THE SMALL FINDS FROM THE EXCAVATION IN FRONT OF KARNAK TEMPLES: THEIR CONTEXT AND SIGNIFICANCE



AMIRA FAWZY ALI IBRAHIM¹

Abstract

Between 2007 and 2013, the Supreme Council of Antiquities conducted a series of six excavation campaigns in front of the western fasade of the Karnak temples. During this operation, significant discoveries were made, including a great embankment of sandstone blocks, public and private Ptolemaic bathes, and a sizable Roman-era bath complex. This excavation also revealed a sizable residential area dating back to the late Ptolemaic Period and extending to the 4th century AD, situated to the north and south of the Roman baths. Among remarkable findings were hundreds of coins from the Greco-Roman period and small finds have been found, such as clay toys, counters, beads made of faience, amulets, bracelets, votive Osiris bronze statue, moulds, human terracotta figurines, animal terracotta figurines, reused blocks, and reused private stela. Ceramic material included trays, cooking pots, fire dogs, bowls, lids, portable cooking stoves, oil lambs and vessels, which were used for the transport and storage of liquids and food. Furthermore, ceramics designed for cultic purposes, such as altars and illumination lamps, were closely linked to the Late Ptolemaic and Roman Period contexts.

This paper aims to focus on specific categories of these small finds excavated in front of the first pylon. These small finds have a great significance as they clearly confirm the continuity of the importance of the western facade of the Karnak temples during the Greco-Roman period. This importance extended beyond religious significance to include industrial and residential areas, as well as public and private baths. Additionally, it's worth noting that the majority of these small finds come from strata dating between the end of the 2nd century AD and the latter half of the 4th century AD. Consequently, these items provide an image of the daily life and belief of the people who inhabited these houses during the Greek and Roman eras in in front of the Karnak temples.

Keywords: Karnak Temples, Excavation, Small Finds, Greco-Roman, First Pylon

¹ Ph.D. in Egyptology, Archaeologist at Karnak temples and Member of The excavation team in front of first pylon at Karnak temples, Ministry of Tourism and Antiquities

مُلخص البحث

اللقى الأثرية المكتشفة أمام الصرح الأول منطقة معابد الكرنك: سياقها وأهميتها

أجرى المجلس الأعل للآثار في الفترة من ٢٠٠٧ حتى ٢٠١٣ ستة مواسم من الحفائر أمام الواجهة الغربية لمعابد الكرنك، وقد كشفت هذه الحفائر عن حاجز مائي كبير، وحمامات بطلمية عامة وخاصة، بالإضافة إلى مجمع حمامات كبير من العصر الروماني. تم أيضًا العثور على منطقة سكنية كبيرة تمتد من أواخر العصور البطلمية حتى القرن الرابع الميلادي، تقع شمالًا وجنوبًا من الحمامات الرومانية. بالإضافة إلى ذلك، تم العثور على مئات العملات البرونزية اليونانية والرومانية، ومجموعة متنوعة من اللقى الأثرية الصغيرة مثل الألعاب الطينية، والخرز المصنوع من القيشاني، والتمائم، والأساور الزجاجية، وتماثيل أوزير البرونزية، والقوالب الطينية، والتماثيل الطينية البشرية والحيوانية. والعثور على فخار، وأواني الطهى والمواقد وأوعية وأغطية، وجرار تُستخدم لنقل وتخزين السوائل والمواد الغذائية؛ وعدد من المذابح التي ترتبط بشكل وثيق بالعصرين البطلمى والروماني.

يهدف البحث إلى التركيز على بعض فئات اللقى الأثرية و التى تشير إلى استمرار أهمية الواجهة الغربية لمعابد الكرنك خلال العصور البطلمية والرومانية. والتى شملت أيضا المناطق الصناعية والسكنية إلى بالإضافة إلى الحمامات العامة والخاصة. علاوة على ذلك، تأتي هذه الاكتشافات الصغيرة في الغالب من طبقات يعود تاريخها إلى نهاية القرن الثاني الميلادي والنصف الثاني من القرن الرابع الميلادي. ولذلك فإن هذه العناصر تقدم صورة للحياة اليومية ومعتقدات الأشخاص الذين عاشوا في هذه المنازل خلال العصر اليوناني والروماني أمام معابد الكرنك.

