in a general manner as Unwin considered, still in most cases doorways match his observation that they mirror human form and movement which is forward-facing due to sight and body orientation. In this respect, doorways "reproduce the axial symmetry of the body", thus controlling movement, perception, and vision.<sup>36</sup> In the same logic, the philosopher Georg Simmel connects the door with the human nature. When compared to the bridge (another liminal passageway), Simmel emphasized the importance of the door describing it as "a linkage between the space of human beings and everything that remains outside it, it transcends the separation between the inner and the outer".<sup>37</sup>

## Ritualisation of the door

The earliest textual evidence of a gate in a ritual context may be found in the Sumerian and Babylonian myths of Ishtar, the goddess of sexual love, war and fertility, when she enters the underworld. Going down into the netherworld, to recuperate her brother and lover Tammuz, Ishtar passes through seven gates, each time the doorkeeper removing one of her qualities until she reaches the underworld. Upon reaching the gate, the Babylonian text describes the powerful goddess seized with anger:

"O gatekeeper, open thy gate,  
Open thy gate that I may enter!  
If thou openest not the gate so that I cannot enter,  
I will smash the door, I will shatter the bolt,  
I will smash the doorpost, I will move the doors,  
I will raise up the dead, eating the living,  
So that the dead will outnumber the living."<sup>38</sup>

In this context, another significant element is that Ishtar has lent her name to one of the gates of Babylon.

The door can also be used to perform various actions, implying barriers as in the case of false doors, hidden passages, and labyrinths.

## Rites of transition from life into death as a spiritual experience

In the funerary rites the idea of the door as a visible mark of the liminal transition represents one of the archetypes of the collective mind. The view is supported by a broad set of evidence extending from the ancient Egyptian false doors in the Old Kingdom private elite tombs to the Korean threshold god Munshin, and to the sacred rear door of the circumpolar Saami.<sup>39</sup> The results of the investigation carried out in 1896 by the theologian H. Clay Trumbull, during which he gathered threshold-related beliefs from around the Globe, led him to the conclusion that the threshold and door were used in ritual practices

<sup>35</sup> Eriksen 2019: 16.

<sup>36</sup> Unwin 2007: 38.

<sup>37</sup> Simmel 1994:7.

<sup>38</sup> Hooke 2004: 39–40.

<sup>39</sup> Eriksen 2019: 22.

almost all over the world.<sup>40</sup> Furthermore, a brief investigation shows that ritual use of the door is known in some form at least through the last four millennia, even maybe longer. Hodder reveals how the door has become increasingly important in the earlier Neolithic of central Europe, partly due to ritual deposits connected with entrances.<sup>41</sup>

## The physical description of the realm of the dead in the ancient Egyptian funerary texts

The transfiguration state and restoration of life (in its eternal variant) reached by the dead in the hereafter was carried out by means of the same rituals that were performed for Osiris so that the deceased, through a subtle metamorphosis, was eventually identified with (the state of) the god, and thus was thought to become a divine being. The mortuary rituals implied a set of indispensable sections and actions for the dead to attain immortality: the burial, the spells, the mummy, the funerary equipment, the procession to the tomb, all necessary for the metamorphosis of the deceased into a divine being and to perpetuate one's prosperity and benefits acquired during the earthly life into the afterlife.<sup>42</sup> Therefore, the dead's transfigured state was associated to the divine one and "translated"/interpreted into visible human concepts accordingly, and thus understood as the result of one's transition – both physical and non-physical! – to the afterlife along already established pathways that the departed had to follow. In this particular logic, the procession to the tomb on the day of the burial was referred to as allowing "the god (i.e., the deceased) to rise to his horizon", i.e., to the specific location(s) where the sun rises and sets, and which was/were filled with regenerative significance and represented the final destination of the transfigured dead.<sup>43</sup>

The topography of the realm of the dead as described in the various funerary texts from different successive periods assumes in one form or another the passing from a kind of envisioned location/state with specific features and guarded by a divine entity to a different one and so on. According to the Old Kingdom Pyramid Texts, the deified deceased king's horizon was located in the northern sky. The immortal part of the king is supposed to reach it by literally rising to the skies, whereupon he would live among the gods beside the sun god Re. A more sophisticated idea is presented in the Coffin Texts, written during the time following the Old Kingdom. The earthly underworld, or kingdom of Osiris, now complements the heavenly domain of the sun deity. The identities of the inhabitants of the underworld, the locations of pathways, waterways, and gates, as well as the appropriate words and deeds to pass them, were among the specific knowledge that the deceased needed in order to enter this realm securely. This information is present in the Coffin Texts, which also contain compositions that are today referred as "guides to the hereafter," which gave the uninitiated departed the knowledge they needed to get safely to their destiny.

## Doors, gates and portals in the ancient Egyptian funerary corpora

Material evidence reveals that the ancient Egyptians conferred significant meaning to doors, gates and portals both for the mundane world of the living<sup>44</sup> and the extramundane worlds of gods and the dead. Currently, the ancient Egyptian false door is viewed as part of a universal human phenomenon.<sup>45</sup>

During the Old Kingdom, the doors of the royal palaces were extensively replicated in the form of the "false" doors in the chapels of the tombs, to connect specific areas of the visible and invisible realms/universes. Also, the pylons of the temples devoted to gods (their palaces) are referred to as portals to different levels of access within the world of the divine.

<sup>40</sup> Trumbull 1896.

<sup>41</sup> Hodder 1990: 119–122, 130.


<sup>42</sup> Schneider 1977.




<sup>43</sup> Taylor 2001: 32.

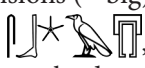
<sup>44</sup> On the construction of the doors in the ancient Egyptian civilization, including the false-doors, see Koenigsberger 1936.


<sup>45</sup> As done previously e.g. in Meskell 2003.



Starting with the earliest corpora of religious–funerary compositions i.e., the Pyramids Texts, and continuing with all significant related ones all along the ancient Egyptian history, the symbol of the door/gate/portal is present at the language level as well as at the imagery one, being associated accordingly with major gods and/or divine gatekeepers whom the royal or non–royal elite deceased meets in the realms of the afterlife. Equally important, the symbol is related to the metamorphosed transition of the non–physical components of the dead (from *k3* to *3h*) and their (re)integration into the invisible cosmos, culminating with the process of the resurrection of the deceased in the Netherworld following the Sungod pattern.




