

Gryglewski, Ryszard W.

Medical and Religious Aspects of Mummification in Ancient Egypt

Organon 31, 128-148

2002

Artykuł umieszczony jest w kolekcji cyfrowej Bazhum, gromadzącej zawartość polskich czasopism humanistycznych i społecznych tworzonej przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego.

Artykuł został zdigitalizowany i opracowany do udostępnienia w internecie ze środków specjalnych MNiSW dzięki Wydziałowi Historycznemu Uniwersytetu Warszawskiego.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



Ryszard W. Gryglewski (Poland)

MEDICAL AND RELIGIOUS ASPECTS OF MUMMIFICATION IN ANCIENT EGYPT

Mummification is the phenomenon which consists in removing from the dead human body all liquid matters contained in the tissues to inhibit the process of putrefaction responsible for decomposition of this body. Mummification can either proceed spontaneously, due to the favourable ambient conditions (natural mummification), or it may be a result of purposeful actions taken by the man (artificial mummification)¹. Both these types of mummification have been described in studies on the ancient Egyptian civilisation. Although in this dissertation attention will be focussed on artificial mummification rather (also called embalment), natural mummification (otherwise called decrepitude) is also important, if we want to trace back an origin and the history of the Egyptian custom of preserving the bodies of their dead. The inhabitants of the Nile Valley were also mummifying the dead bodies of some sacred animals (e. g. ibises, cats, falcons, and bulls), seeing in them a live embodiment of gods. In the present study, the tradition of preserving human bodies through the art of embalment, considered the central and immanent feature of Egyptian civilisation, will be related. First, however, we have to examine in detail the phenomenon of putrefaction, the destructive and abominable power of which the ancient embalmists were trying to annihilate.

The decomposition of body

The putrefaction (*putrefactio*) of human body is (...) *a chemical process resulting in decomposition of complex structures (like proteins, fats and carbohydrates) into less complex compounds, caused by the effect of the enzymes of bacteria*²; the first symptoms of putrefaction are usually sensed in 24 hours after the death, although the process starts still during the self-decomposition of the body. A very obvious symptom of the starting process is the typical chromatosis of integuments in the region of abdomen, usually above the right hip plate. In most cases the chromatosis assumes a greenish colour and is due to transformation of hemoglobin into met sulphohemoglobin,

¹ Cf. W. Grzywo-Dąbrowski, *Podręcznik medycyny sądowej*, Lekarski Instytut Naukowo-Wydawniczy, Warszawa 1948, pp. 72–73.

² M. Byrdy, *Znamiona śmierci późne* in: *Medycyna sądowa*, (ed.) B. Popielski, J. Kobiela, PZWL, Warszawa 1972, p. 82.

taking place under the effect of hydrogen sulphide, formed in large amounts by putrefactive bacteria. The chromatosis is spreading over abdominal integuments, covering gradually the trunk and thorax.

The rate at which the processes of putrefaction are proceeding depends on many factors, among which one can mention ambient temperature and humidity as well as the obesity of the dead person. Coating wrapping the corpse and its type can accelerate or retard putrefaction. The thicker are the layers of material, the slower is the process which makes the body lose its temperature, and the effects of putrefaction can occur much more quickly. Also the condition of the dead as well as its pharmacological treatment affect the rate and characteristics of this process¹. The environment dry and warm or cold and humid, poor in putrefactive bacteria and necrophagic insects, will obviously inhibit the decomposition of the corpse. The environment of high moisture content, warm and rich in bacteria, will speed up the putrefactive decomposition. Putrefactive bacteria have optimum conditions for reproduction in hot environment, and an optimum temperature for their quick procreation amounts to 30 degrees Celsius. Generally, the decomposition of a corpse is observed to proceed most quickly in open air, less quickly in an aqueous medium, while the body can resist this process for the longest time when buried in the earth. It should be remembered that this model, though very schematic only, can nevertheless be quite helpful in the description of individual cases. One single model, which would allow for all the variables and would provide, moreover, full description of the process, simply does not exist.

