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Editorial Foreword

We are delighted to introduce the new volume of our Journal, which we hope you will find informative, engaging and thought-provoking. In this issue we are presenting more papers dedicated to Jack Foster and Ted Brock. As with the work of these two friends and colleagues themselves, the contributions encompass varied facets of Egyptology. We also have to announce an upcoming change in the editorial personnel of the Journal.

With a full-time position in publishing plus her teaching responsibilities, Sarah Ketchley has reluctantly concluded that after vol. 45, she will not be able to continue to serve as both Co-Editor and Technical Editor. It is impossible to thank her enough for her superb work on this volume and the Sally Katary Gedenkschrift, as well as articles which are slated for vol. 46. Fortunately, she will continue as the Technical Editor and a member of the Editorial Board. Also very fortunately, Sarah Schellinger, who has taken on increasing responsibility in her role of Assistant Editor, has agreed to assume the Co-Editorship. We look forward to working with her in her new role.

Now, vol. 45 awaits. Enjoy!

- Edmund S. Meltzer and Sarah L. Ketchley

A short note on the Egyptian oGardiner 304 rt. 7–vs. 3: The averted face as expression of disregarding and its positive parallel in three texts of the Late Period

Stefan Bojowald

Abstract: In this article, oGardiner 304 rt. 7-vs. 3 is re-examined. The passage is part of an Amon hymn in which an anonymous speaker sues his sufferings. The focus will be on the compound „to avert one’s face from (someone)“ which characterizes the antisocial behaviour of the person’s enemies. The positive counterpart can be found in the compound „to turn one’s face to (someone)“ for which three examples are taken from official biographies of the Late Period.

Résumé: Cet article présente un réexamen de l’O. Gardiner 304 (rt. 7-vs. 3), passage qui est tiré d’un hymne à Amon dans lequel un locuteur anonyme expose ses souffrances. Il s’intéresse plus particulièrement à la locution « se détourner le visage de (quelqu’un) » qui caractérise le comportement antisocial d’un ennemi. Sa contrepartie positive correspond à la locution « se tourner le visage vers (quelqu’un) »; cette dernière sera examinée à travers trois exemples tirés de biographies officielles de la Basse époque.

Keywords: Egyptian philology/philologie égyptienne; oGardiner 304 rt. 7-vs.3/ O. Gardiner 304 rt. 7-vs.3; turning toward or away of the human face as expression of disregarding or its opposite/ « se tourner ou détourner le visage » comme expression de respect ou de mépris.

The present contribution deals with oGardiner 304 rt. 7–vs. 3, whose text forms part of a hymn addressed to the god Amon. By palaeographic methods, the ostrakon can be dated to be from the New Kingdom. The article has been motivated by a detailed investigation of the text which has already led to two other studies¹. The focus of the following consideration is a philological aspect. It appears that the resulting observation is made for the first time. The following lines will offer an opportunity to consider the Egyptian terminology regarding turning toward or away of the human face. The gesture can be interpreted as an expression of social and charitable engagement or of its absence.

1 St. Bojowald, “Das glühende Horn des Stieres: eine mögliche Parallele für oGardiner 304 rt. 7–vs. 3?” *JEA* 101 (2015): 325-329; St. Bojowald, “Die Löwensymbolik als Metapher für aggressives Verhalten bei Menschen – eine ägyptische Parallele für Ps 10: 9, Ps 17: 12, Ps 22: 22, Ps 35: 17, Ps 58: 7,” *ZAH* 25-28 (2012-2015): 25-31, where, unfortunately, the work of B. Janowski, “Dem Löwen gleich, gierig nach Raub: Zum Feindbild in den Psalmen,” *EvTh* 55 (1955): 155-173, has been overlooked.

It seems appropriate to cite the whole passage at the beginning in detail:

“*Imn di=f šw r-ḥz=i m wnw.t n.t m-ḥr-m-ḥr m-ḥt śnd, m=k n3 rmt.w m s3 mzi.w ir.wt=w ḥśz, bn št ḥr si3 śn.nw=w ḥr=w pn^c m di=w. ... (?) ḥr śdd <ḥr (?)> śrr=k n=śn (?), rh.kwi ink w^ci.w iw.ti hnw=f, št mi ... (?) iw=w ḥri (?) k3. ‘b.wi ... =w ḥr nśnś r khb p3 izd nty m-ḥnw=w.’”²*

“Amon³! May he put himself behind me in the hour of hardship which goes along with fear. Look, people are like lion cubs, whose eyes⁴ are wild. They ignore their neighbours (lit. “second ones”), averting their faces from them. ... (?) tremble <because of (?)> that which you prophesy⁵ them (?). I know very well, that I am alone and without support. He/They is/are like ... (?) ... bull (?). both horns⁶ [.....] in burning, in order to destroy the affliction which is among them (?).”⁷

The speaker of the words apparently feels socially marginalized and/or discriminated by his contemporaries. In highest despair, he seeks the help of Amon, by whose assistance he hopes to overcome his adversaries. The god is pictured in the shape of a bull which shall

2 J. Černý/A. H. Gardiner, *Hieratic Ostraca*, Volume I (Oxford, 1957), 11f/Pl. XXXVIII 2 (Taf. V–VI).

3 For the god Amon see K. Sethe, *Amun und die acht Urgötter von Hermopolis, Eine Untersuchung über Ursprung und Wesen des ägyptischen Götterkönigs* (Berlin, 1929), 7-126; Chr. Leitz (Hrsg.), *Lexikon der ägyptischen Götter und Götterbezeichnungen*, Band I, 3-y, OLA 110 (Leuven–Paris–Dudley/MA, 2002), 308-320; for the meanings of the name see G. Fecht, “Zum Text der Votivstatue für Amun,” publiziert in *MDAIK* 38, 1982, 334-337, *MDAIK* 40 (1984), 9.

4 For the “*ir.t*”-eye see H. von Deines/W. Westendorf, *Wörterbuch der medizinischen Texte*, Erste Hälfte (3-r), *Grundriss der Medizin der alten Ägypter* VII 1 (Berlin, 1961), 68 ff; VI. E. Orel/O. V. Stolbova, *Hamito–Semitic Etymological Dictionary, Materials for a Reconstruction*, HdO, Erste Abteilung, Der Nahe und Mittlere Osten, Achtzehnter Band (Leiden–New York–Köln, 1995), 29; J. Stephan, *Die altägyptische Medizin und ihre Spuren in der abendländischen Medizingeschichte*, *Ägyptologie*, Band 1 (2011), 13ff.

5 For “*śr*” “prophesy” in connection with Amun see *Urk.* VIII, 142, 3; D. Klotz, *Caesar in the City of Amun, Egyptian Temple Construction and Theology in Roman Thebes*, *MRE* 15 (Turnhout, 2012), 59.

6 Regarding a parallel for the horns of Amon see G. Legrain, *Catalogue Général des Antiquités Égyptiennes du Musée du Caire Nos 42192–42250, Statues et Statuettes de Rois et de Particuliers* (Le Caire, 1914), 88-89; J. Heise, *Erinnern und Gedenken, Aspekte der biographischen Inschriften der ägyptischen Spätzeit*, *OBO* 226 (Fribourg–Göttingen, 2007), 63.

7 For this passage, see H.–W. Fischer–Elfert, *Lesefunde im literarischen Steinbruch von Deir el-Medineh*, *KÄT* 12 (Wiesbaden, 1997), 128; J. N. Oswald, *The concept of Amon–Re, as reflected in the hymns and prayers of the Ramesside Period* (Ann Arbor, 1968), 140.

destroy the evildoers by his horns⁸. The verb “*nśns*”⁹ – a secondary form for “*nśrśr*” – “to burn” is used to remove any doubt about their total destruction.

The hostile behaviour of the fellow citizens has been characterised by the comparison with the piercing lion eyes on the one side and their own averted faces on the other. In this context, the second aspect will be of high importance. The averted faces probably can be interpreted as a sign of lacking solidarity or altruism.

The new look at oGardiner 304 has been encouraged by the fact that in the meantime the positive version for the formula “*Bn śt ḥr sḥ śn.nw=w ḥr=w pn^c m dī=w*” has been found. This small discovery may be of some interest, so the opportunity is seized here to publish it. The passage will be brought in connection with three texts from the Late Period which are most significant for our present purpose.

The first example has come to light in the biography of a certain *ḥz-r-wz* who lived during the twenty-fifth dynasty. The hieroglyphic text has been preserved on a diorite statue of this man which is catalogued by the number Paris Louvre A 84. In this text, the following words can be read:

“*bnr r3 ndm dd, ḥzm ib n wr ndś, rdi {t} ḥr<=f> n śnd sp=f ḥpr, mtr.
w=f ḥ^c <m r3-> mdw*”¹⁰

“Eloquent, sweet-talking, polite to big and small alike, one who gave his attention to one who was afraid when treated unjustly and when his witnesses rose up and spoke”

The second example can be studied on another monument of the same person?. The text has been carved on the surface of a granite statue of this man, which is stored in the Berlin Museum under Inv. 8163.

8 Regarding Amon as a bull see J. Zandee, *De Hymnen aan Amon van Papyrus Leiden I 350*, OMRO, Nieuwe Reeks XXVIII (Leiden, 1947), 96-97; J. Zandee, *Der Amunhymnus des Papyrus Leiden I 344, verso*, Band I, (Leiden, 1992), 88-90; J. Zandee, *Der Amunhymnus des Papyrus Leiden I 344 verso*, Band II (Leiden, 1992), 421-422; Oswalt, *Concept of Amon-Re*, 53/145/159; M. I. Bakr, “Amon, der Herdenstier,” *ZÄS* 98 (1972), 1-4; M. Smith, *On the Primaeval Ocean, The Carlsberg Papyri 5*, CNI Publications 26 (Copenhagen, 2002), 46; M. A. Stadler, *Isis, das göttliche Kind und die Weltordnung, Neue religiöse Texte aus dem Fayum nach dem Papyrus Wien D. 12006 Recto*, Mitteilungen aus der Papyrussammlung der Österreichischen Nationalbibliothek (Papyrus Erzherzog Rainer), Neue Serie XXIII Folge (MPER XXVII) (Wien, 2004), 222; see also the personal names “*Imn m k3*” “Amon is a bull” in H. Ranke, *Die ägyptischen Personennamen Band I, Verzeichnis der Namen* (Glückstadt, 1935), 29, and “*k3 m Imn*” “The bull is Amon” in Ranke, *Personennamen I*, 337.

9 About the verb “*nśns*” “to burn”, see J. Osing, *Hieratische Papyri aus Tebtunis I, Text*, CNI Publications 17, The Carlsberg Papyri 2 (Copenhagen, 1998), 294 n. 1396.

10 Most recent work in Heise, *Erinnern und Gedenken*, 38.

“wꜣh rꜣ, ndm dd, iꜣm ib [n] wr ndś, rdi{t} hr=f <n> śnd sp=f hpr,
mtr. w=f ꜥhꜥ <m rꜣ-> mdw”¹¹

“well–versed, sweet–talking, polite to big and small alike, one who turned his face to one who was afraid when being treated unjustly, when his witnesses rose up and spoke”

The third example can be observed in the wall texts of TT 36 decorated for a certain Ibi who lived in the twenty–sixth dynasty under the reign of Psametik I. The crucial passage runs as follows:

“ꜥhꜥ hr <pgꜣ> hꜣr.t, r dr=f dꜣrw=f iw rdi{t}.n <=i> hr<=i> n śnd sp=f
hpr, mtr=f ꜥhꜥ m rꜣ– mdw”¹²

“(I) was one who stood in for the widow in the (arena) until he ended his distress. (I) turned (my) face to one who was afraid when being treated unjustly and when his witness rose up and spoke”

This should exhaust the relevant texts¹³. To the best of my knowledge, the parallels have not been emphasized so far.

Special attention has to be given to the expression “rdi hr n” “to turn one’s face to (someone)” which is the direct opposite of “pnꜥ hr m di” “to avert one’s face from (someone)”¹⁴. The tension in this relation is created also by the different use of prepositions. The owners of the cited texts show a high degree of open-mindedness toward the problems of their contemporaries. In their own words, the members of the upper class are styled in a similar fashion to Amon in oGardiner 304. The inscriptions bear witness that the people

11 Heise, *Erinnern und Gedenken*, 45.

12 Heise, *Erinnern und Gedenken*, 122.

13 For the phrase “rdi hr” “to give the face” in funerary context, see J. F. Borghouts, “A funerary address to the high-priest Harmakhis,” in: L. H. Lesko (Ed.), *Ancient Egyptian and Mediterranean Studies in Memory of William A. Ward* (Providence, 1998), 22; for “rdi hr” “to give the face” as an benevolent action of Ra in front of the inhabitants of the netherworld, see D. A. Werning, *Das Höhlenbuch, Textkritische Edition und Textgrammatik*, Teil II: *Textkritische Edition und Übersetzung*, GOF IV. Reihe: Ägypten 48 (Wiesbaden, 2011), 413; for the phrase “to turn the face toward” in erotic contexts, see, for example, Ramesside love poetry, “Doomed Prince” and “Setne 1”.

14 For the meaning “pnꜥ hr” “to avert the face” in another context, see C. Andrews, “A stone vessel with magical scenes and texts,” in: W. Clarysse/A. Schoorf/H. Williams (Eds.), *Egyptian Religion, The last thousand years*, Part I, *Studies dedicated to the Memory of Jan Quaegebeur*, OLA 84 (Leuven, 1998), 301/302.

are fully immersed in the social life of their time. The appearance of the word “*śnd*” “fear” could form a further link between these literary documents. If this thesis is acceptable, it cannot be ruled out with certainty that the victims in all texts have suffered under the same, or at least similar, circumstances. The formulations in the texts of the Late Period could, however, be pertinent, as well. The frequent occurrence of the connection seems to suggest a certain phrase commonly used in the upper circles. Fashionable people would have incorporated it in their vocabulary.

The article has for the first time clarified the contrasting pair “*rdi ḥr n*” and “*pn^c ḥr m di*”. To sum up, it can be said that the role of the dignitaries in the three Late Period texts is the exact opposite of the role played by people in oGardiner 304. The difference in date between the text sources can easily be neglected, because in all such cases the haphazard of preservation must be taken into consideration. The fact that the words are uttered from different perspectives does not speak against the proposed explanation either. Considering all the facts, it is hard to dismiss the cumulative effect of the evidence.

Shooting the KV55 Canopic Jars: Ted Brock's Contribution to Solving the Amarna Cache Conundrum

Lyla Pinch-Brock
photos by Edwin C. Brock

Abstract: In 1994 Ted Brock and the author were granted permission by Mohammed Saleh, then Director of the Cairo Museum, to photograph and examine the KV 55 canopic jars for the KV 55 Project publication,¹ marking the first time, to my knowledge, they had been photographed since their discovery in 1907. The Cairo jars have been examined outside their cases by Daressy,² Lucas³ and Krauss⁴ The fourth jar, now in the Metropolitan Museum of Art in New York, has been inspected in detail for publication at least three times.⁵ This article supplies some information from our photo session that may add to the data gathered thus far about the jars and their lids.

Résumé: En 1994, Ted Brock et moi avons reçu l'autorisation de M. Mohammed Saleh, à cette époque directeur du Musée du Caire, de photographier et d'examiner les trois bouches canopes de KV 55 à l'extérieur de leur vitrine. Le quatrième bocal, maintenant dans le Metropolitan Museum of Art à New York, a été examiné en détail au moins trois fois. Pour autant que je sache, c'est la première fois que ces bouches ont été photographiés depuis leur découverte en 1907.

1 I would like to thank several colleagues who provided me with background material for this article, in particular Geoffey Martin, Marc Gabolde, Maksim Lebedev, Aidan Dodson and Salima Ikram. I would also like to thank Louis deKoning for help with translation. Thanks also go to Earl Ertman for consulting with me on several details, providing the photo for Fig. 3, making the application for us to work in the Egyptian Museum, Cairo, and for commenting on a first draft of this article.

The information this article contains was originally intended to be part of a more comprehensive article by Lyla Pinch-Brock, Edwin C. Brock and Earl L. Ertman, reviewing of all the KV 55 canopic jars' evidence, including the jar and lid in the Metropolitan Museum of Art in New York. Instead it was published in various journals according to each author's interests: See references below and also, Earl L. Ertman, "Evidence of the Alterations to the Canopic Jar Portraits and Coffin Mask from KV55," in *The Valley of the Sun Kings: New Explorations in the Tombs of the Pharaohs*, ed. Richard H. Wilkinson (Tucson: University of Arizona Egyptian Expedition, 1995), 108-119.

2 Georges Daressy, "Catalogue of the Objects found in the tomb. IV. Canopic Vases," in Theodore M. Davis et al., *The Tomb of Queen Tiyi* (London: Constable, 1910), 24-25.

3 Alfred Lucas, "The Canopic Jars from the 'Tomb of Queen Tiyi,'" *Annales du Service des Antiquités de l'Égypte*, 31 (1931), 120-122.

4 Rolf Krauss, "Kija – ursprüngliche Besitzerin der Kanopen aus KV 55," *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo*, 42 (1986), 67-80.

5 Geoffrey T. Martin, "Notes on a Canopic Jar from King's Valley Tomb 55," *Melanges Gamal Eddin Mukhtar*, 2, (1985), 111-124; Cyril Aldred, "Hairstyles and History," *Bulletin of the Metropolitan Museum of Art* 15 (1957), 141-147. Earl Ertman examined it briefly in 1994 and discovered the inscription on the rim of the jar.

Keywords: Ted Brock; KV 55 canopic jars/ vases canopes de la KV 55; Amarna Cache/cache d’Amarna; photography/photographie; Cairo Museum/Musée du Caire.

Introduction

Everyone who knew Ted Brock agrees he was a superb photographer,⁶ and because he was involved in the KV 55 project,⁷ we have some excellent photographs taken in the Cairo Museum of the canopic jars and their contents.⁸

In October 1994, I initiated a project to do a final clearance of KV 55 in the Valley of the Kings. At that date the tomb still contained a considerable amount of debris, both ancient and modern, which I felt warranted examination.⁹ Since the canopic jars formed an important part of the original discovery, it seemed logical to re-examine them and their contents. A photo session in the Cairo Museum provided us with the perfect opportunity (Fig. 1).

This article is not intended to be a complete survey of the literature on the canopics, which is exhaustive, rather it is a discussion of our observations in the Cairo Museum in comparison with those of the principal investigators, Daressey, Lucas and Martin, with reference to the notes of Ertman and Schaefer, all of whom examined the jars out of their cases either in New York and/or Cairo.

Since this research was done, a great deal more information has come to light about the Amarna players, including the discovery, in a limestone quarry, of the last known date of Nefertiti reigning with her husband (year 16).¹⁰ And now new scientific techniques, such as testing for DNA, could be applied to provide more information about the individuals involved in this turbulent time period.

6 I donated Ted Brock’s extensive photo archive to Chicago House, Luxor, for all their unstinting help, friendship and encouragement of his work.

7 Carried out from 1993-1996 under the auspices of the Canadian Institute in Egypt. Conservation of KV 55 was financed by a generous USAID grant provided through the American Research Centre in Egypt.

8 Great appreciation and thanks go to Mohammed Saleh, Director of the Egyptian Museum, Cairo, for this privilege.

9 For a short report on objects found, and observations made about the tomb’s architecture during the re-clearance, see Lyla P. Brock, “Theodore Davis and the Rediscovery of Tomb 55,” in Richard H. Wilkinson, *Valley of the Sun Kings New Explorations in the Tombs of the Pharaohs*, 34-46. For the tomb’s conservation, see Lyla Pinch-Brock, “Tomb 55 in the Valley of the Kings,” in *Preserving Egypt’s Cultural Heritage*, ed. Randi Danforth (Cairo: Sahara Printing Company, 2010), 47-48. For Harry Burton’s photography in the tomb, see Lyla Pinch Brock, “Shooting in KV55; New Light on Early Photography,” in *Archaeological Research in the Valley of the Kings & Ancient Thebes, Papers Presented in Honor of Richard H. Wilkinson*, ed. Pearce Paul Creasman (Arizona: University of Arizona Press, 2012), 241-254; and for a report on the pottery found, see L. Pinch-Brock, “The Pottery from the So-Called ‘Tomb of Queen Tiyi,’” *Bulletin de Liaison de la Céramique Égyptienne* 23 (2012), 195-208. For a discussion of the jars found “above” the tomb see also, L. Pinch-Brock, “The Real Location of KVC?” *Journal of Egyptian Archaeology* 85 (1999), 223-226.

10 Athena van der Perre, “Nefertiti’s last documented reference [for now],” in *In the Light of Amarna. 100 Years of the Nefertiti Discovery*, ed. F. Seyfried. (Michael Imhof Verlag: Berlin, 2012), 195–197.

Discovery of the Canopic Jars

In 1907 the tomb subsequently called “the Amarna Cache” (later numbered KV 55 in the Theban Necropolis numbering system) was uncovered by archaeologist Edward Ayrton while doing a sondage along the east side of the tourist path in the Valley of the Kings. Ayrton was working for the American lawyer Theodore Davis, who had acquired a concession from the Antiquities Service to probe the area. The small, single-chambered tomb was found underneath a pile of rubble from the cutting of the adjacent tomb of Ramesses IX.¹¹ At the bottom of a flight of stairs Ayrton found two sets of doors blocking and at the end of a corridor choked with rubble, a single room. The room contained a damaged burial consisting chiefly of a gilded shrine, coffin with human remains, a set of magic bricks and four canopic jars.¹²

The jars were found leaning against the side of the so-called “niche” cut into the south side of the burial chamber.¹³ They are probably the most beautiful items discovered in the tomb but also the most enigmatic, since the inscriptions on the jars had been altered, as had the lids, which do not fit the jars. They have been variously attributed to Kiya, Nefertiti, Akhenaten, Meritaten and Queen Tiye.¹⁴ The jars are made of fine, polished alabaster. The portrait lids, although not identical, have been considered to resemble each other enough to be deemed a set. The brows, eyes and eye rims once had inlays of black jasper, blue enamel and white limestone, now no longer intact.¹⁵ The nose of jar lid (B) has been broken off, and since there is no mention of the missing fragment being found in the niche, it presumably happened during the jars’ transfer from their original location, and again, points to either damage due to robbery, flooding on site, or mishandling in transport.

Because her name was engraved on the shrine, Davis was adamant that the tomb belonged to Queen Tiye, an opinion he never recanted, even though later examination of the body contradicted his conclusion.

KV 55 is generally assumed to be a cache of burial equipment brought down from Akhetaten to Thebes by King Tutankhamun, probably when the royal city was abandoned. A few mud-seals found in the tomb were impressed with the name of Tutankhamun,¹⁶ and it is likely it was he who carried out the re-burial in the Valley of the Kings. The tomb seems

11 Davis et al., *The Tomb of Queen Tiye*, 4.

12 A very thorough re-examination of the contents of KV55 was done on paper by Martha R. Bell, “An Armchair Excavation of KV55,” *Journal of the American Research Center in Egypt*, XXVII (1990), 97-135. However, I gather neither Bell nor any of the other modern authors cited here, save Ertman, Ted Brock and myself, have actually entered the tomb, even though it was theoretically open until very recently.

13 For an early photo of the jars in situ, see Davis et al., *The Tomb of Queen Tiye*, XXVI; For a recently-discovered photo of the burial revealing a slightly different arrangement of the objects, see Lyla Pinch-Brock, “An Unpublished Photograph of KV55,” *Göttingen Miszellen* 175 (2000), 65-69.

14 “Canopic Jar (07.226.1) with a Lid in the Shape of a Royal Woman’s Head (30.8.54).” MMA website, accessed May 22, 2016. <http://www.metmuseum.org/art/collection/search/544689>

15 Davis et al., *The Tomb of Queen Tiye*, IX.

16 *Ibid.*, 4.

to have been cut years before it was plastered, and masons’ marks indicate it was also going to be extended.¹⁷ Its plan is remarkably similar to KV 49 and KV 62; but when these tombs were cut, and by whom, has never been determined.

Dispersal of the Canopic Jars

While the Amarna Cache was being cleared, the canopic jars stayed on Davis’ boat. There his archaeological artists Joseph Lindon Smith and Harold Jones¹⁸ painted their portraits. The jars were subsequently taken to Cairo¹⁹ where they were examined and described by Georges Daressy for Davis’ publication.²⁰ At this time all the jars were still a unit. They were photographed and complete views of two jars, and three views of all heads (but no views of the backs or tops of the heads), were included in Davis’ publication.

The jar and lid, now in the Metropolitan Museum of Art, were awarded to Theodore Davis by Antiquities Service Director Gaston Maspero. They were sent to the Museum as part of the Davis bequest along with other material from his dig house storeroom in Luxor.²¹

Examination of the Jars

Davis was the first to mention the jars’ contents, “...on examination, it proved that the ordinary contents had been removed before the jars had been deposited in the tomb.”²² One suspects he was probably referring to Daressey’s examination, unless he lifted the stoppers himself and looked inside while they were still in the tomb. This is a rather telling point, as it turns out.

The MMA has no records of the contents of their jar (fn. 21). Could the material have been removed before the jar’s arrival in New York and be part of the contents of the plastic bag we saw stored in a cupboard the Cairo Museum?²³ Rühli et al., who were recently

17 Lyla Pinch-Brock, “Collisions, Abandonments, Alterations, Tomb Commencements/Pits and other features in the Valley of the Kings,” in *The Oxford Handbook of the Valley of the Kings*, ed. Richard H. Wilkinson and Kent R. Weeks (Oxford: Oxford University Press, 2016), 117-134.

18 According to Mrs. Andrews’ diary; see Martin, “Notes on a Canopic Jar,” 122. Lindon Smith’s painting of the canopic head is in the Archives of American Art at the Smithsonian Institute, Washington, D.C.; the location of Jones’ painting is not known to me.

19 Now numbered collectively JE 39637, and as of this writing, located in the *Salle* Theodore Davis in the Egyptian Museum, Cairo.

20 For an example of how the “bituminous rags” were involved in the viscera’s preservation, see Theodore M. Davis et al., *The Tomb of Iouiya and Touiyou* (London: Constable, 1907), XVII.

21 MMA 07 226.1 (jar); MMA 30.8.54 (lid). Accessioned in 1907, a gift of T.M. Davis. The jar came at that time, but the lid did not arrive until the very end of 1914 (officially in 1915). Apparently Davis so admired the piece that it sat on his desk for many years (Catharine Roehrig, fax message to author, 10/13/94). He also subsequently bequeathed other KV 55 material to the Museum (see fn. 34).

22 Davis et al., *The Tomb of Queen Tīyi*, 3.

23 Numbered JE 25/10/38/1, Egyptian Museum, Cairo.

exposed to the jars while working with a television crew, seem to think so.²⁴

Davis said the jars were stained by water that had dripped into the tomb through a crack in the ceiling (see fn. 27), but it was probably unguent that he observed; the crack across the ceiling in fact does not extend into the canopic niche. Martin noted the presence of unguent on the MMA jar.²⁵ The material has not been tested by that museum, to the best of my knowledge.

I had conjectured that another object may have lain against one of the jars in the niche, perhaps a decayed fan, which may have stained it.²⁶ In any case, in Davis' publication, the jars, propped against the side of the niche, appear quite dark (see also fn. 27 below).

The following are the results of Daressey, Lucas and Martin's examinations, which I have put in point form in the interests of brevity.

Georges Daressy (1910)

Georges Daressy, an employee of the Egyptian Museum, examined the jars in detail for Davis' 1910 publication.

- All four jars present at time of examination.
- Measured jars: 36.8 cm in height, 15.5 at rim, 24.0 max width, 16.0 at base. Diam. of opening, 11.4; depth of cavity, 34.0. Measurements of heads; height, 18.0 cm, diam. base, 16.0; depth of cavity, 12.0.
- Noted there was a "scene" carved on the vases which had been obliterated and the *pt* inlay surmounting it was removed and replaced with a sliver of alabaster.
- Suggested the portraits resembled Queen Tiye.
- Mentioned viscera absent, "...all that now remain are the bituminous rags with which they were padded."

Alfred Lucas (1931)

In 1931, Alfred Lucas, a chemist working for the Egyptian Antiquities Service, examined three of the jars in the Cairo Museum, looking for information about their contents. The fourth vase had already been turned over to Theodore Davis. At that time the material in the jars was still solidly embedded. Lucas removed it with something resembling an ice-pick(!). He found two jars almost full of material, "The contents consisting of a hard, compact, black, pitch-like mass surrounding a well-delineated centrally-situated one of

24 R. Rühli, A. Bouwman and Michael E. Habicht, "Canopic Jars: A New Source for Old Questions," in *Egyptian Bioarchaeology. Humans, Animals, and the Environment*, eds. Salima Ikram, Jessica Kaiser and Roxie Walker (Leiden: Sidestone Press, 2014). He calls this material TR261938 1a and b. It is probably the same as the number in my fn. 22.

25 Martin, "Notes on a Canopic Jar from King's Valley Tomb 55," 111.

26 Pinch-Brock, "An Unpublished Photograph of KV55," I.

different material, which was of a brown colour and friable nature."

- A third vase half-full of black material, but empty space extended to the bottom of the vase instead of inner zone present as in other jars. Marks on interior showed vase once as full as other two. Due to Daressey's comment about "bituminous rags," Lucas suggested it was, "practically certain" biological material had been removed; he took out the contents from the other two jars and found remains of rags, confirming his suspicion that Daressy had removed the viscera bundles.
- Analysis showed outer ring of material in jars was pitch and fat; inner was nitrogenous material and fat. Latter was, "almost certainly the remains of viscera."
- Concluded; contents original to jars.

Geoffrey Martin (1970)

Examined MMA jar and lid in that museum in 1970 on the assumption that a fresh look at the KV55 material would be beneficial in light of recent research regarding identification of Smenkhkare with Nefertiti, and identity of Kiya.

- Concluded from examining remains of inscriptions that jars were made for Akhenaten.
- Noted brown resinous material "...has stained the head and the inside of the jar."²⁷
- Took measurements: Height of lid, including flange, 18.2 cm; flange 1.5, external diam. of flange 10.2. Max width of wig side-to-side, 11.6; front to back, 14.2. Jar dimensions; height 37.0, max width 22.0, depth of interior 34.5, diam. of opening at top 11.2, diam. of base 15.5. Depth of interior 14.0.
- Lid a bad fit for jar; flange chipped.
- Base not quite circular; diam.16.3.
- Surface of head highly polished, "...but bottom part of the head below the broad collar was left rough."
- Front of wig smoothed-off immediately above brow.
- Three lines and tendons visible on neck.
- Slight depression under chin.

Rolf Krauss (1985)

Rolf Kraus examined the jars in preparation for a catalogue of the Amarna objects in the Egyptian Museum, Cairo.²⁸ He made a number of observations he thought warranted being published as a separate article.

27 Extract from diary of Mrs. Emma Andrews; Martin, *Notes on a Canopic Jar from King's Valley Tomb 55*, 122.

28 Rolf Krauss, "Aus der Arbeit an einem Catalogue-Général-Band der Amarna-Objekte," *Chronique d'Égypte* 89 (2014), 227-235.

- Uniform text arrangement on all canopic jars; Aten cartouches next to two smaller King's cartouches containing the names of Akhenaten.
- Thereafter jars re-inscribed for Kiya.
- Finally, jars reworked for the bearer of an uraeus (he suggests Smenkhkare=Nefertiti).
- Disagreed with Martin about uraeus being original, especially considering that the brow had also been cut back to receive a brow-band and a hole for an uraeus.
- Noted that the front of the collar had been shaved down and was originally carved with hieroglyphs.
- Portraits are those of Kiya.
- Slight scoop under chin suggests something removed from that location.
- Noted sides of wig had also been cut-back.
- Traces of text on jars not visible by shining light through the interiors.

L.P. and E.C. Brock (1994)

On October 23, 1994, the canopic jars were taken out of their case in the Egyptian Museum, Cairo (Fig. 2) and given to us to photograph in one of the museum storerooms. They are surprisingly heavy: I estimated a weight of approximately 10 lbs. (about 4.55 kg.) for the jars that included contents. The jars average 36.8 cm in height with a maximum width of 24.0 cm. They are made of highly-polished, golden-coloured alabaster, are slightly ovoid in shape with high shoulders and flat bases. The ovoid shape may be accounted for by the fact that the shoulders and the inscribed portion on the upper half of the bodies have been shaved down in antiquity. This is particularly evident near the base of the MMA jar and on jar C (Fig. 4), where one can still see vestiges of the original size of the jars. Their very tops seem to have been cut down to a low angle, presumably to achieve a better fit for the lids (Fig. 5) - the jar surface is virtually flat where it approaches the opening, cut at right angles to it. All three jars have a single stroke etched into the rim just above the inscription on their front: Ertman also noted marks on the rim of the MMA jar (Fig. 3) but these are different, consisting of a V or U-shaped mark surrounded with what could be described in modern English as quotation marks.

The interiors of the jars are V-shaped, the natural result of having been cut with a drill. The thickened bottom provides stability to what is otherwise an overbalanced arrangement.

As the earlier investigators had noted, part of the cutting for a *pt* sign topping the frame around the hieroglyphs on the jars' faces had been filled in with a sliver of calcite, and the surface ground down to match the rest of the jars' surfaces (Fig. 4). As for the inscriptions, we could not, literally, shed any new light on them. Ted was unable to detect anything other than what is known, by shining a light down inside the jars. Raking light still produces the clearest impression of the inscription on the exterior.

Jar (C), like the MMA jar, still bears unguent stains. The unguent had dripped down the side of the jar, and seems to have been smeared over the top of the forehead, down over the eyes and onto the eyelid, but was later cleaned off (note eye area in Fig. 7), quite likely after it entered the collections of the Egyptian Museum.

Examination of the Portrait Lids

When viewed from the top, it becomes quite obvious the wigs were shaved down heavily on the sides close to the face. The brow-bands were carved over the wig curls, most clearly visible on (C) (Fig. 7). The area just under the chin, on the collar, has been revised as well; the cutting-down and recarving of the floral bands is obvious (note Fig. 8 [A]), and this area appears flatter than the rest of the collar. There are visible lines running from the ends of the hair to the base of the collar. The inset uraei must have been made of a finer alabaster because the large chip still *in situ* is translucent, very pale green perhaps; it does appear to be alabaster rather than glass, as there are no bubbles visible. On (B) the area around the uraeus socket is raised, showing the probable original size of the wig (Fig. 10). Surprisingly, the red paint delineating the inner corners of the eyes was still present on (C) and (A). On (C), and more or less on the MMA head, prominent neck tendons are visible, typical of portraits of Akhenaten. Jar (C) also has a more severe expression than the others, with the corners of the lips angled downwards, typical of Tiye portraits.²⁹ The hieroglyphs on the front of this jar were the most deeply cut. The interiors of the lids were drilled in a "V" shape like the interiors of the jars (Fig. 11), sometimes drastically. In one case the workman had pierced the alabaster just below the ear either while drilling out the interior of the lid or narrowing the sides of the face.

Jar Contents

Two jars have had their contents removed, put in bags, and re-inserted in the jars. The third still has its contents intact - hardened unguent with a depression in the middle marking the missing viscera bundle (Fig. 5.) This fits Lucas' description of unguent; "... generally opaque and of a dull brown on the outside."³⁰ Other contents that were removed, placed in a plastic bag and stored in a cupboard, have their own registration number.³¹

The unguent levels inside the jars are at an angle. This conforms to the jars' stance - leaning against the side of the niche, as seen in the early photos.

There is quite a lot of unguent present; the jars are over 2/3 full. The material does have the shiny look of that ointment, as Lucas described it, "...a hard blackish crystalline mass." I did not probe in the plastic bags to see if there were any "rags." A cursory look indicated only the above.

29 See for example, the yellow jasper statue fragment, now attributed to Tiye. Dorothea Arnold, *The Royal Women of Amarna* (New York: Abrams, 1996), 34, fig. 27. MMA 26.7.1396.

30 Alfred Lucas and John Richard Harris, *Ancient Egyptian Materials and Industries* (London: Courier, 2012), 96.

31 See fn. 22.

Discussion

Jars: Alterations

The jars' inscriptions and the alterations thereupon have been aptly covered by Martin and Krauss, and their conclusions outlined above. As for the jars themselves, those with human-headed lids were more often employed for private individuals than for royal, with some exceptions (see fn. 41). Royal burials tended to employ sectioned canopic chests with portrait stoppers, as did those of Akhenaten, Tutankhamun and Horemheb.³² Both Martin and this author noted that in all cases the lids from KV55 did not fit the jars well and were probably never intended to be a good match for them, being more oval than round in shape. There *does* seem to have been an attempt, however, to shape the jars where they connected with the lids in order to achieve a reasonable fit.

There is a good example of the type of jar that might have been recarved for this purpose published in the Davis volume on the tomb of Iouiya and Touiyou, and interestingly, its height is 39 cm (including a shallow lid).³³ It is an alabaster jar inscribed for Amenhotep III/Tiyi using the same format for the inscription as the KV 55 examples - a *pt* sign surmounting the area containing the glyphs. The jar would have needed considerable shaving-down to arrive at the shape of the KV 55 jars as they are now.

The jars' "numbering" on their rims could have been done for a variety of reasons, according to Barbara Aston, who has written about stone vessels; "There are three theories that could account for this: 1) a measure of capacity - [sometimes the number is written with the word *hin*; 10 *hin* would be over a gallon (3.785412 litres)], 2) the number in a series (a particular group or batch produced or filled at the same time), or 3) 'the day the amphora was filled or made ready for transportation.'"³⁴ It would be interesting to investigate this issue of numbering, as it might lead us to the jars' source.

Contents

Krauss does not address the issue of the Cairo jars' contents, but Lucas was interested because he was a chemist. No one seems to know what happened to the contents of the MMA jar; however Davis' artist, Joseph Lindon Smith, did mention that, when miscellaneous material from Davis' storeroom was sent to the MMA, some "...entrails of the body.." were

32 Aidan Dodson, "Canopics," in *The Oxford Handbook of the Valley of the Kings*, ed. Richard H. Wilkinson and Kent R. Weeks (Oxford: Oxford University Press, 2016), 261, 17.1, 4 and 5.

33 Davis et al., *The Tomb of Iouya and Thuyu*, XXIV.

34 Thanks to Barbara Aston (author of *Ancient Egyptian Stone Vessels: Materials and forms*, Heidelberg Orientverlag: 1994) for this information. (Barbara Aston, email message to author, February 22, 2019). She also refers to Jacobus van Dijk's discussion of docket no. 51 in, *The Tomb of Maya and Meryt III: "The Pottery,"* Aston, D.A. and Aston, B.G., (in preparation).

present.³⁵

While Lucas seemed to think Daressey disposed of the jars' viscera while in the museum, Davis' comments might suggest they never actually existed. The material once enclosed in the jars is now only partially extant; we have crystallised unguent, and perhaps some remains of viscera and/or their wrappings – only a fresh examination can confirm this.

What our work with the jars does suggest, is that the unguent was still fresh when the jars were put into the tomb in the Valley of the Kings. The jars were probably once lying on their sides, either in KV 55 or elsewhere - because there is unguent on their sides. Finally, the jars were either propped against the walls of the niche – because the unguent level is at an angle – or they tipped over as the result of rock movement.

Lids: Wig

I noted that the wigs on the portrait lids had been cut down in several places; at the back above the collar; on either side of the face; at the front, to sculpt a brow-band, and on the top of the wig, to make room for the body of an uraeus. What does this tell us about the original style of the wig?

All of the royal portrait lids mentioned above sported the *Nemes* headdress. But those of Akhenaten, found in the Royal Tomb at Amarna, must have worn the blue crown and probably a beard.³⁶

When I superimposed the canopic jar lid of Tutankhamun on top of the KV 55 lid, it appears the actual goal in re-carving was to *reduce the size of the face*: The result is a wig that is really too big for the head. This is particularly evident from the side. The upper part of the coffin from KV 55 gives the same impression – the wig almost envelops the face.

Ted Brock had noticed the remains of another type of wig on the first, or uppermost, row of curls on jar A. He said that row seemed to end in tiny braids; however, the wig looks like the one worn by the young woman in the Ny Carlsberg Glyptotek relief AE.I.N 1776 – showing thicker strands of curls interspersed with either smaller curls, or perhaps beads. Whatever the original form was, the Nubian wig is the final result, albeit in this case it is much flatter on either side of the face than usual (see jar [B] being photographed in Fig. 1). This wig evolved from a hairstyle of Nubian soldiers³⁷ and was worn by Nefertiti,

35 "Among broken jars and an unbroken one containing the entrails of the body not preserved in a canopic jar, and seals and fragments of all kinds discarded by Davis as worthless and given to the Metropolitan Museum..." Joseph Lindon Smith, *Tombs, Temples and Ancient Art* (Oklahoma: University of Oklahoma Press: 1956), 128. I have asked the MMA about these "entrails," but they have no information (Catharine Roehrig, fax message to author, 10/13/94).

36 M. Hamza, "The Alabaster Canopic Box of Akhenaten and the Royal Alabaster Canopic Boxes of the XVIIIth Dynasty," *Annales du Service des Antiquités de l'Égypte*, 40 (1940), 537-543.

37 Cyril Aldred, "Hairstyles and History," *Metropolitan Museum of Art Bulletin* 15, 6 (February, 1957), 141-147.

Akhenaten, all of their daughters, Queen Tiyi and others. But in her early depictions Queen Tiyi is often seen in a long, layered wig, which, if cut down, could resemble the Nubian wig.

Why was there such a severe reduction of the hair on either side of the face on the KV55 canopic jar lids? Perhaps it was to make the face more feminine and less masculine by reducing its width. Or was the workman trying to remove something else in this operation - earrings, perhaps? Kiya wears large round earrings, (Ägyptisches Museum Berlin #21239 for example), as do Queen Tiyi and many of the royal daughters.³⁸

Collar

The area on the floral collar just below the chin was shaved down and recarved, leaving a slight depression; this part of the collar is noticeably badly rendered. Krauss noted it was not as polished as the rest of the jar lid. He also saw hieroglyphs in this location, not visible to us. The Tutankhamun canopic jar lids have no inscriptions or cartouches in that place, nor do those of Horemheb, but the cartouches of the Aten exist on either side of Akhenaten's beard on his jar lids.