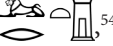
The funerary texts contain various terms corresponding to specific kinds of doors, gates and portals in connection with the structure of the afterlife the dead journeys across; yet they originally describe architectural parts of the man–made buildings, which  were subsequently transferred into the funerary–religious universe for which they have been provided appropriate meanings, patterned after those of the terrestrial world. The main terms are:

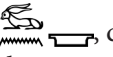

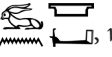
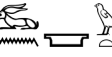
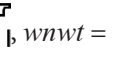

– For door: *3.wj* (found often in dual) as in: , *3.wj r<sup>c</sup>*, “the door–leaves”;<sup>46</sup> or in the Theban priest title  *wn 3.wj*  *p.t*, “the one who opens the doors of heaven”;<sup>47</sup> etc. The meanings of these related terms rely on the concept of a physical and visible object which exceeds the usual dimensions (= big).

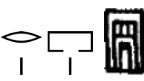
– For gate/portal: , *sb3*, with various forms, made of different materials and covering a wide range of meanings: the door of the house, of the palace, of the tomb, of the heaven, of the Underworld, of the temple, of the necropolis.<sup>48</sup> What is interesting however in this case is the connection of the term with the concept of brightness (shining) suggested by the determinative of the star and associated with that of the door – the inferred meaning being thus that light comes/is accessed by crossing a threshold (a door). In addition, another connotation of the same brightness is taken up in the sense of knowledge obtained through learning, which is written almost identical, with or without determinative:

, *sb3*, “to educate, to teach”.<sup>49</sup>

– For gate: , *rwt*, “gate” – of the house, of the palace, of the temple, in heaven, in the kingdom of dead;<sup>50</sup> and , *rrwt*, “gate” – of the house, of the palace, of the temple, in heaven, in the kingdom of the dead; seat of administration; in titles.<sup>51</sup>

For gateway – and the origin of the false–door! – , *rwt*,<sup>52</sup> det., ,<sup>53</sup> “gateway”; and ; ,<sup>54</sup> *rwt*, “false door”.



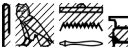


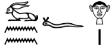
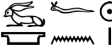
For only a mere **written implied suggestion of the action** in the burial rites **of opening** a door/threshold with the deceased passing through it from this visible world to the invisible one of the beyond:  det. , *wn* = to open; , *wn* = opening (of the door/gate);    *wnwt* = (pl.) doors, openings.<sup>55</sup>

For the false–door (of the tomb, in Old Kingdom): ; *r3-pr*, “false–door”.<sup>56</sup> However, it is important to point out that although there is at least one term inferring a different process and

<sup>46</sup> *Wb* 1971: I, 164.15.  
<sup>47</sup> *Wb* 1971: I, 164.16.  
<sup>48</sup> *Wb* 1971: IV, 83.9–17.  
<sup>49</sup> *Wb* 1971: IV, 83.  
<sup>50</sup> *Wb* 1971: I, 210.12–17.  
<sup>51</sup> *Wb* 1971: I, 211.8–14.  
<sup>52</sup> Haeny 1984: 563–574. As the most significant architectural element within the tomb, the false door functions as a spatial simulation of an actual doorway. This symbolic correspondence is emphasized by its designation as *rwt*, the same term used for real, functional doors, thereby reinforcing its conceptual role as a threshold between the realms of the living and the dead. (*Wb* 1971: II, 404:1–10). Bolshakov 1997: 50.  
<sup>53</sup> Hannig 1995: 460–461.  
<sup>54</sup> Hannig 1995: 460–461.  
<sup>55</sup> Of either earthly/physical or afterlife/immaterial objects, such as: door, gate, building, tomb, heaven, recipient, body part. Hannig 1995: 195.  
<sup>56</sup> In fact, the place of worship and the space of cult. *Wb* 1971: II, 397.8.

phenomenon in physics, often conventional English does not make a clear distinction between the modern words used to translate the ancient Egyptian ones of *arrw.t* and *sbA* for **gate**, **gateway** or **portal**.

Examples:

- In the Pyramid Texts:
  - in spell 361, is mentioned a **door** of the sky, namely (in its dual form) [...]  T,<sup>57</sup> *ʿ3wj pt jpf n ttj*, i.e., “[...] the yonder door of the sky opened for Teti [...]”,<sup>58</sup>
  - the last part of spell 585 refers to an opening associated with Nu and its most appropriate translation (so far!) would be “**gate**”: *sb3w hrw nw* (§ \*1584d), i.e., “[...] the upper gates of Nu”<sup>59</sup> – although *sbA* implies the shining light, so that the action of “opening a gate” should most likely be equated with a process and phenomenon in physics related to luminosity, brightness;
  - in spell 272, a **portal** is referred to as ,<sup>60</sup> *ʿrrwt nt nw*, “the portal of Nu”,<sup>61</sup> yet, the process here being much closer to a mundane one of passing a terrestrial threshold.
- In the Coffin Texts:
  - in spell 1131 the speaker addresses his father and raises him up; just before the rubric he says that he has come to see Osiris and refers to a **door**:  *sšm n ʿ3wy 3ht htm.n=sn hr ntrw*, i.e., “Guide to the double doors of the horizon, which they have closed on the gods”,<sup>63</sup>
  - spell 160 (CT II 373a–375b S2P) along with the previous ones starting with spell 154 are for knowing the *b3w* of specific places such as Pe or Nekhen, or the *b3* of the New Moon or the Easterners. In a few of these “knowing the *b3*”-spells, the rubrics also list outcomes for the dead. As well as in the other rubrics, the knowledge has a central position here, while the spell refers to a **gate** of the sky:<sup>64</sup>  *ʿk prt m sb3w i3b(w)t nw pt*, i.e., “going in and out of the eastern gates of the sky”.<sup>66</sup> Again, this two-way movement of exiting and transitioning through an opening of the visible sky at the east infers the idea of a bursting of light.
  - in spell 97 it is implied only a mere **written suggestion of the action of opening** and passing by the deceased through a door or barrier/threshold “in the burial rites, with a space where the ritual-reciter (role of Thoth) is prominent, and therefore named on the mythic plane as Wenu (cult-centre of Thoth)”,<sup>67</sup> from this world to the one beyond:  *wn φ wnw.t htm φ htmw.t tp=j jnk dhwtj jkr* = “Let open what has to be opened! Let seal what has to be sealed before me (because) I am Thot the excellent the excellent”.<sup>68</sup>
- In the New Kingdom *Book of Gates*,<sup>69</sup> “the second great Book of the Netherworld of the New Kingdom”<sup>70</sup> after the *Amduat*, the First Door<sup>71</sup> is said to be guarded by the serpent-shaped *z3w zmjt* (“Who Guards the Desert”), specifying that  *wnn.f hr ʿ3 pn*, “he is upon this door-leaf” (which  *wn.f n Rʿ*, “he opens for Re”<sup>72</sup>; the language and imagery describe “the journey of the

<sup>57</sup> Sethe 1908: I, spell 324, § 361 c.