The toxicity of corpse

The dread of putrefaction is a phenomenon quite common and observed to exist in all kinds of human culture, over the entire span of the history of mankind. It is an undeniable proof of the victory of Death who breaks by force into the world of the living creatures. The presence of this very unwelcome stranger is manifested in repugnant colour and disgusting odour, which transmit a very clear and threatening message to all people. Destroying of the corpse (cremation, cannibalistic devouring of the dead body), hiding it somewhere (burial), abandoning (in the wilderness, on swamps), arresting the process of putrefaction (mummification), or retarding it (tanatopraxia) are all different ways leading to one and the same purpose, i. e. getting rid of the putrefaction. The repugnance of the process of putrefaction that the dead body must undergo is more than obvious, but mere aesthetic reasons do not seem to be sufficient to explain the reaction of dread. This is emphasized quite explicitly by L.-V. Thomas: *This what makes us fearfully step aside has its source in a hidden image of threat and aggressiveness. Repugnant is not so much the impurity of putrefaction itself as rather the dirt that it represents, the dirt of the death which fouls the body of the dead man and, by being contagious,*

¹ Antibiotics from the group of tetracyclines and sulphonamides seem to be very efficient in arresting the putrefactive transformation of a corpse. This is well visible when examining organs of the exhumed bodies, which even two months after the death still remain in a very good condition. Cf. M. Byrdy, *Znamiona śmierci późne*, p. 78.

*exposes to fouling its relatives, too. So, the dead body is impure and forbidden; to clean it, to hide it, to control it and stop the putrefaction, people thought of the ceremonies, performed not so much for the dead as rather for themselves to become protected from getting infected by the death.*¹

Thomas tries to explain the reaction of dread through the prism of culture-related habits and associates it with the notion of a *hidden sense of guilt which, as proved by Freud, is teasing very strongly our unconscious.* (...) *Through the well known to psychoanalysts mechanism of transposition, the sense of guilt is suppressed and experienced at a level of the, ascribed to the dead, aggressiveness. The decomposition of his body is sensed as a purposeful intention of doing some harm to us: the body of the dead person stinks and spreads infection because he wants to harm the descendants who let him die, who maybe wished him die, and who, first of all, did wrong in remaining alive.*²

Even if the above reasoning sounds convincing, it still leaves the heart of the problem unexplained, and in our opinion the problem lies in something that can be called *toxicity of the corpse*. The term *toxicity of the corpse* means all the products of the process of decomposition which directly or indirectly create hazard to the life and health of people.

Among them, the most threatening are certainly aliphatic diamines (putrescine and cadaverine), which in common terminology are called ptomaines. In minimum amounts they are present in live organisms, revealing their presence during the process of decarboxylation of certain amino acids by bacteria. During necrobiosis they occur in abundant amounts and create real hazard to living people. Their typical feature is the presence of an amine group, due to which they are characterised by a strong tendency to form methemoglobine which, in turn, results in oxidation of bivalent iron to a trivalent one. This mechanism is typical of aliphatic amines which, additionally, during biotransformation liberate ammonia, considered to be the next hazardous compound.³ The contact with ptomaine can lead to septicemia and ultimately to the death.

The Egyptians were able to understand very early the threat that the contact with decomposing corpse carries with itself. Infections induced by ptomaine must have been particularly frequent during epidemics, floods and wars. In a narrow valley in the south and on the widely spreading overflow-arms of the Nile in the north there were conditions almost ideal for quickly growing flora of bacteria, and consequently for the processes of putrefaction. On the other side, in desert adjoining the river, the corpses buried in shallow graves, sometimes just left lying on the sand, were undergoing the process of decrepitude, preserving in most cases exactly the features of the dead person. Thus formed natural mummies were presenting an image quite in contrast to

¹ L.-V. Thomas, *Trup. Od biologii do antropologii* [*Le cadavre. De la biologie à l'anthropologie*], transl. by K. Kocjan, Wydawnictwo Łódzkie, Łódź 1991, p. 85.

² L.-V. Thomas, *Trup. Od biologii do antropologii*, pp. 85–86.