The KV 55 canopic lid heads could have had beards – there does seem to be a slight depression under the chin where such an item could have been removed.

Uraeus

Martin suggested that the tail of the uraeus stretching across the top of the MMA wig appeared to be original, but there was no agreement on this point from Krauss concerning the three Cairo jars. Perepelkin believed this recarving was done in the process of changing two entities to one (vulture and serpent > serpent)³⁹ once integral to the lid. Tiyi's steatite statue in the Egyptian Museum, Cairo, shows both serpents.⁴⁰ There seems to be some individual variation, with the MMA serpent being more raised than those on the other three lids (see Fig. 9). Since the brow-band does not appear to be original, it seems safe to assume that the uraeus must also have been a later addition.

This alteration of female jar lids to male by the addition of an uraeus has also been noted in the case of the (re-) burial of Thutmose I by Hatshepsut, presumably using some of her jar lids. They were apparently set on top of jars and inserted in a canopic chest (50 cm overall height; 25 cm diameter, comparing favorably with the overall measurements of the KV 55 jars/lids). There are no known remains of the jars.⁴¹

Finally, Schaefer gives a good resume of the difficulty in identifying the subject of a

38 Arnold, *The Royal Women of Amarna*, figs. 25, 37, 38, 49 and 6.2

39 Jurij Perepelkin, *The Secret of the Gold Coffin* (Moscow: Nauka Publishing House, 1978), 82.

40 JE 38257.

41 Christine Lilyquist, "Some Dynasty 18 Canopic Jars from Royal Burials in the Cairo Museum," *Journal of the American Research Center in Egypt* 30 (1993), 111-116; Aidan Dodson, *The Canopic Equipment of the Kings of Egypt*, (Kegan Paul: 1994), 49.

portrait on the basis of whether there are one or two serpents on the forehead, and implies there are equal arguments in the case of the KV 55 examples for identifying them as either male or female. But as for the portrait being Akhenaten - "...if the urns that were found in the coffin of Amenhotep IV were really his, we would note the remarkable phenomenon that the heads on the images of the urns of his almost immediate predecessors and successors show two snakes (uraei), while he, as the king between them, has only one."⁴²

Attribution

As mentioned previously, a number of theories have been advanced regarding the ownership of the jars, both originally and finally, according to the inscriptions, and as to who (or even whom) was the model or models for the portrait lids. Up close, the jars seem to have more individuality than Krauss suggests, and it is even possible they could show different people. Jar lid (C), for example, has a more severe expression than the others, with the corners of the lips angled downwards, much like depictions of Queen Tiye. The slightly smaller size of the MMA jar, and its numbering on the rim, also sets it apart from the others. Could these lids have been retrieved from destroyed burials in the Royal Tomb at Amarna? If so, they could have belonged to Tiye, Meritaten or Meketaten, or in fact, to all three women.

Martin, on the basis of the reconstructed (almost completely obliterated) inscriptions, believes the jars were *originally* made for Akhenaten. But the jars are too big for his broken canopic case found in the royal tomb at Amarna, and they are not of the royal type. In addition, as noted previously, there were other canopic jar lids made with his image that are more typical of those made for a sectioned box.⁴³ He concludes, "There is every reason to believe that this chest enshrined the entrails of Akhenaten."⁴⁴ But when the Royal Tomb at Amarna was desecrated, was the viscera then transferred to the new containers discovered in KV 55? And where did it disappear to after that?

Krauss concluded the KV 55 jars were originally made for Akhenaten, then recarved for Kiya, and finally, prepared for another person who he believes might be Smenkhkare. *Smenkhkare* has now been proposed to be another one of Nefertiti's names, perhaps assumed

42 Heinrich Schaefer, "Die angeblichen Kanopenbildnisse König Amenophis des IV," ZÄS 55 (1918), 43-49. Note that Nefertiti wears only one uraeus on her depictions at Amarna, while on the Karnak talatat (unknown to Schaefer at the time of his article) she is shown wearing two. Akhenaten is never shown wearing more than one. For an early summary of the published evidence, see E.K. Werner, "Identification of Nefertiti in Talatat Reliefs Previously Published as Akhenaten," *Orientalia* 48, 3 (1979), 324-331, and later, E.L. Ertman, "From Two to Many, The Symbolism of Additional Uraei worn by Nefertiti and Akhenaten," *Journal of the Study for Egyptian Antiquities* XXIII 3 (1993, published 1996), 42-50. See also most recent work on the talatat by J. Gohary, <http://heritage-key.com/blogs/owenjarus/nefertiti-and-aten-colour-16000-amarna-art-talatat-blocks-luxor-original-pigment>, accessed June 29, 2019.

43 Hamza, "The Alabaster Canopic Box of Akhenaten and the Royal Alabaster Canopic Boxes of the XVIIIth Dynasty," pl. B.

44 Martin, "Notes on a Canopic Jar from King's Valley Tomb 55," 116, n. 2.

when she took the throne for an interregnum (as regent) after the death of Akhenaten.⁴⁵

Conclusions

Except for Tiye's use of the double uraei, our observations would seem to support Arnold's conclusion that the lids are hers,⁴⁶ originally part of her burial equipment, as was the gilded shrine found in KV 55. Her sarcophagus was installed in the Royal Tomb at Amarna⁴⁷ and probably she is the "Elder Lady" whose remains were found in the tomb of Amenhotep II. But like the coffin found in KV 55, the canopic jars were altered to reflect the burial of Kiya, then later, a male, presumably Akhenaten, since it now seems to be generally accepted that the body from KV 55 is his.⁴⁸ According to Ertman, only Kiya's representation fits the criteria that were present prior to the alterations that added brow-bands and uraei to the KV 55 jars' lids:⁴⁹ "By the time of the New Kingdom, the royal wife and the king already wore uraei and gold brow-bands, but Kiya would not have worn these symbols during the Amarna Period as she was not of the same status, even though she was a wife of Akhenaten."

As for Kiya, her real identity remains unknown. I believe her name was a short form of one of the names of the Amarna women, and as is the usual practice, one of the important consonants (k) was retained. If so, she could have been Meketaten, Tadukhepa, or Baketaten. I favour the latter, since she could have been the eldest offspring of Amenhotep III's family⁵⁰ at the time of a post-Akhenaten regency by Nefertiti, making her the most likely candidate to be taken on as "Queen," if that is what indeed happened.

The amount of attention paid to altering the jars and lids speaks of an intense interest in preparing a proper burial in KV 55, but the result was chaotic: Much of it was initiated by rainwater entering the tomb, causing the debris filling the corridor to expand and eject parts of the corridor wall into the burial chamber, thereby smashing the coffin and causing attendant damage. There is also the possibility of robbery and apparently much difficulty was encountered in securing the burial. The tomb was entered on at least two occasions, at first to insert a burial, then again to fill the corridor with debris (as was done in the tomb of Tutankhamun to deter robbers), then a third time to either remove or insert parts of the Tiye

45 Julia Samson, "Nefertiti's Regality," *Journal of Egyptian Archaeology* 63 (1977), 88-87; "Akhenaten's Successor," *Göttingen Miszellen* 32 (1979), 53-58; Julia Samson, "Akhenaten's Co-regent Ankhkheperure-Neferneferuaten," *Göttingen Miszellen* 53 (1982), 51-54; Julia Samson, Neferneferuaten-Nefertiti 'Beloved of Akhenaten,' Ankhkheperure-Smenkhkare 'Beloved of Aten,'" *Göttingen Miszellen* 57 (1982), 1-67.

46 Arnold, *The Royal Women of Amarna*, 118. It is remotely possible that evidence for a double uraei was lost during the re-carving of the brow area on the lids; see fn. 39.

47 Edwin C. Brock, "The Sarcophagus of Queen Tiye," *Journal of the Society for the Study of Egyptian Antiquities* 26 (1996), 8-21.

48 Note, for example, the label on the coffin in the Egyptian Museum, Cairo (JE 32697).

49 Earl Ertman, email message to author, February 28, 2019.

50 Marc Gabolde, "Baketaten, fille de Kiya?," *Bulletin of the Société D'Égyptologie Genève* 16 (1992), 27-40.

shrine. More chaos is indicated by the discovery of one of the elaborate *pt* inlays that would have been removed from the jars, in the mixed material in the tomb. Does this suggest the alterations were done on-site? Gabolde, who discussed this inlay, thinks it is possible.⁵¹

Finally, an analysis of the contents of the KV 55 jars seems essential in the light of progress with DNA as a tool for personal identification. There has been some interest in this recently in connection with the work done by Hawass et al.⁵² Only a thorough examination of the jars' contents can tell us whether there is enough material present for DNA testing. According to Rühli et al., "This is vitally important for obtaining a genetic profile."⁵³ If so, we could tell if the jar contents belong to Akhenaten, or any of the associated individuals whose remains have thus far been analysed. It might also be possible to determine whether this individual suffered from Marfan's Syndrome, a genetic disorder suspected to be present in the Amarna family.⁵⁴

Solutions to the problems posed by the troubled history of this tomb have added up incrementally for over a hundred years. Some recent successes, like the discovery of Nefertiti's latest year date as Akhenaten's chief wife, have been achieved through exploration, while a re-examination of the objects and the human remains involved in the saga, as well as taking another look at the tomb itself, have also added to our knowledge. All related objects deserve continued scrutiny, and in this light, I believe that Ted Brock has played an important part.

51 Marc Gabolde, "Under a Deep Blue Starry Sky," in *Causing His Name to Live: Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, Culture and History of the Ancient Near East 37, ed. Peter Brand and Louise Cooper (Leiden/Boston: Brill, 2009), 109-133.

52 Zahi Hawass et al., "Ancestry and Pathology in King Tutankhamun's Family," *Journal of the American Medical Association* 303, 7 (2010), 638-647.

53 Rühli et al., "Canopic Jars: A New Source for Old Questions," 181.

54 First suggested by Alwyn Burridge, "Akhenaten: A New Perspective: Evidence of a Genetic Disorder in the Royal Family of 18th Dynasty Egypt," *Journal of the Society for the Study of Egyptian Antiquities* 23 (1993, published 1996), 63-74.

Figures

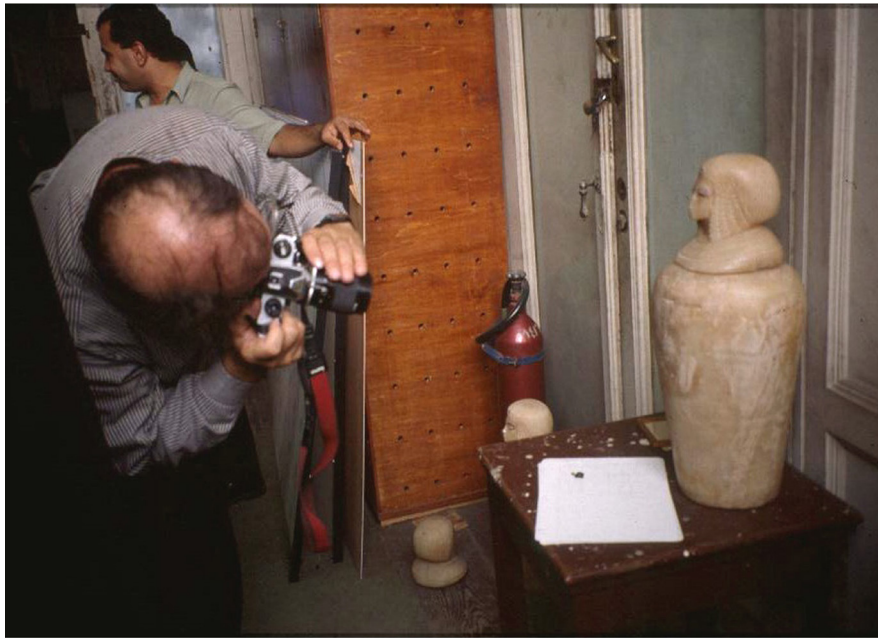


Figure 1. Ted Brock photographing the canopic jars in the Cairo Museum.



Figure 2. The three jars in their case in the Cairo Museum, (from left to right) C, B and A.



Figure 3. (left) Mark inscribed on rim of jar may indicate number of vessels in a group. Photo by E. Ertman

Figure 4. (right) Base of (C) showing shaving-down of whole jar surface as evidenced by remains on base.



Figure 5. View of jar (A) interior showing hardened unguent and hole (left) possibly the result of removal of viscera. Note sharp rim-to-jar angle.



Figure 6. Jar (A) showing the shaving-down of the sides of the wig and broken nose. Note the ends of an earlier, top row of curls, is visible.

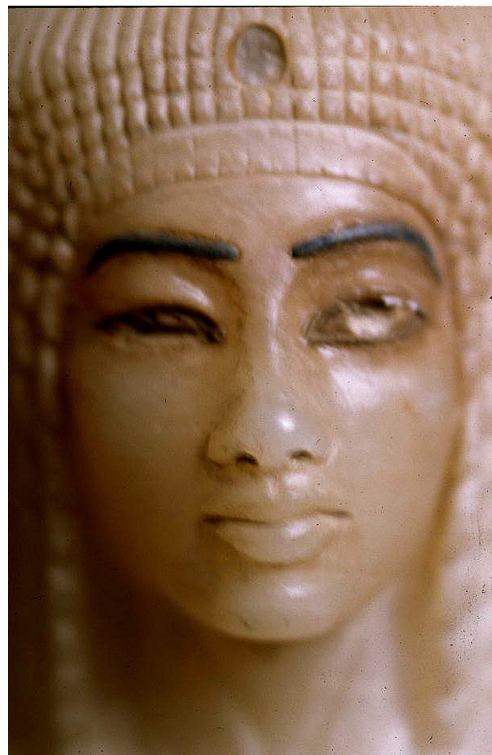


Figure 7. Jar (C) showing alterations to wig made to produce brow-band.



Figure 8. Jar (A) showing the shaved-down and re-carved area on the collar below the chin.



Figure 9. Jar (B) showing shallow-cut uraeus body.



Figure 10. View of remaining raised area surrounding uraeus socket on (B).



Figure 11. View of interior of jar lid.

A Mummy Shroud from Hawara

Maria Cannata

Abstract: Publication of a Roman Period mummy shroud found by Petrie at Hawara and now part of the Egyptian collection in the Bolton Museum (UK). The Shroud would originally have been fitted with a painted portrait, but it was no longer present at the time of its excavation. Inscriptions in Greek and Demotic identify the deceased as Arsinoe daughter of Heraklites, while a Demotic note instructs for the transport of the mummy to Hawara.

Résumé: Publication d'un linceul de momie d'époque romaine trouvée par Petrie à Hawara et maintenant partie de la collection égyptienne du musée de Bolton (Royaume-Uni). Le Suaire aurait initialement été équipé d'un portrait peint, mais il n'était plus présent au moment de ses fouilles. Inscriptions en grec et démotique identifie le défunt comme Arsinoé fille de Heraklites, alors une note démotique charge pour le transport de la momie à Hawara.

Keywords: Roman Egypt, funerary shroud, mummy portraits, transport of mummies, Greek and Demotic names.

Hawara mummy shroud (Bolton Museum MAG 1977.345) (c. 150 AD)

This paper discusses a seemingly inconspicuous mummy shroud found by William Flinders Petrie in the Hawara necropolis during the 1910-11 field season,¹ and now part of the collection of Egyptian antiquities in the Bolton Museum (UK).² In particular, I would like to present this paper as an offering to the memory of Edwin C. Brock whose research interests centered around the funerary sphere in general, and on sarcophagi in particular.

The mummy shroud MAG 1977.345 was found in the same burial pit as three portrait mummies — UC 36215, Brighton Art Gallery and Museum R137, and UC 30088 (Petrie's number 33, 34 and 35 respectively) — and a plain shroud with 'caricatures' drawn at the bottom of the footcase, UC 59432.³ Petrie identified the latter shroud and MAG 1977.345

1 William H. Flinders Petrie, *Roman Portraits and Memphis (IV)* (London: Bernard Quaritch, 1911).

2 The Bolton Museum was a supporter of the Egypt Exploration Fund, an endeavour started by Annie Barlow (1863-1941) who was appointed as honorary local secretary for the Bolton Region to raise money for excavations in Egypt. Institutions and collectors who funded the work of the EEF would receive a share of the finds, and Annie Barlow's went to the Chadwick Museum, forerunner of the Bolton Museum. Accessed 30/04/2019, <http://boltonlams.co.uk/museum/museum-collection-highlights/egyptology/egyptology-collection-history>. I thank the Bolton Museum for permission to publish this artefact. The photographs of the shroud were taken together with the then Keeper of the Museum's Egyptian Antiquities, Dr. Tom Hardwick, whom I thank for sharing them with me.

3 Petrie, *Roman Portraits*, 8 §15; in the case of UC 59432, only the inscribed portion of the footcase was

as belonging to a class of portrait mummies the decoration of which consisted of wrapping the whole body in a smooth cloth. This was either a stiffened red cloth, a thin cloth with a red background, or a plain cloth with an opening to show the portrait.⁴ However, no portrait was present on either of these two shrouds.⁵

According to the Bolton Museum records, the mummy textile dates from the middle of the 2nd century AD. Two of the portraits found in the same burial pit, UC 36215 and UC 30088, have been dated to about AD 120-40,⁶ which is consistent with the dating of the Bolton shroud. The lack of the panel portrait does not permit to confirm the dating of this shroud using stylistic criteria, such as hairstyle, clothing, jewellery, while prosopographical data cannot, in this case, be used as dating criterion since the names of both the deceased and her father were already common from the Ptolemaic Period onwards.⁷ The palaeography of the inscriptions is consistent with a dating in the 2nd century AD.

The Bolton shroud bears two inscriptions in Greek, not mentioned in the original publication, and two more in Demotic (with a possible third), which were published in facsimiles and hieroglyphic transcription by Herbert Thompson in the excavation account.⁸

Description

The shroud consists of two layers of a plain, undyed cloth, of roughly the same size, wider at the top and tapering towards the bottom (fig. 1). In its present state, it measures 1.91 m in length and 0.56 m at its maximum width (fig. 2). The cloth is fairly smooth and

removed. For an interpretation of these ‘caricatures’ as a rough rendering of the bound prisoner motif often found painted on footcases see Cornelia Römer, “Das Werden zu Osiris im römischen Ägypten,” *Archiv für Religionsgeschichte* 2.2 (2000): 141-61. For a photograph of UC 30088 and UC 36215 see Susan Walker and Morris Bierbrier, *Ancient Faces: Mummy Portraits from Ancient Egypt* (London: British Museum Press, 1997), 64-6, no.s 41 and 42; for one of Brighton Art Gallery and Museum R137 see Janet Picton, Stephen Quirke, Paul C. Roberts (eds.), *Living Images: Egyptian Funerary Portraits in the Petrie Museum* (Milton: Routledge, UCL Institute of Archaeology Publications, 2007); Petrie, *Roman Portraits*, Pl. V no. 34.

4 For a study of red-shrouds see Lorelei H. Corcoran, *Portrait Mummies from Roman Egypt (I-IV Centuries A.D.) with a Catalogue of Portrait Mummies in Egyptian Museums* (Chicago: The Oriental Institute of the University of Chicago, 1995), 126-161 and pls. 12-17; for a colour photograph of this type of shroud see, for example, the mummy of Demetrios in the Brooklyn Museum, <https://www.brooklynmuseum.org/community/blogosphere/2007/08/07/meet-our-mummy-demetrios/> (accessed 30/04/2019); and Lorelei H. Corcoran and Marie Svoboda, *Herakleides. A portrait mummy from Roman Egypt* (Los Angeles: The J. Paul Getty Museum, 2010).

5 Petrie, *Roman Portraits*, 8 §15.

6 Walker and Bierbrier, *Ancient Faces*, 64-6, no.s 41 and 42.

7 On the difficulty of using some names, such as Arsinoe, as dating criteria see Yanne Broux and Willy Clarysse, “Would you name your child after a celebrity? Arsinoe, Berenike, Kleopatra, Laodike and Stratonike in the Greco-Roman East,” *ZPE* 200 (2016): 347–62.

8 Petrie, *Roman Portraits*, 22 §48, Pl. xxiv. The Demotic inscriptions have also been discussed by Robert K. Ritner in Corcoran, *Portrait Mummies*, 41-2; Sven P. Vleeming, *Demotic and Greek-Demotic mummy labels and other short texts gathered from many publications* (Short Texts II 278-1200) (Leuven: Peeters, 2011), Vol. 1, 593-95 numbers 1039-1041. I thank Prof. Günter Vittmann for drawing my attention to this and for kindly providing me with a copy of the relevant pages.

strong, and was made from an s-spun (probably single) ply, woven in a warp-faced tabby weave (average thread count 13-14 warp ends per cm, and 10 weft picks per cm).

Remains of a hardened dark resin survive in large quantities in between the two layers (fig. 3). The upper textile is stained along the right-hand edge from the resin used to keep the two fabrics together, and presents a series of perforations, particularly along the outer edge. A large gap has damaged the latter part of the Greek inscription (Text 1, line 2). The lower shroud is much more stained and decayed, with a series of perforations and tears over its entire surface. In fact, both textiles are quite frayed around the edges, probably as result of their removal from the mummy (see fig. 1).

Remains of three ties made from a coarser, hessian-like fabric, are still present on the lower shroud to which they appear to have been attached by means of the same resin used in between the two textiles. They are found around the ankles, the hips and the chest areas (fig. 4).

The two layers of textile were shaped around the panel with the edges folded under to create a roughly oval opening for the portrait (fig. 5). The fabric was neatly folded and turned over the top of the head where it was held in place by means of resin (fig. 6). A number of wide textile bands, one with a much frayed end, are visible on the underside around this area, and were probably used to help keep the portrait in place (fig. 7). At least one tie, of the same fabric type as those used for the rest of the body, is visible around the opening where the portrait was originally inserted, and may have served as reinforcement around the opening (figs. 5, 6 and 8).

Inscriptions

As mentioned above, the Bolton shroud MAG 1977.345 bears two inscriptions in Greek, one across the chest and the other across the ankles, and two in Demotic, one along the body field and the other across the ankles, while a possible third line in Demotic may have been present further down on the footcase (fig. 12).

In both of the Greek inscriptions the strokes are quite broad giving the impression that they were written using a brush, while those in Demotic appear to have been written with a hard writing tool, which, in places, gives the impression of having jumped over the fibers of the textile. In addition, the Greek inscriptions are very faded by comparison to those in Demotic, so much so that they were probably not seen by Herbert Thompson. Such faded appearance is probably the result of the type of pigment used as ink, and, perhaps, of the writing tool employed.⁹

⁹ I thank Dr. Holger Kockelmann for discussing these questions with me. For a chemical analysis of different inks used in Greek and Demotic inscriptions during the Ptolemaic Period see E. Delange, M. Grange, B. Kusko, E. Menei "Apparition de l'encre metallogallique a partir de la collection de papyrus du Louvre." *RdE* 41 (1990): 213-7.

Text 1: across the chest of the mummy (fig. 9)

APCINOH ^a	Arsinoe
HPAKΛEI[ΔOY]	daughter of Heraklei[des]

a) The surviving traces appear to be those for omega, but this may be due to fading and the presence of creases in this area. In a Roman Period inscription one would expect to find an omicron.¹⁰

Text 2: across the ankles of the mummy (fig. 10)

APCIN[OH] ^b	Arsinoe
------------------------	---------

b) The inscription is rather faint, especially toward the end of the name. Traces of what might be an omicron are just visible, but there are also small stains around this area which make it difficult to determine with certainty whether the letter is indeed omicron or omega.

Text 3: along the body of the mummy (fig. 11)

ꜣrsnꜣꜣꜣꜣꜣꜣ ꜥt&ꜥ hrꜥrtꜣꜣꜣ tꜣ rꜣꜣꜣ.(t)e (n) ꜥ.t-wr
 Arsinoe <daughter of> Heraklides, the woman (from) Hawara

c) For this name see *Demotisches Namenbuch*, 30 example 9.¹¹

d) For this name see *Demotisches Namenbuch*, 732-3 example 26.

e) The orthography of the noun *rꜣꜣꜣ* is unusual in that it shows a tall sign, very much like the plural stroke, even though it is used in the singular as clearly shown by the presence of the definite article *tꜣ*, which supplies the correct number and gender of the noun. Interestingly, the same orthography is attested in two wooden mummy labels, Cologne T 32 (from the Herakleopolite nome)¹² and BN Y.21.406 (4) (possibly from Memphis).¹³ In the first document the deceased is identified as ‘the man from Makhol’ (*pꜣ rꜣꜣꜣ n ꜣꜥꜣꜣ*) (lines 1-2), while in the second label another deceased is identified as ‘the man from Memphis’ (*pꜣ rꜣꜣꜣ n ꜣꜣ-ꜣꜣꜣ*) (line 3). Thus, in these documents, as is also the case with MAG 1977.345,

10 I thank Prof. Willy Clarysse for our discussion on the Greek inscriptions and his comments about them.

11 Erich Lüddeckens, unter Mitarbeit von W. Brunsch, G. Vittman, K.-Th. Zauzich, *Demotisches Namenbuch* (Wiesbaden: Dr. Ludwig Reichert Verlag, 1980-).

12 Vleeming, *Short Texts II*, 124 number 453; John Tait and Cornelia Römer in *Kölner Papyri (P. Köln) IX*, ed. Michael Gronewald (Paderborn: Verlag Ferdinand Schöningh), 133-4, ¶374 308-9, Pls. 38-39; this particular orthography is also listed in Wolja Erichsen, *Demotisches Glossar* (Kopenhagen: Ejnar Munksgaard, 1954), 247.

13 Vleeming, *Short Texts II*, 125-6 number 456.3; Michel Chauveau and Helene Cuvigny, “Étiquettes de momies grecques et démotiques de la Bibliothèque Nationale,” *ZPE* 130 (2000): 183–191.

UC 59432 and UC 38058 from Hawara, the noun *rmt* is used in the writing of the epithet identifying the person as originating from a particular area or town. Examples of this orthography of the noun *rmt* are attested also among the Tebtunis scribal hands.¹⁴

Text 4: across the ankles of the mummy (fig. 12)¹⁵

p3 rmt^f (n) ym rg hwyh=f i (r) h.t-wrj

The man (from the) Fayum in order to transport him (to) Hawara

Herbert Thompson read this line as “P.rem.ion son of Huy from Hawara,”¹⁶ taking the topographical designation as the name of the individual, and the verb *hwy*, whose correct reading was established by Ritner,¹⁷ as the patronymic. This led Petrie to suggest that the latter was the name of the deceased, because the inscription is found across the ankles of the mummy, as it is the case with two other mummies (see below). On the other hand, he posited that Arsinoe was the name of the “owner of the mummy, the widow.”¹⁸ The handwriting in the latter part of the line is not very clear and a number of signs overlap one another. This may be the result of using a hard writing tool on a textile, and of the condition of the fabric in this specific area, which may have been less stiff and thus more difficult to write on.

f) The noun *rmt* shows the same orthography as the inscription along the body field, although it employs the masculine rather than the feminine definite article. In addition, one would have expected to find the name of the deceased, and possibly her patronymic, before the epithet ‘the (wo)man from ...,’ as is the case in Text 3, UC 38058, UC 59432, Cologne T 32 and BN Y.21.406 (4).

g) The scribe does not appear to have written a full sentence, but rather used an infinitival construction with preceding preposition to indicate purpose, that is, what was to be done with the mummy. Similar constructions are found in the docketts of letters, which use *r di.t*

14 I thank Prof. Joachim Quack for the information about the Tebtunis attestations.

15 Vleeming, *Short Texts II*, 593 number 1039.

16 Petrie, *Roman Portraits*, 22 §48, Pl. xxiv.4.

17 Ritner in Corcoran, *Portrait Mummies*, 41-2. Although, as Ritner noted, the verb *hwy* is attested in connection with funerary materials in the Magical Papyrus (9, 23) and in tale of Setne Khaemwas (II, 2, 11-12), its meaning in these two sources is not ‘to deliver something,’ but rather ‘to apply’ and ‘to throw’ respectively (see Janet H. Johnson (ed.), *The Demotic Dictionary of the Oriental Institute of the University of Chicago* (henceforth CDD) (Chicago: The Oriental Institute of the University of Chicago), 69 letter *h*; Joachim F. Quack, “Zwei Handbücher der Mumifizierung im Balsamierungsritual des Apisstieres,” *Enchoria* 22 (1995): 123-9, note a to ex. 9; R. L. Vos, “Demotic mummy labels containing permission to bury, addressed to Totoês, a *hry sst* of the sacred Buchi at Hermonthis,” in *Textes grecs, démotiques et bilingues* (P. L. Bat. 19), eds. Ernst Boswinkel and Peter W. Pestman (Leiden: E. J. Brill, 1978), 265.

18 Petrie, *Roman Portraits*, 22 §48.

s n B “to be given to B” in the exterior address.¹⁹ The same construction is employed in UC 38058, which was found in the same necropolis:

pyltw3 p3 rmt̄ ym r ḥwy=f r [ḥ.t-wr] (UC 38058) (fig. 13)
 Philotas the man (from the) Fayum, to transport him (to) [Hawara].²⁰

Interestingly, while the scribes of MAG 1977.345 and UC 38058 simply wrote a short note rather than a complete sentence, the inscription on UC 59432, found in the same burial pit as MAG 1977.345, employs a Third Future:

3ipy²⁰ p3 rmt̄ (n) ym iw=w r ḥwy=f (r) [ḥ.t-wr] (UC 59432) (fig. 14)
 Ipy the man (from the) Fayum, they will transport <him> (to) [Hawara]

In fact, inscriptions on short texts such as mummy labels in Greek used for the transport of mummies, which are comparable to Text 4, are often very brief and indicate the intended destination of the body using just the prepositions εἰς or ἀπό followed by the place name.²¹

h) The verb *ḥwy* has a variety of meanings, such as ‘to throw, strike, thrash, cast aside, leave, abandon,’ and survives in Coptic as **ⲉⲓⲟⲩⲈ** ‘to strike, cast, lay.’ When used in connection with paths and roads it conveys the sense of ‘travel, tread, go, roam, rush,’ hence the extended meaning of ‘deliver, transport.’²² In the present context, one might have expected to find a verb like ‘to take’ (*t*), ‘to bring’ (*in*), ‘to carry’ (*hr*), or even ‘to send’ (*hb*). The latter, for example, is used in the mummy label Wångstedt W.3 (7 AD), one of a group of wooden tags giving permission to bury a named deceased individual.²³ These are characterised by the use of the imperative form of the verb *ir* followed by the infinitive of the verb *ks* ‘to bury,’ or, in the case of Wångstedt W.3 (AD 7), by the infinitive of the verb

19 I thank Prof. Joachim Quack for discussing with me the grammatical construction used and for pointing out its use in the docketts of letters; and also Dr. Robert Simpson and Dr. Andreas Winkler. For the latter see Mark Depauw, *The demotic letter: a study of epistolographic scribal traditions against their intra- and intercultural background* (Sommerhausen: G. Zauzich, 2006), 115-8; and Leo Depuydt, “Demotic Script and Demotic Grammar (II): Dummy Prepositions Preceding Infinitives.” *Enchoria* 27 (2001): 28-9.

20 Lüddeckens *et al.*, *Demotisches Namenbuch*, 1, 62.

21 Bernard Boyaval, “Conclusions provisoires sur les étiquettes du momies en langue greque,” *BIFAO* 86 (1986): 83-6.

22 CDD, 69 letter *ḥ*; Adolf Erman and Hermann Grapow, *Wörterbuch der ägyptischen Sprache* (Leipzig: J. C. Hinrichs, 1926-63), Vol. III, 47 example 23; Mark Smith, *Catalogue of Demotic papyri in the British Museum* Vol. III. *The mortuary texts of papyrus BM 10507* (London: British Museum Publications Ltd, 1987), 63 note (b) to Line 17; Penelope Wilson, *A Ptolemaic lexikon: a lexicographical study of the texts in the temple of Edfu*. *Orientalia Lovaniensia Analecta*, 78 (Leuven: Uitgeverij Peeters en Departement Oosterse Studies, 1997), 624-5.

23 Vos, *Demotic mummy labels*, 260-7; ‘Abd al-Halīm Nur el-Din and Peter W. Pestman, “Wooden tag for the mummy of Senmenchês.” in *Textes grecs, démotiques et bilingues* (P. L. Bat. 19), eds. Ernst Boswinkel and Peter W. Pestman (Leiden: E. J. Brill, 1978), 187-9.

hb ‘to send.’²⁴ In fact, in its lexical role, the verb *ir* has a wide range of meanings, including ‘do, perform, execute,’ and is used in conjunction with various actions. Any added or divergent meaning results from the following infinitive and it is not implicit in the verb *ir*.²⁵

Being a final-weak radical verb one would expect to find a \bar{t} before the pronominal direct object with the infinitive in the *status pronominalis*, as is, for example, the case in the Magical Papyrus (15/31) and the Instructions of ‘Onchsheshonqy (10/8).²⁶ However, this \bar{t} is regularly omitted in a number of texts, such as the Ptolemaic Sacerdotal Decrees and in a Demotic appeal to Ibis, and may represent a ‘dialectal’ peculiarity of Memphite documents since the same is attested in Coptic Bohairic dialect.²⁷

i) The orthography of this suffix pronoun is slightly unclear, so much so that Herbert Thompson transcribed it as a ‘bird’ determinative. The scribe appears to have written over another sign, perhaps correcting himself, or he extended the end of the following sign over the preceding suffix pronoun. The stroke looks heavier at the top than at the tail end of the suffix pronoun, so that the resulting sign seems to be written as a circle with a downward tail.

j) The orthography of this name-place also shows some lack of clarity since the scribe wrote the ‘*t*’ of the noun *h.t* over the ‘*w*’ of *wr*, as a comparison between the orthography of this compound and that of the same in the body-field inscription clearly shows:

Text 4

Text 3

24 The same construction is attested in a number of ostraca from Edfu and Thebes dating from the Ptolemaic Period, on which see: Didier Devauchelle, “Notes sur l’administration funéraires égyptiennes à l’époque gréco-romain,” *BIFAO* 87 (1987): 141-160; Brian Muhs, “Demotic ostraca from Ptolemaic Edfu and the Ptolemaic tax system,” in *Edfu, an Egyptian provincial capital in the Ptolemaic period*, eds. Katelijn Vandorpe and Willy Clarysse (Brussels: Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2003), 102-5; and Brian Muhs, “Two ‘Orders for Burial’ from the Valley of the Kings,” *JARCE* 45 (2009): 393-5.

25 Contra to Corcoran’s statement that the verb *ir* means ‘to go’ and that it is one of the most commonly used in connection with the transport of mummies (*Portrait Mummies*, 42); see Robert S. Simpson, *Demotic Grammar in the Ptolemaic Sacerdotal Decrees* (Oxford: Griffith Institute, 1996), 131; and Mark Smith, *Papyrus Harkness (MMA 31.9.7)* (Oxford: Griffith Institute, 2005), 97 note e to line 5.

26 Janet H. Johnson, *The Demotic verbal system* (Chicago: The Oriental Institute of the University of Chicago, SAOC 38, 1976), 12-3, 106 (ex. 287D) and 153 (ex. 400B).

27 Simpson, *Sacerdotal Decrees*, 1996, 90; George R. Hughes, “The Cruel Father,” in *Studies in honor of John A. Wilson* (Chicago: The Oriental Institute of the University of Chicago, SAOC 38, 1969), 49 note to line 8.

Text 5: across the ankles of the mummy (fig. 12)

To one side and just below this second Demotic inscription there is an ink stain that could represent the beginning of another line of text, which for some reason was partly rubbed off, or simply a smudge made while writing the line above. At the beginning of the line there appears to be a sign that could be the letter *h*, or part of a theophoric name with *Hr*, though the rest of the line is illegible.

The relationship between the two demotic inscriptions on MAG 1977.345 is problematic in that the one along the body clearly refers to a woman, as do those in Greek, while the Demotic line across the ankles refers to a male individual, as shown by the use of the masculine definite article *p3* and the third person suffix pronoun *=f*. According to the excavation account, this shroud was found buried together with UC 59432, also inscribed with a transport note, which raises the possibility that they were transported together to Hawara. This being the case, it is possible that the gender confusion in Text 4 was caused by the presence of a male individual within the same group of mummies awaiting delivery. However, if these mummies represented family members that were shipped together to Hawara, the transport note would probably have been written by the same person, which was not the case judging from both the facsimile of the inscription on UC 59432 and the differences in terms of grammar between the two.

Discussion

This seemingly unassuming shroud presents a number of interesting, if puzzling, aspects. In the first place, it is quite curious to find a portrait mummy without portrait. Petrie believed it to have been removed in antiquity, and supposed that, following a period of time in which the mummy would be kept on display in the house,²⁸ the portrait would be detached before the body was buried. This he understood as an indication of the strong interest in keeping the portraits at home, which led to their removal prior to the mummy's final entombment.²⁹ Indeed, a variety of sources of the Ptolemaic and Roman Periods attest to the practice of leaving the dead unburied for a variable period of time, although they were kept either in a tomb chapel, if one was present, or even in a collective tomb, not in the house.³⁰ In fact, the practice was determined by the specific architecture of the tomb and was linked to the performance of the mortuary cult of the deceased. In tombs where the burial chamber(s) were not easily accessible, as would be the case with the burial pit whence the Bolton shroud was recovered, the deceased would be placed in above-ground

28 Petrie, *Roman Portraits*, 2.

29 Petrie, *Roman Portraits*, 8 §15. There is no evidence at all for the suggestion that a mummy portrait could be removed prior to the final burial of the deceased, while the recovery of hundreds of portraits from burials attests to the contrary.

30 For a refutation of the suggestion that mummies were kept in the house, see Dominic Montserrat, "Death and Funeral in the Roman Fayum," in *Portraits and Masks*, ed. Morris L. Bierbrier (London: British Museum Press, 1997), 33-44.

chapels, or in easily accessible tombs, where the mortuary cult could be performed before the deceased either by a funerary priest or by a family member.

Petrie indicated that, before her final burial, this particular mummy had been re-wrapped to cover the now much frayed original shroud, and the two demotic inscriptions added to it at this time.³¹ This suggestion is certainly consistent with the condition of the lower textile which is much more damaged and decayed than the upper one. A similar case of damage to a shroud and the consequent need for a new wrapping is attested, for example, in P. Giss. 68 (2nd century AD). In the letter, the woman Arsis writes to a certain Apollonios concerning the death of her son and her need to buy additional linen cloths stating: “since you know what happened to my blessed son Chairemon, that the misfortune happened suddenly and he must have a second burial.”³² However, it seems more likely that the mummy was re-wrapped some time before being transported to Hawara. The demotic inscriptions appear to be in two different hands, thus suggesting they may have been executed at different points in time. In addition, and most importantly, had the portrait been detached at the time the mummy was re-wrapped, there would have been no need to use a shroud with an opening given that no portrait was present.

Another possibility is that the mummy and its portrait were interfered with during the transport of the deceased to her final resting place or at the time of burial. The latter possibility is suggested by a Ptolemaic ‘document of calling’ (*sh n ʿš*), P. Carlsberg 37a (220 BC), where the god’s seal-bearer and embalmer in the necropolis of Hawara, Achomneuis, is accused of causing harm to a mummy by the deceased’s wife. In the document the accused declares: ‘If it happens that I refuse to call about it in accordance with what is written above saying “I have not caused that wrong be done to the said mummy-covering in my name, nor have I (myself) done any wrong to the said mummy-covering” (...) I will give to you 10 silver (deben)’ (*iw=f hpr r stz.t=y r tm ʿš r-r=s r h p3 nt sh r hry d bn-pw=y ty ir=w mt-ʿd n t3 ks.t n rn=y bn-pw=y ir mt-ʿd n t3 ks.t n rn=s (...)* *iw=y r ty n=t h d* 10) (lines 11-13).³³ Indeed, the risk of mummies suffering damage or, worse, loss of the body, during transport must have been a great concern as shown by a number of textual sources. In the mummy label Berlin 13440/SB I 3939 (2nd - 3rd century AD) the sender requests that the recipient of the body send a letter confirming that the mummy has reached its destination.³⁴ Others attest to the concern of family members dispatching mummies to relatives and friends that the body should be kept safe until they can reach the place of burial. In P. Princeton III 166 (2nd-3rd century AD), for example, the goldsmith Besas writes to a certain Eidos requesting that the latter collect the body of Besas’ father and keep it safe until he can sail back.³⁵

31 Petrie, *Roman Portraits*, 8 §15.

32 Roger S. Bagnall and Raffaella Cribiore, with contributions by Evie Ahtaridis, *Women’s Letters from Ancient Egypt, 300 BC-AD 800* (Ann Arbor: The University of Michigan Press, 2006), 159-60.

33 Erich Lüdeckens, *Demotische Urkunden aus Hawara* (Stuttgart: Franz Steiner Verlag, 1998), 37-45, Pl. 4; Steve Pasek, *Hawara: eine ägyptische Siedlung in hellenistischer Zeit* (Berlin: Frank & Timme, 2007), 237-42.

34 Vleeming, *Short Texts II*, 107-10 number 437.

35 Allan Chester Johnson and Sidney Pullman Goodrich, *Papyri in the Princeton University Collections*,

Yet another possibility is that the portrait was removed in more recent times, before Petrie's excavation, although, if this were the case, the portraits on the other three mummies buried with MAG 1977.345 would also have been removed. A more likely scenario is that the wood panel deteriorated to the point where it simply disintegrated leaving no trace that Petrie's workers were able to detect, as with the portraits on the mummies discovered in the necropolis of Marina el-Alamein.³⁶ In fact, one of the cloth bands on the right hand side, probably used to keep the portrait in place, appears to have become detached, which may indicate the forceful removal of the portrait, but could equally, and perhaps more likely, be the result of decay of the textile and the resin used to keep the bands and straps together. Indeed, Petrie himself remarks that "[a]bout a third of the portraits buried have been mainly or entirely lost by decay. This was specially the case in the lower ground N.W. of the pyramid, where the rains ran down from the higher mounds. Ground which is perceptibly damp has in no case preserved a portrait. Sometimes white ants have destroyed portraits, or eaten a part."³⁷ In this respect it is worth noting that the three portraits recovered from the same grave all suffered extensive damage and were not retrieved as complete mummies, while of the other shroud, UC 59432, only a portion of the footcase textile was retrieved.