الكلمات الدالة: معابد الكرنك، الحفائر ، اللقى الأثرية ، فترة حكم البطالمة والرومان، الصرح الأول.

Introduction

In 2007, SCA and Luxor City Council collaborated to rehabilitate the area between Karnak temple and the Nile. The project involved demolishing various structures and creating a spacious esplanade, a visitor's center, a park, and a new complex for the French-Egyptian center.² Excavations in designated areas revealed a large embankment in front of the temple, along with two quays.³ A Ptolemaic bath, featuring circular rooms with hip bathtubs, was discovered.⁴ Nearby, a well-preserved Roman bath complex, probably from the 4th century AD,⁵ was discovered. Between the Ptolemaic and Roman baths, another private bath made of fired bricks coated with plaster was found, likely dating to the late 2nd or early 1st century BC.⁶

- ² Boraik, M. & Naguib, M. (2013b),79.
- ³ Boraik, M. (2013a), 98-90.
- 4 Boraik, M. (2010a), 73-74.
- 5 El-Masekh, S.&Fournet, Th. (2017),241.
- ⁶ Boraik, M. (2020), 257-260.





Figure 1 The sand stone embankment.

During the 2012-2013 excavation season, a significant residential area dating back to the late Ptolemaic Period and the 4th century AD was discovered. This habitation zone was situated both to the north and south of Roman baths and had two distinctive sections.

The first area, known as Site H and situated south of the Roman bath, has undertaken extensive excavations, revealing a Ptolemaic house located roughly 20 meters north of the public Ptolemaic bath. This particular structure is probably comes from the late 2nd century BC or possibly the early 1st century BC, and it likely served as the house of a high-ranking individual during the Ptolemaic era.⁷ The second area, referred to as Settlement I and located north of the Roman bath, consisted of residential buildings primarily constructed from mud bricks, with some incorporating red bricks. Remarkably, this area also featured a water well equipped with pipes to supply water to the houses.⁸

⁸ Naguibe, M. (2016),165



⁷ Boraik, M. (2020),257.



Figure 2 view of the two tholoi circular rooms of The public Ptolemaic bath.

Small finds⁹

The subject matter of this paper focuses on the discovery of a large number of small objects that provide valuable insights into the lifestyle, material culture, and various activities that took place in this area during the Greco-Roman period. These small finds fall into categories related to economic and trade activities, the daily routines of households, individual religious practices, and beliefs. At present, all these small finds are stored within the El-Sheikh Labeb (A) Storeroom at Karnak.

⁹ The researcher carried out a comprehensive investigation into these small finds, which is documented in her Ph.D. thesis. If you seek detailed information, including object numbers and images of these finds, I suggest consulting my own doctoral dissertation: Amira, A. (2021),1-285.



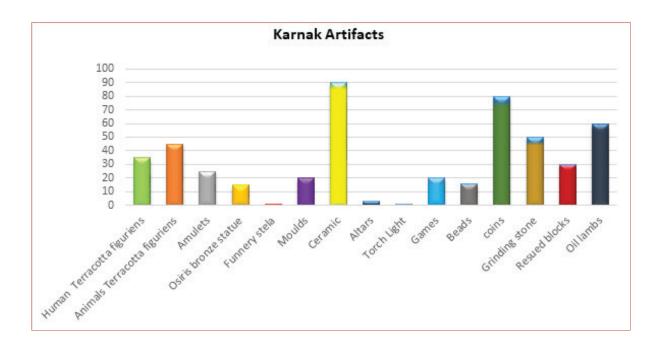


Chart 1 show distribution of Artifacts from the excavation in front of first pylon.

1.Terracotta figurines

During excavations in front of the Karnak temples, a substantial number of terracotta figurines have been uncovered. Most of these figurines are fragmented, with only a few being intact. These figurines have been classified based on their characteristics, resulting in two primary groups: "anthropomorphic" and "zoomorphic." Notably, the anthropomorphic category outnumbers the zoomorphic category in terms of quantity. Within the anthropomorphic group at Karnak, there are two main types: Female Figurines and Male Figurines.