<sup>58</sup> Popielska-Grzybowska 2020: 61.

<sup>59</sup> Popielska-Grzybowska 2020: 44–45.

<sup>60</sup> Sethe 1908: I, spell 272, § 392 a.

<sup>61</sup> Popielska-Grzybowska 2020: 159.

<sup>62</sup> CT VII, Spell 1131, VII 473, B1P.

<sup>63</sup> Landborg 2014: 30.

<sup>64</sup> Landborg 2014: 31–32.

<sup>65</sup> CT II, Spell 160, 373a–375b S2P.

<sup>66</sup> Landborg 2014: 31–32.

<sup>67</sup> Quirke 2013: 24.

<sup>68</sup> Carrier 2004: Spell 97, B3L, 256, 257.


<sup>69</sup> This is not the original title, which is not attested. Hornung suggested that it could, however, be the title mentioned in the judgement hall (33<sup>rd</sup> scene) as “Book of protecting Osiris among those of the Netherworld”. The title used for his book was based “on the prominent depiction of gates concluding the section of every night hour”. Hornung 2013: 9.

<sup>70</sup> Hornung 2013: 7.

<sup>71</sup> That, in contrast to the other gates, is shown in abbreviated form. Only one leaf of the door is visible and fills the entire height of the picture. Hornung 2013: 22.

<sup>72</sup> Hornung 2013: 22.

Sungod through” the twelve hours of the night, “until he is rejuvenated every morning”.<sup>73</sup> Although “these gates are mentioned”, they were “not yet represented in the *Amduat*”. However, we know them due to their depiction in the *pr:t m hrw* i.e., the *Book of the Dead*.<sup>74</sup>

In the various New Kingdom funerary papyri of the *pr:t m hrw* are depicted these gates of the afterlife.<sup>75</sup> Following the Sun-god pattern, the deceased journeys through the various realms of the afterlife, passing the thresholds which mark the stages in which the dead enters a new section of the invisible realm, each being guarded by a divine entity. Yet, when used, the verb meaning “opening the gate/door”, with the determinative of one door-leaf, usually points at the opening of the tomb. E.g.: chapter 92:  [...] , *r<sup>c</sup> n wn iz b3 n.t swt pr:t m hrw shd* [...] = “Formula for opening the tomb for the *b3* and shade, for going out by day-light [...]”<sup>76</sup>



**Fig. 1.** Fragment of the Papyrus of Ani showing the deceased couple worshipping the divine gatekeepers of different realms of the Netherworld. Two “gate spells”. On the top register, Ani and his wife face the “seven gates of the House of Osiris”. Below, they encounter ten of the 21 “mysterious portals of the House of Osiris in the Field of Reeds”. All are guarded by unpleasant protectors. Book of the Dead spells 144 and 145 or 146 from the Papyrus of Ani. Wikipedia, Public Domain. [https://en.wikipedia.org/wiki/Gate\\_deities\\_of\\_the\\_underworld#/media/File:Bookofthedead-144145.jpg](https://en.wikipedia.org/wiki/Gate_deities_of_the_underworld#/media/File:Bookofthedead-144145.jpg) (accessed October 28, 2023)<sup>77</sup>

In ancient Egypt, the tombs of the members of the elite category had several functions such as:

- burial place for the corpse of the deceased owner;
- a monument that marked the deceased’s burial place, hence enabling one’s relatives and successors to pay one respect and to provide with food offerings for the sustenance of the owner’s immortal invisible vital force i.e., the *k3*;
- preserving the deceased’s personality and memory within the framework of the society from which one originated;
- displaying both the socio-economic standing of the tomb deceased owner’s and that of one’s family.<sup>78</sup> The architectural parts of the mortuary monument are *interindependent*.<sup>79</sup> However, to enable both the funerary and mortuary rites in the traditional way they must function as two distinct groups necessary for the dead to enter the afterlife.

<sup>73</sup> Hornung 2013: 7.

<sup>74</sup> Hornung 2013: 7, 9. See also Hornung 1979–1984; Quirke 2013: vii.

<sup>75</sup> Created after 1400 BCE, this specific type of funerary compositions was influenced by the Amarna Period and consists of twelve parts, corresponding to the twelve hours the Sun(-god) spends traversing the eternity.

<sup>76</sup> Lapp 1997: 79.

<sup>77</sup> See Faulkner 1962: 40–44, Pl. 11–12.

<sup>78</sup> The titles the deceased had held, the size and design of the tomb, and the inscriptions describing the owner relationship with royalty all served as indicators of this position. It is also possible that these texts refer to gifts or royal decrees (Roeten 2021: 1).

<sup>79</sup> I.e., they are related not in a systemically interdependent way, but in a “looser” way, described by the neologism “interindependent” which represents a universal whose components have relative importance to different specific cases. See Vilela, Carvalho 2017: 33.

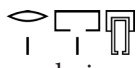
The essential sections of the Old Kingdom private elite mortuary monuments were:

- the ground funerary chapel, intended for performing rituals by the living and for providing offerings for the deceased, in front of the false-door;
- the serdab containing the statue of the deceased's *k3*;
- the underground sarcophagus chamber usually reached through a pit, and related to the false door.

There were also various entrances, doors, gates and thresholds that ritually marked (in the sense of liminality), delimiting and uniting simultaneously the elements of the physical earthly universe, from/with those of the non-physically one in which the deceased was supposed to continue to exist, yet imperceptible to the senses of the living. Going into details about all such connecting architectural portals<sup>80</sup> would exceed both the purpose and the length of this paper. Therefore, hereinafter we will focus on the false door.