Another puzzling aspect of this shroud is the use of a plain textile for a mummy to be fitted with a portrait, since these belonged to one of three categories of body decoration: rhombic-wrapped, red-shrouded and stucco-shrouded mummies.³⁸ A possible comparative example may be BM EA 6713 (c. AD 140-80), a mummy portrait wrapped in what, today, appears to be a plain shroud.³⁹ However, Dawson and Gray surmised that the bandages had originally been gilded since 'remnants of an opaque substance, which has almost certainly been applied by a brush, are present on the linen in the region of the head and legs,'⁴⁰ while Corcoran categorised the latter as a 'stucco-shrouded' mummy.⁴¹ In fact, it appears that it may have been stuccoed and gilded, with only small fragments now surviving.⁴² This being the case, it is possible that the shroud MAG 1977.345 suffered a similar fate, probably owing to specific conditions present in the burial pit. The fact that a new shroud was placed over the original one indicates that the mummy covering had been damaged by the particular conditions present in the chapel or tomb where it was kept. Therefore, it

Vol. III (Princeton: Princeton University Press, 1942), 84-5, number 166. A similar case is found in P. Gron. 15 (2nd century AD) in which a certain Turbo writes to a colleague asking that he collect and store his mother's mummy until he can come to their hometown.

36 W. A. Daszewski, "Mummy portraits from Northern Egypt: The Necropolis in Marina el-Alamein," in *Portraits and Masks*, ed. Morris L. Bierbrier (London: British Museum Press, 1997), 59-65.

37 Petrie, *Roman Portraits*, 6 §13.

38 Corcoran, *Portrait Mummies*; Corcoran and Svoboda, *Herakleides*, 11.

39 See Walker and Bierbrier, *Ancient Faces*, 118 no. 115.

40 Warren R. Dawson and P. H. K. Gray, *Catalogue of Egyptian Antiquities in The British Museum. I: mummies and human remains* (London: The Trustees of the British Museum, 1968), 30 n. 2.

41 Corcoran, *Portrait Mummies*, 12 no. 23.

42 https://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=129371&partId=1&searchText=6713&page=1 (accessed 30/04/2019).

is entirely possible that the original shroud was decorated, though this is no longer visible due to any decay it may have sustained and to the fact that it was re-wrapped at some point before being transported to Hawara.

As Montserrat noted, despite the importance placed on “personalising the dead” preserving their physical form for the next world, very few portrait mummies bear inscriptions identifying them,⁴³ and, of these, even fewer are on the shrouds themselves.⁴⁴ The inscriptions on MAG 1977.345 offer clear parallels to those found on Demotic and/or Greek mummy labels. These included a variable amount of information and performed different functions. Some identify the deceased by name, others add his/her filiation and/or age at death, while many included a short religious formula on one side of the label. Several of these tags were used to identify the deceased during his/her transport from the place of death to his/her final resting place. Similarly, the inscriptions on the shroud MAG 1977.345 served different functions and may have been written at different points in time. Those in Greek identify the deceased by name and would have served both a religious and a practical purpose. On a religious level, the name (*rn*) was believed to be part of a person’s very essence; for a man’s name to be destroyed or forgotten meant the person’s total annihilation in the afterlife, while its enunciation in the context of the offering ritual ensured the nourishment of the deceased in the afterlife.⁴⁵ On a practical level, it identified and distinguished the person from others, since the mummy may have been placed in a tomb together with several others. In the case of MAG 1977.345 it would also identify the mummy during its transport to its final resting place. The Demotic inscription along the body field may have been added at, or around the same time, as those in Greek and probably served the same purpose, that of identifying the dead.

The Demotic inscription across the ankles, on the other hand, provides information for the transporters who were to convey the body to the Hawara necropolis, and, as such, represents a parallel to the same category of mummy labels. Textual sources from the Ptolemaic and Roman Periods clearly attest to the transport of the dead from the place of death to his/her hometown for burial when the death occurred away from the place where family members were still resident and/or where the family burial place was located.⁴⁶

43 Dominic Montserrat, “The Dating of Fayum Mummy Portraits: A Papyrological Perspective,” in *Proceedings of the 20th international congress of Papyrologists*, Copenhagen, 23-29 August, 1992, ed. Adam Bülow-Jacobsen (Copenhagen: Museum Tusulanum Press, 1994), 578.

44 Barbara Borg, *Mumienporträts. Chronologie und kultureller Kontext* (Mainz: Verlag Philipp von Zabern, 1996), 151-4. I refer here only to portrait mummies; shrouded mummies without portraits, or large wraps covering the shrouded body are excluded here. Additional examples may be the four linen pieces in the Leiden Museum collection that were cut from shrouds, but it is unknown whether they would also have had a portrait or not (see Marjolein Thieme and Pieter W. Pestman “Inscribed Mummy linen of the Roman Period,” in *Textes grecs, démotiques et bilingues (P. L. Bat. 19)*, eds. Ernst Boswinkel and Pieter W. Pestman (Leiden: E. J. Brill, 1978), 131-3, and Appendix E, 225-31).

45 John H. Taylor, *Death and the afterlife in ancient Egypt* (London: The British Museum Press, 2001), 23-4, 95, 192-3.

46 See for example Thieme and Pestman, “Inscribed Mummy linen,” 225-31; Jan Quaegebeur, “Mummy labels: An Orientation,” in *Textes grecs, démotiques et bilingues (P. L. Bat. 19)*, eds. Ernst Boswinkel

P. Carlsberg 37a (220 BC), mentioned above, provides an example from the Ptolemaic Period.⁴⁷ In this document, the god’s seal-bearer and embalmer in the necropolis of Hawara, Achomneuis, declares: ‘I am to call before Tesenouphis the god, in your presence on account of the burial of Pasis (...) who is dead, (and) whom you had mummified (through the) god’s seal-bearer and embalmer Paesis (...) from the island-of-the-hound, (and) whom you had brought to Hawara’ (*mtw=y š h3.t tš-nfr p3 ntr i.ir-ḥr=t hr t3 ks.t n p-siy (...) nt mwṯ r-ty=t ks <s> ḥtmw-ntr wyt p-n-ḥs.t (...) n t3 m3y n p3 whr r-ty=t in=w s r ḥ.t-wr*) (lines 5-7). He further declares: ‘I will take him to the *ḥ.t*-tomb of Teos (...), your father, in the necropolis of Hawara, he being embalmed, after he has been placed in my care embalmed’ (*iw=y t.t=f r t3 ḥ.t n d-ḥr (...) p3y=t iṯ n t3 ḥ3s.t n ḥ.t-wr iw=f ks iw=w ty s r dr.t=y iw=f ks*) (lines 7-8).

From the Roman Period, mummy labels and short letters provide ample evidence for the transport of deceased individuals back to their hometown either by land or by river, whilst also attesting to the risks and difficulties that this entailed. In P. Oxy. VII 1068 (3rd century) a certain Saturnilus writes to a man called Apollonius explaining about problems in finding a transport boat to deliver the body of a deceased person from the Arsinoite nome to Alexandria, although once the conveyers arrived in the Fayum they found that the body was not yet ready and thus suffered some delays.⁴⁸ Transport by land entailed the use of donkeys, as indicated, for example, by P. Petaus 28 (late 2nd century AD), although these would, in some cases, need to be loaded on transport boats.⁴⁹ In some instances the body would be conveyed to its final destination in stages, as shown on mummy label Ashmolean Museum E 3714 (3rd century BC) which reads: “Onnophre, soldier, from the village Tanis of the Arsinoite Nome, going to the village Ision of the Memphite Nome.” The note indicates that the deceased is to be taken from the place of death, perhaps the Roman military camp at Nicopolis, southwards to the village of Ision in the Memphite nome, and thence to Tanis.⁵⁰ A similar case is attested in the mummy label SB I 5144 instructing the conveyer to take the mummy to Akanthon, a religious centre south of Memphis, and to deliver it to the undertaker Keleesis, who will then transport it to Philadelphia in the Fayum. Similarly in the letter recorded in P. Petaus 28 (late 2nd century AD), in which the sender reproaches a certain Asklas, to whom carriers from the Heracleopolite nome had delivered

and Pieter W. Pestman (Leiden: E. J. Brill, 1978), 237-38; Corcoran, *Portrait Mummies*, 38-42; Hans-Joachim Drexhage, “Einige Bemerkungen zum Mumientransport und den Bestattungskosten im römischen Ägypten,” *Laverna* 5 (1994): 167-75; Bernard Boyaval, “Le transport des momies et ses problèmes,” in *La mort au quotidien dans le monde romain. Actes du colloque organisé par l’Université de Paris IV (Paris - Sorbonne 7 - 9 octobre 1993)*, ed. François Hinard, avec la collaboration de Marie-Françoise Lambert (Paris: De Boccard, 1995); Bernard Boyaval, “Deux bordereaux d’expédition de momies?” *ZPE* 31 (1978): 118-20.

⁴⁷ Lüddeckens, *Demotische Urkunden aus Hawara*, 37-45, Pl. 4; Pasek, *Hawara*, 237-42.

⁴⁸ Arthur S. Hunt, *The Oxyrhynchus papyri Part III* (London: Egypt Exploration Fund, Trübner & Co., B. Quaritch, H. Frowde, 1910), 223-4.

⁴⁹ Drexhage, *Bemerkungen zum Mumientransport*, 172.

⁵⁰ Herbert C. Youtie, “Critical Trifles VIII,” *ZPE* 36 (1979): 73-4.

the body of a soldier, for neglecting to send it to its final destination.⁵¹ In a number of these documents the senders stress the fact that the transport dues have been paid, as is the case in the letter recorded in P. Louvre N 2341 (P. Paris 18bis) in which the woman Senpamonthes writes to a certain Pamonthes saying: “I sent you the body of Senyris my mother, prepared for burial, with a tag around the neck, through Gales father of Hierax in his private boat, the shipping costs having been paid in full by me,” while also specifying that “[t]here is an identification mark on the mummy: a linen shroud is on the outside, rose-colored, with her name written on the abdomen.”⁵² Alas, with the exception of the letter recorded in P. BL 717, which gives a detailed account of funeral expenses, the surviving sources do not provide any clear indication of the actual cost of transport of a deceased person from one place to another. In this letter the writer informs the two addressees that he has sent to them the body of their ‘brother’ Phibion, via the nekrotaphos, and that he has “paid him the fee for the transportation of the body, amounting in drachmas of old coinage to 340 drachmas,” whilst rebuking them for failing to collect the body, despite carrying away his possessions, and to pay for the funeral expenses.⁵³

Concluding remarks

In the light of the foregoing discussion it is possible to draw a number of conclusions regarding the shroud MAG 1977.345.

The use of the verb *hwy* in MAG 1977.345, UC 59432 and UC 38058, the omission of the *t* following the infinitive in the status pronominalis, and the particular orthography of the noun *rm̄t*, all point to the same place of origin for these mummies, probably somewhere in the north of the country. However, the fact that the transport notes on these shrouds were written by different hands argues against the possibility of them having been transported together to Hawara.

In the case of MAG 1977.345 it is possible to envisage a scenario where individuals had moved from Hawara to another locality where, ultimately, Arsinoe daughter of Herakleides died. The body would have been mummified, wrapped in a shroud, possibly stuccoed and gilded, and placed in a chapel or a collective tomb where other family members would be making offerings and prayers for her benefit. At some point in time the shroud was damaged by natural and/or anthropogenic activity. A host of possibilities could account for the damage suffered by this mummy: parts of the chapel or tomb, for example, may have become unstable thus falling onto the mummy; water may have percolated inside the chapel or tomb; the mummy may have fallen, or may have been, accidentally, knocked to the ground; the body may have been moved around several times to create space for additional mummies. Whatever the cause of the damage, the mummy was re-wrapped in a

51 Youtie, *Critical Trifles*, 74-5.

52 Bagnall and Criboire, *Women's Letters*, 289-90; Walker and Bierbrier, *Ancient Faces*, 187 number 250.

53 Roger S. Bagnall, *The Undertakers of the Great Oasis (P. Nokr.)* (Graeco-Roman Memoirs Supplement) (London: EES, 2017), 63-6.

new, plain shroud and the Greek inscriptions added. The Demotic inscriptions present along the body of the mummy may have been added at this time too. Alternatively, the Demotic text may have been added at a later time, if the faded appearance of the Greek inscriptions is an indication of weathering rather than the result of a difference in the writing tool employed. Later still, surviving family members decided to have the body transported to the necropolis at Hawara, their hometown, where they acquired, or already possessed, a family burial pit. It is at this stage that the Demotic line across the ankles was added to provide instructions for the transporters as to the place of delivery of the body. This inscription is markedly different from that on the body field in terms of orthography and grammar, thus indicating it was not written by the same individuals. Such a difference may have resulted from a greater hardness of the pen used for this inscription, by comparison to that along the body field, or from the fact that it was heavier with ink, so that its general appearance differs from that of the other inscription.⁵⁴ Following the burial, the portrait, probably already weakened by whatever damage befell the mummy while standing in a chapel or tomb, disintegrated leaving no traces of its presence.

⁵⁴ I thank Dr. Holger Kockelmann for suggesting this possibility.

Figures



Fig. 1: Front (left) and back (right) view of the shroud.

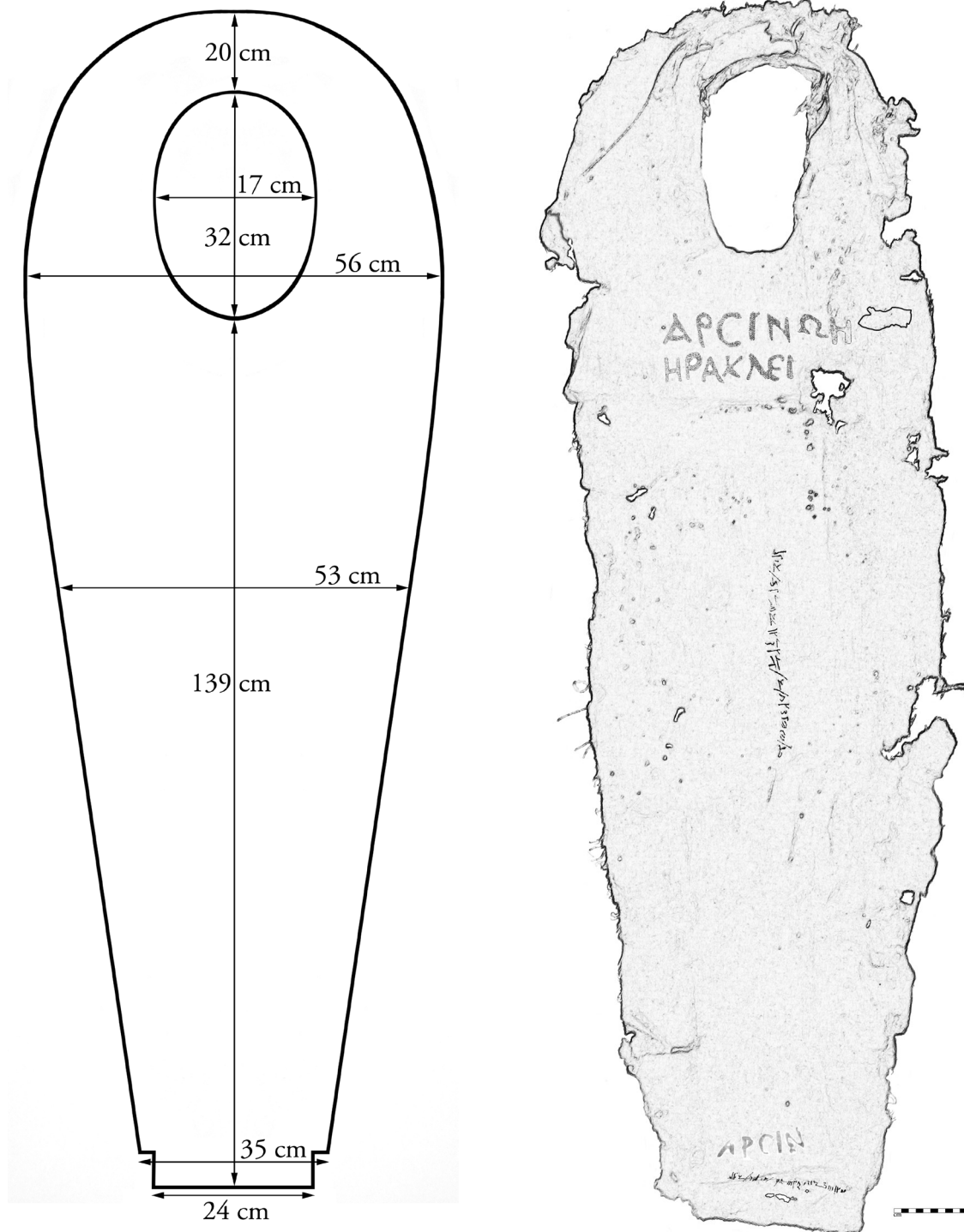


Fig. 2: Sketch (left) of the shroud with size; drawing (right) of the shroud showing the position of the inscriptions on the cloth.



Fig. 3: Detail of the area in between the two layers showing the resin's residues.



Fig. 4: Detail of the underside showing a fragment of a cloth tie.



Fig. 5: Detail of the top of the head and the textile folded under to create the opening for the portrait.



Fig. 6: Detail of top of the head showing the textile folds and residues of resin.



Fig. 7: Detail of cloth ties and bands used on the underside at the top of the head.



Fig. 8: Detail of the top of the head showing the straps and cloth bands possibly used to keep the portrait in place.



Fig. 9: Greek inscription across the chest of the mummy.

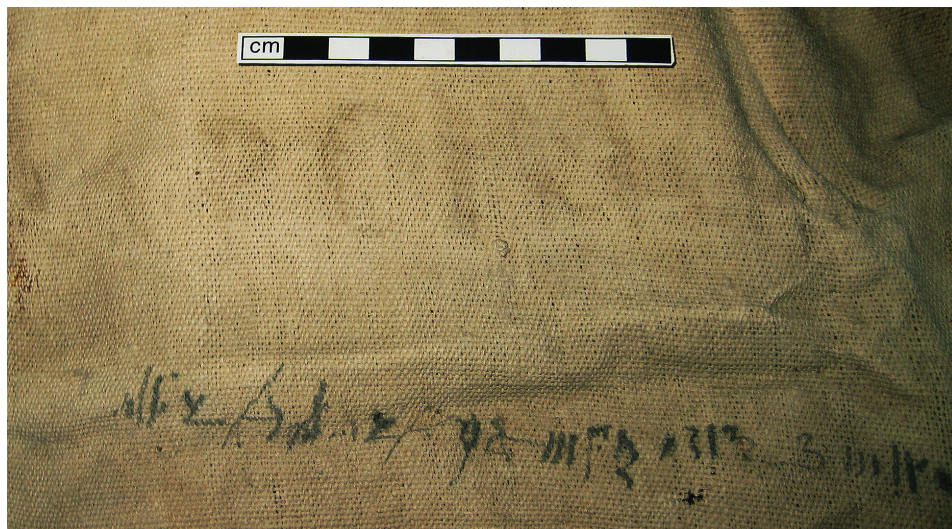


Fig. 10: Greek inscription across the ankles of the mummy showing its relationship with the one in Demotic.

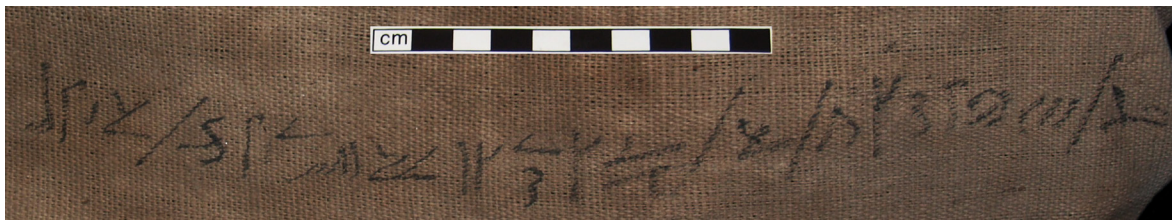


Fig. 11. Photograph and facsimile of the Demotic inscription along the body field.



Fig. 12. Photograph and facsimile of the Demotic inscription across the ankles of the mummy. To the left of the scale is the ink stain that may represent a third line in Demotic.

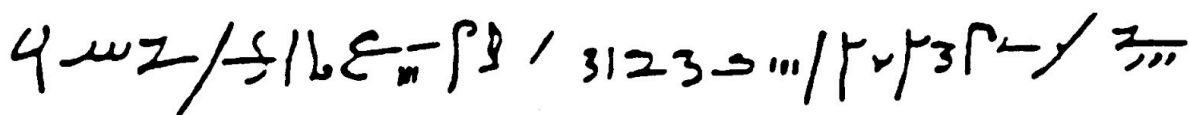


Fig. 13. Facsimile of the Demotic inscription on UC 38058 (After Petrie, *Roman Portraits*, Pl. xxiv.6)

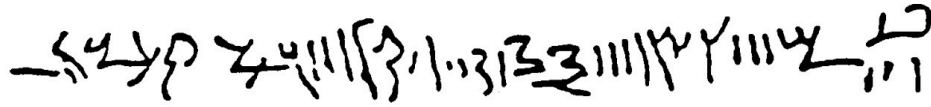
A single line of Demotic script, a form of ancient Egyptian writing. The characters are highly stylized and cursive, typical of the Late Period. The script is arranged in a horizontal line, starting with a long horizontal stroke on the left and ending with a similar stroke on the right. The characters are interconnected, with some showing signs of being joined together.

Fig. 14. Facsimile of the Demotic inscription on UC 59432 (After Petrie, *Roman Portraits*, Pl. xxiv.5)

The Royal Tomb at Amarna Revisited

Aidan Dodson

Abstract: An analysis of the architecture and decoration of the Royal Tomb at Amarna, considering how it may have evolved and altered over time to accommodate additional burials.

Résumé: Cet article présente une analyse de l'architecture et de la décoration des Tombes royales amarniennes en considérant la manière dont elles ont pu évoluer et être altérées au fil du temps afin d'accueillir des sépultures supplémentaires.

Keywords: Akhenaten/Akhénaton; Amarna; Meketaten/Mâkhétaton; Neferneferure/Néfernéferourê; Nefertiti/Néfertiti; Setepenre/Sétepenrê; Tiye/Tiyi.

I first met Ted Brock back in the late summer of 1984 when, as an undergraduate on one of his very first visits to the Egyptian Museum, Cairo, I came across him, and the likewise now-lamented Otto Schaden, copying the decoration of the sarcophagus of Ay (then still in the museum, prior to its return to the king's tomb). Discovering that we were both working on dissertations on later New Kingdom royal sarcophagi, we hit it off immediately, and over the coming decades spent many hours discussing them and the tombs that held them – the last time only a few weeks before his untimely death. One of Ted's many important pieces of work (by some weird synchronicity unknowingly undertaken in parallel with an almost identical study by Maarten Raven!) was a reassessment of the sarcophagus fragments from the Royal Tomb at Amarna, including the identification of the hitherto-unsuspected sarcophagus of Queen Tiye. Accordingly, I am pleased to dedicate some thoughts on that tomb and its history to Ted's memory: ʿnh rn.f dt hnʿ nhh!

The Royal Tomb at Amarna (number 26 in the Tell el-Amarna [TA] sequence – fig. 1)¹ is a rather singular monument, with various features that one finds difficult to parallel in other royal sepulchres. While the presence of non-standard architectural features might be expected as far as decoration is concerned, given the creed of its author, Akhenaten, it has a range of architectural peculiarities that have no obvious connexions with the revised theology of the era. Amongst these, are on one hand, the remarkable dimensions of its

1 B. Porter and R. L. B. Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings, IV: Lower and Middle Egypt* (Oxford: Clarendon Press, 1934), 235–37; G. T. Martin, *The Royal Tomb at el-ʿAmarna: The Rock Tombs of El-ʿAmarna*, VII. Archaeological Survey of Egypt, 35th and 39th memoirs (London: Egypt Exploration Society, 1974, 1989).

principal corridor (fig. 2: some 30% wider and higher than that of the first corridor of Amenhotep III's WV22) and, on the other, the tomb's extensive provision for burials of members of the royal family. These ultimately comprised a large corridor-tomb opening from the north wall half way down the main corridor (rooms 1–6), together with a suite of three rooms (α – γ), entered close to the north side of the top of the stairway that led down to the well-room and the main burial chamber (J). However, preliminary cuttings opposite the door leading to rooms 1–6, and on both sides of the corridor half way between here and the main entrance to the tomb would suggest that further suites were envisaged here – and perhaps another opposite α – γ as well.² Thus, the tomb could potentially have contained at least seven sepulchral units – this six, plus the principal burial chamber at the end of the main axis – and certainly contained three.

That the tomb was intended from the outset as a family sepulchre is made clear in the 'Earlier Proclamation' inscribed on the first group of Boundary Stelae at Amarna: "Let a tomb be made for me in the eastern mountain [of Akhet-Aten], and let my burial be made in it Let the burial of the King's Great Wife Nefertiti be made in it ... [and let the burial of] the King's Daughter Meryetaten [be made] in it".³ This concept stands in contrast to most previous kings' tombs, which had architectural provision for the king's own interment only, the principal pre-New Kingdom exception being the Dahshur pyramid of Amenemhat III, which had a pair of queens' chambers in a complex of galleries that were directly connected to the king's by a corridor.⁴ In the Valley of the Kings during the earlier Eighteenth Dynasty, the canopic jars of princes and princesses found in kings' tombs provide clear evidence that royal family members were buried there,⁵ but it is only under Amenhotep III that specific architectural provision is to be found.

In WV 22, two pillared chambers opened off the burial chamber's crypt, each with its own annex. One, at the end of the chamber, seems to have been part of the original plan of the tomb, and thus likely to have been intended for the burial of Queen Tiye. The second complex, on the other hand, preserves traces that show that it was enlarged out of what had been one of the four standard storerooms found in earlier kingly tombs. As a late addition to the tomb plan, it would seem reasonable to attribute it to Sitamun, Amenhotep III's eldest daughter, who obtained the additional dignity of King's Great Wife, probably during in the last decade of the king's reign.⁶ This putative arrangement of burial places for king,

2 Martin, *Royal Tomb*, 18.

3 W. Murnane and C. C. Van Siclen III, *The Boundary Stelae of Akhenaten* (London and New York: Kegan Paul International, 1993), 41.

4 D. Arnold, *Der Pyramidbezirk des Königs Amenemhet III in Dahschur, I: Die Pyramide* (Mainz: Philipp von Zabern, 1987), 37–53; P. Jánosi, *Die Pyramidenanlagen der Königinnen: Untersuchungen zu einem Grabtyp des Alten und Mittleren Reiches* (Vienna: Akademie der Wissenschaften, 1996), 65–67.

5 B. Porter and R. L. B. Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings, I: The Theban Necropolis*, 2nd edition (Oxford: Clarendon Press/Griffith Institute, 1960–64), 556 (KV 35, Prince Webensenu; also shabtis), 560 (KV 43, Prince Amenemhat and Princess Tintamun).

6 For a convenient list of her attestations as *hmt-nsw (wrt)*, see L. Troy, *Patterns of Queenship in Ancient Egyptian Myth and History* (Uppsala: Acta Universitatis Upsaliensis, 1986), 166. The date of her elevation

queen and princess would neatly parallel that envisaged in Akhenaten's boundary stela decree. On this basis, one would expect the original form of the Royal Tomb to include three burial installations – and indeed we find the main burial chamber J, and the suites 1–6 and α – γ ; however, in their final forms at least, they did not represent the clean threefold division of discrete interments set out in the boundary stela text, and all raise a number of other issues.

Beginning with J, the first question is whether this room was actually planned as a burial chamber, or was at first intended to be the intermediate pillared hall that directly follows the well-chamber (E) in preceding and succeeding royal tombs in the Valley of the Kings.⁷ Certainly the chamber differs greatly from the standard form of burial chamber seen in the Valley of the Kings since the time of Amenhotep II, which featured a six-pillared hall, with a sunken crypt at its far end. Chamber J had also been modified from an original four-pillared form, a northern pair of columns being cut away, together with the adjacent floor, just leaving the southern pair and a podium for a sarcophagus. Although much has been made on occasion of the Royal Tomb adopting a single-axis design for theological reasons,⁸ it seems not impossible on architectural grounds that the current burial chamber was originally intended as an “intermediate” pillared hall of the kind found in earlier and later royal tombs. Thus, the original plan could just as well have included a right-angled turn, in accordance with earlier Eighteenth Dynasty royal tombs, as it could an extension along the existing axis, as in later royal tombs. In this connexion, it is perhaps worth pointing out that it was not until the tomb of Rameses II (KV7) that this extension was strictly axial, the tombs of Horemheb and Sethy I (KV57 and KV17) having the axis jiggged to the left after their first pillared hall.⁹ It should also be noted that while it has been suggested¹⁰ that an extension to a final burial chamber via a right-angle turn might be indicated by the unfinished Ja, its position at ceiling level leaves no scope for this, since in all known examples the exit from such a pillared hall is via descent in the floor.

The decoration of chamber J had clearly been carved prior to Akhenaten's death – the clearest evidence being the presence of Meketaten, who is known to have predeceased him (cf. below), on Wall A.¹¹ In this, the Royal Tomb would be the first such sepulchre to have been decorated (at least in the burial chamber) prior to the royal funeral, evidence in the tomb of Thutmose III (KV34) indicating that the addition of the *Amduat* texts and vignettes followed the sealing of the burial chamber annexes there,¹² with its continuation suggested by the failure to decorate the burial chamber of Thutmose IV (KV43) at all. It also appears likely that Tutankhamun's burial chamber (KV62) was only decorated after the burial had

is unclear, but the context of the First Jubilee and its aftermath seems most likely.

7 First found in Thutmose III's KV 34, then in all tombs through to Amenhotep III's WV 22, and once again in Horemheb's KV57 and all subsequent sepulchres completed to non-truncated plans.

8 Cf. M. Lehner in Martin, *Royal Tomb*, II, 7–8, pl. 12a.

9 Indeed, given the right-turn into the burial chamber in Rameses II's KV7, it was not until Merenptah that a truly-axial royal tomb was produced in the form of KV8.

10 Martin, *Royal Tomb*, II, 27.

11 Martin, *Royal Tomb*, II, 23.

12 J. Romer, “The Tomb of Tuthmosis III”, *MDAIK* 31 (1975): 330–31, 341–43.

taken place, given that the portion of the decoration on the partition-wall between burial chamber and the antechamber could only have been painted after the assembly of all the shrines.

These, of course, were all painted sepulchres, where decoration could be done quickly, and without residual debris. Where walls are carved in relief, of course, timescales greatly lengthen, while the resulting dust and debris would make adornment while any significant equipment was in the tomb impossible. In this connexion, it is interesting that the first Valley of the Kings carved tomb, that of Horemheb (KV57), was left with incomplete decoration, while the impact on the tomb-building process is indicated by the expansion of the Deir el-Medina community during Horemheb's reign,¹³ concomitant on the completely new skills-mix required by the new decorative norm.

On Walls A, C and F we have the battered remains of what seem to be fairly 'standard' royal-family Aten-adoration scenes, featuring Akhenaten and Nefertiti, and in at least the first case four(?) princesses.¹⁴ However, Walls B and E once bore what seem to have been mourning tableaux, the former with a female figure lamented by Akhenaten and Nefertiti and others – the latter too badly damaged to be clear as to the subject(s). As to the second scene, as Martin has noted, Wall E is directly adjacent to the sarcophagus-plinth, and thus might be restored as the mourning of Akhenaten himself. Since Nefertiti is ruled out as the subject of the Wall B scene by her presence as a mourner, and that Tiye's burial in the tomb has now been demonstrated by the presence of her sarcophagus in the tomb,¹⁵ it seems clear that she is the individual in question.

This raises issues about the planning and timing of the decoration of the room: was there always an intention that Tiye should be buried with her son (presumably adjacent to the mourning scene, between the two columns, covered by the shrine that ended up in KV55)?¹⁶ Or was this a later change of plan? If the latter, what might the original intent have been for Tiye's funeral? As already noted, it seems very likely that chamber Jc in Amenhotep III's WV22 had been planned as Tiye's sepulchre, but since she apparently outlived her husband by over a dozen years, re-opening WV22 for her interment may have been regarded as undesirable – and once a stone sarcophagus had been provided for the queen, quite impracticable. Tiye's sarcophagus-fragments bear the later form of the

13 A.M. Blackman, "Oracles in Ancient Egypt", *JEA* 12 (1926), 177.

14 Martin, *Royal Tomb*, II, 23, 25–26.

15 Fragments in Egyptian Museum, Cairo: M.J. Raven, "A sarcophagus for Queen Tiye and other fragments from the Royal Tomb at El-Amarna", *OMRO* 74 (1994): 7–20; E.C. Brock, "The sarcophagus of Queen Tiy", *JSSEA* 26 (1996): 8–21. These publications demonstrated that Martin's allocation of sarcophagus fragments from TA26 in *Royal Tomb*, I, 30 (dividing them between Akhenaten and Meketaten), was incorrect, with Martin's fragments of Types 2 and 6 (allocated by him respectively to the lid of Akhenaten and coffer of Meketaten) actually belonging to the same object, the sarcophagus and lid of Tiye (with some of Type 3 coming from Akhenaten's lid). On the question of a sarcophagus of Meketaten, see below.

16 On the clear ability of the shrine to have held the sarcophagus, see Raven, "A sarcophagus for Queen Tiye", *OMRO* 74: 19 n.68.

Aten's name – as did the KV55 shrine¹⁷ – an interesting point given that this name-form is found on Wall B, in contrast with the Early form found on Wall A.¹⁸ The Later form is also to be seen on the pillars of the chamber and on Wall C, but no traces survive of the Aten-cartouches on the other walls. This might suggest that the chamber's decoration was in progress when the name-change occurred, which also seems to have been the case with Akhenaten's sarcophagus, which had one side with the Early form and three with the Later.¹⁹ Such a scenario would thus leave moot the question of the point at which Wall B was decorated for Tiye, the mutilated state of the wall making it impossible to take a view on whether the extant traces are from the original decoration or a later re-decoration over earlier scenes carved prior to the decision to inter Tiye in the room.

While the rarity of a king sharing a burial chamber might, nevertheless, argue for the Akhenaten-Tiye arrangement being an improvised one, it may also be worth citing one important example of such a circumstance – the re-interment of Thutmose I alongside Hatshepsut in KV20. While most probably a gesture of self-legitimation by Hatshepsut, it nevertheless provides a prototype for an intentional linking of two royal generations in death.²⁰

Moving out of Chamber J, the suite made up of elements 1–6 has long been recognised as representing a discrete “tomb within a tomb”, albeit ultimately incomplete, with only the upper layer of room 6 (presumably to be the burial chamber) partly cut from the matrix. Since there seems no sign of a mourning scene for Nefertiti in J, it would seem that she was intended to be buried elsewhere in the tomb, with the scale of this suite being consistent with attributing it to her, although without proof. Its incomplete state should in this case be put down to Nefertiti's transition to a “crowned queen”, probably following the demise of Smenkhkare, and then to the fully-fledged female king, Neferneferuaten, during Akhenaten's last year.²¹ Although inscriptional evidence is lacking, it is likely that Amarna tomb TA29, 45m deep when abandoned,²² was begun as her sepulchre, it being possible that

17 The present writer views the shrine's presence in KV55 as a clear indication of Tiye's reburial there after the abandonment of Amarna after Year 3 of Tutankhamun, moved there along with the other occupant of the Royal Tomb burial chamber, Akhenaten himself (on the basis of the evidence of the magic bricks found in KV55).

18 On the forms of the Aten's name, see B. Gunn, “Notes on the Aten and his names”, *JEA* 9 (1923), 168–76, although the exact point of transition now seems less clear than the Year 9 that has been generally favored in the past.

19 Martin, *Royal Tomb*, I, 26.

20 Leaving aside the debate as to whether KV20 might have been constructed for Thutmose I and usurped by Hatshepsut for her additional burial (J. Romer, “Tuthmosis I and the Bibân el-Molûk: some problems of attribution”, *JEA* 60 (1974): 119–33.

21 Following the present writer's preferred scenario: see Dodson, *Amarna Sunrise: Egypt from Golden Age to Age of Heresy* (Cairo: American University in Cairo Press, 2014), 143–46, id., *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb and the Egyptian Counter-Reformation*, revised edition (Cairo: American University in Cairo Press, 2018), 27–52.

22 A. El-Khouli and G.T. Martin, *Excavations in the Royal Necropolis at El-'Amarna 1984* (Cairo: Institut français d'archéologie orientale, 1987), 7–12.

the diversion of resources to it may be an explanation for the truncated form of the Royal Tomb itself.²³

It is in the suite α – γ that some of the most important conundra of the tomb reside. Chamber α is a regularly-cut space (fig. 3), as is Chamber γ (fig. 4), but the intervening Chamber β is much more irregular, leading to an off-axis orientation for γ : both thus seem to be additions to the original plan, which envisaged a single square chamber (α). This could imply that Chamber α might be seen as one of the three burial installations indicated by the boundary stelae, most likely for Meryetaten; however, closer examination of Chamber α suggests that it was not originally decorated in a manner consistent with a burial chamber. The two original principal decorative tableaux, on Walls A and C, show no sign of the mourning motifs already noted in Chamber J, which are also present in the secondary Chamber γ , and were later added on Wall E of Chamber α (see below). Rather, they respectively represent two different ‘takes’ on the royal family adoring the Aten at its rising, with Walls B/D (separated by a door [later?]²⁴ broken through into Chamber β) and E depicting supporting figures of attendants, and of Egyptians and foreigners in poses of supplication. While Aten-worshipping scenes are indeed included in Chamber J, their traces suggest that they were of the “generic” variety found all over Amarna (including in private tomb-chapels), rather than akin to these particularly nuanced examples. All this would suggest that Chamber α was initially intended to play some ritual role other than a burial-space – although the presence of magic brick niches makes it clear that it later became such.

This transformation is confirmed by Wall F, which bears (perhaps secondarily, although no traces of earlier adornment, perhaps along the line of Walls B/D and E have been reported) two tableaux, each showing Akhenaten and Nefertiti mourning a figure lying on a bier (fig. 5), with a baby held by a nurse outside the death chamber in the upper tableau. The corresponding area in the lower tableau is too badly damaged to be able to determine if a corresponding figure was once there, but its presence is strongly suggested by the element being formerly present in the very similar scene of Meketaten being mourned in Chamber γ (now destroyed, but surviving in old copies and photographs – see fig. 4).

These scenes have been regularly interpreted as showing the aftermaths of deaths in childbirth, an interpretation made all-but-canonical by Geoffrey Martin’s publication of the Royal Tomb,²⁵ in spite of the fact that mode of death is otherwise never even hinted at in Egyptian tomb-art, while the likelihood of *three* (or even *two*, should the lower tableau in

23 It may be noted that the tomb has on occasion been suggested as that of Neferneferure, on the basis of a pottery fragment found nearby (El-Khouly and Martin, *Excavations*, 8; C. Aldred, *Akhenaten King of Egypt* [New York and London: Thames & Hudson, 1988], 43; L. Green, “The Royal Women of Amarna: Who was Who?” in D. Arnold (ed.), *The Royal Women of Amarna: Images of Beauty from Ancient Egypt* [New York: Metropolitan Museum of Art, 1996], 7–15, esp. 12 and n. 42; N. Reeves, *Akhenaten: Egypt’s False Prophet* [New York and London: Thames & Hudson, 2005], 130), but the likelihood of such a junior princess having a tomb on such a scale seems remote, and see below for our proposal as to her burial place.

24 Cf. Martin, *Royal Tomb*, II, 36, on the change in the width of the doorway after it had been first cut.

25 *Royal Tomb*, II, 37–41, 42–49.

Chamber α have not after all included a baby) of Akhenaten's womenfolk all dying while giving birth seems low, at best (leaving aside for a moment the issue of the ages of the protagonists; cf. further just below). More likely, however, given the stereotypical form of the tableaux, is that whatever is going on reflects a new 'standard Amarna' funerary scene, with presence of the baby most probably symbolic of rebirth, especially in view of Jacobus van Dijk's demonstration that the most credible restoration of the label-text of the baby in Chamber γ names it as the princess (Meketaten) whose death is the subject of the overall tableau.²⁶

In any case, when one considers the actual and likely owners of these tableaux, the idea of death in childbirth becomes extremely unlikely. Martin suggested that the upper scene in Chamber α on Wall F might be the death of Kiya, giving birth to Tutankhamun,²⁷ apparently ignoring the abundant evidence that Kiya ended her career in disgrace,²⁸ with a repeat-representation of Meketaten as an alternative;²⁹ he was of the opinion that the lower register was a sequel to the upper, not a separate death-scene. If Kiya is ruled out, and with Nefertiti depicted as a mourner in all cases, children of Akhenaten seem only credible candidates for those whose deaths are depicted on Wall F, with implicit support from the fact the Meketaten was the unequivocal owner of Chamber γ .

Of the six known daughters of Akhenaten and Nefertiti, Meryetaten lived until at least the very last months of Akhenaten, given her mention on a box-fragment from the tomb of Tutankhamun that also bore the names of Akhenaten and Neferneferuaten:³⁰ since the transition of Nefertiti to Neferneferuaten is now fixed as after Year 16, III *3ht* 15, by the Bersha/Deir Abu Hinnis quarry graffito,³¹ the box can only have been made during the few months that separated Neferneferuaten's assumption of pharaonic titulary at some point after this date and Akhenaten's death in his Year 17. Meryetaten is thus ruled out, as is Ankheseppaten, as having survived to become Tutankhamun's queen, apparently leaving just the youngest three, Neferneferuaten-tasherit, Neferneferure and Setepenre – plus potentially the single known, albeit anonymous, daughter of Kiya. One could possibly also add Akhenaten's sister Beketaten (rejecting the suggestion that she might actually have been the daughter of Kiya, 'adopted' by Tiye after her mother's disgrace).³²

26 J. van Dijk, "The Death of Meketaten", in *Causing His Name to Live: Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, ed. P.J. Brand and L. Cooper (Leiden: Brill, 2009), 83–88. 27 *Royal Tomb*, II, 38.