1.1 Female figurines:

A total of terracotta figurines were uncovered during the Karnak excavation, featuring varying heights from 10.1 cm to 4.2 cm. these figurines were made by pressing clay into a half-mold, resulting in a molded front side while the rear of the figure was manually smoothed. Some of these figurines exhibit traces of white and red coatings on their surfaces. Notably, the most common additions to these handmade female figurines are incised details, which were intricately created using a fine, pointed tool. This tool could have been made from materials such as bone, ivory, wood, or metal.¹⁰ Similar figurines to these were discovered in the Mut Precinct (Type 5),¹¹ identified by their flat, slender

This examples from Mut temple dating to 26th dynasty, see Warksa, E. (1988),40-41.



¹⁰ Arnold, D. (1993),88

bodies with a smooth finish, featuring circular navels positioned beneath the breasts. Additionally, incised lines were used to define the separation between the legs. The lower part of these figurines bears a resemblance to (Type F) figurines found at the Habu Temple, characterized by a V-shaped form.¹²

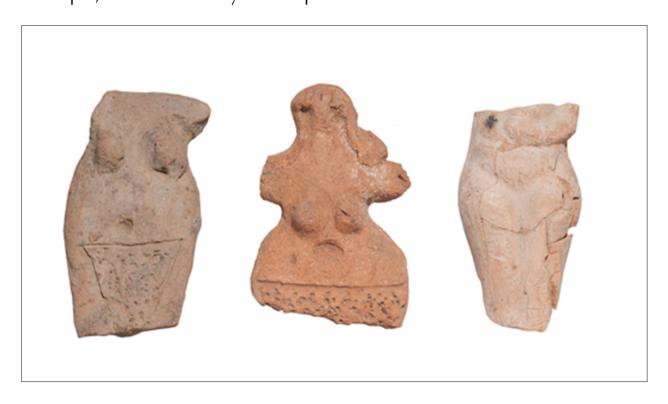


Figure 3 Female figurines from the excavation in front of first pylon.

Regarding the style of Karnak figurine falls into (Type E)¹³ according to Habu typology. These figurines typically depict the right hand resting on a breast, with the navel marked by an impressed dot. The pubic area and breasts are not prominently emphasized. A similar figurine from Karnak excavation aligns with (Type 3)¹⁴ according to Mut classification. These female figurines sport distinctive hairstyles or wigs, characterized by two thick lappets that hang below the shoulders. These figures share common features such as a high forehead, circular eyes, applied breasts situated low and centered on the torso, often just above a large, round, impressed, or incised navel.

1.2 Harpocrates figurines:

A collection of Harpocrates figurines has been discovered in domestic contexts at Sit H and Settlement I. These figurines range in height from 4.4 cm to 12.2 cm. They are primarily made from terracotta and are typically assembled from two or three separate

¹² Teeter, E. (1981),58-59.

¹³ Teeter, E. (1981),51-53.

¹⁴ Warksa, E. (1988),33-37.

mold pieces. Two of these figurines exhibit a circular or oval vent at the back, and several still retain traces of a white coating on their surfaces.

The majority of the Karnak figurines depict Harpocrates in the Egyptian style, representing him as a naked child with a characteristic side hair lock. In these depictions, Harpocrates is often portrayed with his finger pressed to his lips. He is adorned with the double crown of Upper and Lower Egypt, flanked by two lotus buds, and wears a thick floral wreath. This specific floral wreath is significant for identifying Harpocrates during the Greco-Roman period. The Majority of the Karnak figurines represent Harpocrates in Egyptian style as a nude child (with side hair lock) holding a finger to his mouth, wearing the double crown of Upper and Lower Egypt flanked by two lotus buds and a thick floral wreath which related to the identification of Harporates in the Greco-Roman period. One noteworthy category of terracotta figurines within this collection is referred to as 'Harpocrates and the pot.' In these depictions, Harpocrates is shown holding a pot with one hand, and this attribute is commonly associated with Harpocrates during this historical period.¹⁵



Figure 4 Terracotta figurines of Harpocrates from the excavation in front of first pylon.

15 Malaise, M., (1991), 231



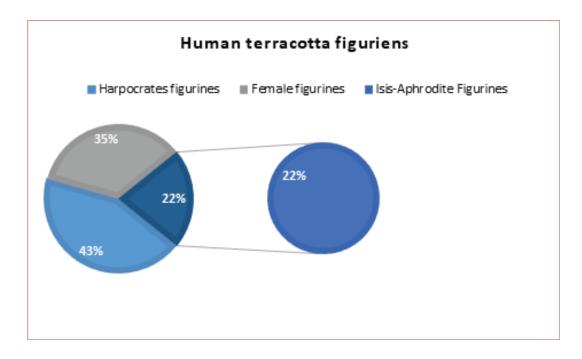


Chart 2 show distribution of human terracotta figuriens from the excavation in front of first pylon.