³ Cf. K. Jacyszyn, *Czynniki warunkujące toksyczność* in: *Toksykologia*, (ed.) W. Seńczuk, Wydawnictwo Lekarskie PZWL, [3 ed.], Warszawa 1999, p. 55.

the atrocity of putrefaction and seemed to be definitely much *safer* to the living people. So, comparing both environments – river–swamps and desert – for this particular case the latter one must have been obviously much more favourable. Therefore it can be supposed that the primaeval laws of nature, which – using modern terminology – we would call biological–medical conditions, combined with reasons of more aesthetic nature finally decided that decrepitation of bodies started to be considered a phenomenon very desired. Additionally, the fact that it was possible to effectively preserve something that suffered desintegration so easily as a cadaver must have been for the Egyptians an obvious sign of the action of magic powers with which the ancient civilisation had got all soaked through. This finally formed a basis for the Egyptian eschatology, in which preservation of body became a prerequisite absolutely necessary for achieving the longed–for immortality.

The development of mummification techniques

As early as in the Predynastic epoch, the Egyptians were drying corpses of the dead people in the hot sand, imitating in this way the natural processes of mummification which were taking place in the case of regular burials¹. It is also supposed that special chambers were designed in which the dead bodies were *dried* in a properly constructed jet of hot air².

In the archaic period some intentional steps were taken to preserve the dead bodies from the process of getting decomposed. During the reign of the First Dynasty bandaging of the corpse had already been applied in practice, but it seems hardly probable that the art of embalming the dead bodies might have developed any farther beyond that point. The first undeniable proof of the existence of such practice is a lower part of an arm, found by Flinders Petrie in the wall of King Djer's tomb at Abydos. Petrie thought that this was a fragment of the dead body of Djer's wife, because the arm had well preserved four gold bracelets with turquoise and amethyst beads and amulets. The most important, however, is the fact that the arm was wrapped in numerous layers of bandages³.

True mummification had started not earlier than during the reign of the Second Dynasty. Then, for the first time, an intentional modelling of bandages was performed in a way such as to preserve the original appearance of the face, breasts and limbs after the body had shrunk around the skeleton due to the desiccation process. This effect was obtained by soaking the bandages

¹ Drying of corpse in the sun was certainly known to the members of the Naqada II culture (3500 – 3100 BC). The dead were at that time buried in the crouched position with their hands and legs drawn in, usually lying on the left side in shallow and oval pit–graves. The bodies were wrapped in mats and cloth. The best known burial of this type is *Ginger* (British Museum). Later, also the technique of drying the corpse in the sun and in the hot sand was used. This technique was used to mummify the corpses of the soldiers of King Mentuhotep II Nebhepetre of the Eleventh Dynasty, who died in a battle and were buried at Deir el–Bahari. About 60 bandaged bodies revealed no traces of any embalment, but the presence of a large amount of the sand grains closely adhering to the skin suggests that the bodies might have been previously subjected to a *sand bath*. Cf. A. J. Spencer, *Death in Ancient Egypt*, Penguin Books, Middlesex 1982, p. 114.

² Cf. H. Reid, *In Search of Immortals*, Headline Book Publishing, London 1984, p. 9.

³ Cf. B. Adams, *Egyptian Mummies*, Shire Publications Ltd., London 1984, p. 9.

with a rubber-like substance¹. The procedure had survived until the beginnings of the Old Kingdom, as proved by the well preserved left foot, found by Jean-Philippe Lauer in a granite chamber at the bottom of a deep pit beneath the Step Pyramid at Saqqara, which was the tomb of King Djoser of the Third Dynasty.

During the period of the Old Kingdom, the next stage in the development was towards a more professional mummification. For the first time the internal organs were removed, mainly to inhibit the process of putrefaction, and so, the decomposition of the dead body. The proof that such operations were made starting with the reign of the Fourth Dynasty is the corpse of a nobleman Ranefer, found in a tomb on the necropolis in Meydum. The nobleman's body was opened and internal organs were removed. The viscera were wrapped with resin-soaked pieces of cloth and placed in a recess in the wall of his burial chamber². At that time, the custom of placing the viscera in special jars, called Canopic jars, was developed³. As a preservative agent in this particular case served baking soda mixed with myrrh and resin⁴.