28 Cf. the erasure of her name and figures on temple-blocks from Amarna and on her canopic jars, reused in KV55; there is also no evidence for her being the mother of Tutankhamun, in spite of frequent assertions to the contrary: see Dodson, *Amarna Sunset*, 16–17.

29 *Royal Tomb*, II, 40.

30 Cairo JE61500a (for a convenient image, see Dodson, *Amarna Sunset*, 34, fig. 28).

31 A. Van der Perre, "The Year 16 graffito of Akhenaten in Dayr Abū Hinnis. A Contribution to the Study of the Later Years of Nefertiti", *JEGH* 7 (2014), 67–108.

32 M. Gabolde, "Baketaten fille de Kiya?" *BSEG* 16 (1992), 27–40; J. van Dijk, "The Noble Lady of Mitanni and Other Royal Favourites of the Eighteenth Dynasty", in *Essays on Ancient Egypt in Honour of Hermann te Velde*, edited by J. van Dijk (Groningen: Styx Publications, 1997), 37.

If, however, one were to take the view that daughters of Akhenaten and Nefertiti might be the more likely candidates, in assessing which of them are the most likely candidates, one may note the modifications that have been made to Walls A and C of Chamber α . These included the apparent plastering-over of some of the princesses’ images, although the traces of the modifications are confusing, and it is unclear whether the plastering-over of images of princesses were as a result of a need to accommodate additional members of the growing family or to obliterate those who had now died. Since the plastering-over of the long-lived Ankhesenpaaten on Wall A clearly could not be linked with her death, the same may hold true of the adjacent image of Neferneferuaten-tasherit.³³ Martin wonders whether the change was to remove Meryetaten and Meketaten from the wall, although he is clearly wrong in speculating that the former’s potential departure was owing to her death,³⁴ given our remarks regarding her longevity, just above. On the other hand, it seems likely that Meryetaten transitioned from princess to queen around Year 13/14 on her marriage to Smenkhkare,³⁵ and it is possible that, while there was no problem with leaving her as a princess in private tomb-chapels, it was perhaps not acceptable in the Royal Tomb³⁶ (cf. below). On the other hand, on Wall C there seems to have been even more extensive adjustments, including slightly moving the images of Akhenaten and Nefertiti themselves.³⁷ However, Meryetaten, Meketaten, Ankhesenpaaten and Neferneferuaten-tasherit all apparently remained visible on the wall – but Neferneferure seems to have been plastered over.

How do we interpret all these changes? The fact that Meryetaten and Meketaten remained present on Wall C would suggest that the speculations about them regarding Wall A are groundless – but the deletion of Neferneferure is intriguing, and might suggest that she is one of those whose deaths are marked on the adjacent Wall F. It may also be noted that she – and also her younger sister Setepenre – are not to be seen in the scene of mourning Meketaten on Wall B of Chamber γ , where we find just the king, the queen, Meryetaten, Ankhesenpaaten and Neferneferuaten-tasherit. This is surely significant, given that all six daughters had been shown in the tomb of Meryre ii in his episode of the Year 12 *durbar*;³⁸ yet now one (Meketaten) is now mourned as dead, and two more are missing – just the number of individuals shown as dead on Wall F of Chamber α . This could suggest that Neferneferure and Setepenre³⁹ died prior to Meketaten, and were buried in Chamber α , which was re-purposed by the addition of niches for magic bricks and the death scenes to Wall F. That they died at the same time is suggested by these scenes all seeming to have been executed as a single unit.

How soon afterwards Meketaten died is unclear, but the fact that she was placed in

33 Martin, *Royal Tomb*, II, 31.

34 Martin, *Royal Tomb*, II, 31 n.11.

35 For arguments in favor of this date, see Dodson, *Amarna Sunset*, 27–30.

36 Cf. Martin’s remark, *Royal Tomb*, II, 31 n.11, end.

37 Martin, *Royal Tomb*, II, 34.

38 N. de G. Davies, *The Rock Tombs of El Amarna*, II (London: Egypt Exploration Fund), pl. xxxvii.

39 Already suggested as likely candidates by M. Gabolde, *D’Akhenaten à Toutankhâmon* (Lyon: Université Lumière-Lyon 2), 107–10, 136–38.

a room only accessible via Chamber α might suggest fairly soon afterward, perhaps even before her two younger sisters had been laid to rest, given the unlikelihood that chip from the cutting of Chamber γ (and perhaps some or all of β) would have been carried though a room in which the princesses' bodies already rested. On the other hand, the small size of Chamber γ would suggest that its cutting and decoration would not have taken very long, perhaps allowing all three girls actual interments to take place at the same time. Such a three-fold death would suggest some kind of epidemic, and it has been suggested that their deaths (and perhaps that of Tiye, and even Smenkhkare) could have been caused by a plague brought into Egypt during the Year 12 *durbar*.⁴⁰ As to why Meketaten had her own chamber, while her sisters shared a room adapted from another purpose, it may have been simply a matter of her being of an age at which more elaborate arrangements were felt appropriate.

This question of age is, as hinted-at above, a final factor that puts a final nail in the 'death in childbirth' theory. Meketaten's birth is probably to be placed around Akhenaten's Year 5/6 (or perhaps slightly earlier) by her secondary insertion into Amarna Boundary Stela K, one of the examples of the Earlier Proclamation,⁴¹ dated in Year 5, and appearance from the outset on the Later Proclamation stelae, dated in Year 6. Given the appearance of Nefertiti as queen, the latest possible date for the reliefs in Chamber γ would be Year 16, making her 10 or 11 at best at death (if one were to argue that she was not added to Boundary Stela K until she was some months old). However, this should probably be lowered by a year or more, given that Nefertiti had been wearing a kingly crown for some time before she transitioned to a fully-fledged female pharaoh,⁴² and in Chamber γ she wears the simple cap-crown in the one preserved depiction (in the mourning scenes in Chamber α she wears her distinctive flat-topped crown in both cases). One would thus argue that Meketaten was at most 8 or 9 at death – on any measure too young to have been likely to have been able to bear a child.

The stature consequent on this age would suggest a height of around 130cm, and a rather small coffin. This would explain the apparent conundrum observed with the granite fragments from the Royal Tomb bearing Meketaten's name and clearly from the same monument.⁴³ This was that the walls of the container represented by these pieces were only around 5cm thick, as compared to the 9cm found with Akhenaten's sarcophagus, leading Raven to query whether the fragments came from a sarcophagus at all.⁴⁴ However, if the body to be contained was only 60% the size of that of an adult, one might expect a sarcophagus to contain it to be both smaller and less massive; indeed, on this ratio, the thickness of the walls of the Meketaten 'sarcophagus' would be almost exactly in scale.

40 Cf. Dodson, *Amarna Sunset*, 17.

41 Murnane/Van Siclen, *Boundary Stelae*, 12–13; there is no evidence for her insertion into Stelae M and X (op. cit. 14, 15).

42 As shown by the stela Berlin ÄM 17813 (cf. Dodson, *Amarna Sunrise*, 145–46).

43 Following the reallocation of fragments by Brock and Raven, as compared to Martin's original view (see. n.13, above).

44 Raven, "A sarcophagus for Queen Tiye", *OMRO* 74: 8.

As for the ages of Neferneferure and Setepenre at death, they are only attested by name in the *durbar* scene in the tomb of Meryre ii, although Neferneferure is plausibly identified with one the two fully-preserved figures on the ‘Princesses Panel’ from the King’s House at Amarna;⁴⁵ a hand once attributed to Setepenre has now been shown not to be so.⁴⁶ The Meryre ii evidence shows that both Neferneferure and Setepenre had been born by Year 12, but otherwise one can do little other than make (gu)estimates based on the likelihood that Ankhesenpaaten had been born around Year 6/7,⁴⁷ Tutankhaten (if Nefertiti’s son)⁴⁸ around Year 7/8,⁴⁹ and then Neferneferuaten-tasherit perhaps a year or so later. In any case, Neferneferure and Setepenre would both have been under six (and probably under five, on the basis of Nefertiti’s headgear) at death – and thus even more clearly not candidates for death in childbirth!

We can thus see the tableaux on Wall F of Chamber α and Wall A of Chamber γ combining with the mourning of standing figures found on the latter’s Wall B and Walls B and E of Chamber J as comprising what might have been ‘standard’ elements of the Amarna subterranean funerary repertoire, which one would have expected to have found any other decorated substructures surviving in other tombs of the period – which does not, of course, appear to have been the case. This is, of course, the fundamental problem with the Royal Tomb, that we have nothing to compare it with, as we can with earlier and later royal sepulchres. Nevertheless, it is a crucial monument for understanding fundamental issues concerning the Amarna Period, and it is hoped that this discussion makes a small contribution to furthering those understandings, in memory of one who did so much to widen our knowledge of this and other key sepulchres.

45 For a definitive publication of the ‘Princess Panel’ (Oxford Ashmolean AM1893.1.41 + Petrie Museum various), see F. Weatherhead, *Amarna Palace Paintings*, 87th Excavation Memoir (London: Egypt Exploration Society, 2007), 91–138.

46 Weatherhead, *Palace Paintings*, 93, 98, 105 fig. 66; on the other hand, traces of Setepenre may be visible in another fragment, possibly attributable to the Princess Panel (op. cit, 106–8[I.a.1]).

47 By virtue of her secondary addition to the Later Proclamation Boundary Stelae A, B, P, Q and U (Murnane/Van Siclen, *Boundary Stelae*, 177–78).

48 As argued in Dodson, *Amarna Sunset*, 15–17.

49 As having died at the age of 18, and on the model that makes him the direct successor of Akhenaten, without any intervening sole reign by Smenkhkare and/or Neferneferuaten.

Figures

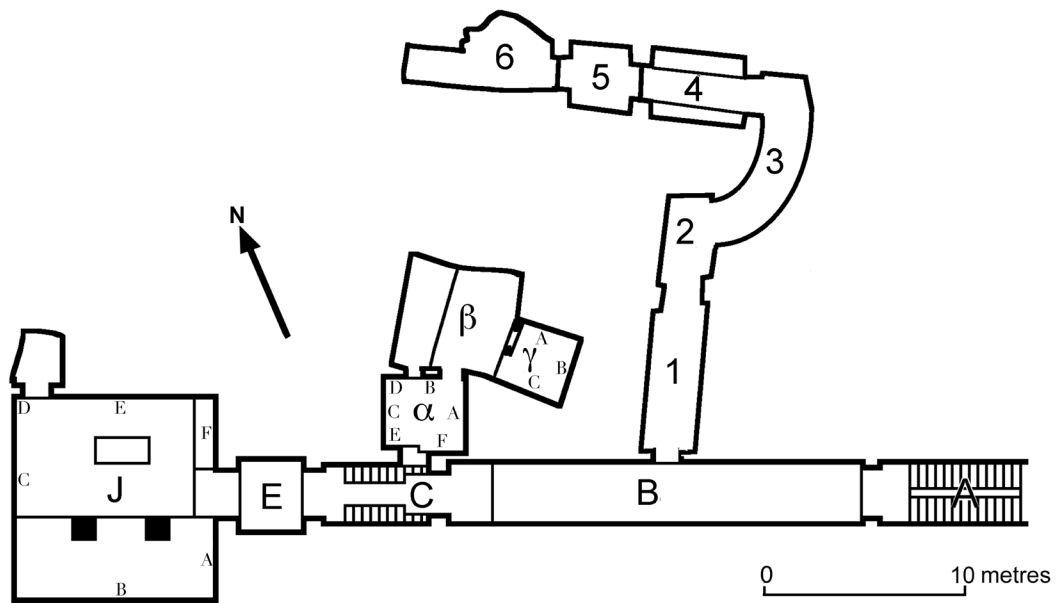


Fig. 1. Plan of the Royal Tomb (TA26) at Amarna (author).



Fig. 2. View down the main corridor, with the entrance to suite 1–6 on the right (author).



Fig. 3. Chamber α : Walls A and F (author).



Fig. 4. Chamber γ : Walls B and C (author).

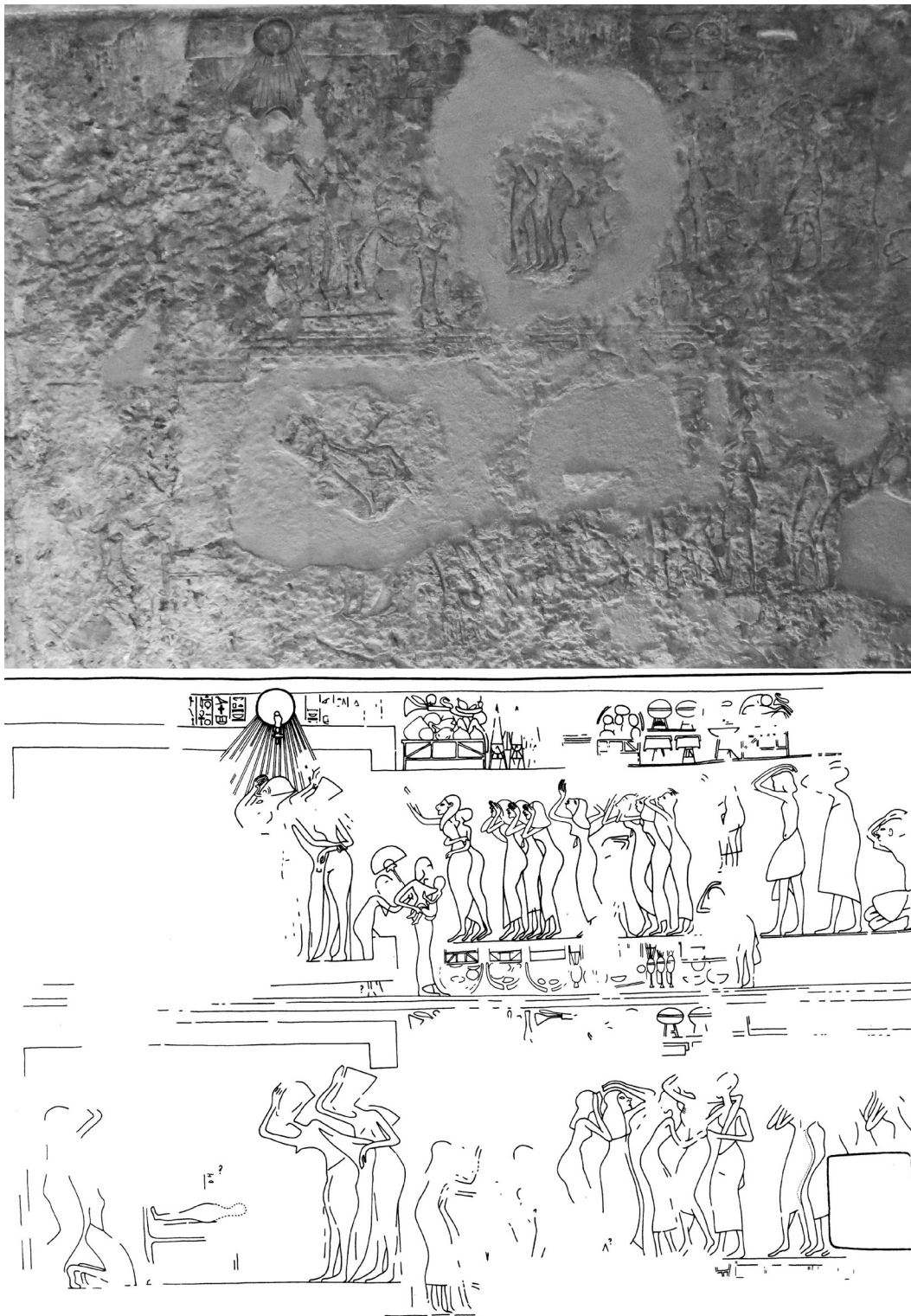


Fig. 5. Chamber α : Wall F (author/Martin, *Royal Tomb*, II, pl. 58).

Rhetorical Devices in Ancient Egyptian Texts

John Gee

Abstract: The article provides a brief synopsis of a variety of rhetorical devices that are used in ancient Egyptian texts.

Résumé: L'article donne un bref synopsis d'une variété de tropes rhétoriques utilisés dans les textes d'Égypte ancienne.

Keywords: acyron/akirologie; alliteration/allitération; anaphora/anaphore; antithetical parallelism/parallélisme antithétique; antonomasia/autonomase, aphorismus/aphorisme, aschemaiston/aschematiston, balanced couplets/couplets équilibrés; bdelygmia; complementary parallelism/parallélisme complémentaires; consonance, effictio/blason, ennoia, epanalepsis/épanalepse; epexegeisis/épexégèse; epicrisis/épicrise; epideictic oratory/discours épideictique; epistrophe/épiphore; epitheton/épithétisme; epitrochasmus/épitrochasse; epizeuxis; ethopoeia; euphemism/euphémisme; exergasia/expolition; frame story/récit-cadre; hydrographia/hydrographie; hypallage; hyperbaton/hyperbate; hypozeuxis; isocolon; literature/littérature; martyria; maxim/maxime; merismus/mérisme; metallage/métallage; negatively positive parallelism/parallélisme négativement positif; onomatopoeia/onomatopée; parallelism/parallélisme; paraleipsis/prétérition; periergia; polyptoton/polyptote; prosopographia/prosopographie; protrope; ratiocination; rhetoric/rhétorique; rhetorical devices/tropes rhétoriques; simile/comparaison; skotison; synonymia/synonyme; synonymous parallelism/parallélisme synonymique; synthetic parallelism/parallélisme synthétique; systrophe/conglobation; tapeinosis/tapinose; taxis/disposition; thalassography/thalassographie; toposia/topothèse.

Jack Foster came into the study of ancient Egyptian after already being a professor of English, one of several individuals brought into the study of ancient Egypt from outside the profession by Klaus Baer.¹ Foster's interest in literature pervaded his Egyptological work,² and it is the present author's hope that the examples discussed here would have been of interest to him.

Ancient Egyptian rhetorical devices have been insufficiently explored thus far, despite the fact that a knowledge of rhetorical devices could enrich our discussions of ancient Egyptian literature. With a few exceptions,³ Egyptologists have had a tendency to

1 One of my undergraduate professors, Hugh Nibley, was another such individual.

2 See John L. Foster, *Love Songs of the New Kingdom* (New York: Charles Scribner's Sons, 1974); John L. Foster, *Thought Couplets and Clause Sequence in a Literary Text: The Maxims of Ptah-hotep* (Toronto: Society for the Study of Egyptian Antiquities, 1977); John L. Foster, *Echoes of Egyptian Voices* (Norman, Oklahoma: University of Oklahoma Press, 1992); John L. Foster, *Hymns, Prayers, and Songs* (Atlanta: Scholars Press, 1995).

3 Notably, Waltraud Guglielmi, "Der Gebrauch rhetorischer Stilmittel in der ägyptischen Literatur," in *Ancient Egyptian Literature: History and Forms*, ed. Antonio Loprieno (Leiden: E. J. Brill, 1996), 465-97.

seize on one or two rhetorical devices—such as parallelism,⁴ or isocolon—and use those as a lens through which to view all Egyptian literature. But the Egyptians were the masters of their language and its rhetorical repertoire, not its slaves.⁵

What follows is a preliminary survey covering different types of rhetorical devices from all time periods of Egyptian history. All of these rhetorical devices are known from other literature, but their use in ancient Egyptian is sometimes undervalued or unrecognized.⁶ The catalog provided here is in alphabetical order according to the English term used.⁷ Unfortunately, the survey is not complete as to the various types of rhetorical devices that might be used in ancient Egyptian literature (there are hundreds of rhetorical devices), but all of the ones listed here can be shown to exist in ancient Egyptian literature. This survey is broader than what is usually covered in discussions of Egyptian poetry and incompletely overlaps an earlier survey by Guglielmi, not covering some of the rhetorical devices that she covers but covering others that she did not.⁸

Acyron

Acyron is the use of a word repugnant or contrary to what is meant.

Examples:

bīn sdm.k

It is bad for you to listen.⁹

The customary phrase is *nfr sdm.k* “It is good for you to hear.”¹⁰ The phrase is used in a satirical letter and the use of acyron is one of the things that points to the letter being satirical.

4 “The full clause of simple sentence is the basic unit. With that basic building-block, and using the concept of ‘parallelism’, the Egyptian (and neighboring poets produced their works.” K. A. Kitchen, *Poetry of Ancient Egypt* (Jonsered: Paul Åströms förlag, 1999), xv.

5 See K. A. Kitchen, review of Anthony J. Spalinger, *Aspects of the Military Documents of the Ancient Egyptians* (New Haven: Yale University Press, 1982), in *The Antiquaries Journal* 64/2: 430.

6 I am grateful to one of my former professors, Arthur Henry King, for teaching me about the wider use of rhetorical devices. Another professor, Robert Alter, taught me about applying rhetorical and literary methods to ancient literature. Much of my information about rhetorical devices comes from my colleague Gideon O. Burton’s “Silva Rhetoricae” (rhetoric.byu.edu).

7 The catalog here is an expansion of John Gee, “Egypt, Ancient, I. History and Civilization, H. Culture and Arts,” in *Encyclopedia of the Bible and its Reception: 7. Dress-Essene Gate* (Berlin: De Gruyter, 2013), 7:494.

8 Guglielmi, “Der Gebrauch rhetorischer Stilmittel in der ägyptischen Literatur,” 465-97.

9 P. Kahun VI 8 line 16.

10 E.g. P. Lahun III 3 verso line 9.

Alliteration

Alliteration consists of repeated initial sounds.¹¹ The special case where the repeated initial sounds are vowel sounds, assonance, is difficult to recognize in ancient Egyptian texts and cases where it is said to exist are probably mistaken.¹² Alliteration is often combined with paronomasia, plays on words.¹³

Examples:

ph.n=n phwy Wꜣwꜣt

sn.n=n Snmwt

... having reached the end of Wawat, having passed by Biggeh.¹⁴

mn mtw=k md.t mtw=f

You do not have anything of his.¹⁵

Anaphora

Anaphora is the repetition of the initial word or words in a series of clauses.¹⁶ It has also been described as beginning “each verse with the same refrain-line within a given poem.”¹⁷

Examples:

n-m in tw

n-m in tw nds

n-m in tw

Who brought you?

Who brought you, little man?

Who brought you?¹⁸

mk bꜥd rn=i m-ꜥ=k r sti hsw m hrww šmw pt th.ti

mk bꜥd rn=i m-ꜥ=k <r> šsp sbnw m hrw rsfw pt th.t

Look, because of you, my name stinks more than the smell of bird droppings on summer days when the weather is hot.

Look, because of you, my names stinks more than a catch of fish on hunting days

11 Guglielmi, “Der Gebrauch rhetorischer Stilmittel,” 467.

12 Guglielmi, “Der Gebrauch rhetorischer Stilmittel,” 467, esp. n. 12.

13 Guglielmi, “Der Gebrauch rhetorischer Stilmittel,” 467-68, 479-81.

14 Shipwrecked Sailor 9-11.

15 Setne I 4/26.

16 R. Dean Anderson Jr., *Glossary of Greek Rhetorical Terms* (Leuven: Peeters, 2000), 19; Guglielmi, “Der Gebrauch rhetorischer Stilmittel,” 469-70.

17 K. A. Kitchen, *Poetry of Ancient Egypt* (Jonsered: Paul Åströms förlag, 1999), 473.

18 Shipwrecked Sailor 69-70.

when the weather is hot.¹⁹

Antonomasia

Antonomasia is the substitution of a descriptive phrase for a proper name.²⁰

Examples:

i fndy pr m hmnw

O Nosey who came forth from Hermopolis.²¹

Here the god Thoth is addressed by the term *fndy* "nosey, or beaky" rather than by his name. This is just one of a series of antonomasia in this Book of the Dead passage which addresses familiar divine entities by descriptive phrases. See also under skotison.

Aphorismus

Aphorismus is the calling to question the proper use of a word.

Examples:

sdmw n 3 sdm.n=k

Listener, you are not really listening!²²

Here the eloquent peasant ironically addresses the ruler as someone who listens (*sdmw*), but notes at the same time that he actually does not listen because he has refused to grant his petition. The ruler hears but does not truly listen and shows it by not acting appropriately to the petition. The ruler has been more interested in the peasant's rhetorical displays than in doing what he is ostensibly supposed to do.

Aschematiston

Aschematiston is the use of plain, unornamented language. Classical authors considered aschematiston a vice. Some authors consider it a virtue. Egyptian's sparing use of adjectives and adverbs makes it easy to think that Egyptian literature is devoid of ornamentation, but thinking so would be a mistake. Many Egyptian hymns, for example, wax flowery in their praise of the god or king.

19 Lebensmüde 1-2.

20 Anderson, *Glossary of Greek Rhetorical Terms*, 23.

21 Book of the Dead 125B.

22 Eloquent Peasant B1 211.

Bdelygmia

Bdelygmia is the use of expressions of hatred or abhorrence of a person, word, or deed.

Examples:

dd.in=sn n hm=f st m p3 nty p3 wr hsy n ht3 im

Then they said that they were from where the wretched chief of the Hittites was.²³

The various accounts of the Battle of Kadesh are not necessarily consistent in their applications of bdelygmia to the Hittite king. Sometimes the noun phrase *wr n ht3* omits the adjective *hsy*.

Consonance

Consonance is irregularly repeated consonant sounds.

Examples:

m3=sn pt m3=sn t3 mk3 ib=sn r m3w

... whether they looked at the sky or at land, their hearts were braver than lions.²⁴

In this particular example, the repeated sounds all happen to occur at the beginning of the word, but they need not be so for consonance to be present.

Effictio

Effictio is the description of someone's body.²⁵ It is related to *prosopographia*, which is a description of someone's face or character.

Examples:

gm.n=i hf3w pw iw=f m ii.t ns-sw mh 30 hbswt=f wr=s r mh 2 h3w=f shrw m nbw inhw=fy m hsb d m3 r r sw r ht

I found that it was a snake coming that was thirty cubits long, whose beard was greater than two cubits, overlaid with gold, whose eyebrows were of true lapis, who was rearing.²⁶

23 *KRI* 2:105.

24 Shipwrecked Sailor 28-30.

25 Anderson, *Glossary of Greek Rhetorical Terms*, 125, 79 n. 80.

26 Shipwrecked Sailor 61-66.

Ellipsis

Ellipsis is the omission of a word or phrase that can be understood from context. This general definition has been considerably narrowed in Egyptological discussions: "Often, in couplets (and even tricola), the ancient poets deemed it cumbersome to repeat the first half of a line twice, when it would recur in the following line. Thus, only the distinctive second half of a second line would be expressed, leaving it in parallel with the second half of the first line, and both of them dependent on the first part of the first line."²⁷ A fuller definition explains the evidence better.

Examples:

sip.n=f sbht n s'nh-t3=s m mnw wr m-hnt t3-rr

r wrh snn=s m-q3b=s m-q3b=s m ibr

r db3 hmt=s m nfrw=s

r rdit n=s s3 n tfrr-šfyt r hh=s

r hnm b3 'nh n R' m hwt

He has inventoried the gate of her-who-makes-her-land-live as a monument in Tarer to anoint her statue in its midst with oil, to enrobe her majesty with her beauty, to place an amulet of lapis-lazuli at her throat, to unite with the living soul of Re in the heaven.²⁸

In the preceding example, the same initial phrase (bolded) applies to a string of purpose clauses and it is omitted after the first purpose clause.

bs=i tw

whm=i tw r zht

m3=k nb ntrw

Let me initiate you into and announce you to the horizon so that you can see the lord of the gods.²⁹

In this example of ellipsis, the same prepositional phrase applies to two verbs and so the first use is omitted because the reader can supply the expected phrase from the second instance.

Ennoia

Ennoia is a kind of purposeful holding back of information that nevertheless hints at what is meant. The description of the snake in the Shipwrecked Sailor (see under *effictio*) hints that it is a deity.

²⁷ Kitchen, *Poetry of Ancient Egypt*, xix; see also Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 481.

²⁸ Dendara IV 232-33.

²⁹ Medinet Habu V 290.

Epanalepsis

Epanalepsis is the irregular repetition of words. Epanalepsis differs from anaphora and epistrophe because these words need not be at the beginning or end of lines.

Examples:

ḥꜥ.n sbt.n=f im=i m nn dd.n=i m nf m ib=f

Then he laughed at me and at the things which I said which were wrong to his mind.³⁰

As the example shows, sometimes the rhetorical device is lost in translation. This is particularly true when it depends on the sound of the word.

Epexegetis

Epexegetis is the reinterpretation of what has just been said.

Examples:

iw rdi.n=i šwty m tp=i

ptr rf sw

ptr šwty=f

hr pw nd it=f

šwty=f pw iꜣrty imyt tp itm

I placed two feathers on my head. What is that? What are his two feathers? He is Horus who rescues his father. His feathers are the two uraei that are on the head of Atum.³¹

Coffin Text 335 and its descendent, Book of the Dead 17 are perhaps the most famous examples of epexegetis, though there are others, including those that are not from funerary literature.³²

Epideictic oratory

Epideictic oratory is oratory for public occasions. The Eloquent Peasant contains many examples of epideictic oratory.

30 Shipwrecked Sailor 149.

31 CT 335 IV 202-205.

32 Some preliminary examples are gathered in John Gee, "Glossed Over: Ancient Egyptian Interpretations of their Religion," in *Evolving Egypt: Innovation, Appropriation, and Reinterpretation in Ancient Egypt*, ed. Kerry Muhlestein and John Gee (Oxford: Archaeopress, 2012), 69-74.

Epistrophe

Epistrophe is the repetition of final words.³³

Examples:

n in ink is dbh m3=f tw m qd=k pw hpr ir=k

Wsir dbh m3=f tw m qd=k pw hpr ir=k

It is not I who asks that he may see you in your form that has come into being for you.

Osiris is the one who asks that he may see you in your form that has come into being for you.³⁴

iw ir.n=i t3w 4

ssn s nb m h3w=f

sp im pw

iw ir.n=i 3gb wr

sh̄m h̄wrw m̄i wr

sp im pw

I created the four winds so that everyone could breathe from its abundance. **That is one instance thereof.**

I created the great flood so that the poor could have power like the great. **That is one instance thereof.**³⁵

Epitheton

Epitheton is the attribution of a quality to a person.³⁶ In Egyptian this device was often applied to deities.³⁷

Examples:

[. . .] *t3 wp.t 3st t3 Pr-3.t tm nb nty w3h sh̄n p3 t3 dr=f*

[. . .] the business of Isis, the Pharaoh of all the land, who commands all the land.³⁸

Though this example is fragmentary, it is clear that the author, Horos, tacks on epithets of Isis to emphasize the importance of the business.

33 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 471.

34 PT 510 §1128.

35 CT 1130 VII 462-63.

36 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 482; Anderson, *Glossary of Greek Rhetorical Terms*, 52-53.

37 So much so that the LGG contains more than 85,000 examples.

38 O. Hor 3 v 5-7.

Epitrochasmus

Epitrochasmus is to touch rapidly on one point and then another.³⁹ This phenomenon is frequently found in letters.

Epizeuxis

Epizeuxis is the repetition of adjacent words. In ancient Egyptian it is commonly used for emphasis, and occurs frequently enough that in Egyptian it is often simply written *sp-2*.

Examples:

w^cb w^cb⁴⁰ nsw-bity (Wsr-m3^ct-R^c-mry-Imn) |

The king of Upper and Lower Egypt, Ramses III is very pure.⁴¹

Ethopoeia

Ethopoeia is a description of a person's character and habits.⁴²

Examples:

*[iw p3]y=f sn šriw m-di=f mi šhrw n šriw . . . iw=f hr šmt m-s3 n3y=f i3wt r šhty . . .
 . iw mnt[w=f] iir n=f wpwt nb nty m šhty*

His younger brother was with him like a son. . . . He went after his cattle to the field.
 . . . He made every report of what was in the field.⁴³

Euphemism

Euphemism is the substitution of a more favorable expression for a pejorative or socially delicate term.⁴⁴

Examples:

3q ntr r 3ht=f nsw-bity šhtp-ib-R^c

The god, the king of Upper and Lower Egypt, Sehetepibre, entered into his horizon.⁴⁵

In this passage “entered into his horizon” is a euphemism for saying that the king died.

39 Anderson, *Glossary of Greek Rhetorical Terms*, 54.

40 Written *w^cb sp-2*.

41 Medinet Habu V 296.

42 Anderson, *Glossary of Greek Rhetorical Terms*, 60-61.

43 P. d'Orbiney 1/2-3.

44 Anderson, *Glossary of Greek Rhetorical Terms*, 60.

45 Sinuhe R6.

Exergasia

Exergasia is the repetition of an idea in different words.⁴⁶ This device is common in hymns. See also *parallelism*.

Frame story

In a series of nesting tales, a frame story is the outermost tale that frames the tale within a tale. The encounter between the captain and the sailor in the Shipwrecked Sailor is the frame story.⁴⁷

Hydrographia

Hydrographia is the creating of an illusion of reality through the vivid description of water.

Examples:

f3t t3w
ir=f whmyt
nwyt im=f
nt mh 8

The wind picked up. It howled. Waves were in it, of eight cubits.⁴⁸

This example will be discussed further under *thalassography*.

ir h3=k r š n m3ˆt sqd=k im=f m m3ˆw nn kf ndyt ht3=k nn ihm dpt=k nn iw iyt m ht=k
nn sw3 sgrw=k nn šhm=k h3ˆ=k hr t3 nn it tw nwt nn dp=k dwt nt itrw nn m33=k hr
snd

If you go down to the water of truth, you will sail on it with the breeze; the bunt will not strip your sails; your boat will not delay; misfortune will not come to your mast; your yards will not break; you will not be overpowered and grounded; the wave will not take you off; you will not experience the evil of the river; you will not see the face of fear.⁴⁹

Hypallage

Hypallage is the shifting of the application of words.⁵⁰

46 Anderson, *Glossary of Greek Rhetorical Terms*, 48-49.

47 There is some commentary on this in Gary A. Rendsburg, "Literary Devices in the Story of the Shipwrecked Sailor," *JAOS* 120/1 (2000): 14.

48 Shipwrecked Sailor 104-105.

49 Eloquent Peasant B1 87-91.

50 Anderson, *Glossary of Greek Rhetorical Terms*, 53-54, 121.

Examples:

ir h3=k r š n m3't sqd=k im=f m m3'w

If you go down to the water of truth, you will sail on it with the breeze.⁵¹

The addition of the genitive *n m3't* to a sentence about sailing on the water shifts the meaning to a discussion of honesty and the consequences of being honest.

Hyperbaton

Hyperbaton is unusual word order.⁵² Since Egyptian usually has a fairly rigid word order, hyperbaton is usually easy to detect.

Examples:

hrw pw 'h3 hr im=f hn' Sth

It is the day in which Horus fights with Seth.⁵³

We would normally expect the *im=f* to go last in the sentence, after the prepositional phrase *hn' sth*.

nwyt im=f nt mh 8

Waves were in it of eight cubits.⁵⁴

The expected word order here is *nwyt nt mh 8 im=f*. The deliberate change in word order points to something going on in the narration. One explanation is suggested below under *thalassography*.

Hypozeuxis

Hypozeuxis is the opposite of zeugma,⁵⁵ by which every phrase in a parallel series has its own verb. This is common in Egyptian.

Isocolon

Isocolon is the repetition of the same number of syllables.⁵⁶ The work of Gerhard Fecht is built upon isocolon.⁵⁷ Fecht set forth a long list of rules that he claimed governed

51 Eloquent Peasant B1 87-91.

52 Anderson, *Glossary of Greek Rhetorical Terms*, 121-22.

53 CT 335 IV 234-35 T3Be.

54 Shipwrecked Sailor 35-36.

55 For zeugma, see Anderson, *Glossary of Greek Rhetorical Terms*, 60.

56 Anderson, *Glossary of Greek Rhetorical Terms*, 65, 90-91.

57 The groundwork was laid in his dissertation: Gerhard Fecht, *Wortakzent und Silbenstruktur* (Glückstadt:

ancient Egyptian metrics. He then broke Egyptian texts into phrases and applying his rules to the phrases claimed that the phrases then broke into lines that had the same number of syllables, that is, isocolon. He then grouped these lines into symmetrical patterns and claimed that it constituted Egyptian metric. However praiseworthy his initial insights, Fecht's use of isocolon as a Procrustean bed into which he forced all Egyptian texts tended to undermine the effectiveness of his argument. His work would have been more useful if he had been able to demonstrate some sort of metric with texts using the so-called verse points, acknowledging that historically unstressed syllables had a tendency to disappear and actually checked to see if there were any sort of metrical patterns in the text, the way that Thissen did with a later Demotic text.⁵⁸

Martyria

Martyria is confirming something by referring to one's own experience.

Examples:

The Shipwrecked Sailor is an extended example of a martyria with another martyria in the middle.

sdd=i rf n=k mitt iry hpr m-^c=i ds=i

Let me tell you something similar that happened to me.⁵⁹

sdd=i rf n=k mitt iry hprw m iw pn

Let me tell you something similar that happened in this island.⁶⁰

Maxim

A maxim is a short pithy saying.

Examples:

in-m rdit mw [n] 3pd h^d-t3 n sft=f dw3

Who gives water [to] a bird the morning of him being sacrificed?

J. J. Augustin, 1960). This was followed by two important articles: Gerhard Fecht, "Die Wiedergewinnung der altägyptischen Verskunst," *MDAIK* 19 (1964): 54-96 and Gerhard Fecht, "Die Form der altägyptischen Literatur: Metrische und stilistische Analyse," *ZÄS* 91 (1964): 11-63; Gerhard Fecht, "Die Form der altägyptischen Literatur: Metrische und stilistische Analyse (Schluß)," *ZÄS* 92 (1965): 10-32. This has been followed by several longer applications: Gerhard Fecht, *Literarische Zeugnisse zur Persönlichen Frömmigkeit in Ägypten* (Heidelberg: Carl Winter Universitätsverlag, 1965); Gerhard Fecht, *Der Vorwurf an Gott in den Mahnworten des Ipu-wer* (Heidelberg: Carl Winter Universitätsverlag, 1972).

58 Heinz Joseph Thissen, *Der vorkommene Harfenspieler* (Sommerhausen: Gisela Zauzich 1992), 78-79.

59 Shipwrecked Sailor 22-24.

60 Shipwrecked Sailor 125.

Merismus

Merismus is the division of a whole into its parts or the reference to something by its parts.⁶¹

Examples:

sšmw n iwtt ntt

Leader of what is not and what is.⁶²

Metallage

Metallage is when a word or phrase is treated as an object within another expression.

Examples:

mṯn wṯ ṯ.kwṯ ḥr=ṯn dr=ṯn ḏwt ṯryt=ṯ mṯ nw ṯr.n=ṯn n ʒḥw 7 ṯpw ṯmyw šms nb spʒt ṯr.n ṯnp st=sn hrw pf n mṯ rk ṯm

Behold I am come before you so that you might expel the evil that pertains to me like that which you did for those seven spirits who follow the lord of the nome whose places Anubis made on that day of “Come here.”⁶³

The phrase *mṯ rk ṯm* is grammatically an imperative, but it is used as a noun in a genitive expression.

Onomatopoeia

Onomatopoeia is using or inventing a word whose sound imitates that which it names.⁶⁴

Examples:

mṯw

cat

nṯṯt

to stammer

ṯwṯw n sṯnh whwh p nty dit wdʒ p=f nb

The barking guard dog is the one who saves his master.⁶⁵

61 Guglielmi, “Der Gebrauch rhetorischer Stilmittel,” 482; Anderson, *Glossary of Greek Rhetorical Terms*, 70.

62 Eloquent Peasant B1 85.

63 CT 335 IV 256-261.

64 Anderson, *Glossary of Greek Rhetorical Terms*, 82-84.

65 P. Brooklyn 47.218.135 4/7, in Richard Jasnow, *A Late Period Hieratic Wisdom Text* (Chicago: Oriental

Parallelism

Parallelism is the repetition of a thought using different words but usually the same syntactic structure.⁶⁶ "Two lines (or thought units) were very frequently set together to form one verse. They make up a *couplet*, or *bicolon*. . . . Such pairs of lines most frequently show repetition in meaning, hence are in parallel ('parallelism'), or development of the meaning, or a contrast. Or, a full sentence could be divided across two 'lines,' to form a whole."⁶⁷ The catch-all category of *parallelism* has been divided into the following types:

- **Synonymous parallelism**

In synonymous parallelism "the two lines of the couplet say the same thing, if in different words. There is no development in thought between the two lines."⁶⁸

- **Synthetic parallelism**

In synthetic parallelism "both lines share the same basic theme, but the second line adds to what is said in the first."⁶⁹

Examples:

dī=i n=k phty mī s3 3st

hftyw=k hr hr tbtv=k

I have given you might like the son of Isis; your enemies have fallen under your sandals.⁷⁰

- **Antithetic parallelism**

In antithetic parallelism "the second line expresses a contrast with, or the opposite situation to, the first line."⁷¹

Examples:

bw iry p3 nkt m3t 3q

bw iry hwr sw3d n p3y=f šri

The property of the just never perishes;
a robber never bequeaths to his son.⁷²

- **Negatively positive parallelism**

Like antithetic parallelism, negatively positive parallelism expresses a contrast, but

Institute, 1992), pls. 8-9.

66 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 483.

