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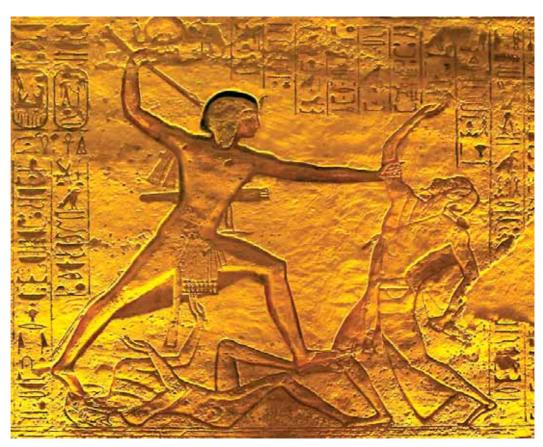


From The Editor

Year 21, first month of the second season, twenty-first day, under the majesty of the King of Upper and Lower Egypt: Usermare-Setepnere, Son of Re: Ramses-Meriamon, given life, forever and ever, beloved of Amon-Re-Horakhte, Ptah-South-of-His-Wall, lord of "Lifeof-the-Two-Lands," Mut, mistress of Ishru, and Khonsu-Neferhotep; shining upon the Horusthrone of the living, like his father, Horakhte, forever and ever. On this day, his majesty was at the city (called): "House-of-Ramses-Meriamon," performing the pleasing ceremonies of his father, Amon-Re-Horakhte-Atum, lord of the Two Lands of Heliopolis; Amon of Ramses-Meriamon, Ptah of Ramses-Meriamon, " great in strength, son of Mut," according as they gave to him eternity in

jubilees, everlastingness in peaceful years, all lands, and all countries being prostrate beneath his sandals forever. There came the king's messenger, the deputy and butler, together with king's m e s s e n g e r [bringing (?) to the king] Ramses II [the messenger (?)] of [Kheta, Terteseb] and the [second messenger (?)] of Kheta [bearing (?) a silver tablet] which the great chief of the Kheta, Khetasar (ht3sr3) [caused] to be brought to Pharaoh, to crave peace [fro]m [the majesty] of the King of Upper and Lower Egypt, Ramses II, given life, forever and ever, like his father, Re, every day. Copy of the silver tablet, which the great chief of Kheta, Khetasar (ht3s3r3) caused to be brought to Pharaoh, by the hand of his messenger, Terteseb (t3r3tysbw), and his messenger, Ramose, to crave peace from the majesty of Ramses II, the Bull of rulers, making his boundary as far as he desires in every land.

From the Egyptian version of the peace treaty between Ramses II and Hattusili III (After Breasted)



Reviving the Lost Ancient Egyptian Art of Sarcophagus Making

Christian De Vartavan¹



Varnished Sarcophagus of Khonsu-Ms (21st dynasty – Deir el Bahari), Victoria Museum, Uppsala –Courtesy of Mr Geoffrey Metz, Curator).

Since the beginning of the Old Kingdom and for over three thousand years, ancient Egyptians used woods, mineral pigments, plasters and binders of various kinds, as well as varnishes to build "boxes" meant to protect the bodies of their deceased ones. This, with the aim to help these defunct souls fare across the Netherworld and live hereafter in the Amenta and its "Fields of Ialou"; which is to say the Egyptian version of paradise. These objects are now known as "sarcophagus" (plural "sarcophagi"), a word said to originate from the Greek "flesh eater" or "coffin". At first simply square, sarcophagi became with time very elaborated, adopting forms imitating parts of the humans bodies and very elaborate religious decorations. With the result that some of them reached such a level of technological and artistic sophistication that they are considered as masterpieces of the art world.

The art of making a heta nb-n-nkh or "Lord of Life", or a heta heta, het

with the disappearance of ancient Egyptian religion; although some later realisations of the Ptolemaic and Christian periods clearly inspired themselves from their pharaonic forebears whether at the technical or religious level. In the course of three thousand years of acquired empirical experience to build these beautiful creations, for the hundreds of thousands of bodies which they aimed to preserve, ancient Egyptian artists developed a technological and technical know-how the sophistication of which is increasingly stupefying us and which in many aspects remain not short of unknown. Considering the various artistic schools which must have existed in Memphis, Thebes, Sais or even Alexandria, and considering that every master - as today - had its own manufacturing secrets, this is perhaps not surprising. Yet as we shall see the careful study of the basic materials once employed in the manufacture of ancient Egyptian sarcophagi has since a few years unravelled new data, in turn further revealing unforeseen technological dimensions. With the result that a first attempt to reconstruct

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Egyptian Blue cake, made of malachite, quartz and other ingredients, prepared YSU Armenian Egyptology Centre before firing.

from scratch an ancient Egyptian sarcophagus is now and for the first time realistically within reach. This is precisely the goal of our state validated "thematic research", started in September 2007, which aims to reconstruct in Armenia not one but two New Kingdom sarcophagi so as to, within the frame of experimental archaeology, trigger several scientific discoveries in the disciplines and fields involved in this reconstruction.

As already stated elsewhere², anyone can take some wood, some plaster, some oil or acrylic paints and some modern varnish to make a an "ancient Egyptian" sarcophagus. In the past many cabinet makers worldwide have produced good to very good looking ancient Egyptian objects, such as, for example, the replicae of the Tutankhamun objects exhibited a few months ago in Zurich (Switzerland). The material and techniques used for their manufacture have however very little to do with those employed by ancient Egyptian workers and artists - if not for a start because many of these are still debated or even unknown in certain cases.

Reconstructing an ancient Egyptian sarcophagus - such as we are employing ourselves with within the frame of our "Sarcophagus Project" - is in fact no less difficult than replaying one of many existing partitions of classic music, parts of which would need rediscovering.

The wood cannot be any wood but one used in ancient Egypt for such purpose. The gessoes - that is the surfaces applied over the wood prior to its painting - must consist of the matter which ancient Egyptian "plasterers" applied. The pigments need to be those employed by ancient Egyptian artists, hence natural pigments; the varnishes equally. Moreover, the tools used should be those once utilized, and the artistic techniques near as much as possible those acquired and practiced by ancient Egyptian craftsmen throughout their lives; which is to say that the mastery of the reed-pen and palm made brushes should be reached. All in all an extremely difficult task, as even if the wood is easily found, the gessoes, natural organic and inorganic pigments as well as techniques need to be reconstructed, whereas ancient Egyptian varnishes so far retain as we shall see a part of mystery. Moreover, the art of coffin making varied not only from one artistic school to another, but also across time - producing a wide variety of sarcophagi, usually recognizable in relation to their time and place of origin.

The "Sarcophagus Project" was initially triggered by a simple request concerning the typical yellowing of 21st dynasty sarcophagi, from our colleague Edward Loring of the Centre for Egyptological Studies of the Russian Academy of Sciences (CESRAS) now our partner in this research program. As formerly stated by Elisabeth Delange curator at the Louvre Museum:



Purer Egyptian Blue obtained in Yerevan State University after several experiments.

²⁻ See the undersigned's edito in the online AEC-Newsletter No. 8 (December 15, 2008), page 1 at http://a-egyptology.atspace.com



"Since the discovery of a whole series of coffins of this [21st dynasty] category in [the cache of] Deir-el Bahari, all curators, all Egyptologists since the beginning of the century ponder on the varnish [of these sarcophagi]...What was the real color [of this 21st dynasty varnish], what was the desired effect, was this varnish aimed to reproduce the color and glittering of gold or was it used for conservation purposes?

Since our Armenian Egyptology Centre specializes on the plant world of ancient Egypt, including basic plant material, and since science showed a few years ago these varnishes to be partly made of a resin issued from one or more Pistacia tree species (the same family to which the true pistachio tree belongs), the various questions attached to the yellowing of the coffins interested us. These questions are much less why this yellowing? A question which recent chemical studies have answered by showing the oxidization processes darkening varnishes remaining in the obscurity of tombs for centuries.

Rather, the unsolved question of the exact composition of these varnishes, as well as their well known alteration of the natural pigments which ancient Egyptian applied on coffins, since these varnishes often turned the original white, red and blue pigments in respectively: yellow, dark red or brown, as well as dark blue to green.



Firing of Egyptian Blue cakes in red hot oven in Yerevan State University.



Firing of Egyptian Blue cakes in red hot oven in Yerevan State University -Edward Loring and Christian de Vartavan.

It was thus first decided that an in depth research on these Pistacia based varnishes should be conducted, with the aim of reconstructing them for "real" and thereafter apply them on ancient Egyptian pigments equally reconstructed - to measure their chemical interactions over a long period. Thereafter sprung naturally the idea to reconstruct entirely one or two ancient Egyptian sarcophagi, and thus give a re-birth to a long vanished art. We also thought - in relation to ancient Egyptian art and technology - that these reconstructed 21st dynasty sarcophagi would be first class tools for educational purposes.

Until now the reconstruction of an ancient Egyptian sarcophagus was for a start hindered by three major obstacles. Firstly, the artistic capacity of the makers (particularly concerning carpenters or draughtsmen where much skill is required for their work) as, as just stated above, the mastery of the reed-pen and brushes needs to be reached so as to be able to draw





First experiment with red ochre and stick by C. de Vartavan – detail of a scene from Ouserhat's tomb reproduced on a wall in construction of Yerevan State University. Photo E. Loring.

the Egyptian "line". Secondly, technological know-how since not only a mastery of the making of ancient Egyptian blue is needed, but also of ancient Egyptian varnishes some ingredients of which and its principle of manufacture remaining unknown.

Reconstruction of Egyptian blue and other ancient Egyptian pigments

Where Egyptian Blue is concerned, it has long been established that since early times ancient Egyptians discovered (or learnt from abroad) the art of cindering in red hot ovens copper oxides - which are available in nature in the form of natural copper ores or of the mineral malachite -with silicates, such as sand or natural quartz. To make it clearer, they discovered how to melt (fuse would be a better word) minerals like malachite and quartz using natron and calcium carbonates as additives and reacting agents. This, so as to be able to transform a green looking sandy paste, in a variety of blue pastes with deep or glittering tones which once crushed produce blue pigments of various density and purity.

Egyptian Blue ($CaCuSi_4O_{10}$), Loring and the author were successful to recreate in November 2008 within the premises of Yerevan State University Faculty of History's Archaeology Laboratory. Against further evidence this is

the first time in modern times that this synthesis is made on Armenian territory, whereas very few institutions worldwide have attempted and succeeded in this endeavor. The creation of this synthetic blue pigment - a difficult process necessitating a just balance between each component at a right temperature above 800° Celsius - is one of the greatest technological achievements of antiquity and one of the first synthetic processes and products in the history of mankind. Our center's capacity to produce Egyptian Blue pigments removes a heavy obstacle

against the reconstruction and decoration of the sarcophagi.

At the same time further successful experiments for the making of the other basic colors - green, yellow, white and black (or even rarer colors) were made, following initial collecting of the wide range of minerals used by ancient Egyptians, such as steatite, realgar, orpiment, etc.. Once gathered, these basic minerals were crushed in the laboratory or in our centre with a hammer or a bronze pestle, so as to thereafter mixed them with a plant gum to bind and transform them into useable pigments.

First experiment with gesso

At that stage appeared the necessity to emulate an ancient Egyptian gesso – that is the white plastering spread on the sarcophagi's wood and on which decorations were drawn and painted. A first experiment using a mixture of cow-dung and earth, thereafter plastered three times with layers of pure gypsum, was made. However, a simpler experiment of sizing the wood with rabbit or fish glue prior to applying various types of gypsum layers – as seems to have been used for Nsi-Khonsu's 21st dynasty coffin in Cairo – is currently in the waiting.