## The Ancient Egyptian false-door

According to Egyptian beliefs, the threshold of the slit of the “false door” (the recess niche) is one of the examples of the door between this ephemeral and perishable terrestrial world and the next immortal one after death. Although its clearest expressions date from the Old Kingdom private elite tomb chapels, the false-door originated in the early mere niche<sup>81</sup> and then developed as a doorway, based on the typical Egyptian civil door of the royal palace façade, to which conceptual additions were included in the correspondent beliefs in the surviving of the immortal part of the human being after death. The symbol of the false door has been perpetuated ever since in one way or another, particularly on Middle Kingdom coffins, and subsequently in New Kingdom private tombs. The elaborately panelled so-called “false door” is one of the essential peculiarities of the ancient Egyptian funerary architectural structure of the tombs and their decoration<sup>82</sup> – be it the tombs royal (showing pictorial representations of it in the pyramids with texts in the burial chamber), or private elite (where, on the false door, the chamber of offerings linked to the burial chamber is dedicated) – since the most remote historical past, as the portal through which the immortal *k3* and the *b3* of the deceased were able to connect (and transition back and forth at will) the two opposite worlds, from the mortal earthly life to the immortal afterlife. In this regard, the false doors did not have any functionality for the living. Starting with the Middle Kingdom, the representations of the deceased on the false door in front of the offerings table along with the funerary formulas were found on the funerary stela. Hence it replaced the false door as the portal between the worlds.<sup>83</sup>

In ancient Egyptian writing, the false door is expressed in two ways:  *r3-pr*<sup>84</sup> and *rwt*.<sup>85</sup> While, *r* refers to an opening,<sup>86</sup> *pr* refers to the house, and the expression *r-pr* designates the false door<sup>87</sup> (viewed as an opening in the eternal and invisible dwelling of the deceased as an immaterial being. The second term, *rwt*, means false door<sup>88</sup> or gate,<sup>89</sup> likely suggests that it was the deceased's gate to the afterlife' underworld. Another significant expression was the *k3*-door,<sup>90</sup> the *k3*, i.e., the spirit (/ the vital force) of the deceased being considered to have the ability to pass freely in both directions through it.

The living was convinced he could communicate with the deceased's *kA* through the false door.<sup>91</sup> The deceased was presumed to move upwards and emerge through.<sup>92</sup>

<sup>80</sup> In this respect see Roeten 2021.

<sup>81</sup> The first type of false door was very simple niche, and this form evolved a form of doorway. See Anderson 2000: 129. The latter became common for private tombs during the Old Kingdom. See Reisner 1932: 328. The eight parts of the common form of false door in the Old Kingdom are: cornice, torus, panel, apertures, jambs, architrave, lintel and central niche. See Strudwick 1985: 11.

<sup>82</sup> Takenoshita 2011: 1; Abdel Hamid 2014: 110.

<sup>83</sup> Dodson notes that in certain cases a statue of the deceased owner replaced or was added to the stela (Dodson 2016: 2149).

<sup>84</sup> *Wb* 1971: II, 397.

<sup>85</sup> Haeny 1984: 563–574.

<sup>86</sup> Faulkner 1962: 145.

<sup>87</sup> *Wb* 1971: II, 397.

<sup>88</sup> *Wb* 1971: II, 403.

<sup>89</sup> *Wb* 1971: II, 147.

<sup>90</sup> Haeny 1984: 563.

<sup>91</sup> Lekov 2005: 19.

<sup>92</sup> Ćwiek 2003: 331.

The false door was usually located in the main section of the tomb's chapel, known as the offering chamber. There the false door is positioned on the west wall. The essential part of the false door was the central narrow pseudo-slot positioned in the centre, with a drum above the opening, imitating a rolled-up reed mat that was believed to help connect the world of the living and the world of the dead and to establish their communication through it. When passing through it from the physical world to the world beyond, and vice-versa, the *k3* (equated to the vital force or the immortal spirit of the being<sup>93</sup>) of the deceased was presumed to move upwards and emerge through. The door's design allowed the person's soul to easily roam between the chapel and the tomb to accept donations. The false door (also called the stela gateway), ensured that the world on earth and the world beyond are in communication.<sup>94</sup>

Above the false door, a panel depicting the deceased show him/her seated at a well-supplied offering table. On both sides of the central narrow false door, a single or several sets (identical pairs) of doorjambs were inscribed with columns consisting of offering formulae, and the names and titles of the deceased.<sup>95</sup>

It is important to stress that due to the one of the principles of ancient Egyptian art implying the utilising of 2D-representation perspective to suggest a 3D-depth perspective in the cases of 2D-representations (i.e., drawings, paintings and reliefs), one must view the several pairs of doorjambs of the false-door in 3D-depth perspective, as the arrangement of these pairs of door-jambs in depth, much like their extension providing the impression of depth, as in a hall, corridor, passage, tunnel, somehow mimicking the hall that opens in a house (palace) behind a doorway/gateway.

Under the inscribed columns there are usually standing representations of the tomb owner, holding a staff or a sceptre, and dressed in clothes that express his status in life. On many false door stelae, a so-called torus moulding, a rounded edge imitating a bundle of reeds tied together with ropes, is added around the door's frame, and above is the hollow cavetto cornice decorated with stylised palm leaves.<sup>96</sup>

Due to the role of the false door as an interface between worlds,<sup>97</sup> the offerings were deposited in front of it, while a water basin and offering tables were placed in front of the equipment to perform the offering ritual.<sup>98</sup>

While the offering places in many burials consist of the stela only, having a very basic shelter either carved out of the rock or built-in brick or stone, in other tombs the offering place was kept in a larger, ample decorated structure – the mortuary chapel or the mortuary temple.<sup>99</sup>

Where it exists, the decoration of the royal tombs reveals that while the kings enjoyed a privileged hereafter environment including deities and events of reign,<sup>100</sup> instead, most of the motifs and themes depicted in the private elite tombs and funerary chapels were taken from the food production, agriculture, farmer and daily experiences of the living. The everyday life scenes depicted in private funerary chapels are an invaluable source for our understanding of life in ancient Egypt. Their main roles were to magically recreate the earthly physical world the deceased had left and to provide him/her an additional source of eternal nourishment.<sup>101</sup>

<sup>93</sup> On the interpretations of *kA* and the immortal parts of being according to ancient Egyptian beliefs (*k3*, *b3*, *3h*) see Tatomir 2005; Tatomir 2006.