67 Kitchen, *Poetry of Ancient Egypt*, xv.

68 Kitchen, *Poetry of Ancient Egypt*, xvi.

69 Kitchen, *Poetry of Ancient Egypt*, xvi.

70 Dendara IV 24.

71 Kitchen, *Poetry of Ancient Egypt*, xvi.

72 P. Brooklyn 47.218.135 2/17, in Jasnow, *A Late Period Hieratic Wisdom Text*, pls. 4-5.

in this case “a positive declaration in the first line is matched by contrasting, negatively-expressed wording in the second which simply confirms (instead of opposing) the first line.”⁷³

Examples:

*dī=i n=k m3ʿt hnm.tw m t3
n hpr grg m rnpwt=k*

I have given you truth united with the land;
falsehood will not occur in your years.⁷⁴

*īry sr ʿnh [m] m3ʿt
ty=f bwt isfy*

A prince lives on truth;
chaos is his abomination.⁷⁵

- **Complementary parallelism**

Complementary parallelism “is where the two lines are indeed in parallel, as two independent sentences or clauses, but the meaning expressed in the second is distinct from the content in the first line. It is, instead, supplementary or complementary to it.”⁷⁶

- **Balanced / balancing couplets**

Balanced couplets are also known as enjambment. “In these cases, a full sentence is divided across two lines, so that it is neatly contained within the overall poetic pattern of a regular couplet.”⁷⁷

Paraleipsis

Paraleipsis is the drawing attention to something in the very act of pretending to pass it over.⁷⁸

Examples:

nn sh3=i n=k s3t=i kt

I will not mention to you my little girl.⁷⁹

73 Kitchen, *Poetry of Ancient Egypt*, xvi.

74 Dendara IV 260.

75 P. Brooklyn 47.218.135 4/10, in Jasnow, *A Late Period Hieratic Wisdom Text*, pls. 8-9.

76 Kitchen, *Poetry of Ancient Egypt*, xvi.

77 Kitchen, *Poetry of Ancient Egypt*, xvii.

78 Anderson, *Glossary of Greek Rhetorical Terms*, 88-89.

79 Shipwrecked Sailor 128-129.

Periergia

Periergia is the overuse of words or figures of speech. Periergia is common in the Eloquent Peasant. To some extent this will be a matter of taste. Thus, a modern assessment that, in Middle Kingdom literature, "there is little or no innovation, and much less variety" and most does not "rise above the totally banal"⁸⁰ is an indication that periergia is involved.

Polyptoton

Polyptoton is the repetition of word roots.⁸¹

Examples:

ir h3=k r š n m3't sqd=k im=f m m3'w

If you go down to the water of truth, you will sail on it with the breeze.⁸²

Prosopographia

Prosopographia is a vivid description of someone's face or character. It is related to *effictio*, which is a description of the body.

Examples:

i itm imy hwt-3t ity ntrw nhm=k wi n ntr pw 3nh m rhyt nty hr=f m tsm inhw=f m rmt
O Atum, who is in the great temple, the sovereign of the gods, may you save me from that god who lives on the peasants, whose face is a dog, and whose eyebrows are a man's.⁸³

Protrope

Protrope is a summoning into action by means of threats. This is common in religious texts.

Examples:

in tm iry=s p3 nt ir=k r-r=f bn iw=y r di n=k nhh

If you will not do it, I will not give you oil.⁸⁴

80 Kitchen, *Poetry of Ancient Egypt*, 474.

81 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 476-79; Anderson, *Glossary of Greek Rhetorical Terms*, 103.

82 Eloquent Peasant B1 87-91.

83 CT 335 IV 311-313.

84 P. Mag. 6/37.

Ratiocinatio

Ratiocinatio is reasoning by asking oneself questions. This is something that is thought to be found in the Lebensmüde.

Rhyme

Rhyme, or homoteleuton, is words that end the same. Normally, the last syllable, including the vowel, must sound the same to count as rhyme, but since we do not have the vowels, the best that we can do is guess.

Examples:

iw ir.n=i 3gb wr shm hwrw mi wr

I made the great flood so that the poor could have power like the great.⁸⁵

Simile

A simile is a comparison using *mi*.⁸⁶

Examples:

di=i n=k phty mi s3 3st

hftyw=k hr hr tbtty=k

I have given you might **like** the son of Isis; your enemies have fallen under your sandals.⁸⁷

Skotison

Skotison is purposeful obscurity. Skotison appears frequently in religious texts.

Examples:

i fndy pr m hmnw

O Nosey who came forth from Hermopolis.⁸⁸

Symploce

Symploce is a combination of both anaphora and epistrophe.⁸⁹

Examples:

rs m htp ht=t hr nfrw di 3hw n hnmmt rs=t htp.tw

85 CT 1130 VII 463.

86 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 485-86.

87 Dendara IV 24.

88 Book of the Dead 125B.

89 Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 472.

rs m ḥtp ^ᶜwy=t *hr* ^ᶜnh-w3s *dī* ^ᶜnh n šm *hr mtn=t* **rs=t ḥtp.tw**

Awake in peace, your body bearing beauty, who gave what is useful to humans, **when you arose in peace**.

Awake in peace, your limbs bearing life and dominion, who gave life to the one who traveled your road, **when you arose in peace**.⁹⁰

Synonymia

Synonymia is the use of synonyms to amplify or explain. This device is common in hymns and royal inscriptions.

Examples:

ind-ḥr=k ^ᶜh-k3w-R^ᶜ *hr=n ntr-ḥpw mk t3 swsh t3šw=f d3r ḥ3swt m wrwt=f inq t3wy m*
r-‘w ‘wy=fy

Hail Khakawre, our Horus, divine of forms, protector of the land, who enlarges his borders, who subdues the foreign lands with his crown, who embraces the two lands with the sweep of his arms.⁹¹

Systrophe

Systrophe is the listing of many qualities or descriptions of someone or something. This is common in hymns and royal inscriptions.

Examples:

(ḥwt-ḥr wrt ḥnwt ntrw ntrwt) |

Hathor, the great, mistress of gods and goddesses.⁹²

Tapeinosis

Tapeinosis is naming something in a way that diminishes it in importance. This is common in Egyptian to refer to kings of other countries as chiefs or officials rather than kings.

Taxis

Taxis entails dividing a subject up into its various components or attributes. This phenomenon is found in the onomastica, but also occurs elsewhere.

Examples:

ir ntr nb 3ḥ nb mwt nb d3ty=sn st m sᶜh=k ipn iw=sn r-m sm3yt tw

90 Dendara I 8.

91 P. Kahun I 2-3.

92 Dendara XIII 190.

As for every god, every spirit, and ever damned man who shall block her with this dignity of yours, they are part of that conspiracy.⁹³

Thalassography

Thalassography is a description of a sea or ocean. This is not very common in Egyptian, but one such description is interesting for a variety of reasons.

Examples:

*h3.kwi r w3d-wr m dpt nt mh 120 3w=s mh 40 m wsh=s sqd 120 im=s m stp n Kmt
m3=sn pt m3=sn t3 mk3 ib=sn r m3w sr=sn d^c n iit= <f>⁹⁴ nšny n hp^rt=f
d^c pr iw=n m w3d-wr tp-^c s^ch=n t3
f3t t3w
ir=f whmyt
nwy^t im=f
nt mh 8
in ht h^h n=i s <y>
h^c.n dpt mwt
ntyw im=f n sp w^c im
h^c.n rdi.kwi r iw in w3w n w3d-wr*

I went down to the sea in a boat, 120 cubits in length and 40 in breadth, with 120 sailors in it of the pick of Egypt whose hearts, whether they looked at the sky or the land, were braver than lions and who could foresee a storm before it came up and a squall before it happened. A storm came up while we were at sea before we could reach land. The wind picked up. It howled. Waves were in it, of eight cubits. It was the mast that broke it (the wave) for me. Then the boat sank. Of those who were in it not one survived. Then I was cast on an island by a surge of the sea.⁹⁵

The description begins with a long sentence with many subordinate clauses. The long smooth narrative imitates the calm sea. A narrative infinitive, which is often used in the titles of new sections of text, begins a new phase. The hyperbaton moves up the prepositional phrase *im=f*, which normally ends a phrase, in front of the indirect genitive, braking the phrase up into tiny segments. So when the storm comes up, the sentences become as choppy as the sea. They lengthen out more as the storm subsides. The unusual sentence types give way to the more normal narrative forms just as the sea returns to normal. Thus, the rhetorical structure of the narrative mirrors what the narrative describes. It is a brilliant piece of narration.

93 CT 47 I 207.

94 Restoring with the parallel text in line 98.

95 Shipwrecked Sailor 24-41.

Topothesis

Topothesis is the description of an imaginary place. The island of the Shipwrecked Sailor would usually be considered an example since it is often posited that the island did not actually exist.⁹⁶

Examples:

*gm.n=i d3bw i3rrwt im izqwt nbt šspt k3w im hn^c nqwt šspwt mi ir.t=s rmw im hn^c
3pdw nn ntt nn st m-hnw=f*

I found figs and grapes there, every noble vegetable, sycamore figs and notched figs, cucumbers as were brought forth, fish and fowl were there; there was nothing that was not in it.⁹⁷

Zeugma

Zeugma is when one part of speech (usually the verb) governs two or more parts of a sentence (often in a series).⁹⁸ An example of zeugma is given in the section on *ellipsis*.

Conclusions

This brief survey shows that ancient Egyptian scribes and authors could, and did, employ a wide variety of rhetorical devices in their writings. The survey is meant to be illustrative rather than exhaustive.

Hopefully, this survey will lead to a better understanding of rhetorical devices used in ancient Egyptian texts, which in turn can help readers understand better how Egyptian authors constructed their narratives. In this way, the modern reader's overall appreciation of Egyptian literature as literature may be enhanced. It was that appreciation of Egyptian literature as literature that drew Jack Foster into Egyptology.

96 For example, see the remarks of William Kelly Simpson, *The Literature of Ancient Egypt* (New Haven: Yale University Press, 1972), 50: "The nature and location of the Island of the Ka, the enchanted island reached by the sailor, are still subjects for discussion. Some view the entire tale as a sort of psychological journey."

97 Shipwrecked Sailor 47-52.

98 See also Guglielmi, "Der Gebrauch rhetorischer Stilmittel," 481.

The Curious Phenomenon of Moving Military Sites on Egypt's Eastern Frontier

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Abstract: Historical geography, the study and identification of the locations of named ancient sites, is a challenging and stimulating scholarly exercise. Sir Alan Gardiner's *Ancient Egyptian Onomastica* (1947) and Pierre Montet's *Géographie de l'Égypte Ancienne* (1957) remain standard works for this discipline, although many early identifications require adjustment. A problem one can encounter when trying to locate Egyptian toponyms is that some sites appear to have moved over the course time between the New Kingdom and Greco-Roman periods. While the location may change, the old name is transferred to the new site.

The present study will investigate the cases of Tjaru/Sile and Migdol in north Sinai. Both were strategic military sites. After demonstrating that these sites did relocate, I will propose an explanation for this practice.

Résumé: La géographie historique qui consiste à étudier et à identifier la localisation de sites anciens est un exercice académique à la fois ardu et stimulant. L'ouvrage de Sir Alan Gardiner, *Ancient Egyptian Onomastica* (1947), et celui de Pierre Montet, *Géographie de l'Égypte ancienne* (1957), demeurent les études classiques pour la discipline, ce, malgré le fait que l'identification de plusieurs sites doit être aujourd'hui ajustée. L'un des problèmes qui complique la localisation des toponymes égyptiens est que certains sites semblent s'être déplacés entre le Nouvel Empire et la période gréco-romaine. Alors que la situation géographique change, l'ancien nom est transféré au nouveau site.

La présente étude examinera les cas de Tjaru/Sile et Migdol dans le nord du Sinaï, deux sites militaires stratégiques. Après avoir démontré que ces sites ont effectivement été relocalisés, une explication pour cette pratique sera proposée.

Keywords: Ways of Horus/Chemins d'Horus; Sile; Tjaru; Tell Abu Sefêh; Hebua/Tell Héboua; north Sinai/Sinaï nord; Wadi Tumilat; Tell el-Herr; Kedua; Migdol; Magdalo; Magdala; Pelusium/Péluse; Daphnae/Daphané; Tell Defenneh; Tell el-Borg.

* I am pleased to offer this paper to the memory of Ted Brock, who in his capacity as director of the Canadian Institute drove me to north Sinai for my first visit that led to a decade of work. Fig. 1 shows Ted on that occasion in March 1994.

Historians have long been interested in identifying the locations of Egyptian ancient sites in order to create a complete map of ancient Egypt. In many cases the ancient names, Egyptian or Greek, have survived into Arabic, thus providing the geographer with the key to identifying the location of ancient toponyms known from texts. Some well-known examples are *šwnw* > Aswan, *Nbti/Ombi* > Kom Ombo, *Gbtyw/Coptos* > Qift, *T3 ntrt* > Denderah, *pr d3d3* > Abu Tisht, and *p3 wsir* > Abu Sir.¹ Through such linguistic analysis of the ancient names, many ancient Egyptian sites have been identified and a rather accurate map of ancient Egypt can be made.

One unexpected challenge facing the identification of an ancient site is when it relocates over the course of time, but retains the original name. This phenomenon is not unique to Egypt. The late Anson Rainey, a leading historical geographer of the Levant, spoke of "transference" when "the ancient name became detached from its original site but continued to exist in the vicinity."² One example of site movement in the Near East is Jericho. The Neolithic to Iron Age site is located on a mound called Tell el-Sultan, whereas the Greco-Roman period site is located a few kilometers to the south rather than on the tell or immediately beside it.³ Jericho's name, however, survived through this period and continues to the present-day city at the heart of the Palestinian Authority territory.

Another case of a toponym moving is Arad in southern Canaan. Famous for its impressive stone enclosure wall dating to the Early Bronze Age (EB I = 3100-2950 B.C.), Arad goes back to the Chalcolithic period (Naqada I in Egypt) and was continuously occupied till the end of the EB II I (ca. 2650 B.C.).⁴ After a hiatus of nearly 1500 years, a small Iron I (ca. 12th-11th century B.C.) settlement was established followed by a citadel that occupied Tell Arad from the 10th through 6th centuries B.C.⁵ Textual evidence⁶ suggests that Arad existed in the Late Bronze age (1550-1200 B.C.) despite the absence of corresponding archaeological evidence at Tell Arad. Yohanan Aharoni, the principal investigator of Arad, thought that "Canaanite Arad" (of the Middle and Late Bronze Ages) had shifted to Tell el-Milh/Malhata, 12 km to the WSW.⁷ In support of this idea he noted that there were

1 Scores of examples are documented in Alan H. Gardiner, *Ancient Egyptian Onomastica*, 2 vols. (London: Oxford University Press, 1947). More recently see, Carsten Peust, *Die Toponyme vorarabischen Ursprungs im modernen Ägypten: Ein Katalog* (Göttinger Miszellen Beihefte 8, 2010).

2 Anson Rainey, *Sacred Bridge: Carta's Atlas of the Biblical World* (Jerusalem: Carta, 2006), 19.

3 See "Jericho," in *The New Encyclopedia of Archaeological Excavations in the Holy Land* Vol. 2 (ed. Ephraim Stern; New York: Simon & Schuster, 1993), 674-697.

4 Yohanan Aharoni, Ruth Amiran & Miriam Aharoni, "Arad," in *New Encyclopedia of Archaeological Excavations in the Holy Land* Vol. 1 (Ed. Ephraim Stern; New York: Simon & Schuster, 1993), 75-82.

5 *Ibid.*, 82-87.

6 The textual evidence is from the Hebrew Bible, said to be sites encountered by Moses and the Israelites leaving Sinai (Num 21:1 & 33:4), in the days of Joshua (Josh 12:14) and during the period of the Judges (Judg 1:16).

7 Yohanan Aharoni, *The Land of the Bible: A Historical Geography* (Philadelphia: Westminster, 1979), 201. See also James Monson, *Student Map Manual: Historical Geography of Bible Lands* (Grand Rapids: Zondervan, 1979), §1-16 where the two Arads are located at Tells Arad and Malhata respectively.

two consecutive toponyms in the Karnak Shishak list with the name Arad (no. 108-112),⁸ suggesting that when Tell Arad was rebuilt in the Iron age that both sites carried on the name concurrently.

This is the phenomenon of a site moving while retaining its name which I have encountered in my efforts to identify toponyms on the eastern frontier of Egypt. At issue is seeking concordance between the textual references to a site and local archaeological evidence. Two test cases will be investigated to illustrate the problem and then an attempt will be made to explain what may be behind the curious phenomenon of moving military sites on Egypt's eastern frontier.

1. Tjaru/Sile⁹

Textual references to Tjaru (*T̪rw*) or the Fortress of Tjaru (*htm n T̪rw*) go back to before the New Kingdom.¹⁰ Its importance has long been recognized. Max Müller in 1888 opined that “no town of the eastern Delta frontier has greater importance than Tharu (=Tjaru), which was not only its largest town, but also the principal point for the defense of the entrance of Egypt, therefore also for the military and mercantile roads to the East.”¹¹ Locating this vital frontier town has been a challenge for Egyptologists for more than a century.

The etymology of the word *T̪rw* remains uncertain. Carl Kùthmann over a century ago recognized that the word *T̪rw* should be vocalized as Sile/Selle, equating the name with Sile of Greco-Roman period texts.¹² William Foxwell Albright suggested that the two occurrences of the toponym *sillu* in Amarna Letter 288, a communiqué from Abdu-Heba of Jerusalem, referred to Tjaru (*T̪rw*).¹³ Further Albright posited a Semitic root behind this toponym, perhaps as vestiges of the Semitic influence during the Hyksos era.¹⁴ The late Anson Rainey in his new translation of the Amarna letters identifies Sillû/Sillô in EA 288

8 Epigraphic Survey, *Reliefs and Inscriptions at Karnak, Vol. III, the Bubastite Portal* (Chicago: University of Chicago, 1954), plates 2-4. For an accessible version of the Shoshenk I/Shishak list, see Rainey, *Sacred Bridge*, 188-189. On the identification of the two Arads in the Shoshenk list, see Shmuel Ahituv, *Canaanite Toponyms in Ancient Egyptian Documents* (Jerusalem: Hebrew University, 1984), 65-66.

9 Over the past century plus, this name has been variously written in the literature, including Tharu, Zaru, Zarou, Tjaru, and Sile.

10 “The Satire of the Trades,” likely originating in the Middle Kingdom or slightly earlier, identifies the speaker as Dua-Khety of Tjaru (see Miriam Lichtheim, *Ancient Egyptian Literature*, Vol. 1 (Berkeley: University of California Press, 1975), 184-185. The earliest writing is found on the base of a statue of the 2nd Intermediate Period that was discovered at Tell Hebua I in 2005, see Mohammed Abd el-Maksoud & Dominique Valbelle, “Tell Héboua-Tjarou: L’Apport de l’épigraphie,” *Rd’É* 56 (2005): 7-8.

11 Max Müller, “A Contribution to the Exodus Geography,” *Proceedings of the Society of Biblical Archaeology* 10 (1888): 467.

12 Carl Kùthmann, *Die Ostgrenze Ägyptens* (Leipzig: Drugulin, 1911), 38-40. Gardiner, *Ancient Egyptian Onomastica* 2, 202*-204*.

13 W. F. Albright, “The Town of Selle (Zaru) in the Amarnah Tablets,” *JEA* 10 (1925): 6-8.

14 *Ibid.*, 7-8.

as "the chief Egyptian border fortress on the eastern Delta frontier."¹⁵

Indeed a Semitic loanword containing the letter *samek* is typically represented in Egyptian by *t*.¹⁶ Examples of this linguistic correspondence can be seen in other geographical terms from the eastern frontier region, e.g. *tkw* = *sukka* (Heb. Succoth; preserved in Arabic is Maskhutta in the Wadi Tumilat); (*p3 twfy* = *sûf* (the Ballah lakes on eastern frontier).¹⁷ Recognizing this linguistic correlation, Albright associated the term *t3rw/sillu* with the Hebrew *sol^elâ*, meaning wall or rampart¹⁸ that is attested as a loanword in Egyptian in Cushite Period texts.¹⁹

Another possibility is that *t3rw/sillu* derives from the Akkadian word *sulû*, *sullû* that occurs as early as the Old Babylonian Period, and means "street," "track."²⁰ If this Akkadian root stands behind *t3rw*,²¹ the meaning corresponds well with its original function as a *w3t*. *T3rw/sillu* was the frontier site on the main route from Egypt across Sinai to Canaan. The Ways/Way of Horus *w3(w)t hr* is the name of this route or area (as Dominique Valbelle argues),²² or both as I have suggested elsewhere.²³

W3(w)t hr is attested prior to Tjaru, going back to the Old Kingdom, the 1st

15 Anson F. Rainey and Zipora Cochavi-Rainey, *The El-Amarna Correspondence: A New Edition of the Cuneiform Letters from the Site of El-Amarna based on the Collations of all Extant Tablets*, Vol. 2 (Leiden/Boston: Brill, 2015), 1594.

16 For examples, see James Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period* (Princeton: Princeton University Press, 1994), §§540-560.

17 For a treatment of this term, see Yoshiyuki Muchiki, *Egyptian Proper Names and Loanwords in North-West Semitic* (Atlanta: Society of Biblical Literature, 1999), 232-233, 251-252. See further James K. Hoffmeier, *Ancient Israel in Sinai* (New York: Oxford University Press, 2011), 65 & 81-89

18 Albright, "The Town of Selle (Zaru) in the Amarnah Tablets," 8. For biblical references, see 2 Sam 20:15; 2 Kgs 19:32; Isa 37:33; Jer 6:6. "Rampart" is also the more recent meaning given in Ludwig Koehler & Walter Baumgartner, *Lexicon in Veteris Testamenti Libros* (trans. & updated by M.E.J. Richardson; Leiden: Brill, 2001), 757

19 Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, §548.

20 CAD 15, 370. The late Anson Rainey suggested to me some years ago that *t3rw* might derive from this root. Linguistically, this association works well. Although a Semitic etymology seems preferable, an Egyptian root has been suggested, the meaning of which would be "to fasten" or "keep safe" (see Abdel Rahman el-Ayedi, *Inscriptions of the Ways of Horus* [Obelisk Publications, 2006], 66).

21 During the 2nd millennium Akkadian was the *lingua franca* of the Near East, and so the thought of a word of East Semitic origin becoming a loan word into Egypt is not inconceivable. See Gary Rendsburg, "Writing and Scripts (with Special Reference to the Levant)," in *Near Eastern Archaeology: A Reader* (ed. S. Richard; Winona Lake, IN.: Eisenbrauns, 2003), 63-70, Rendsburg, "Semitic Languages (with Special Reference to the Levant)" in *Near Eastern Archaeology: A Reader*, 71-73 and W. Horowitz, T. Oshima and S. L. Sanders, *Cuneiform in Canaan: Cuneiform Sources from the Land of the Israel in Ancient Times* (2nd revised edition. Winona Lake, IN: Eisenbrauns, 2017).

22 Dominique Valbelle, "La (les) route(s)-d'horus," in *Hommages à Jean Leclant* (Cairo: IFAO, 1994), 379-386.

23 For discussion and references, see James K. Hoffmeier & Stephen O. Moshier, "'A Highway out of Egypt': The main road from Egypt to Canaan," in *Desert Road Archaeology in Ancient Egypt and Beyond*. (eds. F. Förster & H. Reimer; Africa Praehistorica 26, Köln: Heinrich-Barth-Institut, 2013), 487-490.

Intermediate Period, and Middle Kingdom.²⁴ It seems that the two names, *wꜣ(w)t* and *tꜣrw* refer to the same area or location. This equation is strengthened by the title of the 18th Dynasty official, Sennefer: “overseer of the store house in the Ways of Horus.”²⁵ Surely the storage facility (*st*)²⁶ did not stand alone on the road to Canaan, rather it would have been within a defensive enclosure of some sort. Furthermore, the Papyrus Anastasi I (I, 27) itinerary names “the fortress (*htm*) of the Way[s of Horus]” in lieu of the expected “fortress (*htm*) of Tjaru,” showing that the two could be used interchangeably.²⁷

The famous battle reliefs of Seti I at Karnak depict the forts and wells along the military corridor from Egypt’s frontier at Tjaru (*htm n tꜣrw*) ending at Gaza (“the City of Canaan”)²⁸ (Fig. 2). With only the benefit of very limited archaeological excavations in the area, Gardiner attempted to harmonize the textual data, the sites named on this relief and those on the itinerary in Pap. Anastasi I (13th century B.C.), with the known archaeological sites in north Sinai.²⁹ For nearly 80 years this seminal work served as the basis for understanding the Way/s of Horus (Fig. 3).³⁰ Only with the recent upsurge of archaeological and regional geological work done in north Sinai has Gardiner’s longstanding reconstruction come under scrutiny.³¹

A prominent feature in the Seti Karnak relief is the cluster of military structures associated with the Fortress Tjaru that are separated by a water way labeled, *tꜣ dnit* (Fig. 2). There has been a lengthy discussion over the years as to whether this waterway is a canal or a Nile branch.³² During the 1970s, members of the Geological Survey of Israel, with the aid of aerial photographs, discovered traces of what they believed were the remains of

24 Valbelle, “La (les) route(s)-d’horus,” in *Hommages à Jean Leclant*, 381.

25 *Urk.* IV, 547.4.

26 Here I concur with Ellen Morris’s interpretation of *st* as a storehouse -- Ellen Morris, *The Architecture of Imperialism: Military Bases and the Evolution of Foreign Policy in Egypt’s New Kingdom* (Leiden: Brill, 2005), 49.

27 Hans-Werner Fischer-Elfert, *Die Satirische Streitschrift des Papyrus Anastasi* (Wiesbaden Otto Harrassowitz: 1983), 150; idem., *Die Satirische Streitschrift des Papyrus Anastasi I: Übersetzung Und Kommentar*, (*Ägyptische Abhandlungen* Vol. 44; Wiesbaden: Otto Harrassowitz, 1986), 232.

28 Alan H. Gardiner, “The Ancient Military Road between Egypt and Palestine,” *JEA* 6 (1920): 99-116. Epigraphic Survey, *The Battle Reliefs of King Sety I*. Vol. 4, *Reliefs and Inscriptions at Karnak* (Chicago: The Oriental Institute, 1986), Plates I-VI.

29 Gardiner, “The Ancient Military Road between Egypt and Palestine,” 99-116.

30 See Valbelle, “La (les) route(s)-d’horus,” 379-86 who has argued the *wꜣ(w)t hr* was the name of the northeastern region of Egypt, and not a route. She may be right, but this does not preclude the actual highway might be one and the same: see Hoffmeier & Moshier, “‘A Highway out of Egypt’: The main road from Egypt to Canaan,” 485-510.

31 James Hoffmeier & Mohamed Abd el-Maksoud, “A New Military Site on the ‘Ways of Horus’ -- Tell El-Borg 1999-2001: A Preliminary Report,” *JEA* 89 (2003): 169-97; Hoffmeier & Moshier, “‘A Highway out of Egypt’: The main road from Egypt to Canaan,” 487-490. Hoffmeier & Moshier, “New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak’s Map of the Eastern Delta and Some Historical Implications,” 167-176.

32 For a history of this feature, see James K. Hoffmeier, *Israel in Egypt* (New York: Oxford University Press, 1997), 164-175.

an ancient canal in north Sinai, which they associated with *t3 dnit* of the Seti relief (Fig. 4).³³ This interesting discovery and the possibility of linking it to *t3rw* further motivated my efforts to investigate the geology and archaeology of the NW Sinai region in order to resolve the question of the location of Tjaru, and its famous *htm*-fortress.³⁴

Tell Abu Sefêh has long been equated with ancient Tjaru/Sile (Fig. 3). Jean Clédat, who extensively surveyed the area and visited archaeological sites along the Canal Zone early in the 20th century, included a schematic map (après Larousse) dated to 1856 in his *BIFAO* 17 (1920) report. This map equates "Tell el Sefieh with Zarou" (i.e. *t3rw*).³⁵ Francis Ll. Griffith investigated the Qantara region in the late 1880s and conducted some excavations at Tell Abu Sefêh, which is located just 3 km east of the Suez Canal at Qantara Sharq (East).³⁶

A major consideration for this identification was the discovery of several inscribed Ramesside monuments, found on the surface at the site and another one that Griffith described as standing in the nearby town of Qantara (although it apparently did not originate there).³⁷ The latter was erected by Ramesses I and Seti I, restored by Ramesses II, and dedicated to Horus Lord of Mesen (Fig. 5).³⁸ The other inscribed blocks found at Abu Sefêh contain Ramesses II's cartouches, and they were likewise dedicated to Horus, Lord of Mesen.³⁹ None of these inscriptions mention Tjaru or the Ways of Horus, but it has long been thought that Mesen and Tjaru are somehow related.⁴⁰ These New Kingdom inscribed blocks have significantly influenced the identification of Tell Abu Sefêh with the 2nd millennium B.C. frontier town of Tjaru. As we shall see in the following section, the other archaeological materials found at the site tell a different story.

Griffith described the size of the tell as 500 yards N-S and 700 E-W,⁴¹ and he excavated it briefly in 1887. Only Greco-Roman period remains were recovered, as he reported: "a fortnight spent trenching the mound produced nothing further that was certainly of a period

33 Amihai Sneh, Tuvia Weissbrod & Itamar Perath, "Evidence for an Ancient Egyptian Frontier Canal," *American Scientist* 63 (1975): 542-48.

34 For a full treatment of this toponym in Egyptian texts, see C. Küthmann, *Die Ostgrenze Ägyptens*. Gardiner, *Ancient Egyptian Onomastica* 2, 202*-204*. Hoffmeier, *Ancient Israel in Sinai*, 90-94. Hoffmeier & Moshier, "'A Highway out of Egypt': The main road from Egypt to Canaan," 487-490. Ellen Morris, *The Architecture of Imperialism: Military Bases and the Evolution of Foreign Policy in Egypt's New Kingdom* (Leiden: Brill, 2005), 41-60, 382-409

35 Jean Clédat, "Notes sur l'Isthme de Suez," *BIFAO* 17 (1920): 103-117.

36 F. Ll. Griffith, in W.M.F. Petrie, *Tanis, Part II: Nebesheh and Defenneh (Tahpanhes)* (London: Egypt Exploration Society, 1888), 97-98.

37 *Ibid.*, 97.

38 For an edition of the texts, see, KRI I, 105-107.

39 Griffith, in Petrie, *Tanis, Part II*, pl. 51; see KRI II 4002-403.

40 For a detailed discussion of the identify of Mesen and the possible association with Tjaru, see James K. Hoffmeier, "Deities of the Eastern Frontier," in *Scribe of Justice: Egyptological Studies in Honour of Shafik Allam*, (Z.A. Hawass, Kh. A. Daoud, & R.B. Hussein, Eds.; Cairo: Supplement aux Annales du Service des Antiquités de l'Égypte, Cahier 42, 2011), 199-200.

41 *Ibid.*, 97.

earlier than the later Ptolemies, nor were any more hieroglyphic inscriptions discovered.”⁴² Clédat himself worked at Tell Abu Sefêh in 1914, exposing some defense towers of the Roman fort, but his report is very limited.⁴³ It was Kùthmann’s seminal work on the east frontier from 1911 (in which he equated Tjaru with Sile and located it at Tell Abu Sefêh)⁴⁴ that proved to have a lasting influence on later Egyptologists, especially on Gardiner in 1920.⁴⁵

Another 50 years would pass before modern excavation methods were used at Tell Abu Sefêh. Eliezer Oren surveyed the site and made some sondages in 1972, and reported that he discovered no material earlier than the Persian and Saite Periods.⁴⁶ In 1995, full-scale excavations of Abu Sefêh began by the members of the Supreme Council of Antiquities, headed by Mohamed Abd el-Maksoud and Mohamed Kamal. The Roman fort that was partially exposed by Clédat was cleared and the entire plan revealed (Fig. 6). It dates to the era of Diocletian (3rd century), but was built within the remains of the larger Persian period defensive enclosure.⁴⁷

Recognizing the problem of having Ramesside inscriptions at Tell Abu Sefêh and nearby Qantara East, and the absence of corresponding architecture or pottery of the New Kingdom in excavations, Kenneth Kitchen stated the obvious: “it (Tell Abu Sefêh) may well be the Sile of later records, but not the New Kingdom. The New Kingdom site cannot be far away.”⁴⁸ The aforementioned inscribed blocks, he suggests, came from that location. Situated 8.5 km NNE of Tell Abu Sefêh is Tell Hebua, specifically Hebua I.⁴⁹ Mohamed Abd el-Maksoud began excavating at Tell Hebua (Heboua) in 1986 (having discovered some inscribed materials while surveying there in 1981)⁵⁰ and there uncovered an impressive mud brick defense wall just below the surface. Initially he cleared an E-W wall on the north

42 Ibid., 97.

43 Jean Clédat, “Nécropole de Qantarah (fouilles de mai 1914),” *RT* 38 (1916): 23-24.

44 Kùthmann, *Die Ostgrenze Ägyptens*, 38-42; Gardiner, *Ancient Egyptian Onomastica* 2, 202*-204*.

45 Gardiner, *Ancient Egyptian Onomastica* 2, 202*-204*.

46 Little has been published on this work; I have found only a footnote in Eliezer Oren, “The ‘Ways of Horus’ in North Sinai,” in *Egypt, Israel, Sinai: Archaeological and Historical Relationships in the Biblical Period* (A. F. Rainey, ed.; Tel Aviv: Tel Aviv University Press, 1987), 113 n. 3.

47 Mohamed Abd el-Maksoud, et. al. “The Roman Castrum of Tell Abu Sayfi at Qantara,” *MDAIK* 53 (1997): 221-226 & plates 31-32. As of this writing, this preliminary report was the only publication available, but I have been informed by members of the North Sinai inspectorate that additional publications will appear soon.

48 Kenneth A. Kitchen, *Ramesside Inscriptions Translated and Annotated: Notes and Comments I* (Blackwell: Oxford, 1993), 13-14.

49 Four areas or zones of Tell Hebua have been identified during the archaeological survey, cf. D. Valbelle, F. Le Saout, M. Chartier-Raymond, M. Abd el-Samie, C. Traunecker, G. Wagner, Y.-Y. Carrez-Maratray and P. Zinani, “Reconnaissance archéologique à la pointe orientale du Delta: Rapport préliminaire sur les saisons 1990 et 1991,” *CRIPEL* 14 (1992): Figure 3.

50 For a report on the earliest work at Hebua, see Mohamed Abd el-Maksoud, *Tell Heboua (1981-1991): Enquête archéologique sur la Deuxième Période Intermédiaire et le Nouvel Empire à l’extrémité orientale du Delta* (Paris: Éditions Recherche sur les Civilisations, 1998), 30-31.

side of the mound that was 350 by 400 m.⁵¹ Still operating with the long-held assumption that Tell Abu Sefêh was Tjaru/Sile, Abd el-Maksoud thought he had discovered the second fort in the sequence depicted on the Seti I Karnak relief, "The Dwelling of the Lion."⁵² But excavations over the next 10-15 years revealed the massive size of this military complex. In addition, there was the discovery of two statues with "Tjaru" inscribed on them, leading to the obvious conclusion that Hebua is Tjaru. Between Hebua I and II (a kilometer to the south) flowed a water channel that now appears to be a Nile distributary.⁵³ The New Kingdom fortress uncovered at Hebua II (with walls as thick as 14 m and huge defense towers) is most likely the *htm n t3rw*.⁵⁴ The positioning of these two forts with the distributary between them is precisely what Seti I's artists portrayed on the celebrated outer hypostyle hall scene (Fig. 2).⁵⁵

There is little doubt now that Hebua is home to ancient Tjaru/Sile. Few reports have been published of Hebua after the New Kingdom, but there is evidence of a Saite Period fort at Hebua I, the SW corner of which was revealed inside the SW corner of the New Kingdom enclosure.⁵⁶ The precise chronological horizon of this fort remains the subject of ongoing investigation. During the Greco-Roman era, a cemetery covered Hebua I, but a settlement and public buildings have been identified from this period.⁵⁷ It appears, then, that by the end of the 3rd Intermediate Period the military function of Hebua had ceased.

51 Mohammed Abd el-Maksoud, "Une nouvelle forteresse sur la route d'Horus Tell Heboua 1986 (Nord Sinâï)," *CRIPÉL* 9 (1987): 13-16.

52 *Ibid.*, 13.

53 B. Marcolongo, "Évolution du paléo-environnement dans la partie orientale du Delta du Nil depuis la transgression flandrienne (8000 B.P.)," *Cahiers de recherches de l'institut de Papyrologie et d'Égyptologie de Lille* 14 (1992): 23-31. Hoffmeier & Moshier, "New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak's Map of the Eastern Delta and Some Historical Implications," 167-176. Stephen O. Moshier and Ali El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways of Horus in Northwest Sinai, Egypt," *Geoarchaeology* 23, no. 4 (2008): 450-473.

54 For the blocks with Tjaru, see M. Abd el-Maksoud and D. Valbelle, "Tell Héboua-Tjarou l'apport de l'épigraphie," *Rd'É* 56 (2005) 7-8 & 18-21. Regarding Hebua II, see Mohamed Abd el-Maksoud & Dominique Valbelle, *Tell Héboua II: Rapport Préliminaire sur le décor et l'épigraphie des éléments architectoniques découverts au cours des campagnes 2008-2009 dans la zone centrale du Khétem de Tjarou*, *Rd'É* 62 (2011): 1-39. The title of this article (and the contents) indicates that Valbelle and Abd el-Maksoud believe the Hebua II is "the fortress of Tjaru."

55 See Hoffmeier, & Abd el-Maksoud, "A New Military Site on the 'Ways of Horus' -- Tell El-Borg 1999-2001," 195-197. Further see "Reconstructing Egypt's Eastern Frontier Defense Network in the New Kingdom (Late Bronze Age)," in *The Power of Walls - Fortifications in Ancient Northeastern Africa* (eds. Friederike Jesse & Carola Vogel; Africa Praehistorica, Köln: Heinrich-Barth-Institut, 2013), 163-194. James K. Hoffmeier & Stephen O. Moshier, "'The Ways of Horus': Reconstructing Egypt's East Frontier Defense Network and the Military Road to Canaan in New Kingdom Times," in *Excavations in North Sinai: Tell el-Borg I*, 54-57.

56 Abd el-Maksoud and D. Valbelle, "Tell Héboua-Tjarou l'apport de l'épigraphie," 2 (Fig. 1). As of this date, this structure has not been discussed in the previous reports. I have examined these remains and discussed them on site with Mohamed Abd el-Maksoud. The Saite Period at Hebua is the subject of the dissertation of Mr. Sayed Abd el-Aleem who is doing his PhD with Dominique Valbelle at the Sorbonne.

57 Abd el-Maksoud, *Tell Heboua (1981-1991)*, 35, 93-108.

As noted above, in the Persian Period, and perhaps as early as the Saite Period, Tell Abu Sefêh emerges as an important military site.⁵⁸ In other words, the demise in the military status of Hebua (*ḥbꜣw/Sile*) towards the end of the 3rd Intermediate Period seems to correspond to the emergence of Abu Sefêh's fortress. It is my working hypothesis that in the late 7th to early 6th century B.C. the name Sile was transferred. Perhaps to make it official, the previously discussed Ramesside inscribed blocks were also moved to Abu Sefêh thereby christening the new Sile which was situated on the northern banks of the ancient lake known as Ballah in modern times.⁵⁹ This location was clearly used for transporting material and people to the south and west, to judge from the discovery of quays on the south side of the site (Fig. 7). One site on east side of the lake that likely received ships from Sile is Tell Ballah, a Ptolemaic period site.⁶⁰

The evidence that Tell Abu Sefêh should be equated with Sile after the 7th century B.C. is admittedly limited. No text mentioning Sile from Persian to Greco-Roman times has yet come to light at Tell Abu Sefêh.⁶¹ The Antonine Itinerary (2nd -3rd centuries A.D.) is certainly the most significant source for the travel routes and toponyms in the eastern frontier of Egypt for the late period, and has been cited by scholars for more than a century as the basis for locating Sile at Abu Sefêh.⁶² What this itinerary provides is a sequence of sites stretching from Pelusium (Tell Farama) in the north, followed by Magdalo (thought to be Tell el-Herr), Sile (Tell Abu Sefêh), Thaubasio, Serapeum,⁶³ and terminating at Clysma (Suez) (Fig. 8).⁶⁴ For the purpose of the present investigation, the important point is that the itinerary proceeds north to south, i.e. from the Mediterranean coast to the shore of the Gulf of Suez. In this regard, Tell Abu Sefêh is 17.75 km SSE of Tell el-Herr, thought to

58 Saite Period pottery was documented by Oren, "The 'Ways of Horus' in North Sinai," 113 n. 3.

59 Today the area south of Tell Abu Sefêh is desert, but it was a lake up until the excavation of the course of the Suez Canal. Early maps show Tell Abu Sefêh by this lake and that there was a canal that ran north from it by Qantarah and NW to Lake Manzeleh. See Clédat, *Notes sur l'isthme de Suez*, Plates I-II.

60 I am grateful to Mr. Mohamed Nour el-Din who is with the North Sinai Inspectorate who excavated there, for the information on this site. Publication of the limited excavations are forthcoming. It could be that this site's horizon would correspond to that of Sile.

61 According to Jean-Yves Carrez-Maratray (*Péluse* [Cairo: IFAO, 1999], 35), only three occurrences are known.

62 Küthmann, *Die Ostgrenze Ägyptens*, 38-39. Jean Clédat, "Pour la conquête du l'Égypte," *BIFAO* 16 (1919): 189-199. Gardiner, "The Ancient Military Road between Egypt and Palestine," 108.

63 This location is at the east end of the Wadi Tumilat, possibly where the "Canal of the Pharaohs" turned into the wadi after flowing north from the Gulf of Suez. On this canal, see Georges Posener, "Le Canal Du Nil a La Mer Rouge Avant Les Ptolémées," *CdE* 13 (1938): 259-73. Alan B. Lloyd, "Necho and the Red Sea: Some Considerations," *JEA* 63 (1977): 142-55. Carol Redmount, "The Wadi Tumilat and the Canal of the Pharaohs," *JNES* 54 (1995): 127-35. Remains of this canal have been detected in aerial imagery and by the ground surveying of Israelite geologists in the 1970s. See Sneh, Weissbrod & Perath, "Evidence for an Ancient Egyptian Frontier Canal," 542-48.