1.3 Isis-Aphrodite Figurines

Terracotta figurines resembling Isis-Aphrodite have been found in both the northern and southern parts of the Potlamic Public bath residential area. These figurines measure between 5.3cm and 6.7 cm in height. These 'Isis-Aphrodite' figurines¹⁶ depict a nude female figure standing on a rounded base with legs extended and closed, hands at her sides. She has a middle-parted hairstyle with long, wavy locks flowing onto her shoulders and wears a headdress adorned with a wreath of flowers and a tall basket called a kalathos. The figurines have a flat body with circular navels below the breasts and incised lines to separate the legs. The back is plain with a small circular vent, these holes are made for air escape and the avoidance of cracks on the surface during the firing in the kiln. Such a technique appeared in the late 4th century B.C. in Egypt, probably from Greece via Naucratis. The front shows remnants of a white coating.

16 Fischer, J. (1930) 251, no.C578; Higgins, R. (1967),132 [BM Cat. C574, pl.63E].





Figure 5 Terracotta figurines of Isis Aphrodite from the excavation in front of first pylon

1.4 Horses Figurines:

A collection of clay horse figurines (refer to Fig. 6) has been found, and each handmade, featuring solid bodies with elongated shapes, short and sturdy legs with rounded tips, and short, thick tails. These figurines vary in height, with the tallest being approximately 9.3 cm and a width of 4.9 cm. The heads of most horses are formed by folding the clay of the neck backward, with small ears attached to the sides and simple clay pieces denoting the eyes. Some of the horses have clay-maned hair, created by flattening and texturing the clay with finger impressions, while their muzzles are flat in shape¹⁷

Тееter, E. (1988, No.137, pls. 52a; Leclure, Fr.& Marchand, S. (1995),364, pl. XIII. Compare Nos. 1008.2, 1014.1, 1014.2 and 1016.2



1.5 Dogs Figurines

This terracotta figurine represents a hollow Sothic dog (fig.6), crafted in three dimensions. It stands on a rectangular base with its head facing forward, ears pointed upward, and a curled tail oriented forward. The facial features are elongated towards the muzzle. The figurine was created using molds, and traces of red coloring are still visible on the dog's head.¹⁸ Its dimensions are approximately 5.60 cm in height and 4.46 cm in width.



Figure 6 Animals Figurienns from the excavation in front of first pylon.

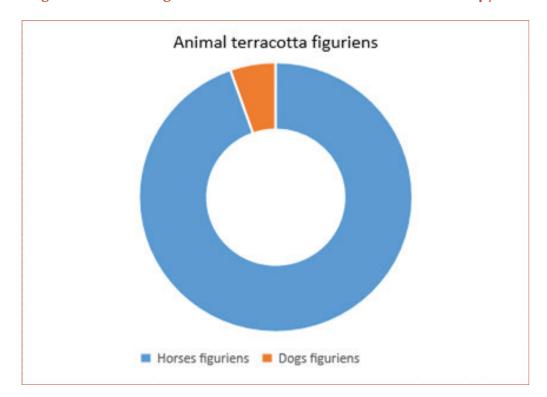
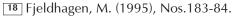


Chart 3 show distribution of animal terracotta figuriens from the excavation in front of first pylon.





2. Amulets

The ancient Egyptians frequently adorned themselves with amulets in addition to their other jewelry. These amulets, while serving as decorative items, also held a practical significance as they were believed to confer power and protection upon the person wearing them. Many of these amulets have been uncovered within the wrappings of mummies, as they were used in the preparation of the deceased for the journey to the afterlife. The meaning of these amulets varied depending on their type and shape. Small amulets that depicted gods and goddesses were thought to invoke the protective abilities of the deity they represented. Conversely, amulets featuring depictions of anatomical parts or animals indicated that the wearer sought protection for a specific body part or desired the attributes associated with a particular animal. During the Old Kingdom Period, amulets depicting animals were particularly prevalent, while representations of deities gained popularity during the Middle Kingdom. The excavation brought the following discoveries:

2.1 Amulet of goddess Taweret¹⁹

Two faience molded amulets depict Taweret, who has the head of a hippopotamus. They are equipped with loops for suspension at the back. One amulet shows the complete head of the goddess, while the other is missing its upper and lower parts. The amulets vary in height, measuring between 2.2cm and 4.1cm.