The oldest, preserved in good condition, mummie is that of Watay, chief of weavers, found at Saqqara, in a tomb of the royal singer named Nefer. This burial is dating to approximately year 2400 (Dynasty V, Old Kingdom). Watay's body was tightly wrapped with bandages which had previously been soaked with resin and – what is most extraordinary – also stucco plaster was used⁵. Upon setting, a hard negative shell was formed, preserving in an excellent way the features of the dead face. The hair, eyes, eyebrows and mustache were painted on the outer surface of bandages; using pieces of cloth, an artificial beard was made, too.

¹ Cf. W. B. Emery, *Archaic Egypt*, Pelican Books, Middlesex 1961, pp. 162–164. Mummies from the time of the Second Dynasty are bandaged very accurately, e. g. each finger is bandaged separately. The dead are still laid on one side in the crouched position, which is related with the tradition of the Predynastic period.

² In numerous tombs dating to the time of the Fourth Dynasty at Meydum recesses of that particular type were found during excavation works. Unfortunately, with exception of the one found in Renefer's tomb, all other were left empty long time ago. On the other hand, their common occurrence proves that Renefer's case was by no means something extraordinary, and that starting with at least the time of the Fourth Dynasty, removing and preserving of internal organs of the dead was the practice well known and commonly used. Cf. B. Adams, *Egyptian Mummies*, p. 13.

³ Canopic jars have already been used at the time of the Fourth Dynasty. One of the oldest examples which prove their use is a chest for such jars found at Giza and holding the viscera of Queen Hetepheres from the time of the Fourth Dynasty (approx. 2600 BC). Cf. C. Andrews, *Egyptian Mummies*, British Museum Publications, London, p. 7. Throughout the whole history of Ancient Egypt jars were made from various materials, like wood, ceramics, stone and pottery. Cf. A. J. Spencer, *Death in Ancient Egypt*, p. 159. Most frequently, the jars were made from limestone, for rich people from alabaster. Cf. B. Brier, *Egyptian Mummies. Unraveling the Secrets of an Ancient Art*, Michael O'Mara Books Ltd., London 1994, p. 85.

⁴ The resins known and used in Egypt were processed from different species of the trees, mainly from the conifers. The most frequently encountered are cedar, juniper, fir, pine and cypress. Pistacia resin was also popular. Cf. M. Kłys, J. Białka, T. Lech, B. Opolska-Bogusz, B. Próchnicka, J. Zięba-Palus, *Badania fragmentów mumii egipskiej kapłanki Iset Iri Hetes datowanej na okres ptolemejski (III – I w. p. n. e.)* in: *Archiwum Medycyny Sądowej i Kryminalistyki* 48, 1998, pp. 13–25.

⁵ The above mentioned tomb at Saqqara had as many as 11 shafts with recesses. It is very difficult to establish if this specific mummie belonged to a person named Nefer or to Watay, and therefore it is usually associated with the former name. At least this is what Barbara Adams does in her study. The second mummie found there belonged to a woman named Kahay. Cf. B. Adams, *Egyptian Mummies*, pp. 16–17.

The method of preserving the body shape by wrapping it tightly with bandages on the outside combined with modelling was adopted as a standard procedure by embalmers throughout the whole time of the reign of the Sixth Dynasty. The bandages were still soaked with resin of various types, though the use of stucco plaster was also gradually spreading, specially when very precise modelling of the face features and head shape was required. In the case of dead males, their sexual organs, penis in particular, were modelled very carefully and placed in position.