Reconstruction of the technique of reed-pen drawing and mastery of the art of ancient Egyptian draughtsmanship

First experiments with twigs collected in the wild during one of our many recent botanical expeditions allowed the author, who is also a draughtsman, to experiment with linemaking using a natural ferrous oxide, otherwise known as red ochre (Fe₂O₃), similar to that existing up to this day in the wadis of the Aswan area. Under an imposed time constraint of less than five minutes, and a free hand since ancient Egyptian artists had to cover rapidly large surfaces of preparatory drawings, the author succeeded in recreating a detail of a scene from the tomb of Userhat. Despite the relative accuracy of the drawing considering that this was a first attempt - the exercise made us understand that the exact

One of Egyptian Blues obtained in YSU transformed in a blue pigment.

species of reed should be retrieved for more precision. By chance we discovered that the same common reed species (*Phragmites communis* L.), with which ancient Egyptians often made their pens, grows wild along the ancient river of Yerevan. Following the cutting of a series of stems, a reserve of potential pens were made, some of them thereafter sharpened to remake the same drawing, but this time with a greater degree of accuracy. The pen and ochre experiment was again repeated to draw a detail of a scene from Tomb 101 (Thebes) showing a young donkey – this time with more than satisfactory accuracy.

The remaining step, where draughtsmanship is concerned, will be to reconstruct ancient Egyptian brushes similar to the surviving examples scattered across museums. This, so as to spread in the very same manner as ancient Egyptian artists did

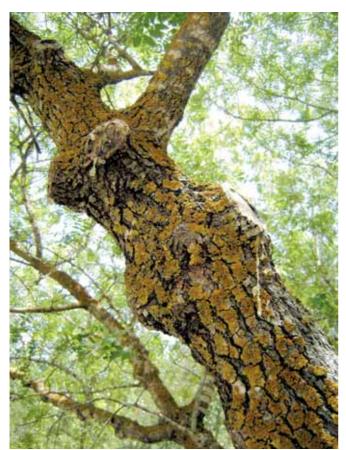
the pigments in the red preparatory lines – so as to obtain the same brushmarks which are sometimes observed in the colors decorating sarcophagi.

Progresses and discovery in the reconstruction of ancient Egyptian varnishes and their history

The third major obstacle, and a formidable one, is the reconstruction of an ancient Egyptian varnish. If published chemical identifications of resins found in ancient Egyptian funerary or field archaeology contexts are substantial, chemical identifications of ancient Egyptian varnishes are extremely rare. For what is published, whether performed in England or in France analyses agree on two points. First and as stated above, some Pistacia resin was often employed for their manufacture; second, they are a mixture of different ingredients as traces of other resins, wax or fats are detected by the various spectrographic techniques employed for these same analyses.

Concerning the Pistacia resin, and despite what is sometimes stated in the literature, there is as yet no proof of the exact species used. The best two





Resin exuding from the Atlantic Mastic Tree (*Pistacia atlantica*).

candidates for the source of the resin are the mastic tree (Pistacia lentiscus L.) - often cited - and the Mount Atlas mastic (Pistacia atlantica Desf.) The former in fact yields very little or no resin, except for the famous Chios variety found only in the southern part of the Aegean island bearing the same name. The possibility that some of it was already imported from there in remote times - or from the northwestern coast of Egypt and Libya where it is also found - should however not be excluded. In the same way as it is possible that the resin of another species - the Bombay Mastic (*P.* khinjuk) - which thrives at the top of Sinai mountains could theoretically be used. It is however more likely that the resin used was that of the Mount Atlas mastic. A tree which thrives not only in Sinai - some fragments of its wood and fruits were found in the Hathor temple in Timnah (New Kingdom;) - but all the way to the Levant, as well as in Libya. This is one of the reasons why last June 2008 N. Garibian and the author organized a botanical expedition to Jerusalem where wild or planted stands of this tree are found, to collect its resin

as well as that of nearly all other Pistacia species which ancient Egyptian could have used. With these resins now in our reference collection, we will soon start reconstructing a series of ancient Egyptian varnishes, particularly as we have made a decisive advance in this respect.

This advance concerns the second aspect on which science agrees, i.e. the mixed composition of ancient Egyptian varnishes. Luckily, a unique papyrus discovered in Deir el Medineh (Upper Egypt) provides the recipe to make a New Kingdom varnish. It is a letter of carpenter Maanakhtef to the scribe of the vizier of Amenmose asking him for the three ingredients necessary to prepare the varnish (mrht/mrhw in ancient Egyptian) of a coffin he wished to finish; the text running as follows:

"..look, I am now decorating the small inner coffin and the lid. The sntr which you brought is completely finished. Please bring sntr, mny, & mnh so that I may prepare varnish [mrht]"

It may be noticed that the varnish is indeed as chemical science revealed it a mixture. Science in fact also revealed that the resin discovered in Canaanite containers found in Akhenaton's capital – Amarna – was Pistacia resin. A most welcome identification as the lids of many of these containers were inscribed with the name <code>sntr</code>. The same <code>sntr</code> the mentioned in Maanakhtef's letter and which Egyptology long knows to be a resin which can also be burned as incense. This discovery establishes one of the three ingredients – Pistacia resin - as necessary to make a New Kingdom varnish, but what of <code>mny</code> in and <code>mnh</code> is and <code>mnh</code> in and <code></code>

Following our examination of the nature of the two other ingredients, we were able to make a first simple but very decisive advance. Epigraphists long understood that *mnh* was some kind of wax and it may there be again noticed that this fits with science which identified some "wax" in ancient varnishes; but which as wax sources are many? This particular question raised, we turned to our colleague Dimitri Meeks of Montpellier University (France), a leading expert on ancient Egyptian lexicography, and asked if this "wax" could not precisely be "beeswax". Particularly as to this day it is used with mastic to make some Renaissance-type varnishes. The answer

came swiftly as Meeks could immediately confirm that "mnh" was indeed "beeswax" since Papyrus Salt 825 clearly states that *mnh* is produced by the bee together with honey. With this reply a second of the three ingredients was thus identified, opening a major door for the identification of the most mysterious mny, a word for which so far very few and contradictory translations exist, and which we are currently examining. In the meantime for whoever knows ancient recipes for varnish making, if two of the ingredients are mastic and beeswax, the third should logically be some sort of solvent. Very probably turpentine as also issued from another Pistacia species found in the Levant, the terebinth tree (Pistacia terebinthus).

The problem is that according to our knowledge of pharaonic technology, artists did not know about solvents such as turpentine (made mainly of either the terebinth or pine

tree) and even less about distillation which seemingly entered the Egyptian civilization during the very late periods of its history. This is the state of our knowledge, but not only recent external evidence increasingly suggest that distillation was more ancient than thought, but ancient Egyptians had in fact probably access to more natural types of solvents either in the form of highly terpenic resins or oils. Recently the author has indeed identified many texts mentioning "etheric" oils which could be some primitive sort of solvent products. Another question now under examination and which to our knowledge has never been raised. More

definite answers will come since mastic and beeswax will soon be combined with highly terpenic resins to see if one or more varnishes can be achieved; something highly likely.

Where we definitely stroke advances, where ancient Egyptian varnishes are concerned, is in relation to their basic nature, as well as their place in history. The knowledge of two out of three ingredients employed by Maanakhtef to make varnish, as well as the strong suspicion of the identity of the third combined with the results showing that varnishes could be monobi- or tripartite, perhaps even quadripartite, permit to definitely qualify these varnishes as "Complex varnishes" or "Complex-media varnishes". These terms, so far unseen in Egyptology, are in contrary well known in the field of applied arts where complex varnishes, in fact similar in nature and composition to that prepared by Maanakhtef's, are used up to the present. This conclusive labeling changes the history of ancient art and technology, since it may be said that ancient Egyptians knew about complex varnishes as early as the New Kingdom (Circa 1550 - 1069 B.C.) In other words, many centuries earlier than previously thought in relation to what is known of the history of varnishes which start, at the earliest,



Raw malachite and Egyptian Blue cakes - note the burnt attempt.

during the very late antiquity and usually concentrates on Renaissance masters; masters who in fact inherited much of their knowledge from antiquity.

This is however not all. The question of how ancient Egyptian artists came to learn about making complex varnishes compels to study the very history of varnishes in ancient Egypt.





Pounded malachite to obtain a vivid green pigment.

A field where, despite scarce analyses, much information is available since varnishes are easily seen on objects. British chemist and Egyptologist Alfred Lucas already established in his pre-Second World War pioneer study "Ancient Egyptian Materials and Industries" that prior to the New Kingdom what were called "varnishes" were in fact often black glosses made out with pigments. Whereas "varnish", properly speaking, only appeared from the beginning of the New Kingdom, to gradually disappear from the 26th dynasty (672-525 B.C.) onwards - with only a few instances found up to Roman times. Recent research has confirmed Lucas's statements, and went further as to precise that the first use of black varnish is linked to the appearance of coffins with a black background and to the beginning of Year 7 of the reign of Hatchepsut (circa 1473-1458 BC - 18th dynasty). Whereas the likelihood was also established that yellow varnish was introduced exactly during the same reignal year; hence during the beginning of the 18th dynasty.

This coincides with the historical time period from which Egyptian power endured increasing setbacks in its "Late Bronze Age" trade. Thereafter in its domination of foreign nations until such time when its power receded within its traditional frontiers. This recession, as various authors rightly noted, would have gradually created a rupture in the exploitation and import of Pistacia/snTr resins and other incenses. Today, "mastic" varnishes are made with the resin of *P. lentiscus* – a question of availability. *P. lentiscus* resin is hence widely available in view of the exports from Chios, the reverse being true for *P.*

atlantica, the resin of which is, as far as we know, not used anymore. The reverse situation was no doubt true in ancient Egypt since *P. lentiscus* resin – a species which in fact yields very little resin (the Chios variety aside) – was not easily available. Whereas when the Egyptian Empire was at its height, *P. atlantica* resin could be obtained from various parts of the neighbouring Levant or Sinai, and even from Libya which Egypt also long controlled.

This is most probably why " sntr " "mastic"made (i.e. P. atlantica) varnishes appeared during the New Kingdom, and thereafter declined in use from the 21st/26th dynasty. When the increasingly arduous tapping and export of these resins - because of the increasingly aggravated political situation became difficult, the fabrication in Egypt of complex varnishes became sporadic. To eventually and gradually disappear when Egypt ultimately faced political chaos during the Third Intermediate Period, and its later direct invasions. In fact, if we refer to the archaeological record, only a few traces of these varnishes are found until the Roman period. To sum it up, so long as the New Egyptian Empire extended itself up to Syria, the mastic and other such foreign supplies flowed. When it receded to the frontiers of Egypt, the mastic supply receded also - until it nearly disappeared. Thus preventing multipartite, particularly tripartite varnishes to be composed and used. Hence the authors' proposition to further label these "complex" varnishes as "imperial", since they have reflected - a pleasant jeu-de-mot - over circa 500 years, i.e. from Hatshepsut's to Ramses IX (circa 1126-1108 BC-20th dynasty)'s reigns, the extent of Egyptian power and the degree of artistic knowledge, technological elaborations and creations which any strong political power, and even more empire, engenders. To clearly label these varnishes as "imperial" (as just explained in Vartavan, 2009: in press) has not, as far as we could verify, been done before. Probably because the subject of ancient Egyptian varnishes has been left either to a very few Egyptologists, and more often to hardsciences specialists such as chemists, who not being Egyptologists and/or [art] historians, couldn't reach this conclusion. Where art history and the history of technology are concerned, this precise labeling should be a useful and important contribution.