2.2 Amulets of the god Bes:

Three amulets representing the god Bes, made from glazed green faience, were also found. These amulets range in height from 1.6cm to 3.9cm. Each of them features two holes, one on each side, allowing them to be worn as necklaces or pendants. Bes is depicted in his characteristic form with a dwarf body and a large head wearing a feathery crown. The crown consists of four feathers separated by three deep grooves.²⁰

19 Masson -Berghoff, A. (2018),60-61.

20 Andrews, C. (2000) 38-40, fig.37; Masson -Berghoff, A. (2018),50-51





Figure 7 Amulets from the excavation in front of first pylon.

2.3 Amulet of the upper part of two fingers:

There is an amulet representing the upper part of two fingers, specifically the index and middle fingers of a right hand. These fingers are intricately detailed, including the fingernails and joints, depicted with incised lines. The amulet is made from obsidian stone and may symbolize the fingers of an embalmer. These amulets were believed to possess magical properties for healing wounds. In ancient Egypt, amulets were created in various forms and from different materials to offer protection in life, death, or both.²¹

2.4 *w3d* ²² papyrus-column amulet

Upper part of Two wAD papyrus-column amulet were found. each featuring a suspension ring at the top, although one of them has broken away. The capital and lower part of these amulets are adorned with incisions made before firing. They range in height from 1.6cm to 3.9cm.

2.5 Scarab amulets²³

Three scarab amulets were made from faience, The base of the scarab marked (OH 71) ²⁴ is engraved with a seated god wearing a two-feather crown, a Winged Uraeus, a



^[21] Andrews, C. (2000), 64h, 73e; Petrie, W.M.F. (1914,) 51 (273), plate XLIII #273f); Colazilli, A. (2012),154-155.

²² Andrews, C. (2000),80.

²³ The scarabs discovered in the Karnak excavations were classified according to Tufnell's (1984) scarab classification system, which was created with the aid of Ward (1978) and then later updated by Ward (1994) is the preferred system of recording and classifying scarabs, particularly for the first half of the second millennium BCE, for instance: Tufnell, O. (1984); Ward, W.A. (1978).

²⁴ Object number

basket sign, and an egg sign. Its dimensions are 1.4cm in height and 0.9cm in width. The scarab (BN94) has a base engraved with three hieroglyphic signs: "nfr," "hs" jar, and basket. This amulet measures 1.3cm in height and 1cm in width. The scarab marked (BN163) features a base engraved with a seated god Amun and a basket, with dimensions of 1.2cm in height and 1cm in width. Each of these amulets is equipped with two holes, one on each side, allowing them to be worn as necklaces or pendants.²⁵



Figure 8 Scarab amulet from the excavation in front of first pylon.

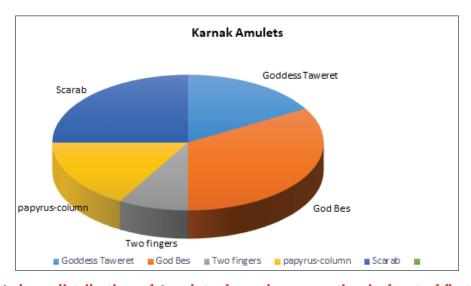


Chart 4 show distribution of Amulets from the excavation in front of first pylon.



3. Moulds

Moulds²⁶ were discovered during the excavation, and they were used to create amulets in a limited variety of styles. To make these Moulds, craftsmen first crafted a stone model of the desired object. They then pressed this model into wet clay to create an impression. Afterward, the clay Mould was dried and subjected to firing. Subsequently, moistened faience paste was pushed into the mold, forming the desired shape, such as a bead or amulet. The amulet was removed promptly to prevent it from adhering to the Mould. Finally, the faience was solidified by baking.



Figure 9 clay Moulds of rosette inlays from the excavation in front of first pylon.

Among these Moulds, two stand out as unique. One is shaped like a scarab (with a height of 2.4 cm), while the other takes the form of a *wd3t* eye (with a height of 2.1 cm). Both Moulds were crafted from Nile clay and featured impressions of simplified versions of a wedjat eye inscribed within a rectangle. The outer edge of the impression was oval, and when molded, it would have produced the right eye.