<sup>94</sup> Providing a passage or an “interface” for the dead between this world and the other world was another function of the Egyptian tomb noted by Assmann, one that, to him “has no equivalent at all in our world”. The scholar also pointed out that the symbolism of the door shows itself at every kind of border over which the deceased must pass to come back into the earthly world and then return to the afterlife. The activation of this function was done through the funerary rites of passage (Assmann 2003: 46–47).

<sup>95</sup> van Dijk 2006: 41.

<sup>96</sup> Subsequently to the Old Kingdom, coffins of the First Intermediate Period and the Middle Kingdom were regularly decorated with a (painted) false door of the *serekh* design. In the following periods the theme became less frequent, although even in the Late Period a coffin was still sometimes decorated with it (Takenoshita 2011: 8).

<sup>97</sup> On the false door see also Tatomir 2023: 33–35.

<sup>98</sup> Takenoshita 2011: 6.

<sup>99</sup> The mortuary temple generally indicates the royal structures of this kind.

<sup>100</sup> Although it does not concern the topic of the present paper, it is important to mention that from around 1250 BCE, the daily life scenes started to be increasingly replaced by ritual ones. Those depict gods and fragments from the funerary so-called books whose main function was to help the deceased reach in optimal conditions for their afterlife destiny.

<sup>101</sup> However, additional esoteric meanings are not excluded, precisely those connected to regeneration and rebirth in the afterworld.



a)



b)

Fig. 2 a-b. The representation of the Old Kingdom Dynasty 6, false-door in the offerings chamber in the private mastaba of the Vizier and Chief Justice Mehu at Saqqara (photo © by R. G. Tatomir)



Fig. 3. 3D suggested reconstitution of the Mehu's false door (processed © by R. G. Tatomir)

The visual expressions of the offering places were also very different. The structures dedicated to the deceased kings could be colossal funerary temples.<sup>102</sup> The huge rectangular enclosures of the first-step pyramid were surrounded by ritual buildings. Yet, they were soon replaced by smaller enclosures providing on the east side of the pyramid a mortuary temple, from which a causeway led to a “valley temple” situated at the edge of the desert.<sup>103</sup>

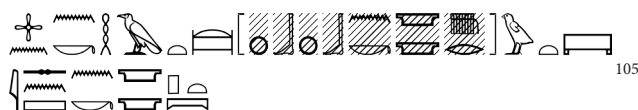
As for the function of the false door the main view is that it allowed the passage of the dead person's spirit (or vital force) – one's *k3* – to come forth and accept the offerings left on the altar.<sup>104</sup>

As an invisible compound of the immortal being, the *kA* was believed to leave (and return to) the coffin at will, being invested with supernatural powers that make accessible passages of any type, be it either material and visible or immaterial and invisible – threshold, door, gate, lid etc:

<sup>102</sup> Either autonomous or, before the middle of the second millennium BCE, attached to a pyramid.

<sup>103</sup> After the royal abandonment of the pyramid as a funerary architectural trend, the New Kingdom's sovereigns (ca. 1550–1070 BCE) adopted the type of free-standing temples. These structures were indistinguishable from contemporary temples of the gods, the differences manifesting in details only. Because now in contrast to the earlier mortuary temples, the king's spirit shared the temple with Amun, the king of the Gods, and the sun god, Re, each having his own separate sanctuary within the temple (Dodson 2016: 2150).

<sup>104</sup> The Egyptian belief was that the *kA* was able to pass through the *kA*-statues of the dead owner located in the serdab, and accessed both the material and visual offerings in the correspondent chamber of the tomb chapel. See Anderson 2000: 129; Kanawati 2001: 58–59. On the evolution of the funerary stela to false-door and its parts, see Takenoshita 2011: 6–8.



*wn n.k h<sup>c</sup>t [hbhb n.k ʕwj] drwt*

*jzn n.k ʕwj pt*

“The tomb has been opened for you, [the door–wings] of the sarcophagus [have been pulled back for you], the door of the sky has been thrown open for you.”<sup>106</sup>

Whatever the material used, the palace façade panelling symbolised this passage, at first sight very clearly suggesting the continuation of existence after death in a dwelling that replicated the one the deceased had enjoyed during life,<sup>107</sup> thus perpetuating in the afterlife the status and the highest level of comfort and advantages of the owner.

Nevertheless, for the livings, the false–door was meant to connect them with the dead and their new invisible hereafter. In front of it, offerings were laid for the deceased and he/she could come from the burial chamber and enter into the chapel then go back into the burial chamber through the false door to partake of them.<sup>108</sup> In its physical and visible manifestation, the false door was conceived and designed exclusively “for the benefit of the deceased”, in their new immortal state of being reached after death.<sup>109</sup>

The false-door was a replica of a real one. It is very interesting that its panelling design was used to provide the perspective, depth and the impression of a tunnel. Nevertheless, there are scientific opinions in this respect that stressed out the ancient Mesopotamian cultic building antecedents for the design of the ancient Egyptian false–door. These may have inspired the Egyptian funerary architecture in the general framework of Egyptian–Mesopotamian relations and exchanges from the 4th millennium BCE.<sup>110</sup> For the false–door, particularly, recessed niches were characteristic of Mesopotamian temple architecture, very likely adopted in Egyptian funerary architecture, especially in the case of mastaba tombs, during the First Dynasty and the Second Dynasty (Early Dynastic or Archaic Period – ca 3150 BCE), lasting from the end of the archaeological culture of Naqada III until c. 2686 BCE, i.e. the beginning of the Old Kingdom.<sup>111</sup> However, it is still unknown whether the transfer of this design was the result of Mesopotamian workmen in Egypt, or temple designs represented on imported Mesopotamian seals may have been a sufficient source of inspiration for Egyptian architects.<sup>112</sup> Architectural visual associations can go even further. Based on evidence found so far, the false–door pattern design may be derived and included in the primary architectural elements of mankind’s simplest dwelling constructions – i.e., bowers, arbors, huts, shelters, tents, enclosures, etc. – from the border between prehistory and history, and the transition from rural to urban communities, specific to the Desert people. These are all common to the first civilisations in Southwest Asia and Egypt. Particularly the multipanelling frame structure of the ancient Egyptian false–door, which provides architectural perspective, the impression of depth, and of tunnelling, may be found throughout the history of architecture until nowadays in design details of cultic and civil structures in the Middle East and even India. Hereinafter, I provide some ancient as well as modern examples.