Conclusions

The above study presented the extent of the advances and discoveries made in our attempt to reconstruct the lost art of ancient Egyptian sarcophagus making. The technology and technique of Egyptian blue is mastered, equally the very difficult art of ancient draughtsmanship. First successful experiments were made in the reconstruction of ancient Egyptian gesso and pigments, whereas, through linguistic, the identity of another of the three ingredients known to have composed an ancient Egyptian varnish has been discovered, namely "beeswax". Discovery opening the door to suspect the nature, identity and use as solvent of the third ingredient named mny. These combined results allowing the further and definite discovery that ancient Egyptian had discovered the art of making "complex media" varnishes many centuries prior than expected. Varnishes which can now be labeled as such and can equally be labeled as "imperial" as they have reflected New Kingdom Egyptian foreign policy and trade over a period of 500 years. The last two conclusions constituting decisive breakthroughs not only in the history of ancient Egyptian art, but in art history in general; and a type of synthetic conclusions which we did not expect to reach before several years.

Much research remains however to be done

until all materials needed to rebuild two sarcophagi from the 21st dynasty will have been collected and their technological use fully mastered. The project is moreover not only aimed at only physically reconstructing such beautiful objects, but also in the process trigger new questions so as to bring new conclusions, such as already reached for the "complex" and "imperial" nature of ancient Egyptian varnishes. Reviving a lost art is of course a rare privilege, but to do it right requires patience and sometimes a voluntarily slowed pace - so as to ponder. Ancient Egyptian artists after all practiced this art all their life and were moreover the heirs of thousands of years of empirical artistic knowledge. This is precisely why, long after the sarcophagi will have been built, their physical evolution will be carefully monitored through a variety of measuring equipments to see how gesso, pigments and varnish chemically interact and alter themselves. Monitoring perhaps to be made by generations of students, who in the meantime, will decipher the beautiful texts and scenes painted on their sides so as to understand the unsuspected deep spiritual meanings which these very elaborate objects harbor. A spiritual aspect of the research which is not forgotten, and which this ancient art powerfully sustained for millennia. A Lord of Life, one may recall, is shaped like a sea vessel so as to carry its owner over a long journey through time.

Christian T. de Vartavan, Director of the Armenian Egyptology Centre (Yerevan State University) since 2006 and founder of Egyptology in Armenia. He has studied the plant remains found from Tutankhamun's tomb (1988-1994) and unwrapped the mummy of Namenkhet-Amen in Venice (1995). He is the author of several publications including two landmark books in Egyptology: "Codex of Ancient Egyptian Plant Remains (1997 - London) and "Hidden Fields of Tutankhamun" (1999 [2nd. Edition, 2002] - London).

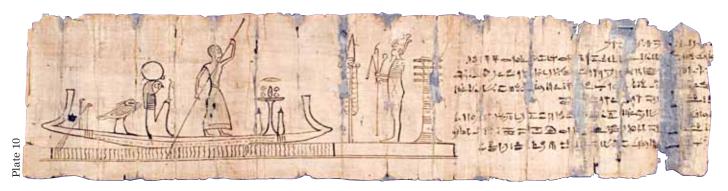


Egyptian Blue cakes after firing – note the different tones reflecting different proportions between constituents.



Ancient Egyptian funerary practices from the first millennium BC to the Arab conquest of Egypt (c. 1069 BC-642 AD)

Mladen Tomorad, Ph.D.



1. Introduction

The Ancient Egyptians changed their burial practices during history mostly as result of changes in religious beliefs and these changes are visible in every period of their long history. The major development of Egyptian burial rites was visible until the Third Intermediate Period when mummification techniques started to be simpler, and funerary practices started to decline. Bigger changes happened during Hellenistic and Roman times when the new elements of funerary practices were added. In the same period the typical Egyptian rites were also adopted by foreigners and new rulers of Egypt (Macedonians, Greeks and Romans).

There are not many literary sources which can give us detailed descriptions about Egyptian funerary customs and burial practices. Most of the details were described by Greek historians, Herodotus¹ (5th century BC) and Diodorus Siculus² (1st century BC). Mostly all other sources came from archaeological excavations of elite and middle class burial tombs. Lower class burials rarely contain more then few objects (usually scarabs, shabtis and amulets).

The archaeological museums in Croatia hold various types of typical funerary equipment which were commonly placed in tombs. I will try to document my work with such objects mostly because they are not so well known in the world of Egyptology.

2. Death and rituals before the embalming

Today the best preserved descriptions about ancient Egyptian funeral customs came from Herodotus and Diodorus Siculus. Their words well describe how Egyptians treated deceased after his/her death and how their associated rituals looked like for thousands of years.

"As regarding mourning and funerals, when a distinguished man dies all the women of the household plaster their heads and faces with mud, then, leaving the body indoors, perambulate the town with the dead man's female relatives, their dresses fastend with a girdle, and beat their bared breasts. The men

too, for their part, follow the same procedure, wearing a girdle and beating themselves like the women. The ceremony over, they take the body to be mummified."³.

"When the wife of a distinguished man dies, or any woman who happens to be beautiful or well known, her body is not given to the embalmers



1- Herodotus, The Histories, II, 85-90.

2- Diodorus Siculus, Library of History, I, 91-92.

3- Herodotus, The Histories, II, 85. Similar description by: Diodorus Siculus, Library of History, I, 91





immediately, but only after the lapse of three or four days. The is a precaution ary measure to prevent the embalmers from violating the corpse, a thing which is said actually to happened in the case of a woman who had just died.⁴"

"If anyone, either an Egyptian of a foreigner, is found drowned in the river or killed by a

crocodile, there is the strongest obligation upon the people of the nearest town to have the body embalmed in the most elaborate manner and buried in a consecrated burial-place; no one is allowed to touch it except the priest of the Nile – not even relatives or friends; the priests alone prepare it for burial with their own hands and place it in the tomb, as if were something more sacred than the body of a man."⁵

3. Mummification

3.1 Embalmers



From the earliest times preservation of deceased body was the key element for reaching eternal life and the essential part of burial practice in ancient Egypt. In Egyptian religion ka could return to the deceased body only if it would be well preserved from decay. In cases when it was in bad shape and unrecognizable because

of the decay afterlife of the deceased will be most likely impossible to reach.

The artificial process of preservation of the deceased body usually is called mummification and it was very well described by $Herodotus^6$ and $Diodorus\ Siculus^7$. In

second part of the first millennium when those ancient writers wrote their works mummification techniques already well declined, and embalming was also more widespread and used for burial of all classes if we compare it with previous times. Similarity of both descriptions is also good evidence that whole embalming process didn't change that much during Late and Ptolemaic periods.

Embalmers profession was very well organized in ancient Egypt. After the death body of deceased was brought to the embalmers. "The embalmers, when a body is brought to them, produce specimen models in wood, painted to resemble nature, and graded in quality; the best and most expensive kind is said to represent a being whose name I shrink from mentioning in this connexion



⁴⁻ Herodotus, The Histories, II, 89.

⁵⁻ Herodotus, The Histories, II, 90.

⁶⁻ Herodotus, The Histories, II, 86-88.

⁷⁻ Diodorus Siculus, Library of History, I, 91²



(e.g. Osiris); the next best is somewhat inferior and cheaper, while the third sort is the cheapest of all. After pointing out these differences in quality, they ask which of the three is required, and the kinsmen of the dead man, having agreed upon a price, go away and leave the embalmers to their work⁸." Body was then firstly taken to the "Place of purification" (ibw). In that structure it was firstly washed with natron and after that was brought to the "House of beauty" (per nefer) where body was actually mummified⁹. "Overseer of the mysteries" (hery seshta), who took mythological part of Anubis, was in charge of mummification. He was helped by "Seal-bearer of the god" (hetemw netjer), who was usually priest of Osiris 10 .



3.2 Embalming: types, magic rituals and development of techniques

Egyptians used "three classes of burial, the most expensive, the medium, and the most humble¹¹". This is how Herodotus described these methods. "The most perfect process ...: as much as possible of the brain is extracted through the nostrils with an iron hook, and what the hook cannot reach is rinsed out with drugs; next the flank is laid open with a flint knife and the whole



contents of the abdomen removed; the cavity is then thoroughly cleansed and washed out, first with palm wine and again with an infusion of pounded spices. After that is filled with pure bruised myrrh, cassia, and every other aromatic substance with the exception of frankincense, and sewn up again, after which the body is placed in natrum, covered entirely over, for seventy days – never longer. When this period, which must not be exceeded,

is over the body is washed and then wrapped from head to foot in linen cut into strips and smeared on the under side with gum, which is commonly used by the Egyptians instead of glue. In this condition the body is given back to the family, who have a wooden case made, shaped like the human figure, into which it is put. The case is then sealed up and stored in a sepulchral chamber, upright against the wall.



When, for reasons of expense, the second quality is called for, the treatment is different:

- 8- Herodotus, The Histories, II, 86.
- 9- Shaw & Nicholson 1995, p. 191.
- 10-Shaw & Nicholson 1995, p. 190.
- 11 Diodorus Siculus, Library of History, I, 91²



no incision is made and the intestines are not removed, but oil of cedar is injected with a syringe into the body through the anus which is afterwards stopped up to prevent the liquid from escaping. The body is then pickled in natrum for the prescribed number of days, on the last of which the oil is drained off. The effect of it is so powerful that as it leaves the body it brings with it the stomach and intestines

in a liquid state, and as the flesh, too, is dissolved by the natrum, nothing of the body is left but the bones and skin. After this treatment it is returned to the family without further fuss.



The third method, used for embalming the bodies of the poor, is simply to clear out the intestines with a purge and keep the body seventy days in natrum. It is then given back to the family to be taken away." 12

Diodorus Siculus well described the details how the body of the deceased was treated after it was brought to the embalmers. "When an agreement has been reached on every detail and they have taken the body, they turn it over to



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men who have been assigned to the service and have become inured to it. The first is the scribe, as he is called, who, when the body has been laid on the ground, circumscribes on the left flank the extent of the incision: then the one called the slitter cuts the flesh, as the law commands, with an Ethiopian stone and at once takes to flight on the run, while those present set out after him, pelting him with stones, heaping curses on him, and trying, as it were, to turn the profanation on his head; for in their eyes everyone is an object of general hatred who applies violence to the body of a man of the same tribe or wounds him or, in general, does him any harm. The men called embalmers, however, are considered worthy of every honour and consideration, associating with the priests and even coming and going in the temples without hindrance, as being

undefiled. When they have gathered to treat the body after it has been slit open, one of them thrusts his hand through the opening in the corpse into the trunk and extracts everything but the kidneys and heart,





and another one cleanses each of the viscera, washing them in palm wine and spices. And in general, they carefully dress the whole body for over thirty days, first with cedar oil and



certain other preparations, and then with myrrh, cinnamon, and such spices as have the faculty not only of preserving it for a long time but also of giving it a fragrant odour. And after treating

the body they returned it to the relatives of the deceased, every member of it having been so preserved intact that even the hair on the eyelids and brows remains, the entire appearance of the body is unchanged, and the cast of its shape is recognizable."¹³

Mummification process did not only include embalming. According two survived papyri from 2nd century AD¹⁴ which has been copied from the sources from previous times after each stage specific magical rituals has been made. Magical texts were read by the "lector priest" (hery heb), and evisceration and bandaging has been done by the "bandagers" (wetyw)¹⁵ as it was described by ancient writers. After the whole process was completed body was returned to the family.