The epoch of the Old Kingdom was also the time when for the first time natron was used for mummification. The Egyptians were using for natron the term *neteryt*, which meant *belonging to God*; originally it was used during ritual acts as a purifying material¹. Natron (natrite) is hydrated sodium carbonate; it perfectly well absorbs water, dissolves fats, and acts as a bactericide. Its composition mainly includes sodium carbonate, sodium chloride and sodium sulphate, all in different ratios. Natron also holds some amounts of clay and calcium carbonate. Besides natron, also the common domestic salt was used. Quite often, by mixing salt or natron with fat (e. g. butter), a thick paste was obtained, and it was used for stuffing the emptied, and thus exposed to the process of putrefaction, cavities (e. g. oral cavity). Natron seems to have been used at first in the form of a liquid solution; this is confirmed by the fact that the internal organs of Queen Hetepheres from the Fourth Dynasty (Old Kingdom) at the moment of being found still held traces of the use of a 3% solution of this compound. The solution of natron was also used for preservation of viscera in the case of burial from El-Lahun dated to the time of the Twelfth Dynasty (Middle Kingdom). Experiments have confirmed that natron in solution acts as a dehydrogative, although the process is proceeding much more slowly than in the case of natron used in crystalline form². There is every evidence to prove that the Egyptian embalmers were also conscious of these effects.

In the Middle Kingdom the technique of embalment continued to be developed and improved. From that epoch originates the oldest preserved set of tools for embalment which was used to treat the dead body of a nobleman called Ipy (Dynasty XI)³.

A very valuable archaeological discovery was finding an undisturbed tomb of the estate manager of the last king of the Eleventh Dynasty Mentuhotep III Sankare, a nobleman named Wah. Wah was buried in a rock tomb at

¹ Natron occurred in Egypt in natural form, and the main deposit where it was taken from was Wadi Natron located about 70 kilometres north-west from Cairo. The second place where natron occurred was located in Upper Egypt in the city of El Kab. Cf. M. A. Ruffer, *Studies in the Paleopathology of Egypt*, The University of Chicago Press, Chicago 1921, p. 59, B. Brier, *Egyptian Mummies ...*, p. 67.

² Cf. C. Andrews, *Egyptian Mummies*, p. 8. Detailed experiments with mummification of chickens and pigeons using pure natron in crystalline form and natron in solution were conducted by A. Lucas, who has proved that natron used in dry form is much more efficient than when used in solution. Cf. A. Lucas, *The Use of Natron in Mummification in: Journal of Egyptian Archeology* 18, 1932, pp. 125-140 [za:] B. Brier, *Egyptian Mummies ...*, p. 65.

³ Cf. F. Dunand, R. Lichtenberg, *Mummies. A Voyage Through Eternity*, Times Mirror Company, New York 1994, pp. 30-31.

Thebes, and his mummie was exceptionally well preserved. The mummie was wrapped on outside with a sort of linen shawl. Underneath there was the first layer of spirally running bandages, which surrounded the body, conferring to the mummie the shape of a cigar. The next layer was formed of the spread sheets and pads of different sizes; at the level of the face a gilded cartonnage mask was placed. During the period of the Middle Kingdom masks of this type were very fashionable and formed a part of the standard set of accessories left with a mummie¹. The next layer was that of a dark resin, where numerous amulets were discovered. Below there was the next layer of bandages, followed by the next layer of dark resin. Hands were embalmed separately. For embalment of the corpse of the nobleman a total of 375 square metres of bandages were used. Some of the internal organs were removed through an incision in the abdomen; but the organs were left intact above the diaphragm, and the brain remained in place.

On the other hand, in the case of the mummy of a lady named Senebtisi, which was found at Lisht, upon removing her viscera from a flank incision in abdominal integuments, the open cavity was filled with resin-soaked pieces of material. Her heart was also extracted, but after having been bandaged it was replaced in thorax together with the filling stuff, which consisted of the pieces of linen material and chopped up straw, mixed and soaked with resin. In the burial Canopic jars were used; their lids were designed in the form of four guardian gods².

In the Middle Kingdom the practice used quite frequently was that of wrapping the nails with linen thread, to prevent their loss during the desiccation process³. Mummies were buried in extended position with arms stretching out along the torso or covering the pubes.