<sup>105</sup> Sethe 1910: II, 486, spell 2009 a–b.

<sup>106</sup> Popielska–Grzybowska 2020: 121, § 2009a–b.

<sup>107</sup> Roeten 2021: 45 and note 50. The author relates the symbolic meaning of the doors with the new residence of the kA (in the afterlife) that is the “whole inner world of the tomb” to which the false door of the chapel is the entrance.

<sup>108</sup> Wiebach–Koepke 1981: 63–66. Roeten 2021: 53.

<sup>109</sup> Roeten 2021: 53.

<sup>110</sup> Demand 2011: 71.

<sup>111</sup> Silberman 2012: 464; Shaw 2000: 479.

<sup>112</sup> Demand 2011: 71.



**Fig. 4.** Sumerian reed dwelling constructions – above, the ancient model, dating back more than 5,000 years, and its modern correspondance, below. These reed houses are still being built, according to the ancient pattern design, <https://twitter.com/malathali16/status/1662358252745523200> (accessed September 28, 2023)



**Fig. 5.** Wall plaque showing a naked devotee offering libations to a temple of goddess Inanna, c. 2500 BCE. libation scene from Ur, Ur, Mesopotamia, modern Iraq, ca. 2500 BCE. British Museum (detail). The door of the temple is quite similar to the Egyptian false door, [https://commons.wikimedia.org/wiki/File:Wall\\_plaque\\_showing\\_libation\\_scene\\_from\\_Ur,\\_Iraq,\\_2500\\_BCE.\\_British\\_Museum\\_\(libation\\_detail\).jpg](https://commons.wikimedia.org/wiki/File:Wall_plaque_showing_libation_scene_from_Ur,_Iraq,_2500_BCE._British_Museum_(libation_detail).jpg) (accessed September 28, 2023)

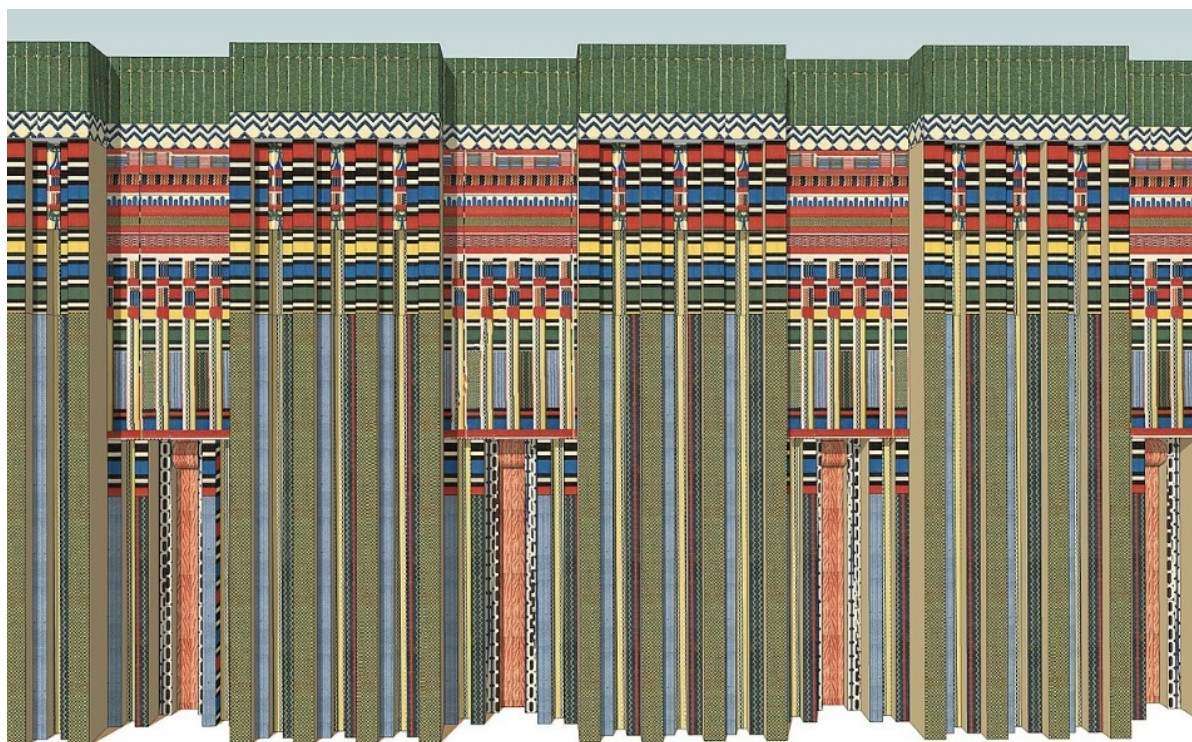


Fig. 6. Typical decoration of the “palace façade” showing the specific Egyptian panelled door, preserved in the design of the false-door, and reproduced on ancient Egyptian mastabas (based on the motifs of the mastaba of Ptahotep), <https://fr.m.wikipedia.org/wiki/Fichier:Fa%C3%A7ade-de-palais-mastaba.jpg> (accessed September 28, 2023)



Fig. 7. The Perimeter Bastion Wall surrounding the Djoser Step Pyramid mortuary complex, Saqqarah, south entrance to the complex, [https://commons.wikimedia.org/wiki/File:Saqqara\\_BW\\_1.jpg](https://commons.wikimedia.org/wiki/File:Saqqara_BW_1.jpg) (accessed September 28, 2023)



Fig. 8. The south wall of the burial chamber of Unas, depicting the palace facade or false door motif. This area is one of the few places inside the pyramid that is not inscribed with the Pyramid Texts,<sup>113</sup> <https://www.flickr.com/photos/pyramidtexts/6258572035> (accessed September 28, 2023)



Fig. 9. The false-door in the mastaba of Mereruka (Old Kingdom, 6th Dynasty), showing the ka of the deceased coming forth through the door to receive the offerings (photo © by R. G. Tatomir)

<sup>113</sup> The Egyptians believed that the false-door” surrounding the sarcophagus helped the royal deceased access the sarcophagus chamber from all four cardinal directions.