In their works Herodotus and Diodorus Siculus did not state what happened with viscera but archaeological evidences gave us the answer to that question. During the Late period the whole viscera were placed in four anthropomorphic canopic jars known as Sons of Horus. The liver was protected by humanheaded Imsety, the lungs by ape-headed Hapy, the stomach by the jackal-headed Duamutef



and the intestines by the falconheaded Qebehseneuf. After the burial these vassals were placed in the tomb along with mummified deceased body. 16 During Hellenistic period internal organs were stored in tall wooden canopic chests or placed between deceased legs during the bandaging. During some embalming procedures organs were removed, treated and then returned inside mummy. Also in some cases mummies were stuffed with balls of resin soaked linen. broken pottery or mud, molten resin or bitumen. 17

During the Ptolemaic period mummification was adopted by Greeks as a traditional aspect of Egyptian religion. After

30 BC when Egypt became part of the Roman Empire it was also adopted by Romans.

During the Hellenistic and Roman periods the actual burial was no longer



¹³⁻ Diodorus Siculus, *Library of History*, I, 91^{4-7} .

¹⁴⁻ Shaw & Nicholson 1995, p. 191.

¹⁵⁻ Shaw & Nicholson 1995, p. 191.

¹⁶⁻Tomorad & Urani_ 2006, pp. 93-97.

¹⁷⁻ David 2002, p. 336

the most important part of funeral procedure. Older traditions were replaced with more sophisticated appearance of the mummified

bodies which were now highly decorated with fancy artistic or rhomboidal patterns on bandages. 18 Ptolemaic mummies of Egyptians were mostly bandaged together with the whole body, but limbs (arms, legs) of Greek mummies were wrapped separately. 19 Head of the mummified body was usually covered with decorated funeral mask made of cartonnage, and body was also wrapped in nicely decorated funeral shroud. The whole body was then put in outer casing made from decorated painted cartonnage, and the body was usually kept in some previously prepared chamber in the house where the body could be seen by living. Such appearances became the most important part of burial practices as it was nicely described by Diodorus Siculus²⁰. Mummies were identified by small wooden label which was usually tied by the neck of deceased. Such labels written in Greek, or bilingual Greek-Demotic usually records the name of the deceased, parents name and age.²¹



Mummification was still in use during the Roman and Byzantine period but the whole process decline even more. During Roman

times bodies were mostly covered with thick coating of resinous substance which supposed to prevent decay.²² During Late antiquity bodies were only treated with natron and instead of bandages body was dressed in daily life dress.²³ The Arab conquest of Egypt in 7th century AD also ended common use of mummification in Egypt.

4. Judgement and preparation for the burial

It is well known from the previous times that after the mummification process family of the deceased announces the day of interment to the forty-two judges²⁴ who had to decide if the deceased could be buried or not. Diodorus Siculus described the process of judgement²⁵ during the late Ptolemaic period when the actual judgement of the dead and the final verdict of the gods were mostly based on a virtuous life of the deceased. But still the whole judgement process was still very important and most likely the central element of achieving the afterlife. When the deceased passed his/her judgement relatives and friends "describe this righteousness and justice after he attained to manhood, also his self-control and his other virtues, and call upon the gods of the lower world to receive him

²⁵⁻ Diodorus Siculus, Library of History, I, 92.



¹⁸⁻Budge 1893. pp. 186-187; Bowman 1986, p. 186.

¹⁹⁻Budge 1893, pp. 181, 186.

²⁰⁻ Diodorus Siculus, Library of history, I, 91⁷.

²¹⁻ Budge 1893, p. 188.

²²⁻ David 2002, p. 337.

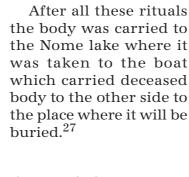
²³⁻ Mummies and Mummification: Late Period, Ptolemaic, Roman and Christian Period at: Digital Egypt for Universities - *A learning and teaching resource for higher education web site* [www.digitalegypt.ucl.ac.uk/mummy/late.html, 13 February 2009].

²⁴⁻Book of the Dead, chap. CXXV.



into the company of the righteous; and the multitude shouts its assent and extols the glory of the deceased, as of one who is about to spend eternity in Hades among the righteous."²⁶

the body was carried to the Nome lake where it was taken to the boat which carried deceased body to the other side to the place where it will be





5. Burial customs during the Third **Intermediate and Late Period**

During the Third intermediate Period archaeological evidences starts to document some changes in Egyptian funerary practices which were not typical in previous periods.

Theban officials of $21^{\rm st}$ dynasty were buried

Egyptians.²⁸ In northern regions pharaohs, members of royal family and high officials were buried in small tomb chambers mostly built within enclosures of the temples. In elite tombs 29 from this period still wide range of grave goods were

found (coffins, shabtis, stelae, funerary papyri, canopic jars, and figures of gods - mostly Osiris). From the 22nd dynasty elite members of Egyptian society were mostly buried in small chambers³⁰ with largely reduced grave goods which only includes coffins, cartonnage, braces and amulets.

Shabtis, funerary papyri and canopic jars are very rarely discovered in tombs from mid-22nd dynasty until the end of period.³¹



In the Late period tombs³² were again equipped with much wider range of grave goods. In some tombs up to for hundred shabtis were found (one for each day and some overseer shabtis). Many figures or statuettes of the gods (e.g. Ptah-Sokar-Osiris; Pl. 2) and goddesses (e.g. Isis, Nephthys) were also placed in tombs. They were made from wood, clay or baked soil.³³

Sometimes bronze votive statuettes of gods and goddesses (e.g. Isis with Horus; Pl. 2) were also discovered in tombs. Scarabs (Pl. 3) and almost all types of amulets (e.g. ankh, djedpillar and *udjet*-eye; Pl. 4-5) were wrapped

> inside the mummy bandages.

> Internal organs were placed in canopic jars (Pl. 7), and the mummified body in coffin or

in vast galleries with other

³³⁻ Burial customs: Late Period at: Digital Egypt for Universities - A learning and teaching resource for higher education web site [www.digitalegypt.ucl. ac.uk/burialcustoms/lateperiod.html, 13 February 2009].



²⁶⁻ Diodorus Siculus, *Library of History*, I, 92⁵.

²⁷⁻ Diodorus Siculus, *Library of History*, I, 92⁵.

²⁸⁻ Dodson & Ikram 2008.

²⁹⁻Dodson & Ikram 2008.

³⁰⁻ E.g. Tomb of Hereuf - Thebes 192 where the family of Amun priests buried their members. In this tomb sarcophagus with the cartonnage and mummy of Kaipamau was discovered (Pl. 1). Today it is kept in the Egyptian collection of the Archaeological Museum in Zagreb. (Pl. 1) Croato-Aegyptica Electronica database (ed. Mladen Tomorad & Igor Uranić) at: www.croato-aegyptica.hr.

³¹⁻ Burial customs: Third Intermediate Period at: Digital Egypt for Universities - A learning and teaching resource for higher education web site [www.digitalegypt.ucl.ac.uk/burialcustoms/3inter.html, 13 February

³²⁻ Dodson & Ikram 2008.



sarcophagus. Wrapped mummy was very often decorated with an elaborated bead net (Pl. 8). Books of the dead (Pl. 9, Pl. 10) and cartonnage (Pl. 11) were also discovered in some of the elite tombs from this period.

During Third intermediate period and Late period non-elite Egyptian classes were usually buried in oval coffins which were placed in small shaft tombs in non-elites cemeteries. Such tombs were equipped with very few types of grave goods which mostly include few small amulets and scarabs (e.g. Matmar tombs

 $1223, 1252, 1253, 1270)^{34}$

During the 4th century BC there are evidences of further development of burial practices. In tombs and graves much wider range of grave goods were discovered, and sometimes traces of various foreign connections and influences (e.g. Greeks, Etruscans, Jews and other ancient tribes and nations) are also more visible (e.g. the mummy of Nesi-Khonsu and her linen wrappings – *Liber linteus Zagrabiensis*, Pl. 11-12).

Very good example for such interconnections is the mummy of Nesi-Khonsu which is today kept in the Archaeological Museum in Zagreb (Pl. 12). Her mummy was bought in Cairo in 1847 or 1848 by Mihael pl. Barich. After his death (1859) Barich by his will gifted this mummy with its linen wrappings (*Liber linteus Zagrabiensis*, Pl. 13) to Narodni muzej in Zagreb. After long investigations of its wrappings it was discovered that they are written with Etruscan signs and language but why this mummy was wrapped with them is still unknown. Radiocarbon analysis in 1980's dated her death

in the beginning of 4th century BC. During unwrapping of 340 cm long linen wrappings flower wreath, pearls, amulets and head of mummified cat were also discovered. Along with this mummy came the Book of the Dead which belong to the Amun priest Paher-Khonsu and his wife Nesi-Khonsu.³⁵ It is still unsure how this Egyptian woman was connected with Etruscan funeral customs but most likely some Etruscan colonies existed in Egypt during Late period³⁶

6. Burial rites during Hellenistic times6.1 Type of tombs



During Graeco-Roman periods new elements of funerary rites were added and the typical Egyptian customs were adopted by foreigners. After the Alexander the Great conquest of Egypt in 332 BC Egyptian society were derived in several communities: Ancient Egyptians and foreigners (Macedonians, Greeks and Jews). The types of tomb architecture are mostly connected with each of these communities.

During the Hellenistic period tombs and its arrangements changed and it only kept previous form. The outer chamber with its inscriptions was rarely used and mostly disappeared from tombs along with the old Egyptian religious ideas.



³⁴⁻ Matmar (Al-Matmar) at: Digital Egypt for Universities - A learning and teaching resource for higher education web site [www.digitalegypt.ucl.ac.uk/matmar/index.html, 13 February 2009].

³⁵⁻Tomorad 2003a, pp. 20, 28, 37, 38, 81-89; Tomorad 2003b.

³⁶⁻ Bubenheimer-Erhart 2006.



There are no archaeological evidences about any fusion of architectural styles but some influences are visible in their decorative styles.³⁷ Anyway archaeological evidence proves that tombs with hybrid elements from various communities existed in Hellenistic Egypt³⁸.

In the Macedonian dynasty tomb of priest of Thoth, Petosiris³⁹, discovered in Tuna el-Gebel, painted decorations with mixture of both Egyptian and Greek artistic styles were discovered on the *pronaos* walls. These mixtures of styles can be seen on the painted reliefs with the traditional motifs of harvesting grain (Pl. 13) and other agriculture activities⁴⁰. On these reliefs Petosiris and his family are shown in dresses and appearances with visible Greek influences, in not fully common Egyptian front view but still as profile⁴¹. All these elements documents radical departure from previous iconography characteristic for pharaonic periods.

Diodorus Siculus described burial in tombs during Ptolemaic period. Such burial could be afforded by rich and middle class. "Those who have private sepulchres lay the body in a vault reserved for it, but those who posses none construct a new chamber in their own home, and stand the coffin upright against the firmest wall. 42" Rich mummies were mostly laid in stone sarcophagi in nicely decorated tombs. Middle class mummies were

laid in wooden sarcophagi and placed in tombs which were made by more modest and with fewer decorations. The poor were just mummified in most common way and laid in a community graveyard.⁴³

6.1.1 Egyptian types of tombs

Archaeological evidences from Hellenistic period show us that previously plundered and abandoned old New Kingdom tombs at Thebes and Hawara, along with the tombs from Third Intermediate and Late period in other regions, were commonly re-used. The new shaft or chamber tombs were also made.⁴⁴

Most of the discovered Egyptian tombs were made in traditional Egyptian architectural style. Mostly middle or lower Egyptian population without much wealth were buried in them. These tombs were mostly roughly built with the main purpose to accommodate multiple burials for the members of each family. In them decorations like wall paintings and hieroglyphic inscriptions were only made in burial chambers.⁴⁵

The shaft tombs were usually cut in the rock. In some cases tombs were made as shafts open to the sky or in the shafts which descended from the pavement of a chapel. These kinds of tombs were mostly excavated in Gurub, Hawara and the Faiyum region. 46



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³⁷⁻ David 2002, p. 333.