Amulets created from these Moulds would have been pierced lengthwise. there were four clay Moulds designed for rosette inlays. These Moulds had deep-cut impressions and still retained traces of faience paste. Their heights varied, ranging from 3.2 cm to 4.3 cm.

Additionally, the scarab Mould was particularly detailed, with a deeply cut impression and a border line marking the body. Interestingly, there are no visible remains or traces of white faience paste inside this Mould.

²⁶ Petrie, W.M.F. (1894), 30; Hamza, M. (1930),31-68; Nicholson, P.T. (2009), 98.



Figure 10 Clay Mould from the excavation in front of first pylon.

4. Coins

Numerous coins of varying sizes, weights, and shapes were unearthed during the excavation. Among these discoveries was a red clay vessel made from Nile clay, which was found to the south of the Ptolemaic bath.²⁷ It contains a collection of bronze coins from the Ptolemaic period at this site. Additionally, there is another group of coins from different seasons.²⁸ These coins are in diverse states of preservation, with some in poor condition requiring restoration, while others are in good condition.

This collection of Roman coins spanned nine emperors, covering the period from 41 AD to 354 AD. The number of coins varied depending on the emperor, including:

Claudius I	Maxentius
Trajan	Licinius I
Hadrian	Constantius the Great
Diocletian	Fausta
Maximian	Constantius II

^[27] Boraik, M.& Faucher, Th. (2010b),79-100

These coins were restored and processed back in 2016 at the School of Currency Restoration by specialist Faucher and Egyptian team in the laboratory of the American Research Center in Karnak. The results of this restoration work were subsequently included and published by the author in her Ph.D. thesis.



The obverse of the coins frequently featured bust-portraits of Roman Emperors such as Diocletian, Maximianus, Constantine I, and Constantine II, facing right. Diocletian and Maximianus wore Radiate crowns (sun crown)²⁹ and cuirasses, while Constantine I wore a laurel wreath and draped attire, and Constantine II was depicted with a diadem. Circularly surrounding the portraits were Latin inscriptions of their respective names.



Figure 11 A collection of 316 bronze coins from the Ptolemaic period.

The reverse of the Roman coins depicted themes related to the relationship between Emperors Diocletian, Maximianus, and the god Jupiter. A horizontal line divided the reverse, with Greek inscriptions such as "XXI" for Cyzicus and "ALE" for Alexandria, along with the Latin letter "B" (symbolizing the 2nd officina) in the center field, indicating the mints where these coins were struck.

[29] The crown of the god SOL





Figure 12 coin RM452# and coin RM380#

One widely issued coin type was **CONCORDIA MILITYM**³⁰ (Military concord). on Cyzicus mint used for Diocletian the obverse legend **IMP C C VAL DIOCLETIANVS AVG**, without the title **PF** (**Pius Felix**) while the other mint places such as Antioch and Heraclea they have always added the titles **PF**.

Alexandria played a significant role in producing post-reform "CONCORDIA MILITVM" reverses for various rulers, and this coin type may have served as a precursor to the standardization of Roman coinage. Another coin **SN431** featured the emperor Constantine I and the god Sol on the reverse, with an uncertain letter in the exergue indicating the coin's place of origin. This coin type, known as "[SOL IN VICTO COMITI]," honored the Invincible Sun, the companion of the emperor, and symbolized Constantine's shift away from the worship of Hercules to the Sol Sun God Cult in 313 AD.

One specific coin, RM#51, portraying Constantine II, depicted two soldiers facing each other with a standard in the center between them. An inscription in Greek, "CONS," in the center field indicated that this coin was struck in the Constantia Mint. The reverse legend dedicated this coin to "the glory of the Army" The expression of [GLOR]] was used the first time during the time of the Emperor Probus (276-282)AD and the Constantin I was add to this expression another words such as army(Glory of the Army)³² [GLOR-IA EXERC]-ITVS. The use of "[GLOR]" dates back to the time of Emperor Probus (276-282 AD) and continued to be used on Roman coins, sometimes accompanied by additional terms like "Army" or "Romans.



³⁰ Saы Roll-Vйlez. (2014) ,223–243.