Fig. 10. Coffin of Khnumnakht, detail showing the eye panel and false door on the left side of the coffin. (MET, 15.2.2a, b), Middle Kingdom, Dynasty 13, ca 1802–1640 BCE, [https://commons.wikimedia.org/wiki/File:Coffin\\_of\\_Nakhtkhnun\\_MET\\_DP354911.jpg](https://commons.wikimedia.org/wiki/File:Coffin_of_Nakhtkhnun_MET_DP354911.jpg) (accessed September 28, 2023)



Fig. 11. First century BCE Nabataean Mada'in Saleh tombs. located in the Al-Ula sector, within Al Madinah Region of Saudi Arabia, approximately 400km north-west of Madinah, <https://timesofindia.indiatimes.com/travel/destinations/pre-islamic-civilisation-in-madain-saleh-in-saudi-arabia/articleshow/37579243.cms> (accessed September 28, 2023)



Fig. 12. Diwan-e-Aam (Hall of Public Audience) of the Amber Fort Rajasthan (built in 1592 and developed in the two following centuries), a great example of Rajput architecture. It provides the same perspective and sensation of a tunnel, <https://stylesociety.co.za/jaipur-rajasthan-amber-fort/> (accessed September 28, 2023)



Fig. 13. Typical Tihama house, Palm trunk construction and thatched roof, Yemen, <https://www.pinterest.com/artebitarealb/> (accessed September 28, 2023)

## Current interdisciplinary approach (paradigm) to understand the deep meaning of the false door

The current interdisciplinary paradigm for understanding the false door integrates architectural analysis, semiotics, anthropology of ritual, and cognitive archaeology to move beyond purely functional or funerary interpretations. Within this framework, the false door is no longer viewed solely as a symbolic threshold facilitating the deceased's transition to the afterlife but as a polyvalent medium embedded in broader sociopolitical and ideological contexts.

I propose an alternative perspective that expands upon traditional, *etic* Egyptological readings by situating the false door within the living sociocultural and political dynamics of the Old Kingdom elite. Rather than representing exclusively the liminal passage between the worlds of the living and the dead, the false door may also be understood as a materialised expression of social identity, legitimacy, and continued affiliation with royal authority.

Specifically, the false door – conceived as an architectural replica of the entrance to the royal palace – was situated in the funerary chapel, the locus of commemorative ritual activity accessible to the living family. Its placement outside the sealed burial chamber suggests that its function extended beyond mediating contact with the deceased's spirit: it also served as a visible emblem of the tomb owner's enduring connection to the royal court and the hierarchical order of dignitaries. Through the performance of offering rituals before the false door, the surviving kin reaffirmed not only the memory of the deceased but also his or her legitimised social status as a member of the palace elite.

In this sense, the false door's symbolic association with royal architecture may have conveyed a message of continuity between the earthly and posthumous identities of the tomb owner. Just as certain officials of the late Old Kingdom inscribed their names alongside that of the reigning monarch within a royal cartouche – asserting loyalty and deriving legitimacy from proximity to the king – the false door could have embodied a similar assertion of social and political belonging. It thus operated simultaneously as a ritual interface, a monument of status, and a semiotic assertion of elite identity before posterity.

To a better understanding of the ancient Egyptian paradigm of the false door, and in order to be as close as possible to the Egyptian way of understanding the transition back and forth of the deceased from the world of the living to the eternal yet invisible world after death through the false-door, I postulate an interdisciplinary approach (paradigm).

This approach stems from the ancient Egyptian perspective on death and the continuation of life after that. In its “anonymous” form it is largely based on various categories of evidence provided by the history of religious beliefs and the corpora of mythological accounts, as well as on various anthropological paradigmata. Therefore, one must not overlook the fact that our Egyptological understanding comes in the slipstream of and depends upon the ancient Egyptian view on their own traditions of funerary beliefs and practices for reaching an eternally prosperous afterlife successfully, based on one's own wealthy life pattern. As such, death was not viewed as the end of life, but rather as a *transition following a journey* to another kind of – still – incomprehensible realm/universe, characterised by different yet unknown laws of physics, where “life” continues, although imperceptible to human senses.

This sensitive topic of the continuation of life after death and of journeys to/into/through the afterlife is best presented in the studies of the history of religions, as well as in the mythological and anthropological ones.

In this respect we can rely on the ancient Egyptian funerary texts, their so-called funerary “books” in which are described and depicted encounters between the dead and the divine invisible entities during the deceased's journey through the invisible afterlife.

Nevertheless, taking into account the fact that, throughout more than three millennia of history, the ancient Egyptians did leave visual (as depictions) and written mythological and religious evidence about the journeys of the dead through the realms that make up an after-death universe, at a hypothetical level at least this approach must be taken in consideration.

One should notice that transcendental mystical or spiritual experiences close to death have been described in written sources for millennia, and chances are they may have been orally transmitted since prehistory.

In this regard, I must mention here at least one relevant research, a kind of synthesis of the most well-known journeys into death and the afterlife in the history of humankind and how they impacted people's

perceptions of the relationship between life, death, and the hereafter – I.P. Couliano, *Out of this World. Otherworldly Journeys from Gilgamesh to Albert Einstein*, Shambhala, Boston & London 1991.<sup>114</sup>

The mythical–religious accounts which form the corpora of texts mostly labeled as *ritualic* and used as such, which are present in all cultures of mankind without exception, and from all ages, all those narratives contain descriptions of the following features:

- transition of the deceased into the state of death in which one “awakens” suddenly and which, implicitly, one perceives;
- elements of the new reality with which one comes into contact, after death, from a physical, geographical, topographical, and sensory point of view;
- beings/ entities, labeled as *divine* or *spiritual* – who guide or appear to the deceased in the afterlife (underworld), and with whom one communicates and who inform one – and their attributes, capacities, titles, functions, duties;
- realms that the deceased crosses (in one’s new spirit, invisible “state”), and in which the reader finds out that the afterlife is formed of/divided into, etc.

This can be noticed starting from the long prehistoric era of primitive human ancestors who placed in the burials their first offerings near and around the dead bodies of their closest.<sup>115</sup>

Based on the primary sources to date, there is an impressive amount of written evidence in the religious and funerary categories to describe the new afterlife reality; and the ancient Egyptian perspective on death and the hereafter is part of this understanding of the posthumous transition between the two kinds of life – the life of the living – perceptible with the biological senses, yet limited and ephemeral – and the life of the dead – imperceptible, yet eternal and unlimited.