³⁸⁻ Dodson & Ikram 2008.

³⁹⁻ Dodson & Ikram 2008, pp. 293-294.

⁴⁰⁻Lloyd 2000, p. 393.

⁴¹⁻ David 2002, pp. 335-336.

⁴²⁻ Diodorus Siculus, *Library of History*, I, 92⁶.

⁴³⁻Bowman 1986, p. 186.

⁴⁴⁻ David 2002, p. 334; Dodson & Ikram 2008.

⁴⁵⁻ David 2002, p. 335; Dodson & Ikram 2008.

⁴⁶⁻ David 2002, p. 334; Dodson & Ikram 2008.

Chamber tombs were designed like the previous known chamber tombs with the one or two chambers which were cut in the rock. Cut steps usually lead to the vaults. During the Ptolemaic period middle Egyptian classes used these kinds of tombs for the burial of their families. In rare cases the walls of such tombs were decorated with painted inscriptions and funeral scenes.⁴⁷

Not much has been known about the Egyptian tombs in capital city of Alexandria were elite tombs where mostly associated with Greeks or Jews. Most of the burial tombs were destroyed by later building or today has been few meters under the sea. Because of that archaeological excavations did not gave any answer to the question how Egyptian tombs looked like in Alexandria but we can presume that they were built in similar style like in other parts of Egypt.



6.1.2 Greek type of tombs

Greeks who lived in Egypt since the first colonies buried their dead in Greek type of tombs which were discovered mostly in Northern Egypt (Alexandria, Naucratis, Abusir and the Faiyum region)⁴⁸. They were buried in pit or underground tombs.⁴⁹

The pit tombs were dig in the ground and covered with soil and stones or cut in the rock and inside of them various number of burials were found.⁵⁰

Underground tombs

are usually divided in two main groups: kline and *loculus* tombs. Kline tombs were built like the similar tombs discovered in Macedonia, and they were used for the burial of Greek aristocracy. Archaeological evidences indicate that such tombs only existed in Alexandria. Kline tombs were usually divided in an open court, *prostas* anteroom) with an offering altar and bench for mourning relatives and friends, and the *oikos* – burial room where a sarcophagus of deceased were placed. In later period they were replaced by *loculus* tombs mostly because of limited burial space in Alexandria.

Loculus tomb, which were discovered in Alexandria and the Faiyum⁵³, most likely had been adopted from Phoenicians and then mixed with Greek and Egyptian influences. They were made for the single and mass burial. Single tombs were cut in the ground with a shallow shaft which leads to the loculus room where the actually burial took place. More popular mass tombs had a long narrow corridor with cut rows of loculi in which bodies of the deceased were placed.⁵⁴



Both type of tombs were usually decorated with sphinxes, which were placed at the entrance of the tomb, stalae. columns, statues, wall paintings, inscriptions and other carvings which Egyptian influences can be seen (e.g. decorations of pillars, copies

⁴⁷⁻ David 2002, p. 334; Dodson & Ikram 2008.

⁴⁸⁻ Dodson & Ikram 2008.

⁴⁹⁻ David 2002, pp. 332-333.

⁵⁰⁻ David 2002, p. 333; Dodson & Ikram 2008.

⁵¹⁻ David 2002, p. 333; Dodson & Ikram 2008.

⁵²⁻ David 2002, p. 333; Dodson & Ikram 2008.

⁵³⁻ Dodson & Ikram 2008.

⁵⁴⁻ David 2002, p. 333.



from temple decorations ...). Some kind of sacrificial animal altars were also discovered in such tombs. 55



6.2 Grave goods

During the Ptolemaic period most common objects found in elite and middle class Egyptian tombs were: shabtis, wooden statuettes of Ptah-Sokar-Osiris, Isis and Nephthys, amulets, scarabs, canopic boxes, stele, painted reliefs,

tombstones, sarcophagus, coffins, cartonnage and the Books of the Dead. Such grave goods were discovered in the burial ensemble of Hornedjtyitef from el-Assasif and ensemble from the Nesmin family tomb in TT32.⁵⁶

Daily life objects were rarely discovered in the tombs during the Late and Ptolemaic period (except in tombs which were related with Greeks), but placing them in tombs will become popular during the Roman period. During the Ptolemaic period daily life pottery and painted vessels were placed in the tombs in some native Egyptian tombs around Thebes (e.g. daily life objects discovered in TT32⁵⁷.

Since the end of $7^{\rm th}$ century BC Greeks made their colonies in Egypt. With them they also brought their traditional funerary practices and other rites. During the $4^{\rm th}$





century BC and later Hellenistic period Greek population in Egypt became much larger. Archaeological excavations in the Hellenistic capital Alexandria document these burial traditions. There Greek tombs were equipped with urns, Greek style coffins and some objects of daily life.⁵⁸

Shabtis figures which were commonly placed in graves during Late period now became product of the common manual craft without any esthetic or artistic value⁵⁹. In most cases they still hold inscriptions on the backpillar which still contains complete or only partly formula *shd Wsir hm-ntr* ⁶⁰. During the Ptolemaic and Roman period shabtis were involved of diffusion of Egyptian cults all over Europe and Mediterranean (Pl. 15). Usually they were copies of shabtis made in previous times and they were made in workshops in Alexandria or some other place. Sometimes they were buried in Roman graves as symbol of these cults⁶¹. In the end they mostly disappear as religious ideology began to change with various new religious ideas.⁶²

Placing wooden statuettes of the gods and

⁶²⁻Tomorad 2005; Tomorad 2006, pp. 282-285.



⁵⁵⁻ David 2002, p. 333.

⁵⁶⁻ Strudwick 2006, pp. 294-297; Schreiber 2006, pp. 228-229.

⁵⁷⁻ Schreiber 2006, p. 229.

⁵⁸⁻Burial customs: Ptolemaic Period at: Digital Egypt for Universities - *A learning and teaching resource for higher education web site* [www.digitalegypt.ucl.ac.uk/burialcustoms/ptolemaic.html, 13 February 2009].

⁵⁹⁻Tomorad 2004, p. 93.

⁶⁰⁻Tomorad 2006, p. 283.

⁶¹⁻Tomorad 2006.





goddesses in tombs was very popular. The most popular was the statuette of Ptah-Soker-Osiris which usually stands on wooden pedestal⁶³. Ichnographically they were made in the shape mummified figure of the god Osiris. Sometimes it wears typical head horns, the disk and plumes. A figure hand holds the flail and the crook and they were crossed over his breast. Sometimes they are really nicely decorated and well preserved (e.g. statuette from the British museum, inv. no. EA 9736 from the t o m b $Hornedjtyitif)^{64}$ but mostly artistic values of such figures are very poor (Pl. 16). Wooden statuettes of Isis and Nephthys and votive bronze figures (Pl. 17) were also placed in the tombs.

Various types of amulets (*djed*-pillar, *udjet*-eye – Pl. 18, *ankh*, *neha* amulet, papyrus sceptre amulet, etc.), scarabs and heart scarabs were usually placed inside mummy wrappings. They were commonly made from stone, semi-precious stone, coloured faience, baked soil and glass.

Stelae found in tombs from Late and Ptolemaic periods were made in all types of styles. They usually contain hieroglyphic inscriptions with mostly religious formulas (Pl.



19-20) or autobiography text about the deceased (e.g. Stele of Taimhotep from the British museum inv. no. EA $147)^{65}$. Such texts were usually inscribed or cut in wood or stone. In these periods it seems that they were placed in tombs more as matter of form of burial rites then the actual belief. During the Hellenistic period inscriptions on stelae were written in hieroglyphic, demotic and Greek and they were made mostly as the copies of models made in previous pharaonic periods. High relief figures of the gods were also very popular with iconography which contains elements of both Egyptian and Greek

attributes (Pl. 21). During the Ptolemaic times painted reliefs and decorated tombstones were discovered in Greek tombs (Pl. 22) and rare cases in Egyptian tombs (Pl. 23). They were made in Ptolemaic style. Around Alexandria funerary stelae were usually made in Greek style in typical form of a small temple with two pillars and a triangular pediment (e.g. funerary stelae from Egyptian Museum in Cairo⁶⁶.

Sarcophagi were commonly used during this period. They were made from wood, and consisted two parts: the lower board on which coffin was placed and the rectangular vaulted cover. Both parts were usually colourfully decorated with figures of gods, hieroglyphic inscriptions, sign of the Zodiac, animals, scarabs etc. Greek sarcophagus commonly holds inscription with the name of the deceased and his father. During Ptolemaic period coffins were rectangular in shape and made from thin pieces of wood. They bare inscriptions but rarely chapters from the Book of the dead. In Lower Egypt stone coffins with

⁶³⁻e.g. fig 87 in: Nagy 1999, pp. 105-106.

⁶⁴⁻ Strudwick 2006, pp. 296-297.

⁶⁵⁻ Strudwick 2006, pp. 302-303.

⁶⁶⁻Bongioanni & Sole Croce 2001, pp. 242, 245.)

⁶⁷⁻Budge 1893, p. 314.



inscriptions and various figures were also commonly used.⁶⁸

The Egyptian collection of Archaeological Museum of Zagreb (AMZ) has two female sarcophagi with coffins and cartonnage⁶⁹ which nicely documents Egyptian burial rites during Ptole maic period. Mummified body of Shepenun (AMZ E-667) was placed in beautiful wooden sarcophagus. It is vaulted cover is decorated with several sections inscribed hieroglyphic with inscriptions, images of the gods in-between them (Pl. 24). Bottom board is also nicely decorated with

inscriptions and various images (Pl. 25-27), and inner part is decorated with image of Horus (Pl. 28). Covers of the sarcophagus (Pl. 29) and coffin (Pl. 30) are decorated with various images of the gods and several sections inscribed with hieroglyphs. Bottom side of the coffin board is decorated with middle hieroglyphic pillar with there rows of inscriptions, and various images on both right and left side along with inscriptions (Pl. 31-32). Mummified body of Shepenun was placed inside the coffin (Pl. 33)

During the Late and Ptolemaic periods cartonnage was commonly used as part of



m u m m y d e c o r a t i o n . Hypocephalus was placed bellow mummy head to provide rebirth and heat for the deceased (this is usually connected with the 162 chapter of the Book of the Dead) 70 . Mummies were wrapped in nicely decorated funeral shrouds (Pl. 34-35). A bead collars (Pl. 36), mummy trappings 71 , decorated masks with idealistic



images of the deceased⁷² and a painted foot-piece were also common part of funeral equipment. Mummies were usually covered with the net made from cylindrical blue faience⁷³ which symbolised the sky which the deceased soul supposed to reach after the death.

Shepenun mummy was covered with golden leaf decoration on linen shroud, and wrapped with typical faience cylinder bead net (Pl. 37). Nice golden painted funeral mask was placed above her head (Pl. 38). During the Roman period such masks were replaced

with painted wood panels on which the idealized portrait of the deceased was colourfully painted (e.g. Faiyum portraits, Pl. 39).

It seems that during the Ptolemaic period complete Books of the dead were no longer placed in the tombs. Instead of placing



expensive books during the Hellenistic and Roman periods deceased relatives prepared copies of only certain parts of the Book of the dead. Such changes were the result of the new religious beliefs and funerary practices which allow every deceased to achieve eternal life in netherworld. It also seems that such new concepts, which were introduced since the Third intermediate period onwards, "move

⁶⁸⁻Budge 1893, p. 310.