64 On this itinerary, see Konrad Miller, *Itineraria Romana* (Stuttgart: Strecker & Schöder, 1916), 858. For a partial reconstruction of this route, see the map inserted in J. Carrez-Maratray, *Péluse*. For a more complete map, see Philip Mayerson, "The Pilgrim Routes to Mount Sinai and the Armenians," *IEJ* 32 (1982): 51, fig. 3.

be Magdalo (more on this below), which corresponds well with the distance between the sites in the Antonine Itinerary which locates Sile 12 Roman miles from Magdalo.⁶⁵ On the other hand Tjaru/Sile of earlier times (Hebua I) is 8.5 km directly due west of Tell el-Herr; clearly not a stop travelers or caravans would take going from Pelusium to Clysma. This geographical datum suggested by the Antonine Itinerary, along with the fact that Abu Sefêh was home to forts from the Persian through Roman Periods (while Hebua I is not), is convincing evidence that it was Sile of the last half of the 1st millennium B.C. and well into the Roman-Christian era.

The question that must be addressed is, why did the name of the site move? The reason for the move will be explored below as it is the same one for the relocation of the second military site we will consider, viz., Migdol. Let us now examine the textual and archaeological evidence for this site.

2. Migdol/Magdalo

Magdalo/Magdala is the Greek writing for the Semitic word Migdol/Migdal, a loanword into Egyptian during the New Kingdom as *mktr*.⁶⁶ Migdol means "lookout" or "tower."⁶⁷ It derives from the root *diglu* (Akkadian),⁶⁸ meaning "eyesight," "gaze," and "look."⁶⁹ In the Near East in the Late Bronze Age Migdol/Migdal widely occurs in place names in the Levant and in Egypt during the New Kingdom, but on a limited basis.⁷⁰ The earliest possible attestation within Egypt is found in the letter from Satatna, ruler of Acco (EA 234) who mentions "Migdol (*Ma-ag-da-lt^{ki}*) in the land of Egypt."⁷¹ As a toponym, Migdol widely occurs in the Levant during the New Kingdom as early as the reign of Thutmose III.⁷²

The next New Kingdom attestation of Migdol is found in the name of the frontier fort, "the Migdol of Men-maat-Re" (*mktr mn-m3 't-r'*) on the previously mentioned Seti I

65 Miller, *Itineraria Romana*, 857.

66 *Wb* 2, 164. Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, §169-170.

67 For a discussion of the derivation of this Semitic word and the metathesis from *dgl* to *gdl*, see Koehler & Baumgartner, *Lexicon in Veteris Testamenti Libros*, 213-214. Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, §169. Aaron Burke, "Magdaluma, Migdalîm, and Majdila: The Historical Geography and Archaeology of the Magdalu (Migdal)," *BASOR* 346 (2007): 30-34. Seguin, *Le Midgol*, 15-35.

68 *CAD* 3,136.

69 This Semitic root is attested in Egyptian as early as the Old Kingdom as *dg3* > *dgi* (*Wb* 5, 496-497) but is not written as a loanword, suggesting the word entered the Egyptian language at a very early stage.

70 For a thorough treatment of this word and sites bearing the name, see Burke, "Magdaluma, Migdalîm, and Majdila," 29-57 and Joffrey Seguin, *Le Migdol - Du Proche-Orient à l'Égypte* (Paris: Sorbonne, 2007).

71 Rainey and Cochavi-Rainey, *The El-Amarna Correspondence* Vol I, 980-981.

72 Burke, "Magdaluma, Migdalîm, and Majdila, 29-57 offers a list of all known sites with the name Migdol/Migdal in them. See also Shmuel Ahituv, *Canaanite Toponyms in Ancient Egyptian Documents* (Jerusalem: Magnes Press, 1984), 141-142.

Karnak battle reliefs (Fig. 2).⁷³ In this sequence, the first site after “the Fortress of Tjaru” is “the Dwelling of the Lion” followed by “The Migdol of Men-ma’at-Re.” This name occurs again in Pap. Anastasi V (20, 2) where the fort is called *t3 inbt mḥty n(y) mḳtr sti mr-n-ptḥ* -- “the northern wall of the Migdol of Seti Merneptah.”⁷⁴ This could refer either to Seti I or II. Because the third fort in the Karnak sequence is “the Migdol of Men-ma’at-Re,” one wonders if the fort in Anastasi V is named after the second Seti?⁷⁵

The final New Kingdom reference to Migdol is found at Medinet Habu among the Sea Peoples battle scenes. It is at “the Migdol of Ramesses (III)” that the victorious Pharaoh is depicted receiving POWs, and a schematic depiction of the fort is included (Fig. 9).⁷⁶ This fort is most likely the same Sinai fort named “Migdol” in the Seti I relief at Karnak,⁷⁷ and it represents the last occurrence of the name Migdol in the New Kingdom. The term Migdol, however, is incorporated in other toponyms in later periods in Egypt.⁷⁸

Tell el-Herr is one of the most impressive archaeological sites in northwestern Sinai, a true tell unlike many other desert sites in the region (Fig. 10). It was located on the eastern shore of the ancient paleo-lagoon (30° 58’ 2.31” N 30° 29’ 34.45” E) (Fig. 3). Because of its location between Pelusium and Tell Abu Sefêh (assumed to be Sile), it has long been thought that it is Magdalo of the Antonine Itinerary and also Migdol of New Kingdom sources.⁷⁹ After conducting his systematic archaeological survey of north Sinai, Elizer Oren concluded: “Tell el-Her is indeed the only site between Tell Farama (Pelusium) and Tell Abu-Seifeh where a large city of the Classical period was recorded, thus making its identification with Classical Magdalo most plausible.”⁸⁰

73 Epigraphic Survey, *The Battle Reliefs of King Sety I*. Vol. VI. The lower portion of this relief showing the fort sequence was largely lost when the Epigraphic Survey made its facsimile of this scene. In Gardiner’s “The Ancient Military Road between Egypt and Palestine,” (Plates XI-XII) he includes a drawing that relies on earlier copies when the lower section of the relief was still intact showing most of the iconic images of the forts and their names.

74 Alan H. Gardiner, *Late Egyptian Miscellanies, Bibliotheca Aegyptiaca* (Brussels: Édition de la Fondation Égyptologique, 1937), 67. The reference to “the northern wall,” given the setting of this line in the text in the Wadi Tumulat, points to the northern complex of forts in the Tjaru region for the location of Migdol (see discussion of this in James K. Hoffmeier, “The Search for Migdol of the New Kingdom and Exodus 14:2: An Update,” *Buried History* 44 (2008): 7.

75 Over the course of the Ramesside period, that names of the forts remain the same, except that the reigning monarch’s name replaces that of his predecessor.

76 H. H. Nelson, et. al., *The Early Historical Records of Ramesses III* (Chicago: University of Chicago Press, 1930), pl. 42.

77 So argues Donald Redford, “Egypt and Western Asia in the Late New Kingdom: An Overview,” in *The Sea Peoples and Their World: A Reassessment* (ed. Eliezer Oren; Philadelphia: The University of Museum, 2000), 13.

78 Gardiner, “The Ancient Military Road between Egypt and Palestine,” 108. Seguin, *Le Migdol*, chapter 4.

79 For some early examples see Küthmann, *Die Ostgrenze Ägyptens*, 38-42 and Gardiner, “The Ancient Military Road between Egypt and Palestine,” 107-109. Gardiner, “The Ancient Military Road between Egypt and Palestine,” 108.

80 Eliezer Oren, “Migdol: A New Fortress on the Edge of the Eastern Nile Delta,” *BASOR* 256 (1984): 14.

Tell el-Herr has been excavated extensively since the 1980s by Dominique Valbelle.⁸¹ A series of forts was laid bare that range in date from the Persian, Hellenistic, to Roman periods – but nothing was uncovered from the 3rd Intermediate Period, and certainly nothing as early as the New Kingdom. These factors have prompted Joffrey Seguin in a recent study to affirm the traditional view that Tell el-Herr is Magdalo of the Greco-Roman Period.⁸² Due to the thoroughness of Valbelle's excavations over a quarter of a century, going down to basal sand in some areas, it seems logical to conclude that there is no earlier occupation there that could represent Migdol of earlier times.

Two kilometers north of Tell el-Herr lies the site of Qedua, Eliezer Oren's survey number T-21. Indeed, one can easily see the mound of Tell el-Herr from Qedua (Fig. 11). Oren excavated this site briefly, revealing a large fortified enclosure wall, 200 x 200 m made of mud brick,⁸³ with 13.5 m thick walls that become 17 m wide where square towers extend from the walls.⁸⁴ Based on the Egyptian, Levantine, Phoenician, and Cypriote ceramics discovered, he determined that this was the main frontier fort of the Saite Period (7th century B.C.) that probably was destroyed when Cambyses invaded in 525 B.C. Oren argued convincingly that T-21 was the military site named Migdol of the Hebrew prophets Jeremiah and Ezekiel (e.g. Jer 44:1 & 46:14; Ezek 29:10 & 30:6). This determination is reflected in the title of his preliminary report, "Migdol: A New Fortress on the Edge of the Eastern Nile Delta."⁸⁵ Remarkably at present, the name of the fort is not attested in contemporary Egyptian sources.

Subsequent work at Qedua largely supports Oren's findings. Donald Redford conducted two brief seasons in 1993 and 1997, suggesting that it may have been inhabited beyond 525 B.C., "but appears not to have survived into the 5th century."⁸⁶ It may be that its military function began to wane after 525 B.C., but was not totally abandoned until the new Migdol (fort) at Tell el-Herr was fully operational. Egyptian archaeologists with the North Sinai Inspectorate have conducted some further work at Qedua, revealing more of the defense walls that guarded the site.⁸⁷ Oren maintains that "following the destruction by

81 Dominique Valbelle & Etienne Louis, "Les trois dernières Fortresses de Tell el-Herr," *CRIPPEL* 10 (1988): 23-55. Dominique Valbelle & Giorgio Nogara, "La Forteresse du IV^e Siècle Avant J.-C. à Tell el-Herr (Nord-Sinaï)," *CRIPPEL* 21 (1999): 53-66. Dominique Valbelle, "The First Persian Period Fortress at Tell El-Herr," *Egyptian Archaeology* 18 (2001): 12-14. Dominique Valbelle, et. al., *Tell el-Herr: les niveaux hellénistiques et due Haut-Empire* (Paris: Éditions Errance, 2007).

82 Seguin, *Le Migdol*, 119-122.

83 Eliezer Oren, "Migdol: A New Fortress on the Edge of the Eastern Nile Delta," *BASOR* 256 (1984): 7-44.

84 Measurements by Donald B. Redford, "Report on the 1993 and 1997 Seasons at Tell Qedwa," *JARCE* 35 (1998): 51.

85 Oren, "Migdol: A New Fortress on the Edge of the Eastern Nile Delta," 7.

86 Redford, "Report on the 1993 and 1997 Seasons at Tell Qedwa," 45-60, especially 57. Further excavations

87 While this material awaits publication, Dr. Hesham M. Hussein showed me his work in 2008, and the picture used in Fig. XI was taken on that occasion. A brief discussion and a photo and plan of this fort appeared in Arabic by Sayed Abdul Aleem in a booklet edited by Dominique Valbelle, Jean-Yves Carrez-Maratray, & Cédric Meurice, *Le canal de Suez et la coopération archéologique dans l'isthme de Suez*

Cambyses of Saite Migdol at T-21, the name Migdol, or its Greek version Magdolo, was transferred to the new fort on the nearby site of Tell el Her.”⁸⁸

Interestingly, both 7th century B.C. Hebrew prophets Jeremiah and Ezekiel offer some significant data about the site. Jeremiah, who himself travelled with a band of fleeing Judean refugees after the fall of Jerusalem in 586 B.C., entered Egypt via Migdol. He mentions Migdol as the first of a series of Egyptian cities, followed by Tahpanhes (Daphne/Defenneh), and Memphis (Jer 44:1 & 46:14) (Fig. 12). This sequence implies that Migdol was the northern border fort where one enters Egypt; a point corroborated by Jeremiah’s fellow 6th century B.C. prophet, Ezekiel. The latter pairs Migdol with Aswan (Ezek 29:10 & 30:6), the point of which is that these were the extreme frontier towns (with forts) of Egypt, north and south respectively.⁸⁹ The implication is clear enough. Just as Aswan marked Egypt’s southern border, so Migdol did in the north. Most significantly, then, the two biblical prophets provide the ancient name for Qedua, viz., Migdol.

There is textual evidence that the term Migdol continued to be used as a frontier fort in the Persian period. A statement in a 5th century B.C. letter among the Aramaic papyri from Elephantine is instructive. The writer, a Jewish man of Elephantine named Osea (i.e. Hosea), corresponds with his son Shelomam, revealing that the young man was a soldier stationed at Migdol,⁹⁰ at the other end of the country from Elephantine. Not surprisingly, Shelomam must have been finding the weather close to the Mediterranean to be cold in the winter (quite a contrast from Aswan!) and so had written to his father to have his cloak sent to him. Bezalel Porten dates this letter to the first quarter of the 5th century B.C., by which date Shelomam would have been assigned to Migdol at Tell el-Herr.⁹¹

Neither at Qedua nor Tell el-Herr were any traces of the New Kingdom occupation uncovered, let alone a fort. There is no doubt based on Ramesside period texts and depictions that there was indeed a fort in the area bearing the name Migdol. Considering the textual data along with the recent archaeological discoveries at Tell el-Herr and Qedua, Kitchen rightly observed “‘Migdol’ was an entity that moved more than once, if but locally ... The New Kingdom ‘Migdol’ of Sethos I is identical to neither of these sites, but remains to be discovered somewhere in the vicinity.”⁹² So, where is it?

Now that we are certain of Tjaru/Sile’s location at Hebua 1 and 2, and that Tell el-Borg (3.5 km ESE of Hebua II) is most likely the second fort in the Seti I sequence, viz., “The Dwelling of the Lion,”⁹³ then “Migdol of Men-ma’at-re” should be situated south

(Cairo: IFAO & Ministry of Antiquities, nd), 24-25.

88 Oren, “Migdol: A New Fortress on the Edge of the Eastern Nile Delta,” 34-35. T-21 is the site number given to Tell Qedua in Oren’s survey.

89 Ezek. 29:10 reads, “I will make the land of Egypt an utter waste and desolation, from Migdol to Syene, as far as the border of Cush.” Divine judgment was coming in the form of an invasion from the north, starting at Migdol and moving southwards to Aswan and the border of Cush.

90 Bezalel Porten, *The Elephantine Papyri in English* (Leiden: Brill, 2011 - 2nd ed), 108-110.

91 Ibid., 108.

92 Kitchen, *Ramesside Inscriptions Translated and Annotated*, 14.

93 Hoffmeier, & Abd el-Maksoud, “A New Military Site on the ‘Ways of Horus,’” 195-197. Hoffmeier &

or southeast of Tell el-Borg.⁹⁴ Hebua and Tell el-Borg are situated on the west side of the eastern lagoon, whereas both Tell el-Herr and Qedua are on the opposite or east side of the 8 by 8 km paleo-lagoon known as Shi-hor (Fig. 3). Given the locations of later period Migdol sites, I proposed that New Kingdom Migdol should be found somewhere between Tell el-Herr and the southern end of the now defunct lagoon.⁹⁵ Specifically I proposed that it was located at the very southern tip of the lagoon and can be identified with a New Kingdom site from Oren's survey, T-211.⁹⁶ One can see in CORONA satellite images from the late 1960s a dark spot at the southern end of the ancient lake (Fig. 13). CORONA images taken in the winter months, when the desert sands are moist, can reveal the partial footprint of an archaeological site. In Figure 13, the following sites are discernible: Tell el-Luli, Tell Ghaba, Tell Qedua (T-21), Tell el-Herr, and the dark spot at the bottom of the lagoon is precisely where T-211 is located. When enlarged, this dark feature appears to be somewhat square, seemingly reflecting the actual shape of the fort's enclosure walls (Fig. 14a-b). On the east and west sides are concave lines that could be traces of a moat. Within the feature are what appear to be walls.

The efforts to locate T-211 in 2007 were dashed when several members of the Tell el-Borg staff went to the spot, but discovered that a few years earlier the area had been turned into a large fruit tree plantation and covered with about a meter sand (trucked into this rather low lying area) to deal with the seasonal saturation of the sand in the winter months. Not a single sherd was found by our team when we surveyed the area of T-211. It appears, regrettably, that now archaeologists may never gain access to this New Kingdom site that Oren documented forty years ago.⁹⁷

The recent discoveries at Tell Abyad (Oren's T-116)⁹⁸ provide an alternative location for Migdol. Tell Abyad is a New Kingdom site with ceramics dating from as early as the reign of Amenhotep III extending into the early Ramesside era.⁹⁹ It is located on the east side of the lagoon, about 3 km south of Tell el-Herr. Explored by a team under Valbelle's

Moshier, in *Tell el-Borg* Vol. I, 58.

94 Some scholars have entertained the idea that Tell el-Borg might be Migdol of Menmaatre, i.e. Cavillier, Giacomo. "The Ancient Military Road between Egypt and Palestine Reconsidered: A Reassessment," *GM* 185 [2001]: 23-31; Benjamin E. Scolnic, "A New Working Hypothesis for the Identification of Migdol," in *The Future of Biblical Archaeology: Reassessing Methodologies and Assumptions* (eds. J.K. Hoffmeier & A.R. Millard; Grand Rapids: Eerdmans, 2004), 91-120. Even though the Arabic word means "tower" as does the Canaanite-Hebrew word Migdol, it seems doubtful that the ancient Semitic term was translated into Arabic in more recent times.

95 Hoffmeier, "The Search for Migdol of the New Kingdom and Exodus 14:2," 8-10.

96 The limited information from the survey was kindly provided by Professor Oren. In fact he circled on this CORONA image the area of T-211 and marked adjacent sites.

97 I am grateful to the information Professor Oren has shared with me from his survey that remains unpublished.

98 See James K. Hoffmeier, "Tell el-Borg on Egypt's Eastern Frontier: A Preliminary Report on the 2002 and 2004 Seasons," *JARCE* 41 (2004): 86, fig.4.

99 Anne Minault-Gout, Nathalie Favry & Nadia Licitra, *Une Résidence royale Égyptienne: Tell Abyad à l'époque ramesside* (Paris: Paris-Sorbonne University Press, 2012), 94-101.

direction, this site was home to what the excavators called a “residence fortifiée,” a fortified residence, rather than a fortress on the scale of those discovered at Tell el-Borg or Hebua I and II.¹⁰⁰ The Tell Abyad enclosure wall is quite narrow by New Kingdom military standards in north Sinai. A 2 m thick mud-brick wall surrounded the residence, which was widened to 2.75 m in a second building phase.¹⁰¹ One might also expect a *migdol*-type structure to have been more substantial,¹⁰² possibly with a tower or a *migdol*-style gate.¹⁰³

In 1905 Petrie uncovered the Ramesside gate of the fortified enclosure at Tell el-Retaba.¹⁰⁴ Giacomo Cavieller in his study of *migdol*-style gates in the Levant and Egypt recognized the gate at Retaba to be patterned after the Levantine citadel architectural tradition.¹⁰⁵ The current excavations by the Polish-Slovak mission at Tell el-Retaba have confirmed, but slightly modified, the earlier architectural plan of this Ramesside gate. It is, however, definitely a *migdol*-style gate.¹⁰⁶ Perhaps such a gate stands behind the name of the fort, “the Migdol of Men-ma’at-re/Ramesses III” on the Ways of Horus. Certainly, nothing approximating such a robust structure is present at Tell Abyad.

The excavators of Tell Abyad did not reach a firm conclusion about its identity, recognizing that it could be Migdol of Menmaatre or possibly Oren’s T-78. In a recent study on forts in Egypt, Franck Monnier favors equating Tell Abyad with Migdol.¹⁰⁷ Despite the proximity of Tell Abyad to Tell el-Herr and Qedua, I am still inclined to locate the “Migdol

100 Dominique Valbelle & François Leclère, “Tell Abyad: a Royal Ramesside Residence,” *Egyptian Archaeology* 32 (2008): 29-32. Minault-Gout, Favry, & Licitra, *Une Résidence royale égyptienne: Tell Abyad à l’époque ramesside*.

101 Minault-Gout, Favry, & Licitra, *Une Résidence royale égyptienne: Tell Abyad à l’époque ramesside*, 23.

102 On the architectural aspects of a *migdol*-fort, see Seguin, *Le Migdol*, 95-117. Giacomo Cavillier, “‘Migdol’ di Ramesse III a Medinet Habu fra originalità ed infussi asiatici,” *Syria* 81 (2004): 23-31. Because *mgdl* is a Semitic word that most commonly means “tower” and is associated with fortifications (Koehler & Baumgartner, *Hebrew and Aramaic Lexicon of the Old Testament*, 543-544), it might be thought that a toponym using “Migdol” might have such a tower in it. The tower-gate entrance of Ramesses III’s mortuary temple at Medinet Habu is thought to replicate the Canaanite *migdol*-style gate (see the words of Seguin and Cavillier in previous note).

103 One recognizes that the term used for fort may not correspond to the installation’s architecture. Gerhard Haeny has noted that when it comes to architectural terminology, because “Egyptians did not use building terms very consistently” ... “Attributing too much importance to the Egyptian word used in particular text could be misleading” (“New Kingdom ‘Mortuary Temples’ and ‘Mansions of Millions of Years,’” in *Temples of Ancient Egypt* [ed. B. Shafer; Ithaca: Cornell University Press, 1997], 97).

104 W.M.F. Petrie, *Hyksos and Israelite Cities* (London: British School of Archaeology in Egypt, 1906), Pl. XXXV.

105 Cavillier, “‘Il ‘Migdol’ di Ramesse III a Medinet Habu fra originalità ed influssi Asiatici,” 63-65. Others have followed Cavillier in recognizing the *migdol*-type gateway at Retaba, see Franck Monnier, *Les fortresses égyptiennes: Du Prédynastique au Nouvel Empire* (Brussels: Éditions Safran, 2010), 89; Seguin, *Le Migdol*, 109-117.

106 Slawomir Rzapka, et. al., “New Kingdom and the Third Intermediate Period in Tell el-Retaba: Results of the Polish-Slovak Archaeological Mission, Season 2009-2010,” *Ägypten und Levante* 21 (2011): 139-142.

107 Franck Monnier, *Les fortresses égyptiennes* (Brussels: Safran, 2010), 85.

of Menmaatre” at the southern tip of the lagoon, T-211, although one cannot rule out the possibility of Tell Abyad – located about 5 km north of T-211.

There are three reasons for preferring T-211 over Tell Abyad. First, if Tell Abyad is Migdol of New Kingdom texts, then what is T-211? The Seti I and the Pap. Anastasi I sequence mention no fort between the Dwelling of the Lion/Ramesses and Migdol.¹⁰⁸ Second, as mentioned above, Ramesses III received the surrender of the Sea Peoples at the fort named Migdol of Ramesses III. One might be inclined to think if this fort played a critical role in the battle against the Sea Peoples that a more substantial defensive structure would have been preferable for the king’s protection and military activities than the lightly defended Tell Abyad. Third, related to this point is the fact that the chronological horizon of Tell Abyad, judging from the published ceramics, dates from the time of Amenhotep III to Ramesses II,¹⁰⁹ and appears not to have continued in use in the later 19th and 20th Dynasties. This chronological factor opens up the possibility that Tell Abyad is the next Ramesside structure after Migdol in the itinerary, viz. “the Wadjet District of Men-ma’atre.” Consequently, I provisionally hold to the following identifications:

Egyptian Name	Archaeological Site
Tjaru/The Ways of Horus ¹¹⁰	Hebua I
<i>tꜣ dnit</i>	Hebua distributary (early Pelusiac)
<i>ḥtm n tꜣrw</i>	Hebua II
The Dwelling of the Lion/Ramesses II	Tell el-Borg
Migdol of Menmaatre/Ramesses III	T-211
Wadjet District of (Ramesses II)	Tell Abyad

What the foregoing demonstrates is that there are good textual reasons to believe that the New Kingdom frontier fort called Migdol was located beyond Tjaru and the “Dwelling of the Lion,” and possibly at T-211 situated 3.6 km SE of Tell el-Borg. Sometime at the end of, or just after the New Kingdom this fort was abandoned,¹¹¹ only to reappear in the

108 For a convenient correlation of these two sources, see Gardiner, “The Ancient Military Road Between Egypt and Palestine,” 113. It should be noted that while Pap. Anastasi I does not mention Migdol (see Fischer-Elfert, *Die Satirische Streitschrift des Papyrus Anastasi*, 150), Seti I refer to the name of the well or cistern associated with Migdol as *ḥpn*, which apparently has the variant writing *ḥtyn*, in Anastasi I. Gardiner argued, despite the differences in writing, they referred to the same water source (Ibid., 107).

109 Minault-Gout, Favry, & Licitra, *Une Résidence royale égyptienne: Tell Abyad à l’époque ramesside*, 113.

110 Since every fort had a name, it stands to reason that the fort at Hebua I was named even though presently, we do not know what it was; *ḥtm n tꜣrw* (as suggested by the placement of the label on the Seti I scene) was likely the recently discovered fort at Hebua II. Since we do not know the name of the fort at Hebua I, I have simply called it “Tjaru/Ways of Horus.”

111 Our knowledge of the east frontier defense network in the 3rd Intermediate period is limited indeed. Given the vastness of Hebua, it could be that data from the 11th-8th century might be forthcoming in the future. It is now becoming evident that at Tell Retaba, where a New Kingdom fort guarded that access route to Egypt via the Wadi Tumilat, the 3rd Intermediate period is represented. The Polish team has recently

form of a substantial fort named Migdol in the Saite Period at Tell Qedua (Fig. 11). After the Persian conquest, the fort experienced some damage and was subsequently abandoned, and a new fort named Migdol replaced it at Tell el-Herr (see Fig. 10). The relocation from T-211 to Tell Qedua represents a move of 8.30 km, and then 2.5 km from Qedua to Herr. What happened? Why the movements?

3. An explanation for the movement of eastern frontier sites

In the case of Tjaru/Sile and Migdol, both are eastern frontier sites in the New Kingdom, strategically located military installations. As such, Egypt's eastern frontier would always need defending from the east. Proof of this claim is that these military sites continued in some form at different locations for more than 1500 years.

It has been argued that the location of the New Kingdom forts in northwestern Sinai were strategically placed to guard the roads and Nile distributaries that led into the Delta, while taking full advantage of the lakes and marshlands as natural defenses in the region.¹¹² The paleo-environmental picture for the 2nd millennium B.C. in northwestern Sinai has become clearer, thanks to the work of geologists over the past 30-40 years, especially that of David Neev,¹¹³ Amihai Sneh and Tuvia Weissbrod,¹¹⁴ Jean-Daniel Stanley and his associates,¹¹⁵ and most recently Stephen Moshier who collaborated with members of the Geological Survey of Egypt.¹¹⁶

uncovered a stable with hitching stones (see Slawomir Rzepka, et. al., "New Kingdom and the Third Intermediate Period in Tell el-Retaba," *ÄuL* 21 (2011): 139-184). At nearby Tell el-Maskhuta, Naville discovered a statue of "the lieutenant of Tjeku (Succoth)" named Ankh-Renp-nefer, who served under Osorkon II (ca. 860), see Edouard Naville, *The Store-City of Pithom and the Route of the Exodus* (London: Trübner & co.: 1888), 15-16, plate 4. So it is clear that the Wadi Tumilat had a military presence in the 3rd Intermediate period. It is therefore inconceivable that the Ways of Horus was not likewise defended during this period despite the dearth of supporting data.

112 Hoffmeier, "Reconstructing Egypt's Eastern Frontier Defense Network in the New Kingdom (Late Bronze Age)," 165-190.

113 D. Neev, "The Pelusium Line – a major transcontinental shear," *Tectonophysics* 38 (1977): T1-T8. David Neev, N. Bakler & K.O. Emery, *Mediterranean Coasts of Israel and Sinai: Holocene Tectonism from Geology, Geophysics, and Archaeology* (New York: Taylor & Francis 1987).

114 A. Sneh and T. Weissbrod, "Nile Delta: The Defunct Pelusiac Branch Identified," *Science* (1973): 59–61. Sneh, Weissbrod, & Pereth, "Evidence for an Ancient Egyptian Frontier Canal," 542–48. A. Sneh et al., "Holocene Evolution of the Northeastern Corner of the Nile Delta," *Quaternary Research* 26 (1986): 194–206.

115 Daniel Stanley & Vincent Coutellier, "Late Quaternary Stratigraphy and Paleogeography of the Eastern Nile Delta, Egypt," *Marine Geology* 77 (1987): 257-75. D. J. Stanley & M. M. Abu-Zeid, "Temporal and Spatial Distribution of Clay Minerals in Late Quaternary Deposits of the Nile Delta, Egypt," *Journal of Coastal Research* 6, no. 3 (1990): 677-98. D.J. Stanley & G.A. Goodfriend, "Rapid Strandplain Accretion in the Northern in the Nile Delta in the 9th Century AD, and the Demise of the Port of Pelusium," *Geology* 27, no. 2 (1999): 147-50.

116 Moshier was the staff geologist at Tell el-Borg. See Hoffmeier & Moshier, "New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak's Map of the Eastern Delta and Some Historical Implications," 167-176. Moshier & El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways

Northwestern Sinai owes much of its formation to its location on the Pelusium Line. According to Neev, it is a transcontinental linear structure along the Central Plate (which is moving northwards) and the NW African Plate. He interpreted the structure to extend in a northeasterly direction from Brazil across the Atlantic Ocean seafloor to the west coast of Africa, across North Africa to the Mediterranean coast near the ancient site of Pelusium in the eastern Nile Delta, and terminating in Turkey.¹¹⁷ The Pelusium Line was instrumental in formation of the coastline of the Sinai in Pharaonic times and earlier. The ancient Mediterranean coastline is clearly visible in CORONA satellite images used in our study of the paleo-environment in Northwestern Sinai; it runs ENE at about a 30° angle from the N-S Suez Canal (Fig. 13). Moshier's investigation of the ancient coast showed that it was an ancient beach ridge (known along the eastern Mediterranean coast as the kurkar ridges) composed of poorly cemented, cross bedded sandstone.¹¹⁸ This ridge controlled the direction of the eastern Nile distributary(ies), forcing them to flow south of the ridge and towards the east.¹¹⁹

Two Nile distributaries are now known to have flowed across northwestern Sinai, proceeding west to east in Pharaonic times. The northern one passed between Hebua I and II, the pre-Pelusiatic distributary,¹²⁰ and debouched into a large lagoon about 3 km east of Hebua I. The southern branch passed by Tell el-Borg (Fig. 13). The course of the former was identified by Bruno Marcolongo in connection with the early investigations at Tell Hebua.¹²¹ The latter was only discovered during the 2001 excavation season at Tell el-Borg, and it was followed by tracing this feature using CORONA images and inspecting north-south canals that intersected the ancient distributary.¹²² Subsequent work by Moshier in the Ballah basin has led to the creation of a computer-modeled hydrologic reconstruction that suggests that a Nile branch flowed into the Ballah Lake, which in turn exited on the east side and passed by Tell el-Borg before emptying into the eastern lagoon (Fig. 3 & 15).¹²³

of Horus in Northwest Sinai, Egypt," 450-473. Stephen O. Moshier, "The Geological Setting of Tell el-Borg with Implications for Ancient Geography of Northwest Sinai," in *Tell el-Borg I*, 62-83.

117 Neev, "The Pelusium Line – a major transcontinental shear," T1-T8.

118 Moshier & El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways of Horus in Northwest Sinai, Egypt," 458-459. Moshier, "The Geological Setting of Tell el-Borg with Implications for Ancient Geography of Northwest Sinai," 67-69. At Tell el-Borg, inland from the coast, 2 km south of the dune ridge, a Kurkar formation was uncovered in Field VI & VII, which accounts for the elevation of the site and, no doubt, this mound represents an earlier formation than the coastal ridge on which Hebua I is situated (see previous note, p. 69).

119 Moshier & El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways of Horus in Northwest Sinai, Egypt," 453-460.

120 I call it pre-Pelusiatic since the site of Pelusium was not established until the first millennium B.C.

121 Marcolongo, "Évolution du paléo-environnement dans la partie orientale du Delta du Nil depuis la transgression flandrienne (8000 B.P.)," 23-31.

122 Hoffmeier & Moshier, "New Paleo-Environmental Evidence from North Sinai to Complement Manfred Bietak's Map of the Eastern Delta and Some Historical Implications," 168-169; Moshier & El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways of Horus in Northwest Sinai, Egypt," 461-468.

123 For a preliminary report and map of this reconstruction, see Stephen O. Moshier & James K. Hoffmeier,

Manfred Bietak has long equated the eastern lagoon with š-*hr* (Shi-hor), the Waters of Horus of Ramesside period texts.¹²⁴ This lagoon was open to the Mediterranean in New Kingdom times (and earlier) as is clear from the break in the kurkar ridge that represents a tidal inlet (Fig.13). The depression in the crust (where the Nile's water collected to create the lagoon) is associated with the aforementioned Pelusium Line. To the WSW is the Ballah Lakes which occupied a depression that aligns with a longer N-S stretch of low topography between Port Said and Suez that extends from the Gulf of Suez (present location of the Suez Canal).

The presence of the eastern lagoon and its opening to the sea explains why the military road from Egypt to Canaan had to circle around the lagoon before turning east across north Sinai. It is along this circuitous route where the initial military sites are located that are portrayed on the Seti I relief at Karnak. The body of water shown at the bottom right of the Seti I relief (Fig. 2), by which the Shasu POWs are walking, might represent the lagoon.

Tell el-Borg and Tell Abyad are devoid of 3rd Intermediate period remains, suggesting they were abandoned towards the end of the New Kingdom and subsequently the route around the lagoon fell out of use. We notice, however that new sites from later periods and some earlier sites of the 1st millennium, lie on the old coastline (i.e. the dune ridge).

The change in the location of later period forts from those of the 2nd millennium can be attributed to a combination of natural forces:

1. The late Karl Butzer pointed to the poor harvests, depreciation of land prices, combined with inflationary costs of commodities in the 20th Dynasty¹²⁵ as evidence that Nile inundations were dangerously low, and he spoke of “catastrophic failure in the annual flood.”¹²⁶ The Nile branches in the eastern Delta experienced “lower discharges” starting at the end of the reign of Ramesses II, Rushdi Said observes in his study on the history of the Nile.¹²⁷ The reduced volume of the Nile led to the silting up of the Pelusiac distributary that resulted in the abandonment of the Ramesside Residence of Pi-Ramesses.¹²⁸
2. The northward migration of the Nile resulted in the expansion of the delta, thereby

“Which Way Out of Egypt? Physical Geography Related to the Exodus Itinerary,” in *Israel's Exodus in Transdisciplinary Perspective* (eds. Thomas Levy, et. al.; Cham: Springer International Publishing Switzerland, 2015), 101-108.

124 This equation was made by Manfred Bietak, see *Tell el-Dab'a II* (Vienna: Österreichischen Akademie der Wissenschaften, 1975), figs. 10 & 23; idem. “Comments on the ‘Exodus’,” in *Egypt, Israel, Sinai: Archaeological and Historical Relationships in the Bible Period* (ed. A. F. Rainey; Tel Aviv: Tel Aviv University Press, 1987), 165; idem, *Avaris the Capital of the Hyksos: Recent Excavations at Tell El-Dab'a* (London: British Museum, 1996), fig. 1. Shihor is attested as a body of water on the eastern limits of Egypt in the Hebrew Bible: Josh 13:3; Isa 23:3; 1 Chron 13:5 & Jer 2:18.

125 See J.J. Janssen, *Commodity Prices from the Ramesid Period* (Leiden: Brill, 1975).

126 Karl Butzer, *Early Hydraulic Civilization in Egypt: A Study in Cultural Ecology* (Chicago: University of Chicago Press, 1976), 56.

127 Rushdi Said, *The River Nile: Geology, Hydrology and Utilization* (Oxford/New York: Pergamon, 1993), 150.

128 Ibid, 150. Butzer, *Early Hydraulic Civilization in Egypt*, 29. See also, Bietak *Tell el-Dab'a II*, 85ff.

extending the Mediterranean coast to the north and east. This in turn allowed the Pelusiac branch to flow in an easterly direction to the north of the earlier coastline.¹²⁹ The course of the later Pelusiac Nile was discovered in the 1970s by Sneh and Weissbrod.¹³⁰ Traces of this distributary are visible in CORONA images (Fig. 13, see also Fig. 4).

3. Another factor has been suggested which may have contributed to the reduced flow of the Nile to northwest Sinai is tectonic activity along the Pelusium Line. This may have caused some tilting of northwestern Sinai, which resulted in water coursing away from the area, thus reducing the discharge into the eastern lagoon.¹³¹

These three forces led to the silting up of the Hebua and Borg distributaries, limiting drastically the flow of water to the lagoon. By the middle centuries of the 1st millennium B.C. the once vibrant lagoon had been reduced to a much smaller lake or wetland.¹³² Proof of this desiccation comes from archaeological data.

First, Tell el-Ghaba¹³³ was established in the 7th century B.C. about 1 km north of where the lagoon opened to the Mediterranean during the New Kingdom (Fig. 12 & 13). It could not have been constructed at this location 500 years earlier. Second, Tell Qedua was built around the same time as Tell el-Ghaba and was situated just inside the maximal coastline of the lagoon rather than on the higher ground outside of the earlier shoreline as the CORONA image reveals (Fig. 13). The paleo-lagoon had shrunk sufficiently by the 8th and 7th centuries B.C. for these respective constructions to be located where they were.

Tell el-Ghaba is located on a line between Qedua, 4.5 km to its east, and the Saite fort at Hebua I/Sile about 7.5 km to its west. This sequence of sites marked the 3rd Intermediate period road into Egypt (Fig. 12). Apparently, the fort at Qedua, Migdol of the Hebrew prophets, was the entry point of this new route into the Delta. Further to the east is Tell Defenneh, Daphnae, that is Tahpanhes (*t3 hwt p3 nhsy*)¹³⁴ mentioned by Jeremiah (2:16, 44:1, 43:6, 8 & 46:14) and Ezekiel (30:18). The former mentions the sequence of Migdol, Tahpanhes and Memphis (Jer. 44:1), a logical route of travel to Egypt from the east to the heart of Egypt. It would also be the route one would take to Egypt's principal east Delta capital, Tanis located to the WNW of Tell Defenneh. Defenneh has been equated with the military site where, according to Herodotus, Psamtik I (Psammetichus) established a

129 Daniel Stanley & Vincent Coutellier, "Late Quaternary Stratigraphy and Paleogeography of the Eastern Nile Delta, Egypt," 257-275.

130 Sneh and Weissbrod, "Nile Delta: The Defunct Pelusiac Branch Identified," 59-61.

131 Moshier & Hoffmeier, "Which Way Out of Egypt? Physical Geography Related to the Exodus Itinerary," 104.

132 Moshier & El-Kalani, "Late Bronze Age Paleogeography along the Ancient Ways of Horus in Northwest Sinai, Egypt," 259-260.

133 Perla Fuscaldo, *Tell el-Ghaba II: A Saite Settlement in North Sinai Egypt (Argentine Archaeological Mission, 1995-2004)*, (Buenos Aires: Consejo Nacional de Investigaciones Científicas y Técnicas, 2006). Silvia Lupo, *Tell el-Ghaba III: A Third Intermediate-Early Saite Period Site in the Egyptian Eastern Delta: Excavations 1995, 1999 and 2010 in areas I, II, VI and VIII* (Oxford: BAR, 2015).

134 For a thorough treatment of the name Daphne, see François Leclère, "Tell Dafana: Identity, Explorations and Monuments," in *Tell Dafana Reconsidered: The Archaeology of an Egyptian Frontier Town* (eds. F. Leclère & A.J. Spencer; London: The British Museum, 2014), 1-40.

garrison. This in turn explains its importance and why Tahpnahe is named by Jeremiah.¹³⁵

4. Conclusions

The military road between the eastern delta and the southern Levant that Gardiner sought to trace in 1920 can now be reconstructed with much more accuracy. The New Kingdom route had to go circuitously around the paleo-lagoon, the body of water known as Shihor of Egyptian texts (Fig. 3 & 13). An easterly continuation of the road from the Avaris/Pi-Ramesses area,¹³⁶ the “Ways of Horus” flowed between Hebua I & II, turning southeast due to the presence of Shihor to Tell el-Borg. It continued to T-211 at the southern end of the lagoon before angling north to Tell Abyad, after which it turned eastwards not far from the coast and headed towards Canaan. This route was used throughout the New Kingdom and in earlier periods.¹³⁷ In the final centuries of the 2nd millennium B.C., the process of desiccation of the Nile distributaries and eastern lagoon began, changing the regional landscape. As a consequence, the forts around the lagoon were abandoned late in the New Kingdom. Meanwhile in the northern area of the lagoon had filled in and the ancient coastline served as the new overland route into the Delta. Hence, the sites of Qedua, Ghaba, Hebua, and Daphnae were established (or rebuilt as in the case of Hebua/Sile) starting early in the Saite period to accommodate to the new terrain on the east frontier, and new power centers in the Delta like Tanis and Bubastis (Fig. 12 & 13).

The more northerly course of the Pelusiac in the 3rd Intermediate period was also influential in the placements of settlement and military establishments. A 2007 visit to Tell Defenneh revealed in the cross section of a new north-south canal the place where the Pelusiac Nile passed by the site. Just recently, these observations were confirmed by others and publically announced in the Egyptian press by Dr. Mohamed Abd el-Maksoud.¹³⁸ The Pelusiac of the late period proceeded east by Daphnae and then across northwestern Sinai to Tell Farama (Pelusium) where it debouched into the Mediterranean (Fig. 4, 12, 13). The origin of the site of Pelusium remains obscure as most of the recent archaeological work has concentrated on surveying, clearing, and conserving of the latest (surface) structures.¹³⁹

135 For discussion of this, see Leclère, “Tell Dafana: Identity, Explorations and Monuments,” 9-10.

136 For a discussion of road beginning at Avaris/Pi-Ramesses, see Hoffmeier & Moshier, “‘A Highway out of Egypt’: The main road from Egypt to Canaan,” 487-488.