In light of the above, scholars have taken into account various kinds of mystical, mythical, and religious experiences – as indirect primary historically attested sources that have as their main topic the journeys of the deceased as well as of other living characters into/through the afterlife (underworld), its characteristics and the different non-human beings encountered in those realms – found in the ancient civilisations: Pharaonic Egypt, Mesopotamia, Vedic India, Greco–Roman Antiquity, pre-Buddhist China, Himalayan Buddhism, pre-Columbian Meso-America.<sup>116</sup>

With respect to the religious–funerary beliefs of the ancient Egyptians, based on the evidence of material culture and the assigned symbolism, hereinafter I provide some written or visual religious and mythological clues:

- the corpora of funerary texts created to help the deceased (chronologically, first, the king, then the members of nobility) in one’s journey into/through the afterlife – underworld – and the descriptions of the entities encountered in its “geographical”/“topological” realms: the *Pyramid Texts*, the *Coffin Texts*, the *Book of the Two Ways*, the so-called *Books of the Dead*, the *Books of the Underworld* (the *Litany of Re*, the *Book on the Amduat*, the *Book of the Gates*, the *Book of the Creation of the Solar Disk*, the *Book of the Day and Night* etc.). The idea inferred in the first chronological corpora, *The Pyramid Texts*, emphasizing the understanding of death as a continuation of life (on the mythical pattern of the god Osiris, killed and resurrected in the afterlife underworld) may be essentialised in the spell§134 a and b:
  - a. *h3 Wnis ni šm.n.k is mt.ti šm.n.k ʿnh.t = O Unis, it is not dead but alive that you have gone away.*
  - b. *hms hr hnd Wsir = Sit upon the throne of Osiris!*<sup>117</sup>
- the funerary goods and their huge quantities, deposited in the tombs – in the Old Kingdom elite tombs, in front of the false door – and in the foundation deposits, most of them either replicas of the constituent parts of the environment in which the deceased lived, or containers (statues and statuettes) of more or less nonperishable materials (stones, ceramics etc.), in which the immortal part of the

<sup>114</sup> To this one must add all primary sources on this topic, from shamanism, to Mesopotamia, and from ancient Egypt, to Tibet.

<sup>115</sup> According to Ronen (Ronen 2012: 554), the oldest burials are found in the Middle Palaeolithic of Mt. Carmel and the Galilee, in Israel, 130 to 100 ka ago. Two populations, modern humans and Neandertals are involved, with a total of some 40 individuals. The burial practices of the two populations are similar and consist of placing the corpse in a prepared pit, sometimes inserting grave goods, then filling the pit. Protecting the corpse from scavenging animals, the burial reflects the oldest concern for human dignity. The gifts offered to the dead might be alluding to some kind of religious belief in rebirth and afterlife. Accordingly, the use of an advanced syntactic language is suggested for both modern humans and Neandertals in the Levant.

<sup>116</sup> E.g. Shushan 2009; 2018; 2022.

<sup>117</sup> Popielska-Grzybowska 2020: 271.

deceased (one's *k3*), characterised by (in the absence of specific terms that correctly describe their structure) non-physical, super-sensitive, and invisible structure, could return to live in the physical world one had just left;

- the mummification techniques for preserving the body of the deceased so that his *k3* (~ spirit, vital force) be able to recognize it upon returning to visit the living terrestrial realm;
- the way of designing the tombs which involves, in most cases, a tunnel/a corridor/a hallway – intended for the deceased's journey to the realms of the afterlife underworld, symbolised by the very tomb (depending on the period and the beliefs of the time, the tunnel is either ascending or descending). What is even more interesting is that in many chapels of the mastaba tombs of the Old Kingdom elite members this corridor is designed in such a way that the individual who crosses it, at its ends, comes into contact with sunlight/daylight;
- the concept of *psd* (light), the bright light that appears on multiple semantic and symbolic levels in the Egyptian mindset, including in the context of the deceased's transition into the underworld and one's *pr:t hrw*, going forth by day(light);
- the concept of *3h* and the causative *s3h* – which implies the transformation of the dead into an efficient being of light;
- the description of the realms of the underworld afterlife, which replicate the components of the earthly Egyptian landscape which means recreating eternally the life of the ex-living-current-deceased in the afterlife;<sup>118</sup>
- the very title of the so-called 'Book of the Dead': *pr:t hrw* = going forth by day(light);
- the New Kingdom white bright light dress of the *wšbtw* symbolising the body of light of the deceased after the ritual transformations;
- the funerary stelae/false door/'doors of apparitions' which depict the deceased in front of the offering table with a pile of offerings and with the inscribed offering formula (during the Old Kingdom, the deceased is sitting alone, subsequently along with his family members), viewed by the ancient Egyptians as portals connected the world of living and the world of deceased;
- the very general belief of the Egyptians in the survival of the individual after death and the perception of death as a continuation of life as a transformation of state.

## Conclusions

In light of the foregoing discussion, it may be concluded that a comprehensive understanding of the ancient Egyptian perception of the *false-door*—a pivotal funerary concept that endured throughout the three millennia of Egyptian civilisation—necessitates a genuinely both emic and etic interdisciplinary and cross-disciplinary approach. Such an approach should integrate methodologies and theoretical insights not only from Egyptology, philology and archaeology, but also from a variety of other fields including quantum tunnelling theory, neuroscience, psychology, anthropology, and theology, in dialogue with the established frameworks of Egyptology and archaeology.

The false door, as both a ritual object and a symbolic construct, encapsulates the Egyptian conception of liminality, personhood, and continuity between the worlds of the living and the dead. Its complexity cannot be fully grasped through a single disciplinary lens; rather, it invites the convergence of material, cognitive, and phenomenological analyses that together illuminate the multidimensional nature of ancient Egyptian belief systems.

Ultimately, Egyptology and archaeology themselves are inherently inter- and multidisciplinary sciences, united by the broader objective of understanding the human condition in its historical depth. Within this framework, the study of the false door transcends the confines of architectural or iconographic analysis to become an inquiry into how ancient Egyptians perceived existence, identity, and transcendence. It is, in essence, a study of humanity's enduring attempt to articulate the boundaries between life, death, and the sacred.

<sup>118</sup> Death was not equated to the complete extinction of the earthly being, but it was rather understood as a transformation of the being's state which implied a transition to another type of existence. Spell 178 of the Book of the Dead describes death as 'the night of going forth to life', stressing its transitional character. For further information on death and afterlife see also Taylor 2001: 10–13.

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