⁶⁹⁻ Shepenun – inv. n. AMZ E-667, Kareset – inv. n. AMZ E-668.

⁷⁰⁻ Gee 2006, pp. 49-50.

⁷¹⁻ E.g. figs. 89-90, Nagy 1999, pp. 108-109.

⁷²⁻ E.g. figs. 69-70, Nagy 1999, pp. 84-85.

⁷³⁻ E.g. fig. 96, Nagy 1999, p. 116.

towards the concept of righteous living as a qualification for the enjoyment of an afterlife"74. During the Late and Ptolemaic periods there was the feeling among Egyptians that only the certain chapters of the Book of the dead were really important for the resurrection of the deceased body, and for the actual salvation of its soul. Archaeological excavations of the tombs from Late and Ptolemaic periods proves that Egyptians mostly rejected the old magical aspects of the Books of the dead, and made only copies of the chapters and formulas which were associated with the popular cult of Osiris. Sometimes such texts extracts with magical formulas were inscribed on the mummy bandages, coffins or were written on papyrus and placed in tomb.⁷⁵ During the Ptolemaic and Roman periods the most popular books associated with death were "Book of breathing" and the "Book of traversing eternity". 76

7. Summary

In this article author described changes in the ancient Egyptian funerary practices from the Third intermediate period (c. 1069 BC) to the Arab conquest of Egypt in 641/642 AD.

First part of the article contains basic description of burial practices and rites written by ancient writers (Herodotus, Diodorus Siculus) which were also well documented in various archaeological sources (various unearthed artefacts, tombs etc.). Author describes how ancient Egyptians deal with death, various rituals before the embalming process, mummification process, judgement according ancient Egyptian mythology and preparation for the burial after all these rites and rituals.

In second part author describes funerary practices from the Third intermediate period to the Arab conquest of Egypt. In this section various type of tombs and grave goods were described and documented from the findings of various archaeological excavations. Most of the typical funerary equipment mentioned in article was taken from the Egyptian collection of the Archaeological Museum in Zagreb. Article also contains original photos taken by Filip Beusan and Mladen Tomorad.

Mladen Tomorad, he was born in Zagreb, Croatia in 1971. He studied history, ancient history, museology and Egyptology at the University of Zagreb - Faculty of Philosophy where he got M.A. degree in history (1997) dissertation entitled: "Shabtis from Roman provinces Dalmatia and Pannonia"), master of science degree (M.Ph.; 2001 - thesis entitled: "Egyptian antiquities in Croatian historical sciences") in ancient history, doctor of science degree (Ph.D.) in museology and history (2006, thesis entitled "Model of computer-aided analysis and presentation of Egyptian artifacts in museum collections in Croatia"). He also studied Egyptology at the University of Manchester, Faculty of Life Sciences (dissertation "Shabtis from Archaeological Museum in Zagreb, Croatia"). Since 2000 he works at the University of Zagreb (Department of History, Faculty of Philosophy). From 2003 to 2008 he visited various universities and museums around Europe (Belgrade, Berlin, Bologna, Budapest, Florence, London, Manchester, Oxford, Padua, Prague, Rome, Naples, Vienna, Warsaw, ...), USA (Boston, New York, Philadelphia, New Haven ...) and Egypt (Luxor, Cairo, Aswan, Esna, Edfu). His major research fields are: early Egyptian history until the end of Old Kingdom, Egypt in 1st millennium BC, diffusion of Egyptian cults during Graeco-Roman times and Egyptian collections in Croatia.

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⁷⁶⁻ Budge 1914 at: [http://egypt.annourbis.com/EgyptianLiterature/chapter5.html, 13 February 2009]



⁷⁴⁻ Shaw & Nicholson 1995, p. 106.

⁷⁵⁻ David 2002, p. 336.

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Pl. 22 Typical Greek style of tombstone. Ptolemaic period. Collection of the Metropolitan Museum of Art in New York. Photo: Mladen Tomorad (2004).

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Pl. 30 Decorated outside cover of the coffin of Shepenun. Ptolemaic period. The Archaeological Museum in Zagreb. Inv. no. E-667. Photo: Filip Beusan (2005).

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Pl. 39 Faiyum portrait. Roman period. Collection of the Metropolitan Museum of Art in New York. Photo: Mladen Tomorad (2004).

Eternal Youth

Lise Manniche

The ancient Egyptians were very concerned with the passing of time and its effect on the fragile human frame. Their interest went deeper that just looking good. During their life on earth, few Egyptians could have been expected to reach an age beyond some 30-odd years. Most people would never have known their grandchildren. This would have provided an incentive to marry at a fairly early age. A genre of literature, perhaps invented by the Egyptians, the so-called Wisdom Texts, gives advice on how a man should interact with fellow Egyptians, especially those of a higher rank, but basic instructions also concern marriage: 'Take a wife when you are 20 years old, so that you may have a son while you are still young.' Keeping in good health was important, and the same texts suggest moderation in all things: food, drink - and women. Were it not for the ignorance of germs, and, in the case of women, the risks of childbirth, in theory the variety of available foods would have provided an adequate base for a healthy diet and a long life, certainly in the higher echelons of society where there would have been no shortages.

The quest for eternal life

When commissioning a statue or the decoration of a tomb chapel, the brief of a member of the elite to the artist must clearly have been to depict the owner in the prime of life, with a firm, muscular body, a full head of hair and an erect posture, occasionally with his wife at his side. If he was a member of the clergy, he was, however, obliged to shave his head for reasons of purity. In the wall decoration of a tomb, those who came to join the tomb owner during the annual, religious feasts conform to this ideal and show the same characteristics. There are no children present here, apart from occasionally those immediately related to the tomb owner, usually shown as adolescents or adults. When grandparents are present they are indistinguishable from their offspring.



ill. 1. A tomb owner and his wife sniffing lotus flowers. Tomb of Roy at Thebes, 19th dynasty.

There is a specific reason for this. The idea was not to reflect the various age groups of a family, as it would have been in real life, but to project a picture of dynamic people in the procreative phase of their life in order to generate on the tomb wall an image of the sexual energy that was required for the miracle of rebirth in the Hereafter. This is spelled out by depicting people at the appropriate age, and by a wealth of pointers such as being heavily made-up and scented, wearing semi-transparent



ill. 2. The Egyptian lotus still grows in the Orman Garden in Cairo.



garments, and displaying intimate gestures. It is further emphasized by straightforward symbols relating to rebirth such as the lotus flower, which is being worn, sniffed and presented [ill. 1-2]. Egyptian art is imbued with these sexual notions which all relate to the idea of a continued existence after death. On the tomb wall, with a view to obtaining such eternal life, the essential idea to get across was one of dynamic, youthful energy.

The king, above all, projected an image of everlasting vigour. Such is the message he conveyed on the walls of his temples whether they were meant to be seen by his subordinates or not. He is strong on the battlefield and for ever active presenting offerings to the gods. Because of his position he has access to what may be called the elixir of life: the divine milk which he suckles from the udder of a cow (one of the forms of the goddess Hathor) or from the breast of a goddesss [ill. 3]. Drinking this precious liquid rejuvenates him for ever, on



ill. 3. King Ramesses II drinking divine milk. Temple of Beit el-Wali, 19th dynasty.

earth and beyond.

Looking good on earth

On a more mundane note, the Egyptians were obviously concerned about their bodies during their brief life on earth. Cosmetics were used not just for funerary purposes, placed in the tomb in bags or vessels of pottery, stone or glass, but to delight and enhance men and women alike, and preparations were made to keep the skin smooth and white. Some 3500 years ago experts recommended this body scrub which can easily be prepared at home today (substituting chalk for calcite): '1 part powdered calcite; 1 part red natron; 1 part delta salt; 1 part honey ground to a paste and rubbed into the body.' Wrinkles were treated with a daily application of a mixture of gum resin, wax, moringa oil (Arabic: ban) and Cyperus esculentus (Arabic: habb el-aziz) ground together. A liquid gum resin on its own is said to be equally successful.

Because of the fact that refined sugar was absent from their food, the Egyptians ought to have had decent teeth. But mummies show severe wear and tear, in many instances probably caused by the amount of dust and grit left in the flour used for the most important item in their diet: bread.

Greying hair was not desirable. It is rarely represented in art, and they used herbal remedies to stop the process. Some sympathetic magic would have been involved in a preparation consisting of oil boiled with the blood of a black ox or calf, or the horn of a black gazelle was made into an unguent with oil. The hair of some mummies, notably that of Ramesses II in the Cairo Museum, have a reddish tinge which would appear to suggest that the Egyptians dyed their hair. However, this may have occurred during mummification, or it is a case of discoloration which took place naturally over the millennia.

A remedy for youth

If the damage had been done and signs of ageing presented a problem, there was hope yet if one was acquainted with 'The beginning of the book of making an old man into a young man'. It is of some interest that the male and not the female sex is involved here. The



treatment is external, and it is not specified if the purpose is purely cosmetic or whether the aim was total rejuvenation, inside and out.

You must collect a great quantity of hemau, about two sacks full (if the reference is a sack of grain, we are talking about some 50 kilograms). Then you shall break them up and leave them in the sun. When they are completely dry, you shall thresh them like you would thresh barley. Then you must winnow it down to the last pod. All that has come out of it must be measured and sifted. Divide it into two portions, one consisting of the seeds, the other of the pods, of equal quantity. They you shall place them in water, the two portions having been combined. Knead it to a dough. Place it in a clean pot on the fire and boil it for a long time. You will recognise when it is done when the water has evaporated and they dry up until they are as dry as straw with no moisture at all. Take them away from the fire.

When they have cooled, place them in a pot and wash them in the river. Wash them thoroughly. You will know when they are washed enough when you taste the water in the pot and there is no bitter taste left. Then you shall leave them in the sun spread out on a piece of laundryman's cloth. When they are dry, you shall grind them on the mill stone until they have been reduced to small pieces.

Then you shall steep them in water and make them into a soft dough. Then you shall place them in a vessel on the fire and cook them for a long time. You will know when they are done when the pellets of oil rise to the surface. All the time you must skim the oil which has risen with a spoon. Place it in a jar whose inner surface has been plastered with clay, smooth and thick. Skim the oil and strain it into a jar through a cloth. Then you shall place it in a jar of stone and use it as an unguent. It is a remedy for illness in the head. When the body is rubbed with it, the skin is left beautiful without any blemishes. It is a million times efficient.

The crucial issue here is of course the nature of the word *hemau*. The suggested translation of this single ingredient is fenugreek [ill. 4]. Fenugreek (Arabic *helba*) is a herb producing pods with 10-20 seeds of a yellowish-brown colour, which are almost odourless unless subjected to heat. They are rich in vitamins, nitrates and calcium. The seeds are thought to



ill. 4. Fenugreek from Siwa.

encourage lactation and heal inflammations. Nowadays they are an ingredient in some curry spices. In Egypt they are added to bread, and in the Siwa oasis they are boiled with water and sugar (3 tsp *helba* and 4 tsp sugar to 4 cups water) for 10 minutes to make an invigorating, hot drink in the winter, or, medicinally, to be taken while having a 'sand cure', allegedly to prevent sweating. In England fenugreek seeds are sprouted and included in salads.