³¹ Saыl Roll-Vйlez. (2014),240

³² Bruun, P. (1962), 24.



Figure 13 the Roman bath SN431 coin and RM51# coin

Conclusion

In conclusion, the excavation carried out by the Supreme Council of Antiquities between 2007 and 2013 in front of the Karnak Temples has yielded a rich collection of historically significant small artifacts. These discoveries have illuminated the Greco-Roman era, offering insights into the life and beliefs of the people who inhabited this area. Among the artifacts unearthed were terracotta figurines, amulets, moulds, coins, and more, all of which underscore the enduring importance of the Karnak temples' western facade during this period. Beyond its religious significance, this site was also home to various industrial, residential, and bathing facilities.

Notably, numerous terracotta figurines were discovered, categorized into anthropomorphic and zoomorphic types. Of particular interest are the female figurines with intricate incised details, providing a window into the artistic styles and craftsmanship of the era. Additionally, the discovery of Harpocrates figurines, representing a deity, showcases the syncretism of Egyptian and Greco-Roman cultures. The presence of Isis-Aphrodite figurines highlights the blending of Egyptian and Greek mythological elements, exemplified by nude female figures adorned with floral wreaths and kalathos headdresses, revealing the interplay of cultural influences during this period. The clay horse figurines, with their distinctive features, offer insights into the artistry and craftsmanship of the time, while the representation of dogs as terracotta figurines demonstrates the diversity of findings in the excavation.

Amulets, including those depicting Taweret and Bes, reflect the strong religious beliefs and practices of the area's inhabitants, serving both decorative and protective purposes and shedding light on the spiritual aspects of daily life. The discovery of molds used to create these amulets provides valuable information about production techniques during the Greco-Roman period. Furthermore, the excavation yielded a significant collection of coins, spanning various emperors and dating from 41 AD to 354 AD. These coins depict rulers and deities of the time, revealing the political and religious influences of the era.



In summary, the small finds from the Karnak Temples excavation offer invaluable evidence regarding daily life, religious beliefs, economic activities, and cultural practices during the Greco-Roman period. The precise dating of these artifacts, their diversity, and their contextual significance collectively provide a comprehensive and compelling glimpse into the past, reaffirming the central role of the Karnak temples in shaping the historical narrative of the area.

Bibliography

- 1. Amira, F. (2021). "Study and Publishing the Artifacts from The Excavation in front of the first pylon at Karnak Temples", Faculty of Archaeology, South valley University, Unpublished Ph.D. Thesis.
- 2. Andrews, C. (2000). Amulets of ancient Egypt, London.
- 3. Arnold, D. (1993). "Techniques and Traditions of Manufacture in the Pottery of Ancient Egypt," Fascicle 1 of Dorothea Arnold and Janine Bourriau, eds. An Introduction to Ancient Egyptian Pottery. Mainz am Rhein: Verlag P. von Zabern
- 4. Boraik, M. (2009) "Ptolemaic Baths in front of the Temple of Karnak. A Brief Preliminary Report November 2007", in Le bain collectif en Йдурте, ЙtUrb7, 73-86.
- 5. Boraik, M. (2010a). The Excavations of the Quay and the Embankment in front of Karnak, Karnak 13, 79-191.
- 6. Boraik, M.& Faucher, Th.(2010b). Le Tresor de Bains de Karnak, Karnak13, 79-100.
- 7. Boraik, M.(2013a). "A Private Funerary Stela from the Excavation in Front of Karnak Temples", Archaeological Research in the Valley of the Kings and Ancient Thebes, University of Arizona Egyptian Expedition, Wilkinson Egyptology Series, 89_100.
- 8. Boraik, M. (2020). « A Private Ptolemaic Bath in Front of Karnak Temple », dans J. Kamrin, M. B6rta, S. Ikram, M. Lehner, M. Megahed (йds.), Guardian of Ancient Egypt. Studies in Honor of Zahi Hawass, vol. 1, Prague, 247–266.
- 9. Boraik, M.&Naguibe, M. (2013b). "Ceramic Material from the. Ptolemaic Baths Excavations in front of Karnak. Temples", Karnak 14,79_191.
- 10. Bruun, P. (1962). The Christian Signs on the Coins of Constantine, Arctos 3, 5-35.
- 11. Charloux, G.&Thiers, C. (2019). Le temple de Ptah a Karnak III. La favissa, TravCFEETK, ВіGйп 55, Le Caire.
- 12. Colazilli, A. (2012). Reproducing human limbs. Prosthesis, amulets and votive objects in Ancient Egypt, RES 3, 147-174.
- 13. El-Masekh, S.&Fournet, Th. (2017). "The Roman Baths at Karnak, Between River and Temples" In: Redon, B., (ed.), Collective Baths in Egypt 2. New Discoveries and Perspectives, IFAO, Le Caire, 221-263
- 14. Fischer, J. (1994). Griechisch-Rumische Terrakotten aus Δgypten, die Sammlung Sieglin und Schreiber, Dresden, Leipzig, Stuttgart, Tubinger Studien zur ΔrchΔologie und Kunstgeschichte 14, Tübingen.