137 On the earlier use of the Ways of Horus as the road across Sinai, see Eliezer Oren, “The Overland Route Between Egypt and Canaan in the Early Bronze Age (Preliminary Report),” *Israel Exploration Journal* 23 (1973), 198-205, pls. 52-54; idem., “The ‘Ways of Horus’ in North Sinai,” 69-119; Idem. “Northern Sinai,” in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, (ed. by Ephraim Stern; Jerusalem/New York: Israel Exploration Society & Simon and Schuster, 1993), 1386-96. Oren has advised me that T-211 did have some later period remains as did nearby T-78, 51 & 50.

138 I have had a personal communication from Dr. Abd el-Maksoud on this matter. See also Nevine el-Aref, “Part of long-lost Pelusiac branch of Nile uncovered in Egypt’s Qantara,” *Ahramonline* (Friday, October 21, 2016) -- <http://english.ahram.org.eg/NewsContent/9/40/141504/Heritage/Ancient-Egypt/Part-of-longlost-Pelusiac-branch-of-Nile-uncovered.aspx>.

139 Mohamed Abd el-Maksoud, Ahmed el-Taba’i, & Peter Grossman, “The Late Roman army castrum at Pelusium (Tall al-Farama),” *CRIPPEL* 16 (1994): 95-104. Krzysztof Grzymalski, et. al., “Canadian-Egyptian

A geo-archaeological study by Stanley of the area around Pelusium, including drilling for subsurface datable faunal remains, has determined that the site was probably initially inhabited around 800 B.C.¹⁴⁰ Pelusium's growing importance in the final centuries B.C. was due to the fact that, like Tjaru in the second millennium, it was on the Mediterranean coast and was accessible by the Nile (Fig. 13).

Due to the changes in the flow of the Nile distributaries entering northwestern Sinai and the desiccation of the paleo-lagoon, the site of Migdol moved at least three times: from T-211, to Qedua, and finally to Tell el-Herr. The transfer of the name Sile from Hebua I and II to Tell Abu Sefêh in the late Saite to Persian period seems to correspond to the establishment of the route between Pelusium on the Mediterranean to Clysma on the Gulf of Suez (Fig. 8). Another factor in the establishment of the routes into the Delta and to the Gulf of Suez was the establishment of Pelusium as the foremost eastern port of Egypt.

Excavations at Tell el-Farama (Pelusium) West: Spring 1993," *CRIPEL* 16 (1994): 109-122. Horst Jaritz, et. al. Pelusium: Prospection archéologique et topographique de la région de Kana'is," *CRIPEL* 16 (1994): 123-153.

140 Jean-Daniel Stanley, Maria Bernasconi & Thomas Jorstad, *Journal of Coastal Research* 24 (2008): 451-462. Stanley & Goodfriend, "Rapid Strandplain Accretion in the Northern Nile Delta in the Nile Delta in the 9th Century AD, and the Demise of the Port of Pelusium," 147-50

Figures



Fig. 1 - Ted Brock and inspector Rifaat Gindy, March 1994
(Photo by James K. Hoffmeier)

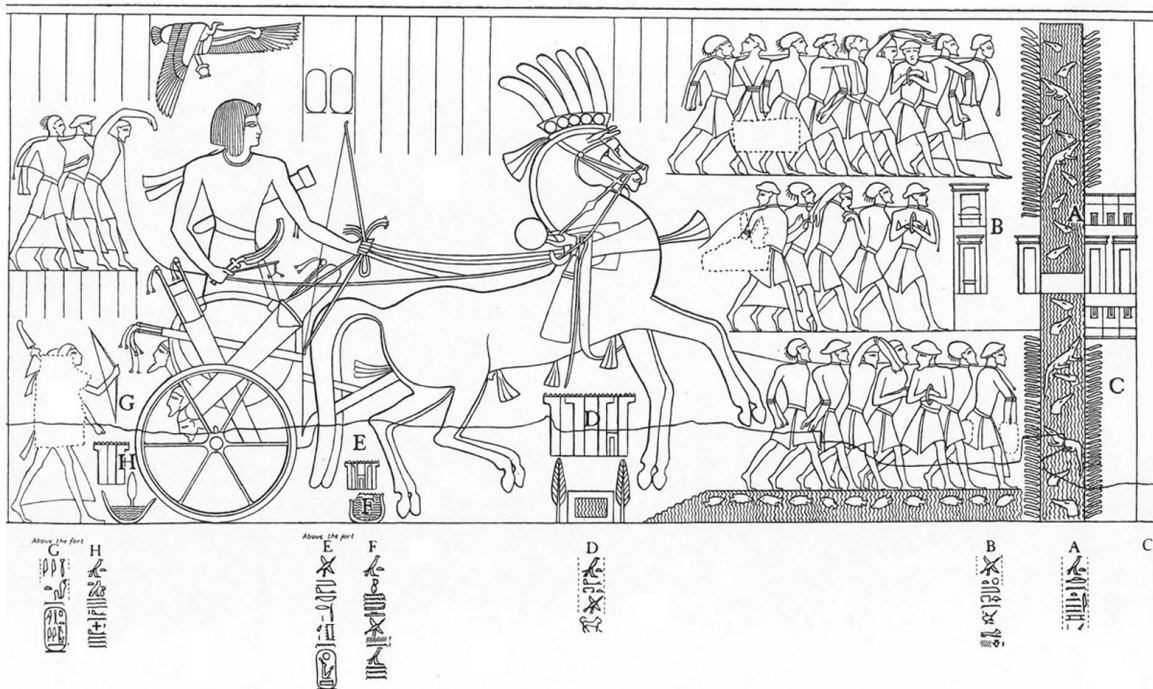


Fig. 2 - Seti I Relief at Karnak (Alan Gardiner, "The Ancient Military Road between Egypt and Palestine," *JEA* 6 (1920): pl. xi.

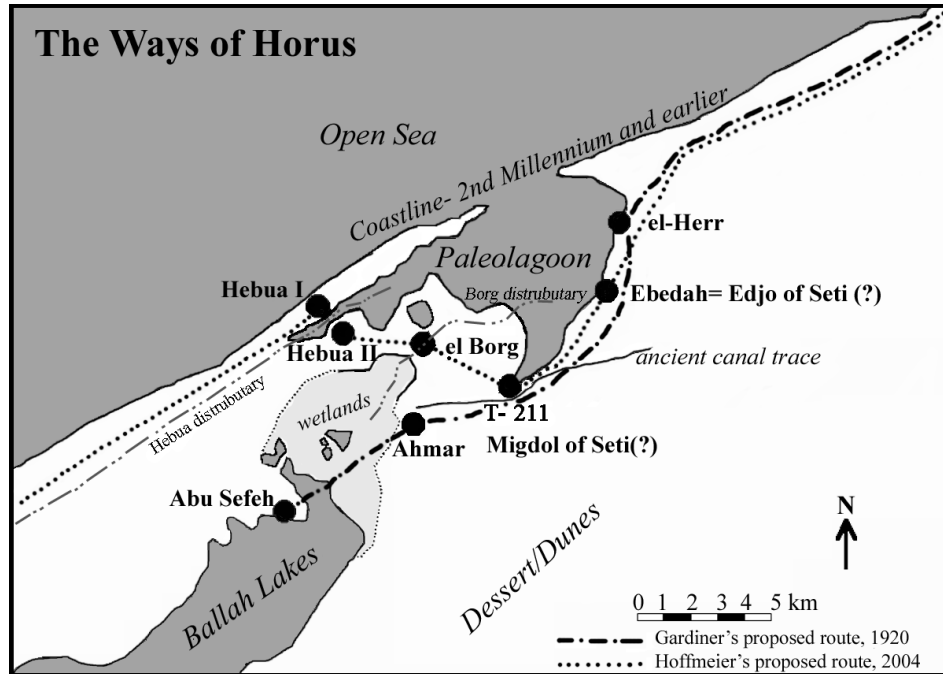


Fig. 3 - NW Sinai map by Stephen O. Moshier, digitized by Jessica Hoffmeier Lim

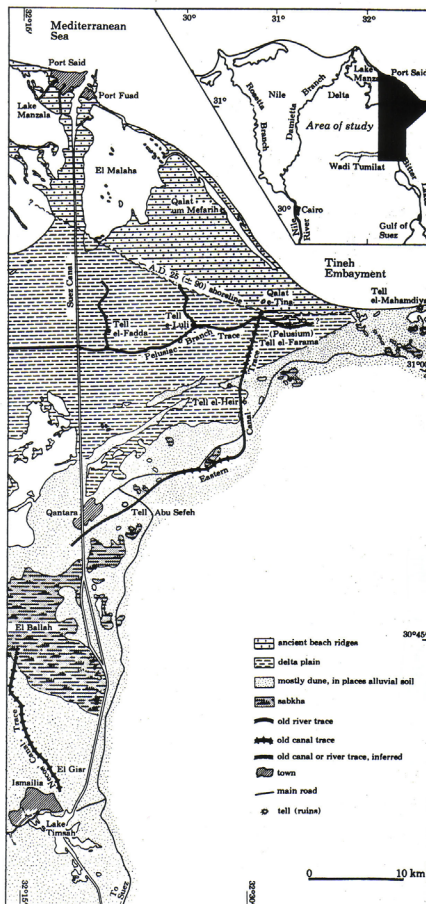


Fig. 4 - Geological/Archeological Map of NW Sinai (Amihai Sneh, Tuvia Weissbrod & Itamar Perath, "Evidence for an Ancient Egyptian Frontier Canal," *American Scientist* 63 (1975): 543)



Fig. 5 - Ramesses II stela from Qantara Sharq now in Ismailiya Museum
(Photo by James K. Hoffmeier)



Fig. 6 - Tower of Roman Period fort at Tell Abu Sefêh, 1995
(Photo by James K. Hoffmeier)



Fig. 7 - Quay on south side of Tell Abu Sefêh, 1995
(Photo by James K. Hoffmeier)

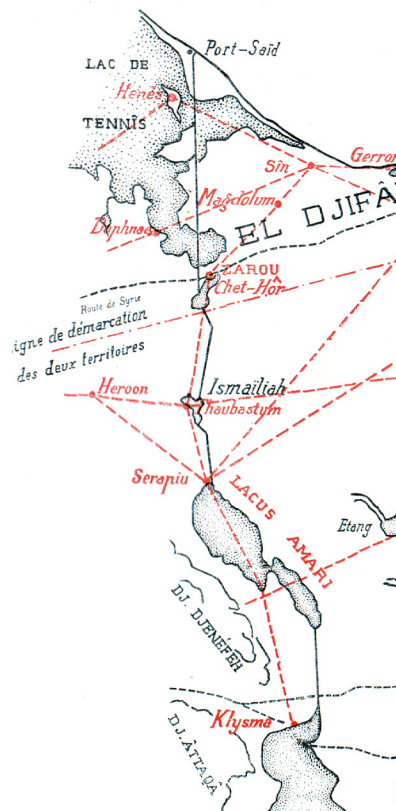


Fig. 8 - Map of Jean Clèdat, "Pour la conquête de l'Égypte," *BIFAO* 16 (1919): 116.

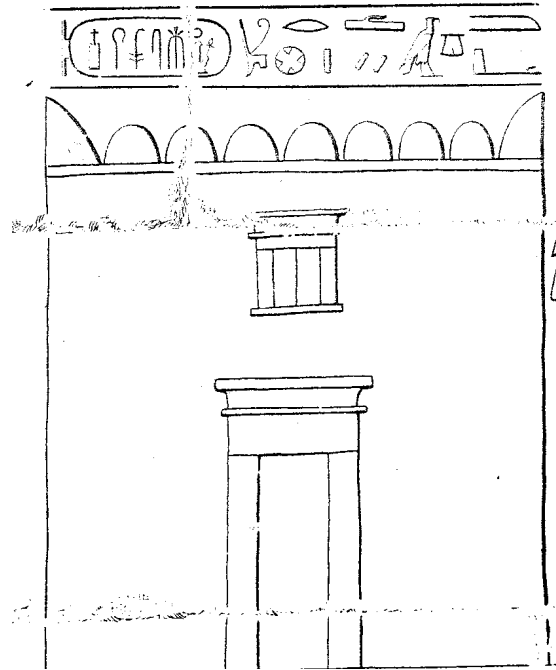


Fig. 9 - Migdol of Ramesses III from Medinet Habu.
(H. H. Nelson, et. al., *The Early Historical Records of Ramesses III* (Chicago: University of Chicago Press, 1930), pl. 42)



Fig. 10 - Tell el-Herr
(Photo by James K. Hoffmeier)



Fig. 11 - Tell el-Herr from Tell Qedua
(Photo by James K. Hoffmeier)

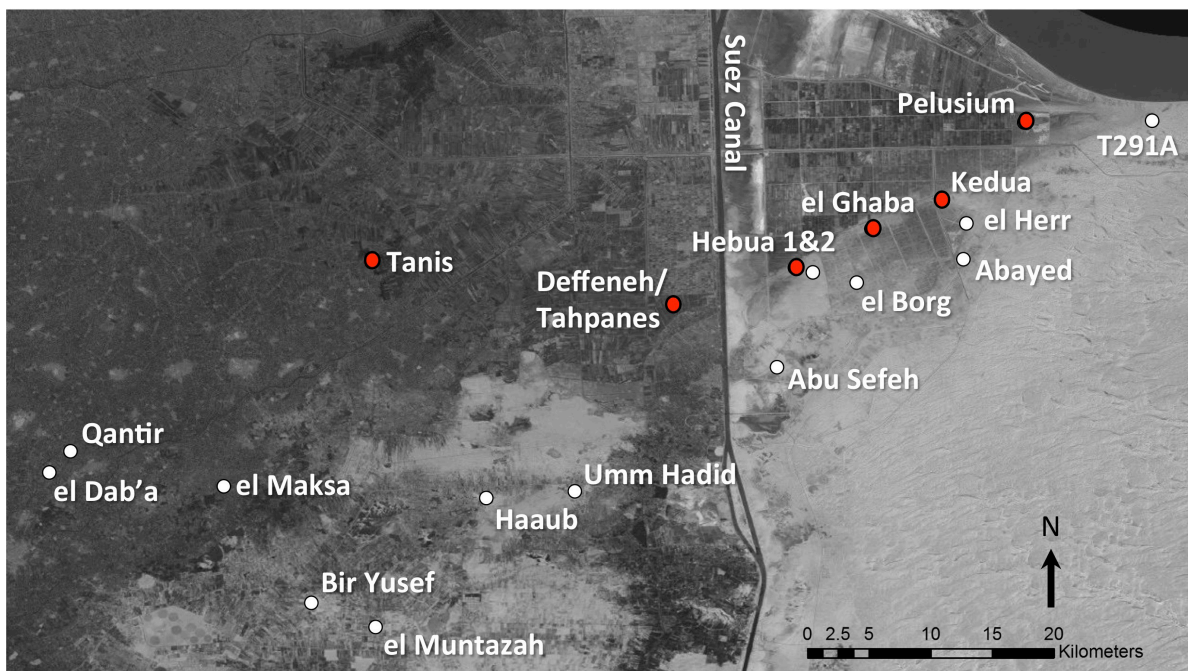


Fig. 12 - Satellite Image showing sequence of sites from Pelusium to Tanis (Prepared by Stephen O. Moshier, sources Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USGS, AeroGRID, IGN, and the GIS User Community)

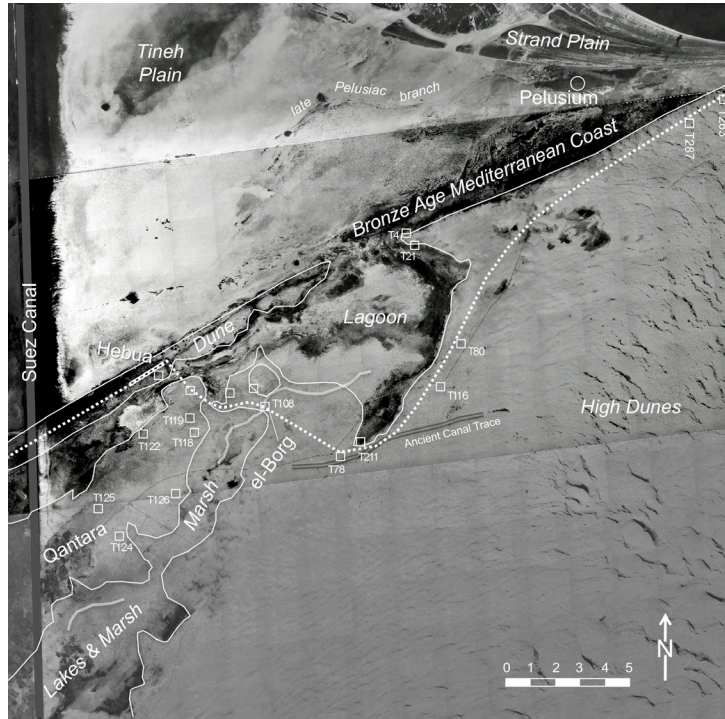


Fig. 13 - NW Sinai (CORONA satellite photograph December 1967, USGS EROS Center)

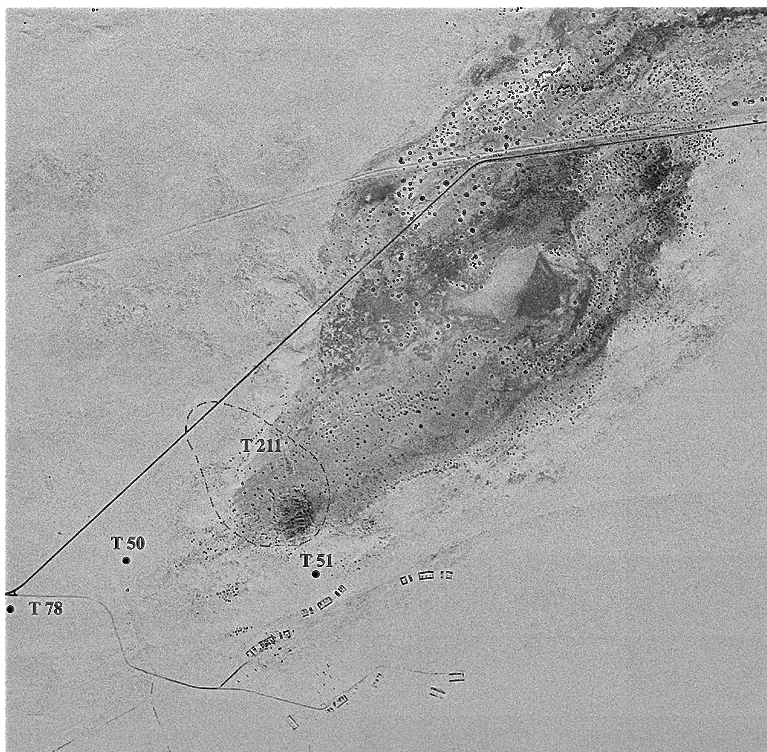


Fig. 14 - A. Archaeological sites at the southern end of paleo-lagoon (CORONA satellite photograph December 1967, USGS EROS Center)

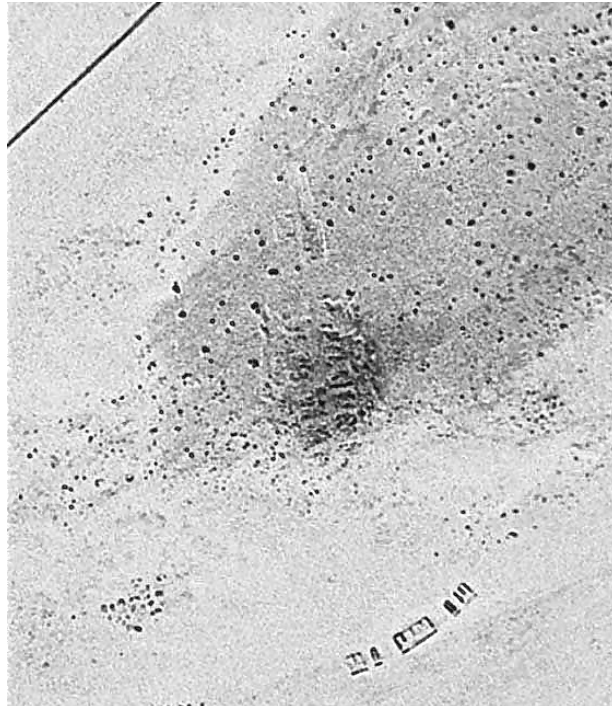


Fig. 15 - B. Close-up of T-211(CORONA satellite photograph December 1967, USGS EROS Center)

Female Terracotta Figurines from Kom Wasit and Kom al-Ahmer, Egypt¹

Amy Wilson

Abstract: This paper presents the female terracotta figurines recently uncovered from the Western Delta sites of Kom Wasit and Kom al-Ahmer, which were occupied from the Late and Hellenistic Period onward, respectively. While a number of fragments showing pairs of legs are common and are not datable by style, one intact piece shows stylistic variance from earlier periods, most notably in the form of a rounded body and a short, round hairstyle. The study begins with an overview of the process by which the figurines were manufactured and decorated, with attention given to the black pigment found on one intact example. The archaeological context of the figurines is assessed at Kom Wasit, Kom al-Ahmer, and across other Delta sites; their usage within these settlements is also discussed. These figurines represent the domestic religious activities that were practiced on the Koms by the local population during the Hellenistic Period.

Résumé: Cet article présente les figurines féminines en terre cuite découvertes récemment sur les sites du Delta de l'Ouest, Kom Wasit et Kom al-Ahmer, occupées respectivement pendant la Basse époque et la période hellénistique. Tandis qu'un certain nombre de fragments montrant des paires de jambes sont communs et ne peuvent être datés par le style, une pièce intacte montre une différence stylistique par rapport aux périodes précédentes, notamment sous la forme d'un corps arrondi et d'une coiffure courte et arrondie. L'étude commence par un aperçu du processus de fabrication et de décoration des figurines, en portant une attention particulière aux pigments noirs trouvés sur un exemple intact. Le contexte archéologique des figurines est évalué à Kom Wasit, à Kom al-Ahmer et dans d'autres sites du Delta; leur utilisation au sein de ces colonies est également discutée. Ces figurines témoignent des activités religieuses domestiques pratiquées par la population locale sur les deux sites interconnectés pendant la période hellénistique.

Keywords: Female terracotta figurines/Figurines féminines en terre cuite; female figurines/figurines féminines; terracotta figurines/figurines en terre cuite; Kom Wasit; Kom al-Ahmer; Kom al-Ahmer -- Kom Wasit Archaeological Project; le projet archéologique Kom al-Ahmer -- Kom Wasit; Western Delta/Delta occidentale; Hellenistic Period/période hellénistique; domestic religion/religion domestique; popular religion/religion populaire.

Kom Wasit, Kom al-Ahmer, and their Current Excavation

The archaeological sites of Kom Wasit and Kom al-Ahmer are located in the Western Delta of Egypt, approximately 50km southeast of Alexandria, in the province of Beheira. Both sites encompassed 88 faddān (فدّان) of area in 1940.

The Kom al-Ahmer -- Kom Wasit Archaeological Project, a joint Italian-Egyptian archaeological mission coordinated by the Università di Padova and the Centro Archeologico Italo-Egiziano (CAIE), began work at the sites in September 2012.² The overall research

1 A version of this paper was presented at the 42nd Annual Meeting of the Society for the Study of Egyptian Antiquities / Société pour l'Étude de l'Égypte Ancienne, Toronto, 2017.

2 The Kom al-Ahmer -- Kom Wasit Archaeological Project is an international team directed by Cristina

aim of the project is to uncover and study the history of the two ancient settlements which, according to the current investigations, were interrelated in antiquity and most likely hosted the *nome* capital, Metelis. To this end, the project has sited excavation trenches in several key positions on the Koms in an effort to explore the layout of each site.

Background

Female figurines have been attested from the Predynastic Period through the Hellenistic, Roman, and Byzantine Periods. The figurines are small and portable, and were made from a variety of materials, e.g. clay (both fired and unfired), faience, ivory, stone, and wood.³ W.M.F. Petrie published a number of female figurines from the sites he excavated, which set the trend for later archaeologists to follow.⁴ The most comprehensive studies of this genre of objects has been done by Geraldine Pinch, whose work spans the Middle through New Kingdoms,⁵ as well as those of Emily Teeter and Elizabeth Waraksa, whose studies span the Second Intermediate through Late Periods;⁶ female figurines from the Amarna Period have been published by Anna Stevens.⁷ This paper seeks to add to the known corpus of female figurines by presenting those that have been found in the Hellenistic deposits at Kom Wasit and Kom al-Ahmer, respectively.

Despite the number of female figurines appearing in excavation reports from the 1890s onward, the precise function(s) of the figurines have remained a matter of conjecture. Early Egyptological publications refer to the figurines as "wife figures,"⁸ "concubines (dumort),"⁹ "Beischläferin,"¹⁰ among other terms. Bernard Bruyère¹¹ interpreted the objects as votive

Mondin, Michele Asolati, and Mohamed Kenawi of the University di Padua, Italy. The team's website can be viewed at: <http://www.komahmer.com/eng-index.html>.

3 Geraldine Pinch, *Votive Offerings to Hathor* (Oxford: Griffith Institute/Ashmolean Museum, 1993), 225; Emily Teeter, *Baked Clay Figurines and Votive Beds from Medinet Habu* (Chicago: Oriental Institute of the University of Chicago, 2009), 7-8; Elizabeth Waraksa, "Female Figurines (Pharaonic Period)," in *UCLA Encyclopedia of Egyptology*, ed. Willeke Wendrich (Los Angeles: UCLA, 2008), 1-6; Elizabeth Waraksa, *Female Figurines from the Mut Precinct: Context and Ritual Function* (Fribourg: Academic Press, 2009), 12.

4 W.M.F. Petrie, *Kahun, Ghurob, and Hawara* (London: K. Paul, Trench, Trübner, and Co., 1890); W.M.F. Petrie, *Illahun, Kahun, and Ghurob* (Warminster: Aris & Phillips, 1974), etc.

5 Geraldine Pinch, "Childbirth and Female Figurines from Deir el-Medina and el-'Amarna," *Orientalia* 52 (1983): 405-414; Pinch, *Votive Offerings*.

6 Teeter, *Baked Clay Figurines*; Waraksa, "Female Figurines;" Waraksa, *Female Figurines*.

7 Anna Stevens, *Private Religion at Amarna: The Material Evidence* (Oxford: Archaeopress, 2006).

8 W.M.F. Petrie, *Objects of Daily Use: With over 1800 figures from University College, London* (London: British School of Archaeology in Egypt, 1927), 59-60; W.M.F. Petrie, *The Funeral Furniture of Egypt: With Stone and Metal Vases* (Warminster: Aris & Phillips, 1977), 8-9, 12.

9 Christiane Desroches-Noblecourt, «Concubines du Mort et Mères de Famille au Moyen Empire,» *Bulletin de l'Institut Français d'Archéologie Orientale* 53 (1953): 7-47.

10 Wolfgang Helck, "Beischläferin," in *Lexikon der Ägyptologie* I, ed. Wolfgang Helck and Eberhard Otto (Wiesbaden: Harrassowitz, 1975-1992), 684-686.

11 Bernard Bruyère, *Rapport sur les fouilles de Deir el-Medineh (1934-1935)* (Le Caire: Institut Français d'Archéologie Orientale, 1939); Bernard Bruyère, *Rapport sur les fouilles de Deir el-Medineh (1948-1951)*

fertility figurines, or objects that were offered to a deity in a ritual context in the hopes of achieving conception and safe childbirth. Those that were placed within funerary contexts may have been intended to ensure the rebirth of the deceased and further guarantee their fertility in the afterlife. This interpretation has been followed by Pinch,¹² Stevens,¹³ and Teeter,¹⁴ and has essentially become the standard designation in Egyptological literature. While this categorization applies to a number of examples, but it certainly does not apply to all figurines. Waraska¹⁵ dismisses the term “fertility figurines” in favor of the more neutral term, “female figurines,” which I have also chosen to adopt in this paper.

The Kom Wasit and Kom al-Ahmer Female Figurines

During the 2016 season, the Kom al-Ahmer -- Kom Wasit Archaeological Project identified a total of six female figurines that depict women lying on beds. Five of the figurines are made of terracotta (four of which are fragmentary), while one is made out of limestone (also fragmentary).

All five fragmentary examples were found at Kom Wasit, and date to the Hellenistic Period.¹⁶ SCA 255 (Figure 1) is made out of white limestone. The figurine is broken above the neck and at the thighs, and the torso is broken into two pieces. The woman’s body has an hourglass shape and her arms are positioned alongside her body. Her upper arms are painted with three black bands that may represent armlets. Her breasts and shoulders show traces of red and black stippling and her pubic triangle is defined by a wider patch of black color. She has a large (and slightly off-center) bellybutton. The bed runs beneath the entire figure; its outer edges have been painted with black stripes.

The next two figurines, SCA 306 (Figure 2) and SCA 403 (Figure 3), are fragments of the lower part of a woman’s legs and feet that rest upon the footboard of a bed. In the case of SCA 403, her feet have been excessively burned. SCA 404 (Figure 4) and SCA 422 (Figure 5) preserve only the mid-sections of the woman’s legs along with the portion of the bed that she is lying upon.

SCA 235 (Figures 6-7) was found at Kom al-Ahmer and also dates to the early Hellenistic Period. This intact figurine shows a nude woman on a bed. Her facial features are non-distinct with her nose forming the most prominent feature. She sports a cropped hairstyle and has a disproportionately large head for her thin body. Her body lies in the supine position, and her arms are at her sides, touching her thighs. Her feet rest upon an upward-projecting footboard. Some traces of black pigment remain on the front, back, and

(Le Caire: Institut Français d’Archéologie Orientale, 1953).

12 Pinch, „Childbirth and Female Figurines,” 405; Pinch, *Votive Offerings*, 225.

13 Stevens, *Private Religion at Amarna*, 85-94.

14 „[...] The female figurines are clearly related to fertility.” Teeter, *Baked Clay Figurines*, 27.

15 „The term ‚fertility figurines,’ however, may not be appropriate for all nude female figurines when one considers the Egyptians’ own statements regarding figures of clay and their uses.” Waraksa, *Female Figurines*, 15.

16 These collective figurines fall within Waraksa’s „Type 2” and may also be considered a continuation of Pinch’s „Type 6B.” Refer to: Waraksa, *Female Figurines*, 25-30; Pinch, *Votive Offerings*, 207-208.

sides of the figurine.

The short, round hairstyle became popular during the 25th Dynasty, and can be found on four female figurines (OIM 14584, 14589-14591) from Medinet Habu.¹⁷ The first two examples belong to Teeter's "Type B: Slender Female, Arms at Sides, On Bed, Without Child,"¹⁸ whereas the latter two derive from Teeter's "Type E: Non-Idealized Female, Not on Bed."¹⁹ All four figurines date to the Third Intermediate Period. SCA 235 represents an interesting variation on this theme, in which the figurine displays a similar hairstyle although its proportions are different from the Medinet Habu examples.²⁰ The hairstyle may have been associated with a particular goddess, and the persistence of this hairstyle into the early Hellenistic Period may be a reflection of the goddess' popularity.²¹

Foreign influences may have also played a role in the representation of female figurines from the Late through Hellenistic Periods due to the presence of various multiethnic groups in the Delta.²² Figurines from these periods have more rounded bodies and some wear the cropped hairstyle exemplified by SCA 235. Later examples include architectural features such as columns or cornices that were inspired by Astarte plaques from the Levant,²³ as well as other examples from Cyprus²⁴ and Greece.²⁵ Such features are present in figurines that have been found at other sites within the Delta, e.g. Tell Gi'eif (Naukratis),²⁶ Tell el-

17 Teeter, *Baked Clay Figurines*, 39-40, 54-55.

18 Teeter, *Baked Clay Figurines*, 34-41.

19 Teeter, *Baked Clay Figurines*, 51-58.

20 Emily Teeter, personal communication. Additional comparanda of unknown date may be found in: Carl Kaufmann, *Ägyptische Terrakotten der griechisch-römischen und koptischen Epoche vorzugsweise aus der Oase El Faijûm* (Cairo: Verlag von F. Diemer Finck & Baylaender Succ., 1913), 100-103; Eva Bayer-Niemeier, *Griechisch-römische Terrakotte: Liebighaus-Museum alter Plastik, Bilderwerke der Sammlung Kaufmann* (Melsungen: Verlag Guttenberg, 1988), 148-149, pl. 50 [264-267].

21 Donald Bailey, *Catalogue of the Terracottas in the British Museum. Volume IV: Ptolemaic and Roman Terracottas from Egypt* (London: The British Museum Press, 2008), 20.

22 W.M.F. Petrie, *Memphis I* (London: School of Archaeology in Egypt, 1909), 15-17; Dorothy Thompson, *Memphis Under the Ptolemies* (Princeton: Princeton University Press, 1988), 82-105.

23 Elodie Rotté, „Egyptian Plaque Terracottas of Standing Nude Women From the Late Period: Egyptian Heritage or Foreign Influences,“ *Newsletter of the Coroplastic Studies Interest Group* 7 (2012): 13-16; P.R.S. Moorey, *Idols of the People: Miniature Images of Clay in the Ancient Near East* (Oxford: Oxford University Press, 2002), 35-37; Ross Thomas, „Egyptian Late Period Figures“ in *Naukratis: Greeks in Egypt*, accessible at: <http://www.britishmuseum.org/naukratis>; Pinch, *Votive Offerings*, 207-208.

24 Ross Thomas, „Cypriot Figures,“ in *Naukratis: Greeks in Egypt*, accessible at: <http://www.britishmuseum.org/naukratis>.

25 Greece had adopted mold-made figurine-plaques from the ancient Near East between the 8th to 7th Centuries BC. Refer to: R.A. Higgins, *Catalogue of the Terracottas in the Department of Greek and Roman Antiquities, British Museum. Volume I: Text. Greek: 730-330 B.C.* (London: British Museum, 1954), 36-37; R.A. Higgins, *Catalogue of the Terracottas in the Department of Greek and Roman Antiquities, British Museum. Volume I: Plates. Greek: 730-330 B.C.* (London: British Museum, 1954), 3; Ross Thomas, „Greek Terracotta Figures,“ in *Naukratis: Greeks in Egypt*, accessible at: <http://www.britishmuseum.org/naukratis>; Ross Thomas, „Ptolemaic and Roman Figures, Models and Coffin-Fittings in Terracotta,“ in *Naukratis: Greeks in Egypt*, accessible at: <http://www.britishmuseum.org/naukratis>.

26 Bailey, *Catalogue of Terracottas*, 41-42, pl. 19 [3107-3110].

Rub'a (Mendes),²⁷ and Tell Timai (Thmuis).²⁸

Both the woman-on-a-bed²⁹ and shrine-plaque³⁰ figurines have been associated with the goddess Hathor, and by extension, any equivalent goddess.³¹ The adoption of the cropped hairstyle as well as the nondescript facial features of SCA 235 may indicate a transferability of goddess iconography,³² for which the figurine could have been associated with Hathor,³³

27 Donald Redford, „The First Season of Excavations at Mendes,“ *The Journal of the Society for the Study of Egyptian Antiquities* 18 (1988): 67, n. 146, pl. 22; Susan Redford, „A Cache of Terracotta Votives from Mendes: Elements of Popular Religion in the Axial Age“ in *Cultural Contact and Appropriation in the Axial-Age Mediterranean World: A Periplos*, ed. Baruch Halpern and Kenneth Sacks (Leiden: Brill, 2017), 137-148.

28 James Bennett, Robert Littman, and Jay Silverstein, *The Terracotta Figurines from Tell Timai: 2009-2013* (Oxford: BAR International Series, 2016), 22, figs. 86-87 [T. Cat. Nos. 81-82].

29 Pinch, *Votive Offerings*; Waraksa, *Female Figurines*.

30 These objects are described as „terracotta figure-plaques depicting nude female figures in shrines“ and are distinct from the woman-on-a-bed motif. Refer to: Thomas, „Egyptian Late Period Figurines,“ 35-36, 55-56. For a catalogue of representative examples, see: Amihai Mazar, „Pottery Plaques Depicting Goddesses Standing in Temple Facades,“ *Michmanim* 2 (1985): 5-18. For typology, see: Sakkie Cornelius, „A Preliminary Typology for the Female Plaque Figurines and their Value for the Religion of Ancient Palestine and Jordan,“ *Journal of Northwest Semitic Languages* 30 (2004): 21-39. For additional studies, see: P.J. Riis, „The Syrian Astarte Plaques and their Western Connections,“ *Berytus* 9 (1949): 69-90; P.J. Riis, „Plaquettes syriennes d'Astarte dans les milieux grecs,“ *Mélanges de l'Université Saint-Joseph* 37 (1960-61): 194-198; Shin'ichi Nishiyama and Satoru Yoshizawa, „Who Worshipped the Clay Goddess? : The late first millennium BC terracotta figurines from Tell Mastuma, Northwest Syria,“ *Bulletin of the Ancient Orient Museum* 18 (1997): 73-79; P.R.S. Moorey, „Novelty and Tradition in Achaemenid Syria: The case of the clay ‚Astarte plaques,“ *Iranica Antiqua* 37 (2002): 203-218.

31 Thomas, „Egyptian Late Period Figures,“ 55-56.

32 „It is likely that female figurines were fashioned as generic females so that they could serve as any one of numerous goddesses, depending on the situation at hand.“ Waraksa, „Female Figurines,“ 3. See also: Waraksa, *Female Figurines*, 147. Alternatively, the identification of the goddess „may not have been of real consequence to those seeking the benefits of fertility.“ Redford, „Cache of Terracotta Votives,“ 145. On the contrary, Moorey states that „the female terracotta images are not goddesses“ due to their lack of definitive attributes. Refer to: Moorey, *Idols of the People*, 37.

33 Bailey believes the figurines may more specifically represent Hathor of the West. Refer to: Bailey, *Catalogue of Terracottas*, 7. Török attributes the figurines to the priestesses and attendants of the cult of Hathor. Refer to: László Török, *Hellenistic and Roman Terracottas from Egypt* (Roma: L'Erma di Bretschneider, 1995), 138-139, pls. CVIII-CVIX [203-209]. Backhouse likewise suggests that some earlier examples from Deir el-Medina „may have been designed to represent priestesses.“ Refer to: Joanne Backhouse, „Female Figurines from Deir el-Medina: A review of evidence for their iconography and function“ in *Current Research in Egyptology 2012: Proceedings of the Thirteenth Annual Symposium*, ed. Carl Graves et al. (Oxford: Oxbow Books, 2013), 30.

Isis,³⁴ Astarte,³⁵ Cybele,³⁶ or perhaps another goddess entirely.³⁷ The identification of the goddess may have also depended upon the user of the figurine;³⁸ thus, the figurine may reflect the socio-cultural diversity of the site during the Hellenistic Period.

Materials, Manufacture, and Form

Five of the six female figurines from Kom Wasit and Kom al-Ahmer were formed from Nile silt clay. The figurines were shaped by pressing wet clay into an open or half-mold, which resulted in the front of the figurine being molded and the back being hand-smoothed, in which excess clay was scraped off with a straight-edged instrument.³⁹ This technique is most visible on the rear of intact piece SCA 235 (Figure 7). Molding was a means of producing large quantities of figurines of similar dimension and appearance and is a more complex method of manufacture than hand-modeling.⁴⁰ This process was most likely completed by potters rather than unskilled workers.⁴¹ To date, we have not yet found

34 Or „the goddess who ensures a successful birth,“ whom Polaczek-Zdanowicz equates with Isis-Aphrodite. Refer to: Krystyna Polaczek-Zdanowicz, „The Genesis and Evolution of the Orant Statuettes against a background of Developing Coptic Art,“ *Études et Travaux* 8 (1975): 135-149. For further discussion on the fusion of Isis with other goddesses, refer to: Frédéric Colin, „Le P.Petr.2 I,1, les terres cuites isiaques et le culte d'Isis et Aphrodite-Hathor“ in *Proceedings of the 20th International Congress of Papyrologists, Copenhagen, 13-29 August, 1992*, ed. Adam Bülow-Jacobsen (Copenhagen: Museum Tusulanum Press, 1994), 534-539; Karol Myśliwiec, «Isis-Aphrodite 'anasyrménè' et le culte de la déesse nue à Athribis ptolémaïque» in *Hommages à Jean Leclant. Volume 3: Études Isiaques*, ed. Catherine Berger, Gisèle Clerc, and Nicolas Grimal (Le Caire: Institut Français d'Archéologie Orientale, 1994), 385-389; Redford, «Cache of Terracotta Votives,» 143-144.

35 The wig style and facial features of MFA 1990.605 are said to be of Astarte, which Bennett, Littman, and Silverstein cite as a parallel example for T. Cat. No. 81 of Tell Timai. Refer to: Bennett, Littman, and Silverstein, *Terracotta Figurines from Tell Timai*, 22, fig. 86 [T. Cat. No. 81]. On the syncretism of Isis and Astarte, see: Thompson, *Memphis Under the Ptolemies*, 88-93. See also: Mazar, „Pottery Plaques,“ 14.

36 Redford, „Cache of Terracotta Votives,“ 144-145.

37 „The meaning of the figure may have been so well understood by those who made and used the figurines that contemporary writers did not find it necessary to refer to it.“ James Pritchard, *Palestinian Figurines in Relation to Certain Goddesses Known through Literature* (New Haven: American Oriental Society, 1943), 86.

38 Collin Cornell, „The Forgotten Female Figurines of Elephantine,“ *Journal of Ancient Near Eastern Religions* 18 (2018): 121-125.

39 Figurines from Kom Rabi'a (Memphis) and the Mut Precinct were made in the same manner. Refer to: Lisa Giddy, *The Survey of Memphis II* (London: Egypt Exploration Society, 1999), 30; Waraksa, *Female Figurines*, 46.

40 Ann Gunther, „Material, Technology, and Techniques in Artistic Production“ in *Civilizations of the Ancient Near East III*, ed. Jack Sasson (New York: Scribner, 1995), 1541.