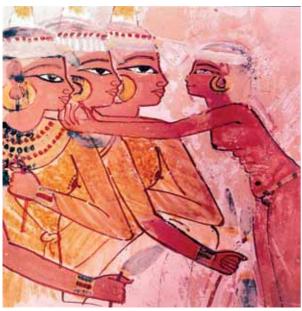
There can be no doubt that the Egyptians knew fenugreek, for seeds were found in the tomb of Tutankhamun (c. 1350 BC). The Greek herbalist Dioscorides (1st cent. AD) says that the Egyptians called it *itasin*, a word which is totally different from *hemau*. His remedy was used to treat a female complaint. This does indeed somehow relate it to the use of *hemau* in pharaonic Egypt, for with honey it was taken to induce childbirth, or it was an ingredient in a suppository for the same purpose. Whatever the philological implications, we seem to be in the field related to hormones.

Survivals

The knowledge of the beneficial properties of herbs goes back as far as human civilisation. The many remedies recorded in writing by the Egyptians give substance to such a claim. Although some genetic changes may occur, a herb may be supposed to maintain its properties for thousands of years. Herbalists today will in many instances acknowledge the use of ingredients which were equally familiar to their colleagues in antiquity [ill. 5]. This case of 'fragrant archaeology' is particularly interesting in a composite remedy used today under the name of *tiryac*. It consists of a



number of herbs individually mixed to suit the needs of a patient. Since the Middle Ages it has been used to treat serpent bite - for which purpose reptile skin was included - but it may also be taken on a regular basis to keep people young and prolong their life, almost comparable to a modern 'rescue remedy'. A number of the components of tiryac have a parallel in a composite preparation which may go back as far as to the age of the pyramids: kyphi. We have details of its ingredients with many variations from the Greco-Roman period, recorded on the walls of the temples of Edfu and Philæ [ill. 6] and in manuscripts by the classical writers. One prescription from AD1574 records kyphi as being itself an ingredient in tiryac. Those who will today consult a herbalist at al-Azhar for personalised tiryac is thus perpetuating a tradition that may go back 4500 years.



ill. 5. Guests being attended to at a banquet. Tomb of Nakht, Thebes. 18th dynasty.

Perfect old age

Strangely, while being engaged in their quest for eternal youth, at the same time the Egyptians strove after 'good old age'. They even put a figure to their thoughts: 110 years was the perfect score, and this span of years is quoted in some tales in order to imply that the person in question was imbued with great wisdom. Few Egyptians achieved it, although it appears that king Pepi II of the 6th dynasty (c. 2400 BC) ruled for 94 years, having ascended the throne at the tender age of 6. One official



ill. 6. Door to the unguent storeroom at Philae, with a prescription for kyphi written in the upper left corner.

of the New Kingdom (c. 1000 BC) is quoted on his tomb wall to have lived to the age of 88.

The resurrection of ancient mummies, as portrayed in certain popular films, has until now been proven to be pure fantasy. In fortunate circumstances, DNA material may be available, and perhaps one day we shall see a clone of an ancient Egyptian walking the streets of London, although, regrettably, with his cultural baggage left behind...

Lise Manniche graduated from the universities of Copenhagen and Cambridge. She teaches Egyptology in Copenhagen and is editor of Papyrus, magazine of the Danish Egyptological Society (www.daes.dk). She has appeared in a number of television programmes and is the author of many books including:

- Sexual Life in Ancient Egypt, London 1987 (also in Arabic 2002)
 - L'art égyptien, Flammarion 1994
- Egyptian Luxuries. Fragrance, Aromatherapy and Cosmetics in Ancient Egypt, American University Press, Cairo 1999
- An Ancient Egyptian Herbal, 2nd ed., British Museum Publications 2006 (also in Arabic 1993)



In Preparation for Regeneration The Wabet in Temples of the Ptolemaic and Roman Period

Dr. Filip Coppens

The ever growing darkness each visitor encounters when proceeding from the temple entrance to the central sanctuary is in a number of temples of the Ptolemaic and Roman era suddenly chased away by the appearance of a few rays of sunlight in a small court. (fig.1) This court is part of an architectural ensemble with a distinct layout: a court, open to the light of day, and a slightly elevated and covered chapel, accessible from the court through a flight of steps. The terminology presently in use refers to the ensemble as the 'court (of the new year)' and wabet or 'pure place' $(w^c b.t)$. This paper aims to provide an overview of the essential characteristics of this remarkable ensemble of spaces.

The complex has so far been identified in nine and suggested for at least four other temples. The nine ensembles illustrate the complex's occurrence in the temple over a period of almost half a millennium, approximately from the middle of the fourth century BC until the end of the first century or perhaps even the first half of the second century AD. The state of preservation of the nine ensembles differs greatly from temple to temple. While for instance only the foundations remain of the complex in the temple of Khnum on Elephantine or in the temple of Sobek and Haroeris in Kom Ombo, the Ptolemaic ensembles in the temples of Isis at Philae (fig. 2), Horus in Edfu and Hathor in Dendara, and the Roman complexes of Isis in Shanhur and el-Qal'a are much better preserved. The ensembles in the temples of Isis and Mandulis in Kalabsha and Isis in Deir Shalwit are also well preserved, but have remained undecorated. All of these temples are located in Upper Egypt, from Dendara in the north to Kalabsha in the south. The location of these monuments suggests that this ensemble might have been a typical component of the temples of southern Egypt. One has to keep in mind that the absence of complexes of wabet and court in temples to

the north of Dendara might be due to the poor state of preservation and insufficient publication of the temples in this region rather than any purposeful geographical planning done by the ancient Egyptian priests.

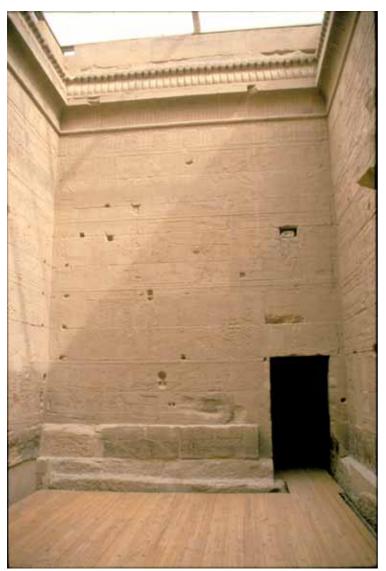
Layout

After the initial stages in the development of the layout of the ensemble during the Thirtieth Dynasty and the early-Ptolemaic period (Khnum temple of Elephantine and Isis temple of Philae - fig. 2), the complex appears to have received its typical form for the first time in the temple of Horus at Edfu during the reign of Ptolemaios III, Euergetes I. (fig. 3). In essence the layout of the complex of wabet and court consists of the following characteristics. The ensemble is located in the core of the temple, almost at the height of the sanctuary, and is accessible through the 'hall of the ennead' or vestibule preceding the sanctuary. Ideally it is located to the right of the sanctuary in temples on the west bank or on islands in the Nile, and to the left in temples on the east bank. This rule is strictly applied in Pharaonic and Ptolemaic times, but only partly in the Roman period. The ensemble consists of two distinct areas: a court, open to the light of day, and a slightly elevated and covered chapel. A small staircase, located in the middle of the space, connects both parts of the ensemble, while a facade, consisting of two screen walls attached to the lateral walls of the complex, two columns and two broken door lintels, screens the wabet from the open court. (fig. 1 and 3) An entrance to a crypt was another essential characteristic of the typical complex. In the larger examples, the ensemble was usually positioned near one of the staircases leading to the roof of the temple, while in smaller temples this could not be achieved, most likely due to the size of the building.



The ensemble of wabet and court in the Temple of Hathor at Dendara (photo by the author)





The open court in the Temple of Isis at Philae (photo by the author)

Designations

The Egyptian priests who designed the inscriptions and reliefs for the walls of the ensembles in the Ptolemaic and Roman temples used a large variety of designations to refer to the ensemble. These various designations appear to illustrate quite different aspects of the complex, such as its architectural appearance and the nature and period of the ritual activities performed in it. Although the ensemble is best known today as the wabet, the most frequently used term — from early Ptolemaic times well into the first century of Roman rule — appears to have been 'seat of the first feast' (s.t hb tpy). The association of this term with the ensemble is at times still problematic since it was shared with the kiosk on the roof of the temples of Edfu and

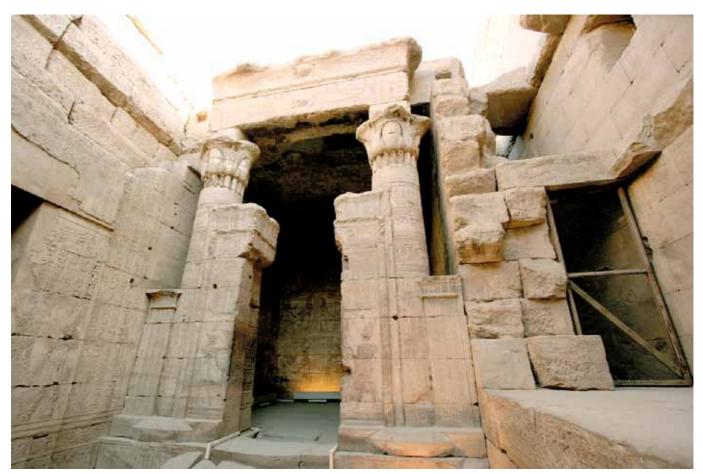
Dendara. The designation clearly indicates that the complex and the kiosk played an important role during the first feast (*hb tpy*) which took place during the last days of the old year and the first days of the New Year. The transition from the old to the New Year represented to the ancient Egyptian mind a period of renewal and rejuvenation and this idea appears to have been a source of inspiration for a series of designations associated with the ensemble. A large number of terms refer to the concepts of death and burial and the subsequent resurrection and renewal of life. Although in general the term wabet (w^cb.t) designates a workshop where all sort of goods were prepared, it has also a mortuary connotation. It can be a place of embalming, where the body of the deceased was prepared, and even refer to the tomb itself. The term *h3yt* ('chapel') also appears to point to this aspect of the complex as a mortuary workshop and tomb. The transitional region between this world and the next could well be represented by the use of the term 3h.t ('horizon') as one of the names for the ensemble, while the single occurrence of the designation bw rnp ('place of regeneration') would suggest the final stage in this process, from death to new life. The transitional period at the time of the New Year was also well known to be an unstable and life-threatening time and this might well have inspired the use of the term *hw.t* or 'protective chapel' for the ensemble in Dendara. A series of other

terms, like *w3dy.t* ('columned edifice') and *sbh.t* ('screen-walled portico'), refer to the architectural appearance of the ensemble and more specifically to the facade with columns and screen walls which separated the open court from the *wabet*. The designation 'b3 df3w or '(court of) the food-altar' clearly suggests which type of activities took place in the open court. The latter is confirmed by the many depictions of the '3b.t'3.t or 'large offering' on the walls of the open court in most ensembles. (fig. 4)

The decorative programme and function

In only five complexes the decorative scheme and inscriptions have been preserved to such a degree that a detailed study of the





The complex in the Temple of Horus at Edfu (photo by Miroslav Bárta)

decorative programme can be carried out. The decorative scheme in these five ensembles fortunately covers almost the entire period during which the complex occurred in Egyptian temples, including examples from early Ptolemaic times in Philae and Edfu, a late Ptolemaic example in Dendara, and two Roman ensembles in Shanhûr (fig. 5) and el-Qal'a.