- 15. Fjeldhagen, M. (1995). Catalogue Greco-Roman terracottas from Egypt, the Ny Carlsberg Glyptotek.
- 16. Gombert-Meurice, F.(2019). "Thousands of Osiris: the archaeological contexts of the bronzes found in the temple of 'Ayn Manawor and at the Serapeum of Memphis", in: Masson-Berghoff, millйnaire av. J.-C. Dйсouvertes et travaux гйсентя, Bibliothиque d'Йtude 153, Le A. (ed.), Statues in Context: Production, Meaning and (Re)uses (British Museum Publications on Egypt and Sudan 10). Lovaina- Parhs-Bristol, CT: Peeters, 197□207.
- 17. Hamza, M. (1930). Excavations of The Department of Antiquities at Quantir, ASAE 30, , 31-68.
- 18. Higgins, R. A. (1967). Greek Terracottas, Methuen, London.
- 19. Hill, M. (2001). Bronze statuettes: in Redford, DB (ed). The Oxford encyclopedia of ancient Egypt, vol. 1.(Oxford: Oxford University Press, 206-207.
- 20. Jones, A.H.M. (1959). "The Origin and Early History of the Follis." The Journal of Roman Studies 49, 34-38.
- 21. Leclure, Fr.& Marchand, S. (1995). « Donnйes complйmentaires sur les structures de briques crues rubйfiйes du musüe de Plein Air de Karnak », Karnak 10, 349-380.
- 22. Malaise, M.(2014). "Le calathos sur la tκte d'Isis: une enquκte , Studien zur Altagyptischen Kultur 43, 223-265.
- 23. Masson-Berghoff, A. (2018). "Seals and Seal Impressions", in Naukratis: Greeks in Egypt, (British Museum online Catalogue, 2018), 1-96.
- 24. Naguibe, M. (2016). A Ptolemaic Kitchen in front of the Temples of Karnak. CCE 10, 165-189.
- 25. Nicholson, P.T. (2009). Faience Technology in Willeke Wendrich (ed.), UCLA Encyclopedia of Egyptology, Los Angeles.
- 26. Petrie, W.M.F. (1914). Amulets. Constable & Company, London UK.
- 27. Petrie, W.M.F. (1894). Tell Al-Amarna, London.
- 28. Redford, D. (1977). Preliminary Report of the First Season of Excavation in East Karnak, 1975-76, Journal of the American Research Center in Egypt 14,9-32.
- 29. Saыl Roll-Vĭilez,(2014). Te Pre-reform CONCORDIA MILITVM Antoniniani of Maximianus: Teir Problematic Attribution and Teir Role in Diocletian's Reform of the Coinage, AJN Second Series 26, 223–243.
- 30. Teeter, E. (1981). Baked Clay Figurines and Votive Beds from Medinet Habu. Based on the Field Notes of Uvo Hulscher and Rudolf Anthes. Chicago: The Oriental Institute, forthcoming. Thomas, Angela P. Gurob: A New Kingdom Town. Warminster, UK: Aris & Phillips.
- 31. Tufnell, O. (1984). Studies on Scarab Seals, Volume II: Scarab Seals and Their Contribution to History in the Early Second Millennium B.C. Part 1, Warminster.
- 32. Ward, W.A. (1978). Studies on Scarab Seals, Volume I: Pre-12th Century Scarab Amulets; With an Appendix on the Biology of Scarab Beetles by S.I. Bishara, Warminster.
- 33. Waraksa, E.(1988). Female figurines from the Mut Precinct: context and ritual function, Baltimore, Maryland.