41 Pascale Ballet, «Potiers et fabricants de figurines dans l'Égypte ancienne,» *Cahiers de la céramique égyptienne* 4 (1996): 113-126; Peter Dorman, *Faces in Clay: Technique, Imagery, and Allusion in a Corpus of Ceramic Sculpture from Ancient Egypt* (Mainz am Rhein: Verlag P. von Zabern, 2002), 26-27. Waraksa adds, „The same conclusion has been reached for Bronze Age ceramic female figurines from neighboring regions.“ Waraksa, *Female Figurines*, 49, n. 207; Moorey, *Idols of the People*, 38; Alexander Pruss, „Patterns of Distribution: How Terracotta Figurines were traded,“ *Transeuphratène* 19 (2000): 57.

any molds nor any unfired female figurines at the Kom Wasit or Kom al-Ahmer. Future excavations may reveal a center of pottery production where the figurines may have been produced.

As observed by Maarten Raven, “Like wax, this [clay] is a plastic material that can be easily modeled and quickly be destroyed, suggesting the spontaneous transition from life to death. Like wax, it is a primeval substance, the very essence of the earth, yet proceeding from the Nile waters and bringing fertility and new life wherever it settles. Paradoxically, fire does not harm it, but preserves it forever.”⁴² Clay could be used for images to endure or for images to be destroyed, e.g. execration figurines.⁴³

Waraksa notes the presence of a red ochre wash that had been applied to a number of the female terracotta figurines in her study,⁴⁴ and the same has been observed at a number of sites throughout the Nile valley.⁴⁵ The color red is associated with execration rituals in Egyptian magical practice,⁴⁶ and as such, the female figurines covered in a red wash may be considered a type of execration figure.⁴⁷

While no red wash has been observed on the female terracotta figurines from Kom Wasit and Kom al-Ahmer, the application of black pigment to a fired figurine can be best seen on SCA 235, which has areas of black pigment still visible on the front, back, and sides of the figurine. The entire figurine was covered in black pigment, perhaps to imitate black stone magical healing statues that were inscribed with spells and/or vignettes during the Hellenistic Period.⁴⁸ An example of one such healing statue was found at the site of Tell Atrib (Athribis), which is now in the Cairo Museum (JE 46341).⁴⁹ The color black symbolized the rich silt of the Nile Delta, which in turn was associated with fertility and regeneration.⁵⁰ Waraksa states, “Black is thus a fitting color for Egyptian objects intended

42 Maarten Raven, „Magic and Symbolic Aspects of Certain Materials in Ancient Egypt,“ *Varia Aegyptiaca* 4 (1988): 240.

43 Robert Ritner, *The Mechanics of Ancient Egyptian Magical Practice* (Chicago: Oriental Institute of the University of Chicago, 1993), 159-162; Waraksa, *Female Figurines*, 94.

44 Waraksa, *Female Figurines*, 54-58.

45 Jean Jacquet, *Karnak Nord IX* (Le Caire: Institut Français d'Archéologie Orientale, 2001), 62; Rudolf Anthes, *Mit Rahineh 1956* (Philadelphia: University Museum, 1965), 127-128; Giddy, *Survey of Memphis II*, 29-30; Stevens, *Private Religion at Amarna*, 85. A similar phenomenon has been observed in the Levant. For more information, see: Nishiyama and Yoshizawa, „Who Worshipped the Clay Goddess?,“ 73-79.

46 Ritner, *Mechanics of Ancient Egyptian Magical Practice*, 147-148.

47 Waraksa, *Female Figurines*, 102-113.

48 Richard Wilkinson, *Symbol and Magic in Egyptian Art* (London and New York: Thames and Hudson, 1994), 110; Raven, „Magic and Symbolic Aspects,“ 238.

49 Eva Jelínková-Reymond, *Les inscriptions de la statue guérisseuse de Djed-her-le-Sauveur* (Le Caire: Institut Français d'Archéologie Orientale, 1956); Elizabeth Sherman, «Djedhor the Savior Statue Base OI 10589,» *Journal of Egyptian Archaeology* 67 (1981), 82-102.

50 Gay Robins, „Color Symbolism,“ in *The Oxford Encyclopedia of Ancient Egypt III*, ed. Donald Redford (Oxford: Oxford University Press, 2001), 333; Wilkinson, *Symbol and Magic*, 109-110; Emma Brunner-Traut, „Farben,“ in *Lexikon der Ägyptologie II*, ed. Wolfgang Helck and Eberhard Otto (Wiesbaden: Harrassowitz, 1975-1992), 123.

to magically ensure general health and fertility."⁵¹

Only one female figurine from Kom Wasit, which is made of white limestone, shows a more detailed application of pigment. Black and red pigment can be seen on SCA 255, with black and red stippling appearing on the breasts and shoulders; she also has a black pubic triangle. Black bands also appear on the woman's upper arms (indicating armllets), and black stripes appear on the outer edges of the bed. In the case of this figurine, the paint was most certainly applied by an artisan.

Archaeological Context

Female figurines have been found in a variety of archaeological contexts throughout Egypt,⁵² including houses,⁵³ temples,⁵⁴ tombs,⁵⁵ and refuse zones associated with these

51 Waraksa, *Female Figurines*, 113.

52 Pinch, *Votive Offerings*, 198-209, 225-234; Waraksa, *Female Figurines*, 12-13, 22-42; Waraksa, „Female Figurines,” 2.

53 Lynn Meskell, *Private Life in New Kingdom Egypt* (Princeton: Princeton University Press, 2002), 73-74; Françoise Dunand, „Book II,” in *Gods and Men in Egypt 3000 BCE to 395 CE*, ed. Françoise Dunand and Christiane Zivie-Coche (Ithaca: Cornell University Press, 2004), 302; Georges Nachtergaele, «Les terres cuites ‘du Fayoum’ dans les maisons de l’Égypte,» *Chronique d’Égypte* 60 (1985): 223-239; Pascale Ballet, «Tebtynis, Umm al-Brigat (Fayoum) 1991,» *Bulletin de Liason de Groupe International d’Étude de La Céramique Égyptienne* 16 (1992): 16-19; Pascale Ballet, «Terres cuites gréco-égyptiennes du Musée d’Alexandrie,» in *Alessandria e il mondo ellenistico-romano: Atti del II Congresso Internazionale Italo-Egiziano*, ed. Nicola Bonacasa, Cristina Naro, Elisa Portale, and Amedeo Tullio (Roma: L’Erme di Bretschneider, 1995), 259-264; Marti Allen, *The Terracotta Figurines from Karanis: A Study of Technique, Style, and Chronology in Fayoumic Coroplastics* (Ann Arbor: University of Michigan, 1985), 560-564, 574-579.

54 Pinch, *Votive Offerings*, 198-209, 225-234; Waraksa, *Female Figurines*, 12-13, 22-42; Waraksa, „Female Figurines,” 2. For Ptolemaic and Roman examples, see: Paul Perdrizet, *Les Terres cuites grecques d’Égypte de la collection Fouquet I* (Paris: Berger-Levrault, 1921), x-xiv; Allen, *Terracotta Figurines from Karanis*, 560-564, 574-579; Donald Bailey, „Terracotta and Plaster Figures, Sealings and a Stone Group,” in *Mons Claudianus: Survey and Excavation. 1987-1993, III: Ceramic and Related Objects*, ed. Valerie Maxfield and David Peacock (Le Caire: Institut Français d’Archéologie Orientale, 2006), 262, 266 [3], 272-273 [28]; Georges Nachtergaele, «Terres cuites de l’Égypte gréco-romaine,» *Chronique d’Égypte* 70 (1995): 254-294, Clementina Caputo, «Le terracotta figurate,» in *Soknopaiou Nesos Project I (2003-2009)*, ed. Mario Capasso and Paola Davoli (Pisa: Fabrizio Serra Editore, 2012), 363-375. Contra Dunand, who states, „[figurines] have never been found in temples.” Refer to: Dunand, „Book II,” 302.

55 For those in the western oases, see: Céline Boutantin, «Les figurines en terre crue de la nécropole de Balat,» *Bulletin de l’Institut Français d’Archéologie Orientale* 99 (1999): 41-61; Frédéric Colin and Sandrine Zanatta, «Hermaphrodite ou parturiente? Données nouvelles sur les humanoïdes de terre crue en contexte funéraire (Qaret el-Toub, Bahariya 2005),» *Bulletin de l’Institut Français d’Archéologie Orientale* 106 (2006): 21-55. For those in Alexandria, see: Achille Adriani, «Trouvaille à Ras el Soda,» *Annuaire de Musée Gréco-Romain* III (1952), pls. v-vii; Dominique Kassab Tezgör, «Les figurines de terre cuite de la tombe 1 de Gabbari» in *Nécropolis I: Tombes B1, B2, B3, B8*, ed. Jean-Yves Empereur and Marie-Dominique Nenna (Le Caire: Institut Français d’Archéologie Orientale, 2001), 409-421. For late Roman examples, see: Bailey, *Catalogue of Terracottas*, 49-50, pl. 22 [3122-3123], 112, pl. 70 [3391], 114, pl. 73 [3401].

areas.⁵⁶ In the Delta, female figurines have been found “scattered about the town” at Tell Gi’eif (Naukratis)⁵⁷ and inside domestic building complexes at Tell Atrib (Athribis),⁵⁸ Tell el-Balamun (Diospolis Kato),⁵⁹ Tell Nebesheh,⁶⁰ and Tell Timai (Thmuis).⁶¹ Among other materials, both female and male figurines comprised the foundation deposit of a house at Tell el-Muqdam (Leontopolis).⁶² Other deposits have been found outside the temenos wall of the Egyptian temple precinct near the Canopic branch of the Nile at Tell Gi’eif (Naukratis)⁶³ as well as within the sacred lake at Tell Rub’a (Mendes).⁶⁴

The fragments from Kom Wasit were found within and around a very large domestic structure in the central residential area, which culminates in one of the highest points of the Kom. The building, constructed in the form of a Hellenistic tower house, was named “the House of the Horses” after the discovery of a number of fragmentary horse figurines in both Egyptian and Persian styles. Among these figurines is a male horse-and-rider. SCA 306 and SCA 422 were found within the southwest room (Room E) and were sealed in the room by tumble. At some point, this room was infested by insects and was in turn sealed by a layer of ash.⁶⁵ SCA 255 and SCA 403 were found in the street area immediately south of the House of the Horses. The south street contained debris that was associated with waste disposal. The south street has yet to be fully excavated.

SCA 404 was found at a lower elevation on the northeast side of the Kom. The figurine was recovered near the surface of a very disturbed layer of tumble within a slope that may have been cut by the *sabbakhîn* and was not found *in situ*. This area has yet to be fully excavated as well.

The intact figurine from Kom al-Ahmer, SCA 235, was found in a layer of potsherds within an unidentified structure that is located next to a large, wide wall built upon the lowest elevation of the site. Excavation is ongoing and this area has yet to be fully analyzed.

56 Barry Kemp, „How Religious were the Ancient Egyptians?“, *Cambridge Archaeological Journal* 5(1) (1995): 31; Giddy, *Survey of Memphis II*, 30-31; Waraksa, *Female Figurines*, 72, 74-76.

57 Thomas, „Egyptian Late Period Figures“, 55.

58 Karol Myśliwiec, „Remains of a Ptolemaic Villa at Athribis“, *Mitteilungen des Deutschen Archäologischen Instituts* 44 (1988): 183-197; Karol Myśliwiec and Hanna Szymańska, „Les terres cuites de Tell Atrib: rapport préliminaire“, *Chronique d’Égypte* 67 (1992): 112-132; Karol Myśliwiec, „Athribis -- eine hellenistische Stadt im Nildelta“, *Antike Welt* 25 (1994): 35-46; Karol Myśliwiec, „Les ateliers d’Athribis ptolémaïque“, *Archeologia* 47 (1996): 7-20.

59 A.J. Spencer, *Excavations at Tell el-Balamun, 1991-1994* (London: British Museum Press, 1996), 83, pl. 77 [90-91].

60 W.M.F. Petrie, *Tanis II: Nebesheh (Am) and Defenneh (Tahpanhes)* (London: Trübner & Co., 1888), 26-27, pl. VII [7, 23].

61 Bennett, Littman, and Silverstein, *Terracotta Figurines from Tell Timai*, 34 (Area N).

62 Carol Redmount and Renée Friedman, „Tales of a Delta Site: The 1995 Field Season at Tell el-Muqdam“, *Journal of the American Research Center in Egypt* 34 (1997): 63-65, figs. 5-7.

63 Thomas, „Egyptian Late Period Figures“, 55.

64 Redford, „Cache of Terracotta Votives“, 137-138.

65 This phenomenon is further discussed in: Ole Herslund, „The House of the Horses -- A Tower House in Kom Wasit“, in *Kom al-Ahmer / Kom Wasit I* (Oxford: Archaeopress, in press).

The recovery of female figurines from domestic contexts and their associated refuse zones at Kom Wasit and Kom al-Ahmer are consistent with findings at Tell Atrib (Athribis), Tell el-Balamun (Diospolis Kato), Tell Nebesheh, and Tell Timai (Thmuis). The presence of male horse-and-rider figurines with female figurines at the same site has likewise been noted at Tell Rub'a (Mendes).⁶⁶

Function

Female figurines served multiple different functions depending on time period, location, the intentions of their users, as well as other factors that may not be readily perceptible to the modern observer. The figurines found at Kom Wasit and Kom al-Ahmer were found in or near structures and their associated refuse zones. This type of figurine, representing a nude goddess, may have been regarded as a protector of the domestic sphere. Broken figurines may have served a single-use function after which they were discarded.⁶⁷ These figurines, whether intact or fragmentary, are the remnants of domestic religious practice⁶⁸ that may have focused on Hathor, Isis, Astarte, Cybele, or another goddess. None of the figurines were recovered from funerary contexts, and, as such, any mortuary function may be effectively ruled out.

Conclusion

The excavations at Kom Wasit and Kom al-Ahmer have recovered six female figurines in areas that date to the Hellenistic Period. The figurines have been found either within domestic structures or nearby refuse zones. These figurines represent aspects of domestic religious practice that may have focused on Hathor, Isis, Astarte, Cybele, or another goddess. The production center for the figurines has not been found, nor have any molds or unfired figurines. The presence of black pigment on all sides of SCA 235 is distinct from other known female figurines, which are often covered in a red wash. The application of black pigment may have been intended to imitate contemporary black stone magical healing statues. The aim of this paper has been to add to the known corpus of female figurines found in Egypt, as well as to shed additional light on their form and possible function during the Hellenistic Period.

66 Redford, „Cache of Terracotta Votives,“ 139-145.

67 Kemp, „How Religious were the Ancient Egyptians?,“ 30; Waraksa, *Female Figurines*, 71, 75-76.

68 For further discussion on terracotta figurines as representative of popular religion, see: Barbara Lesko, „Household and Domestic Religion in Ancient Egypt,“ in *Household and Family Religion in Antiquity. The Ancient World: comparative histories*, ed. John Bodel and Saul Olyan (Malden: Blackwell, 2008), 197-209. For the Ptolemaic and Roman Periods, see: Dunand, „Book II,“ 267-276, 299-306.

Figures



Fig. 1 - SCA 255



Fig. 2 - SCA 306



Fig. 3 - SCA 403



Figure 4. SCA 404



Figure 5. SCA 422



Figure 6. SCA 235 (Front)



Figure 7. SCA 235 (Back)

Book Reviews

John Baines. *High Culture and Experience in Ancient Egypt*. Sheffield: Equinox Publishing, 2013. 348 pages. ISBN-13: 978-1845533007

High Culture and Experience has as its origin a series of lectures given at the American University in Cairo in March 1999. Given the scope and length of the book, it clearly represents a dramatic expansion and augmentation of the original lectures. Throughout, Baines probes the settings and “high culture” aesthetic products (especially self-presentations) of the elite in order to develop a picture of lived elite experience (p. viii). To illustrate his approach, he invokes *The Anthropology of Experience*, edited by Victor W. Turner and Edward M. Bruner (1986), a collection of essays that aims to explore both people’s experience of their culture and the ways these experiences are expressed (in writing, art, ritual, etc.).

Chapter 1 serves as an introduction, establishing as a key focus of the book “ephemeral” activities, paradigmatic of which is the hunt. The chapter also emphasizes the interdisciplinary methodology and cross-cultural comparison utilized throughout the monograph as a whole.

Chapter 2, which takes up over half of the volume, is entitled “Egypt as Physical, Social, and Represented Landscape.” Here, Baines very consciously avoids defining the term “landscape” (p. 22). Clearly, however, his usage is far broader than the classic use of the term in western Fine Arts to denote a painting of natural scenery. The chapter’s title reveals the range of understandings it develops: landscape is at once physical environment, the setting for human activity, and something that can be depicted in pictorial form. At the core of the chapter are the “relations between Egyptians and their surroundings” (p. 23) and the exploration of “an ancient sense of place” (p. 134).

The bulk of the chapter’s discussion focuses on the category of Egypt as “represented landscape.” The body of pictorial depictions explored is ultimately pragmatic in purpose and is deeply informed by the symbolic meaning inscribed upon the landscape by members of the elite. As a result, the most definitive conclusions drawn from this material concern high culture belief rather than lived experience. Nevertheless, the two categories are by no means mutually exclusive, and it is clear that cultural attitudes often shaped individual experiences of the environment; that is, people’s “sense of the world around them” (p. 150). Moreover, a major facet of Baines’ argument is that pictorial sources, along with written texts, were also “created for enjoyment” (p. 261). Any analysis must take into account their aesthetic properties to be fully comprehensive.

Baines argues that the pictorial evidence is dominated by three distinct types of represented landscape (p. 150). First, there are the managed landscapes of the cultivated field and rural estate. When agricultural scenes appear in non-royal tombs, they serve both to reveal the tomb owner’s earthly wealth and to provide sustenance in the afterlife. The

garden scene, a common subset of this genre, is similarly dual in nature. It is “an ideal place of repose and delight,” something “created on earth” that also exists and is enjoyed in the next world (p. 81).

Second is the marsh scene, an emblem of disorder that was “seen as a locus of both pleasure and regeneration” (p. 149). To Baines, marsh scenes emphasize the ability of the elite to control the disordered marsh for its own pleasure and were incorporated in tombs to establish the space as a liminal zone between worlds. As time passed, such scenes expanded in their appearance from tombs to luxury items and temples.

Last is the desert, the highly ambiguous site of the necropolis. The arid desert environment in which the necropolis was located likely had negative associations connected with the fear of death, a trepidation that seems evident in tomb scenes depicting the powerful emotional response of mourners at the funeral.¹ But, Baines argues that the desert necropolis had positive connotations as well, its status as entrance to the underworld making it a locus of hope for the next life. Particularly interesting here is the impact of the local environment upon tomb scenes depicting the necropolis. At Thebes, the steep escarpment plays a dominant role, but is completely absent at Memphis (p. 115).

While all of these depictions are without doubt elite constructs, it can also be argued that such representations of an ideal landscape may contain hints of real experience. The common garden and marsh scenes are a case in point, parallel, I would contend, to a modern vacation brochure. While the scene depicted is an imagined ideal, it must reflect reality to some degree. Just as some people really do take extreme pleasure from their beach vacations, it seems reasonable to assume that the members of the ancient Egyptian elite genuinely enjoyed relaxing in their gardens.

Even in cases where the scene itself defies reality, Baines finds the possibility of real underlying emotion. He discusses at length the Theban tomb of Amenemhab, a key example of the more idiosyncratic and innovative tomb decoration of the early Eighteenth Dynasty. This tomb contains a scene in which the tomb owner comes face-to-face with an enormous female hyena, which Baines sees as “an imaginary depiction, perhaps of a nightmare episode with personal importance” (p. 84). Speculative though this suggestion may be, it certainly highlights the striking nature of this unusual scene.

Moreover, in these representations we catch glimpses of ways in which the environment shaped cultural belief. One intriguing and less well known example is provided by the gate of Hadrian at Philae, which includes a quite realistic depiction of the rocky granite boulders so characteristic of the region. Merged with this realism is evidence of the religious imagination, for set within the pile of rocks is a cave encircled by a snake in which a fecundity figure sits libating (pp. 128-129; see also p. 49 for the

¹ Such fears continued to manifest in the Coptic period. The earliest monastics saw the desert as a “demon-infested hinterland,” and thus their choice to settle in caves and ancient tombs on the desert edge may well have been intended to serve as a “defensive spiritual perimeter.” Gillian Pyke, “The Christianisation of the Amarna Landscape: Conquest, Convenience or Combat?” in *Egypt in the First Millennium AD: Perspectives from new fieldwork*, ed. Elisabeth R. O’Connell (Leuven: Peeters, 2014), 153.

“embedding of cults in the local landscape” at Aswan).

Missing from the ancient repertoire as a whole is the urban landscape, which does not seem to have formed a key element of the imaginary world of the elite of ancient Egypt. The fullest explanation for this phenomenon appears in Chapter 3, where Baines argues that ancient Egypt (in sharp contrast to Mesopotamia) had a “non-urban or anti-urban orientation” in which the majority of the population was evenly scattered across rural areas rather than clustered in cities, although cities certainly existed (p. 154). Perhaps it is no surprise that the notable exceptions to this pattern stem from tomb scenes at Amarna clearly set in an urban environment. The tomb of Mahu, for example, depicts a royal chariot ride through the city. Even more notable to Baines is a scene of city waterside activity in the tomb of May that, with its small details, conveys an “unusually strong sense of place” (p. 97).

Baines also presents the argument that certain pictorial and written depictions of the landscape were inspired by an encyclopaedic understanding; in other words, the urge to create order in the cosmos by codifying it in comprehensive lists and catalogs. To give just two examples: 1) the plants from Syria in the botanical garden of Thutmose III at Karnak (pp. 83-85); and 2) the “mixed pictorial-textual” depiction of the underworld in the Amduat, with its “vast numbers of names of beings and features” (pp. 145-146). Chapter 2 as a whole feels rather encyclopaedic in scope, and its host of examples (some analyzed in more depth than others) provides much food for thought.

Chapter 3, “A planned world?”, focuses on the ways the elite of the early Egyptian state consciously ordered the environment. On the national level, this took the form of the creation of elite estates, with the resulting flow of resources from periphery to core acting as an important unifying force. The process of estate formation may have involved a significant amount of resettlement of the rural workforce, or, at the least, the re-assignment of labour to “new units of production and distribution” (p. 154). On the municipal level, environmental planning took the form of the “sacralization” of the urban landscape. For evidence of this latter phenomenon, Baines looks to a seemingly very ancient list of the gods of the Memphite area inscribed in Sety I’s temple at Abydos. The gods of the list are grouped geographically, being associated with specific structures located at the four compass points (the first heading reads “West side; East side; The workshop of Ptah in the East/East side; the Markers (?) of the West” [p. 167]). To Baines, this list produces a picture of “a settlement with extremely dense religious associations” (p. 168). The construction of large, state-planned temples would have created the backbone of the city’s religious landscape. However, Baines also argues that such state-sponsored religion must have been only one facet of lived experience, and he posits the existence of smaller-scale religious structures that popped up more organically on the city landscape.

Chapter 4, “Celebration in the Landscape,” takes as its centerpiece a fowling expedition held during the reign of Amenemhat II and commemorated in an annal inscription (carved on a granite block found at Memphis and reused in a 19th Dynasty statue base). While the sporting exploits of Amenhotep II and III have been widely

discussed in modern scholarship, Baines argues that the critical importance of hunting in general as a facet of royal ideology has been under-emphasized. To situate Amenemhat II's fowling expedition within its broader context, he identifies early pictorial parallels on Early Dynastic tags and the pyramid causeway of Sahure.

As described in the Amenemhat II annals, the events of hunt are carefully orchestrated to emphasize the skill of the king and the hierarchy of his court. First the king catches a huge number of birds in an enormous clapnet, and then his nobles close their own smaller nets at his command. While the surviving record from the Old Kingdom is patchy enough to mean that earlier annals may have included such hunts, the extensive detail incorporated into the Amenemhat II account likely represents an innovation developed at roughly the same time as the birth of written fictional narrative in Egypt, and was likely influenced by it.

Underlying the surviving records are the real-life hunts that inspired them. The hunt itself must have been carefully planned to produce the desired effect, and Baines sees this kind of "staged, celebratory event" as characteristic of the interactions between the king and his elite (p. 218). As a result, both the real-life event and its commemoration in pictorial and/or textual form were in some way fictionalized, and it is difficult to say how closely the two actually aligned with one another. Irrespective of this disjuncture, however, both the event and its permanent record played a critical role in the self-presentation of the king. Baines argues that the pleasure taken by the king in the hunt was as important a part of royal ideology as the control of nature that it signified (both features being shared by the closely comparable marsh scenes of non-royal tombs). Royal hunts would have involved a significant portion of the elite population, making them effective vehicles by which to renew elite solidarity (pp. 213; 223).

For both the king and his nobles, the fowling expedition would have been a memorable "experience." It is in the final chapter of the book that Baines defines the notion of experience, identifying two primary meanings: first, the unmarked category of one's daily "interaction with society and the world"; and second, the marked "significant events in one's life" (p. 235). These definitions caused me to re-evaluate my own expectations. Throughout the book, I had been looking for evidence of the former, where Baines himself was focused on the latter. The distinction is a useful one, and it is certainly true that major life experiences are more tangible in the surviving records. At the same time, I would argue for some overlap between the categories, for major events represent "lived experience" just as much as the mundane flow of daily life. Moreover, representations of the high points of an individual's life can provide hints of the more quotidian. Steve Harvey's exploration of tombs recording workers' songs placed in the mouths of the non-elite is just one possible example.

Whatever the type, individual experience itself is "personal, subjective, and ultimately uncommunicable" (p. 238). In order to record such experiences in permanent written or pictorial form, they must be objectivized and crafted, thereby distancing them from the original, "unmediated" experience. For Old Kingdom tomb scenes of daily life,

some of this crafting involved the incorporation of spectacle and humour, elements that to Baines were meant to heighten the tomb's entertainment value. As one example, he cites a depiction of a bull and three cows in which the bull is labeled with the royal epithet "mighty bull" and the cows as "his (human) wives" (Hmwt=f). It is notable that Baines chooses to end the book with humour. Monumentalized jokes hardly fall into the category of major life experiences, and they provide a hint of the kind of humour the ancient Egyptians must have enjoyed in daily life.

It seems an almost unsurmountable goal to write a book "of which a principal aim is to study features of ancient elite life that leave little material evidence" (p. 263), and it is true that at times lived experience seems to take a backseat to descriptions of the evidence. Critically, however, the volume also contains a remarkable number of moments at which Baines is able to tease from the surviving records personal, subjective ancient Egyptian experiences that feel very real indeed.

Jacqueline E. Jay (Eastern Kentucky University)

Alex S.K. Chiu. *An amazing structure. How the Great Pyramid was built with the use of levers and stairways*. Distributed by the Author and the University of Toronto Bookstore, 2013. ISBN 978-0-9881603-0-9

This book presents the results of a prolonged and in-depth technical investigation of construction methods possibly used to build the Great Pyramid, carried out by a Toronto-based professional architect. The book fits most realistically within the body of work produced by the many keen amateurs and professionals from domains outside of Egyptology, who apply their own expertise to the problem of understanding the great monuments of the Old Kingdom. Chiu is clear from the start that he is a professional architect who has spent many years of his retirement devoted to the study of this monument. There has been a tendency in academic Egyptology to reject amateur studies of this type out of hand, but many of the greatest Egyptologists such as Petrie and Lehner started as keen amateurs, and so this study should be analyzed respectfully and with that in mind.

Due to the fact that there are many unique and complex aspects to the Great Pyramid's architecture, conventional Egyptologists continue to find it difficult to explain all details of the monument, so any attempt to describe and explain it inevitably involves some degree of speculation. What is known must be supplemented by what is uncertain but plausible to some extent, but to what degree should studies incorporate discussions of what was possible rather than probable? Chiu takes a practical approach to solving the challenges of explaining the accomplishments of the Great Pyramid builders, and while his hypotheses are based on facts and physical evidence in some places, there is a deal of speculation incorporated in the study. The test for the reader here is to identify what

valuable observations are included in the study, while enjoying the speculation with a pinch of salt. Chiu is reasonably up-front about it. He is clearly impressed by the monument and the achievement that it represents, and has immersed himself in the details of the subject matter.

On page v he states that frankly he has his doubts about those theories that propose the use of ramps to build the pyramids. After studying some of the main ramp theories and failing to identify one ramp that can satisfy all of the construction requirements, he concludes that ramps were not used and that levers and stairways were instead employed throughout. It seems to this reader that the author created a false dichotomy at this point. Surely the use of ramps does not preclude the use of levers, and vice-versa? Chiu concludes that the ramp theories were a dead end, but he does not address more developed ramp theories such as Mark Lehner's.² Lehner's theory was based on extensive archaeological evidence from the Giza site including the surrounding quarry areas. Chiu's study is based on evidence in places, such as on page vii where he correctly draws on Petrie's survey work to identify the basic metrical unit, the cubit, used by the ancient pyramid builders.

After discussing and rejecting the ramp theories, Chiu begins to introduce details of the system of levers and steps that he proposes was used. The basic mechanism includes a wooden framework that was built around each block, which has two long wooden levers protruding out either side. These were used to tip the blocks up from side to side while shims were inserted under the sides. As the workers rocked the blocks back and forth with these levers, and shims were slipped under alternating sides, the block would rise up onto the next step level and so on. Chiu proposes that the pyramid was first constructed with a flight of steps that stretched almost the whole width of the monument, so that dozens or perhaps hundreds of these rocking systems could be used simultaneously. Unfortunately, as the author himself admits, and as other Egyptologists have discovered, wooden construction frames do not survive at such Old Kingdom archaeological sites. Construction wood was often re-used, re-shaped, or burnt in fires once the projects were ended. Any surviving pieces dried out and deteriorated or floated off in flash floods to decompose in the damp Nile silt. It should be noted that many other authors have tried to describe lever and step systems, even during Classical Greek times.³

In chapter 6, Chiu addresses one construction related object that has survived, at least in the form of small models that were often included in foundation deposits alongside miniature chisels and adzes. These are the wooden rocker frames with two semi-circular sides connected laterally by several horizontal wooden rods. Chiu proposes a system whereby these rocker frames were used as platform bases with rounded corners that helped support the blocks as they were rocked over and then raised up. The raising process is not, however, fully developed at this stage in the book, and more work on incorporating these

²Mark Lehner, "The development of the Giza necropolis", *MDAIK* 41, 1985.

³Crozat, P., *Système Constructif des Pyramides*. Canevas Editeur Frasné, France, 1997. *Le Génie des Pyramides*. Éditions Dervy, Paris, France, 2002. Isler, M. 1985. "On Pyramid Building." *JARCE* 22: 129-142, 1987; "On Pyramid Building II." in *JARCE* 24: 95-112; Herodotus, *Histories* Book 2: 125.

devices into the story would have been beneficial. In chapter 7, Chiu begins to discuss in detail how the wide staircase could have been progressively contracted inwards as the core block layers progressed upwards. The construction phases based on such staircases fit the pyramid geometry well. On page 24, as the summit is reached, readers can begin to appreciate how complex the construction process must have been, particularly since tight spiral ramps or staircases, or systems of levers and perhaps pulleys, must have been used extensively close to the top of the pyramid.

In chapter 8, Chiu introduces what is perhaps the most elaborate and speculative of his hypotheses in order to explain how the huge granite roof beams used to build the so-called king's and queen's chambers were raised up onto the monument. He proposes a rocking lever system similar in principle to the one supposedly used to raise the core blocks. In this case, however, a complex set of rounded stone shims of progressive sizes were inserted into indentations on top of a vertically oriented central support slab stone. As the long stone beams are rocked back and forth with their levers, the sizes of the rounded stone shims are gradually stepped up underneath, and the beam rises in a ratchet-like process. While a system of this type lies within the realms of possibility, and the stone balls conventionally interpreted to be pounders could be used in this way, there is a lack of evidence for the elaborate system as it is set out, particularly for any surfaces showing sets of indentations that could have served as keys for holding these rounded stone shims. What's more, the author should have addressed the dangers that could have arisen due to the moving center of gravity that would be caused by rocking these giant stone beams back and forth. The lateral forces, generated by such movements of monoliths supported only at concentrated fulcrum points, would have been enormous. Such operations would have been dangerous when carried out high above the plateau.

In chapter 10, the rocker frames reappear, but this time used in an inverted position. Chapters 11 and 13 discuss the inclinations of the faces and the casing stones, and while I did not agree with the author's conclusion that a 5:4 rise to run ratio was used, I was intrigued by his analysis of the positioning of the sloped casing stones around the perimeters of the core layers. His suggestion is that the use of longer casing stones near the center of the sides could have resulted in the enigmatic creases running down the centers of the pyramid's outer core block faces. After the casing-stone perimeter was positioned, the core blocks were moved in behind these, so that once the casing stones were removed, the underlying misalignments of the core blocks were exposed. This was the most potentially valuable observation made in the book, and shows the value of the application of logic and practical experience.

Chapter 16 introduces an ambitious and complex analysis of the magnificent structure that is the Grand Gallery. The author clearly appreciates the truly monumental task and levels of precision that were achieved during its erection, but it is difficult for the reader to follow the full process, although it is described using many complex diagrams. It is difficult to evaluate the hypothesis in all its details, but the use of wooden support frames sliding on inclined planes, to ensure that the sloped corbelling remained aligned as the

horizontal layers of inclined blocks were added, seems plausible.

The remainder of the chapters present more hypotheses explaining the gable vaulted roofs over the chambers, discussions of the star/air shafts and their inclinations, the trial passages, and the closing methods. Chapters 20-22 cover different possible devices that could, together, have constituted the ten-step closing process outlined. Sliding granite portcullis slabs, block mechanisms released by sand timers, and carefully polished casing stones placed over the northern entrance would have sealed the pyramid up at the end of construction.

Overall, the book is well illustrated with many accurate diagrams and is well organized. There are a few high-quality photographs included, and some in color. From an intellectual standpoint, the book does not provide the intellectual rigor, continuous deductive reasoning, and completeness that would be necessary in an academic publication, but it nevertheless provides a stimulating exploration of what could have been possible, and at times provides plausible insights based on solid practical experience, as well as locally applied inductive logic.

David Ian Lightbody (Journal of Ancient Egyptian Architecture)

Barbara A. Richter. *The Theology of Hathor of Dendera, Aural and Visual Scribal Techniques in the Per-Wer Sanctuary*, Wilbour Studies in Egyptology and Assyriology Number 4. Atlanta: Lockwood Press, 2016, VII-XXIX, 1-543. ISBN: 978-1-937040-51-2

The review is concerned with the revised version of the doctoral dissertation of the author, which was submitted in 2012 to the Near Eastern Studies Department of the University of California, Berkeley. The subject of the book pertains to certain aspects of Hathor of Dendera based on word and sign plays in the texts of the Per-Wer sanctuary. The study can be divided into the following parts:

Chap. 1 is devoted to the Myth of the Wandering Goddess and the Per-Wer Sanctuary at Dendera. The “Return of the Wandering Goddess“ is described as one of the most important festivals during the Ptolemaic era (1). The background of the myth and its modern interpretations are elucidated (2-8). An introductory tour through the peculiarities of the Ptolemaic temple is designed. The origin of the typical facade with screen walls is traced back to the White Chapel of Senuseret I at Karnak in the 12th dynasty (8). The circular arrangement of subsidiary rooms and corridors surrounding a single main chamber is stressed (10). The preference for underground crypts, roof chapels and mammisis in the sacral architecture of the Ptolemaic era is highlighted (10-11).

In chap. 2 the focus is narrowed to word plays in the Per-Wer. The special popularity of word plays during the Greco-Roman period is alluded to (13). In total, 179 individual

examples for word plays in the Per-Wer have been sampled in the present study (17). The mechanisms of the word plays are split up into the categories a) Repetition: same root, same form, same meaning (19-22), b) Antanaclasses: same root, same form, different meaning (22-25), c) Polyptoton: same root, different form, different meaning (26-28), d) true pun: same or different root, same sound, different meaning (28-31).

In chap. 3 sign plays in the Per-Wer are covered, for which 280 examples have been collected. The overwhelming majority of these can be found in the bandeaux of the frieze and base as well as in cryptographic texts in the South Niche (44). The creation of most sign plays in the Per-Wer by means of ideograms is discussed (44). The visual emphasis by arrangement of sign is explained, which could encompass symmetrical groupings of signs in two or more words (50-52) or alternations of similarly shaped signs (52). The emphasis by visual alliteration is portrayed, which can consist of a) Repetition of same sign (53-54), b) Repetition of signs of similar shape (54), c) Repetition of signs of similar type (55-56).

In chap. 4 primary emphasis is placed upon plays on iconography and epithets. The variations of the horn-and-disk headdress are given a detailed scrutiny (71-76). The variations of the Atf-crown are taken into account as a second category (77-81). The variations built on the Red Crown are tackled as a third category (81-87). The variations built on White Crown are referred to as a fourth category (88-90). The variations built on the Double Crown are quoted as a fifth category (90-101). The reason for the different configurations in the royal crowns of Horus/Hathor/Isis is explained by the role of each divinity in mythology (97). The variations on double feather crowns are accentuated as a sixth category (101-110). The most frequently depicted crown in the Per-Wer is the simple double crown (111). Hathor's horns-and-disk headdress is the third most encountered crown (111), while the fifth most frequently used crown is the Blue Crown of the king in ritual scenes (112). The greatest variety of crowns can be detected for the king as intermediary between the human and divine world (113).

In chap. 5 remarks on the Per-Wer sanctuary are adduced. The composition of all sanctuary texts during the reign of Cleopatra VII is highlighted, having led to a certain unity in compositional style and use of word and sign plays (123). The importance of the Myth of the Wandering Goddess in the texts and reliefs is illustrated by many examples (129-162). The characterization of Hathor as primordial creator of heaven/earth (169-172), inundation (172-181) and light (181-192) is underscored in text, iconography and imagery. The relationship of Hathor to the ancestor gods and the role of the king in this constellation are investigated (192-205). The author arrives at the conclusion that Harsomtut at Dendera and Hathor at Edfu fulfilled complementary functions in maintaining the funerary rituals for the ancestor gods (204-205). The position of the king as intermediary is documented, for which Affirmation of Legitimacy (210-220), Effectiveness of Speech (220-233), and Maintenance of Ancestor Cults (233-236) are summarized as essential aspects.

Chap. 6 is used for some conclusions. The Myth of the Wandering Goddess, Hathor as Creator, and the King as Intermediary are underlined as central themes in the Per-Wer (250).

In chap. 7 the translation of the texts in the Per-Wer Sanctuary is developed. The texts are provided together with transliteration, translation, and notes.

In Appendix I a table of word plays in the Per-Wer Sanctuary is given (389-414). The plays on words are introduced in the textual context and traced back to their origins.

In Appendix 2 a table of sign plays in the Per-Wer Sanctuary is added (415-473). The sign plays are visualized graphically and studied in detail.

In the bibliography, the pertinent literature is cited (475-498). The last pages of the book are occupied by indices (499-543).

The following hints may open up one or another new perspective:

23: The interpretation of the Red Crown as the preposition n “for” as allusion to the king might go too far.

28: For the root mnx “excellent” cf. A. I. Blöbaum, “*Denn ich bin ein König, der die Maat liebt*”, *Herrscherlegitimation im spätzeitlichen Ägypten, eine vergleichende Untersuchung der Phraseologie in der offiziellen Königsinschrift vom Beginn der 25. Dynastie bis zum Ende der makedonischen Herrschaft* (Aachen, 2006), 211.

28/29: The reconstructed puns between psD “nine” – psD “light” and HD “shrine” – HD “be light” should be considered highly speculative.

33: The root wbn “to shine” should be included in the word play, cf. St. Bojowald, “A word play between wbn “arise” and nbw “gold”?”, *AOH* 64 (3) (2011), 357-360.

46/47: The proposed connection between the signs “cow with stars between its horns” as writing of nTr.w nb.w “all the gods” and the Predynastic slate palette with stars perched above the head, on the ends of the horns, and by each ear of a cow may be called into question.

144: The connection between cnm “sadness, grief” and nm “shout” has to be rejected outright.

155: The explanation of the “hand” in sSp “luminous” in combination with the štw.t-rays as reminiscence of Amarna-period art might follow an oversimplified path.

172: For the verb qfn “to bake” cf. U. Verhoeven, *Grillen, Kochen, Backen im Alltag und im Ritual Altägyptens, Ein lexikographischer Beitrag*, *Rites Égyptiennes IV* (Bruxelles, 1984), 159-161.

178: The connection between HD.w “milk” and HD.t “white crown” may ultimately prove to be nonexistent.

189: The two roots txn “to hidden, conceal” and THn “be joyful” seem to have been combined by mistake.

218: The connection between nfr.w “good things” and nfr.w “crown” is open to some doubts.

257: The validity of the etymological connection between nbi “to fashion, work, make” and nbw “gold” may be open to question.

427: For the “scarab beetle” (Gardiner Sign-list L 1) and its sound cluster tA cf. J. A.

Roberson, *The Awakening of Osiris and the Transit of the Solar Barques, Royal Apotheosis in a Most Concise Book of the Underworld and Sky*, OBO 262 (Fribourg/Schweiz-Göttingen, 2013), 146.

443: The visual connection between the – completely regular – use of the “boat” (Gardiner Sign-list P 1) to write im “in” and the concept of the flood expressed by baH “inundation” in the same sentence is difficult to accept.

444/445: For the writing of Hwn.t “young girl” with cat-ideogram cf. Roberson, *Awakening of Osiris and the Transit of the Solar Barques*, 46.

445: The connection between nhs “Seth” and nhsi “to awake” must be rejected decisively.

447: The grounds for supposing a “personalisation” of the 2nd m. s. pronoun k with the bag wig worn by the king as part of his regalia are rather subjective.

468: For the relationship between the nb- and Hb-basket cf. W. Helck, *Zur Verwaltung des Mittleren und Neuen Reiches*, PdÄ 3 (Leiden-Köln, 1958), 302.

The study provides some tentative clues to the scribal techniques in the Per-Wer sanctuary. The proposals made by the author for the most part appear conceivable. In the interpretation of some puns, however, an overly maximalistic line is pursued.

Stefan Bojowald (Bonn)

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