The study of the decorative programme of these ensembles has revealed that it is possible to distinguish a number of recurring themes in the decoration of the complex's walls. The central theme of all texts and reliefs engraved upon the walls of these ensembles focuses on notions of rejuvenation and renewal attained through the rite of the 'union with the sun disc' (hnm-itn) or the exposure of the 'lifeless' statues of the gods to the rays of the sun. The complex functioned as a crucial stage, if not at times the final destination, during festive processions that would result in the renewal of the statues residing in the temple. The exact sequence of events, such as the routes of the

processions, was undoubtedly not the same for every temple and can be reconstructed for most sanctuaries only in a very hypothetical manner. The exact timeframe of the rituals performed in the complex also differed from one temple to another, but in general it seems to have mainly revolved around the final days of the last month of the year (Mesore), the five epagomenal days, New Year's Day – undoubtedly the best suited day for any act of renewal and rejuvenation – and the first days of the first month of the year (Thoth). The ensemble however also functioned on other occasions throughout the year.

In the decorative scheme two general themes can almost always be recognised: a) the safeguarding of the natural course of events and b) the preparation of the deities for their rejuvenation. The first concept is expressed in a variety of scenes and inscriptions in the open court related to the perpetual and undisturbed journey of the solar bark and to the appearament of the raging goddess, whose destructive powers reached their climax

precisely during the five epagomenal days preceding the New Year. The second theme is usually found on the walls of the elevated chapel. An extensive number of scenes inscriptions focus on a series of ritual acts to be performed prior to the actual rejuvenation of the statues of the gods: the festive procession of the statues in their shrines to the elevated chapel; the opening of the shrines and the revealing of the face of the deities; their subsequent purification with water, incense and natron, clothing with linen, anointment with various unguents, and finally the presentation of protective amulets in the shape of necklaces and pectorals. Next to these activities in the elevated chapel, large offerings of food and beverages appear to have been presented in the open court, judging by the always present scenes of the "large offering" on its walls. A final $(\Im b.t \, \Im.t)$ category, which consists mainly of inscriptions, is most often found in text columns on the broken door-lintels and columns that separate the open court from the elevated chapel. These inscriptions regularly refer to the sun shining down on the statues of the gods and the joy it creates in the land - the actual result of a perfect execution of the rites in the ensemble.



The ensemble in the Temple of Isis at Shânhur (photo by the author)

Precursors of the complex

The typical and recurring decorative scheme the priests designed for the walls of the ensembles did not come about entirely by accident. It is a well thought out programme based on an extensive knowledge of various ritual practices. In order to express the function of the ensemble in the decoration its editors chose a (visual) language that was already well-known. They found inspiration in a series of rites that also expressed the themes which played a central role in the function of the

complex - the transfer from death, or at least a lifeless or deathlike state, to new life. The editors found this in the rites that in their mind had been performed successfully for many centuries and in various contexts: in temple rites (e.g. especially the daily temple ritual), in royal rituals (e.g. the confirmation of the pharaoh's power at the time of the New Year), and mortuary rites (e.g. particularly the ritual of the 'opening of the mouth'). The influence of older rituals is, as one would expect, much more detectable in the decorative programme that dates from the early period in the development of the ensemble and its





The open court of the complex, with a column reused as an altar, in the Temple of Shânhur (photo by the author)

decoration (Philae and Edfu). In later examples the editors kept the main decorative themes which derived from older rites and rituals, but their distribution and the inclusion of other themes in the decoration indicates a further development.

The typical architectural layout of the

ensemble is likewise not an innovation of the Thirtieth Dynasty and the Ptolemaic and Roman period either. It appears to conclude a development that started at least as early as the New Kingdom Eighteenth Dynasty. The *šw.t R*^c or 'sunshade' of many New Kingdom temples¹ is generally considered to be the most likely precursor of the complex of court and elevated chapel in the temples of the Thirtieth Dynasty and the Ptolemaic and Roman period. The development of these New Kingdom solar courts is unfortunately extremely difficult to trace through the first millennium BC due to an almost total lack of well-preserved temples from this period. Several monuments from Nubian and Saite times provide some insight into the general development in the layout and cult of the temples in between the New Kingdom and Ptolemaic times. These temples, specifically six Ra-Harakhte courts or throne rooms in the Amun temples in Nubia², the edifice of Taharqa near the sacred lake in Karnak, and a series of rooms (complex E) on the roof of the temple of Amun-Ra in Hibis in the el-Kharga oasis, offer a brief and, unfortunately, rather unsatisfying glance at the plausible further development of the solar courts and cult in the temple. The presence of an open court, often accompanied by a platform or altar and a partly covered room, is a recurring architectural element in the layout of many temples of the New Kingdom, the Third Intermediate Period and the Late Period. Even if we keep in mind that many temples from this era have not been preserved and only very little remains of the decorative scheme that was once applied on the walls of these open courts and associated spaces, a few very general themes and concepts can still be recognised in all these monuments.

1- For instance: the open court in the north half on the upper terrace of the temple of Hatshepsut at Deir el-Bahari., the open court in the north-east corner of the Akh-Menu of Thutmosis III in Karnak, the open court XLII to the north of the hypostyle hall in the temple of Seti I on the Theban west bank, the hardly preserved court in the north half of the Ramesseum (Ramses II), the north chapel or 'Pylon-/Kioskheiligtum' of Ra-Harakhte to the north of the temple of Abu Simbel of Ramses II, the open court in the north-west corner of the temple of Merenptah on the Theban west bank, and the open court 18 and rooms 17 and 19 in the temple of Ramses III in Medinet Habu

2- For instance: Chapel B520 in the great Amun temple of Piye and Taharqa at Gebel Barkal/Napata (temple B500); rooms D and E in the temple of Amun from the reign of Taharqa in Sanam; rooms D and E in the temple T of Taharqa at Kawa; an unnumbered chapel in the Amun temple of Tabo on the island of Argo, dated to the reign of Taharqa; chapel 106 in the Amun temple of Naqa which dates from the reign of king Natakamani and queen Amanitore, and chapel 266 in the Late Amun Temple of Meroe City from the second half of the third century BC.



The presence of a court open to the light of day clearly points towards a solar cult and perhaps even to the ultimate ritual act in Ptolemaic and Roman temples: the exposure of statues of the deities to the rays of the sun for renewal and rejuvenation. The origin of this typical architectural structure and its recurring decorative programme is perhaps located in the Theban region of the New Kingdom and of the cult of the creator god and solar deity Amun-Ra. In the course of the first millennium BC the solar cults gradually assimilated with the funerary sphere and especially the god Osiris. One can witness, for example in the Edifice of Taharga in Karnak, a development towards the incorporation of funerary motives or themes from the sphere of Osiris into the solar cult. The recurring presence of a large court open to the sunlight in the monumental tombs of the Late Period in the Assasif at the same time appears to point towards a similar development in the funerary architecture. It is not the concept of death but the victory over death and especially the renewal, rejuvenation or reanimation of the deceased and their entry into a new life that is the central theme of the funerary rites and notions that became incorporated in the temple and solar liturgy at this time.

The remaining decorative schemes of these solar monuments also link the confirmation and the renewal of kingship, a theme that later on also occurs in the ensemble of wabet and court, with the events taking place in these rooms. The New Kingdom šw.t Rc.w and the edifice of Taharqa indicate the importance of the king for the continuity of the daily renewal of the sun and the world order. In Ptolemaic and Roman times the by then foreign ruler appears to no longer have such a prominent position. In these examples the ruler is still depicted performing the necessary rites for which he is for instance granted the kingship over the two lands, but the kingship of Horus (Edfu) and Hathor/Isis (Dendara) and its confirmation and renewal has taken the pride of place in the decorative schemes of these monument.

All these facts indicate that the main themes in the decorative scheme of the wabet and court and its function in the temple in Ptolemaic and Roman times draw upon age old traditions that developed in the course of the preceding millennium. The idea of renewal and rejuvenation, the central theme running through the decorative scheme of the Ptolemaic and Roman ensembles, is in one way or another already present in these older structures. The themes and the typical architectural layout that is found in many temples of the previous periods appears to have crystallised in the course of the fourth century BC in the ensemble of wabet and court which would reach its standard format in the temple of Edfu in the early Ptolemaic times.

Conclusion

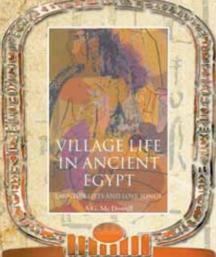
The complex of wabet and court is an architectural ensemble that is typical for temples of the Thirtieth Dynasty and the Ptolemaic and Roman era, but it is also the end result of a development that started at least a millennium earlier. The reworked and edited elements from these various architectural and ritual precursors, combined with new texts and imagery, resulted in the creation of a coherent decorative system that eloquently expressed the themes that played a central role in the function of the complex: renewal, or rather, the transfer from death, or at least a lifeless or deathlike state, to new life.

Further Reading

- Claude Traunecker, "Les ouabet des temples d'el-Qal'a et de Chenhour", in Dieter Kurth (ed.), 3. Ägyptologische Tempeltagung. Systeme und Programme der Ägyptischen Tempeldekoration, (Ägypten und Altes Testament 33/1), Wiesbaden 1995, 241–282.
- Walter Niederberger, Elephantine XX. Der Chnumtempel Nektanebos' II., (Archäologische Veröffentlichungen 96), Mainz 1999, especially 113–137.
- Filip Coppens, The Wabet. Tradition and Innovation in Temples of the Ptolemaic and Roman Period, Prague 2007.

Dr. Filip Coppens is a member of the Czech Institute of Egyptology, Charles University in Prague, and participates in the excavations of the institute in Abusir. He specialises in the religion and language of the Late Period and the Ptolemaic and Roman era."

Per Medjat



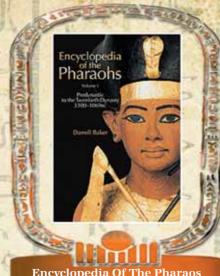
Village Life in Ancient Egypt Laundry Lists and Love Songs Author: A. G. McDowell Publisher: Oxford University Press ISBN: 978-0-19-924753-0 314 pages, 26 line illus/maps, 216x138 mm Price: £34.00 (paper)

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Deir el-Medina, the village of the workmen who built the royal tombs in the Valley of the Kings, is a uniquely rich source of information about life in Egypt between 1539 and 1075 BC. The abundant archaeological remains are complemented by tens of thousands of texts documenting the thoughts and activities of the villagers. Many of the texts are written on papyrus but most are on flakes of limestone which, being free and readily available, were used for even the most casual and temporary of records. They include private letters, administrative accounts, magic spells, records of purchases, last wills and testaments, laundry lists, and love songs. The value of these rare glimpses of daily life is greatly enhanced by the concentration of texts in one time and place.

This book combines translations of over 200 of these texts spanning the entire range of preserved genres with stunning illustrations. The reader will, therefore, be able to experience the life of the villagers through their own words whilst viewing places known to each individual writer. Each text is introduced by a commentary that provides the context and explains the contribution each text makes to our understanding of Egyptian society at this period.

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Encyclopedia Of The Pharaos Volume 1: Predynastic to the Twentieth Dynasty: 3300–1069 BC Author: Darrell D. Baker Publisher: American University in Cairo Press ISBN: 978-977-416-221-3. 588pp. Hbd. 17x23.5cm LE200 / \$49.50

This new and meticulous reference work includes an alphabetized list of all the known pharaohs up to the end of the Twentieth Dynasty. Each entry includes a brief biography of the reign, the tomb location and number (if known), the location of known mummies, the chief consorts (if known), the hieroglyphs and transliterations of each form of the pharaoh's name, and pertinent bibliographical references. In addition, the encyclopedia contains a glossary of commonlyused terms, an index of Greek forms of names and variant spellings, a list of apocryphal kings of the Fourteenth Dynasty, the royal titulary, and a chronological king list by dynasty.

Darrell D. Baker studied ancient Egyptian history, archaeology, and language at the University of California, Los Angeles.