In the New Kingdom the art of embalment reached the peaks of its development and sophistication. The process of transformation of the cadaver into a mummy started with the removal of brain. Usually, this was done through the nostrils; although sometimes a trepanation hole in the base of the skull was made, or the technique of plucking out the eyes and piercing through upper septum of the eye-socket was also used⁴. When the brain was removed through the nasal channels, it was necessary to pierce through the ethmoid bone first, and reach the skull next. For this purpose a sharp-pointed instru-

¹ Masks were most often made of waste papyrus or linen soaked in plaster, which ultimately gave an effect similar to *papier maché*. Masks were gilded and/or painted. According to Barbara Adams, the custom of using grave masks could have some relation with an earlier tradition of modelling the surface of bandages observed during the period of the Old Kingdom. Cf. B. Adams, *Egyptian Mummies*, p. 27.

² Only as late as at the close of the Eighteenth Dynasty it became a rule that each of the jars had a head-like formed lid representing the four guardian gods, called sons of Horus. Imsety guarded the liver, Hapy – the lungs, Daumutef – the stomach, and Kebehsenuf – the intestines. The burial of Senebtisi is one of the examples of the earliest jars with head-shaped lids.

³ Exactly this sort of treatment was applied in burial of the step brothers: Nekht-Ankh and Khnum-Nakht in Rifeh. In the case of one of the brothers, the embalmers using a thin thread were trying to keep the nails in their original position. This double burial is dated to the period of the Twelfth Dynasty. Cf. B. Adams, *Egyptian Mummies*, pp. 24–25.

⁴ Until the beginnings of the Eighteenth Dynasty (approx. 1500 BC) the brain had usually been left in place. Cf. C. Andrews, *Egyptian Mummies*, p. 16.

ment (a chisel) was used. Then a rod with hooked end was used; it was pushed into the brain cranium to slice up the brain tissue. Pieces of the brain were removed and thrown away. They were never preserved¹. Finally, the empty cavity of the skull was filled with chopped up straw, resin, or resin-soaked pieces of cloth, and bandages, introduced through the hole by which the brain had been extracted. Through the nostrils, with the head tilted backwards from the neck and face upwards, liquid resin or bitumin were also poured inside². The matter was setting quickly, and the head could be restabilised.

The embalmers were next cutting the abdominal integuments and removing the viscera. In the case of female corpses, also the reproductive organs were removed. The cut was made on the left side in the lower part of abdomen using a sharp-edged tool about ten centimetres long, made from flint or obsidian. Until the times of Tutmosis III, the cut was running vertical, starting slightly below the bow of ribs and ending roughly at the level of hip. Starting with the mummie of Tutmosis and continuing with the mummies of his successors, the cut was running diagonally from the hip bone towards the pubic bone³. The preserved viscera were placed in Canopic jars. All four jars were put in chests, usually ornamented and provided with inscriptions. As regards the internal organs, the liver, the spleen, the intestines and the stomach were removed completely, as well as most of the vessels. The kidneys were sometimes removed, but more often than not they were left in place. Actually, until now, all attempts at finding in the Egyptian language a word which would correspond to the word *kidneys* have failed. There are well justified reasons to suppose that the inhabitants of the Nile Valley were not aware at all of their existence, and if the kidneys were removed, it was an accidental rather than intended action⁴. It is probable that the kidneys were considered an object of some special cult, and as a *sacred organ* had to be left intact⁵. Upon cutting down the diaphragm, the lungs were extracted, having broken previously the bronchial system, although sometimes the bronchi were extracted through an additional incision in a lower part of trachea. The eviscerated corpse was washed with water or palm wine with additions of spices and perfumes. The main aim of this treatment was, first of all, suppressing the unbearable odour which in a hot climate must have been emitted by the corpse.

An apogee of the embalmers' skill falls to the reign of the Twenty First Dynasty. The tissues and organs of the Egyptian mummies dated to that time contain a lot of salty substance, which indicates that the use of large amounts of natron (salt) was quite common at that time. Frequent traces of an evident

¹ In all evidence the brain seems to have been simply thrown away. Cf. B. Brier, *Egyptian Mummies ...*, pp. 61–62.

² In Egypt bitumen was excavated from the Dead Sea and used by embalmers. Its composition comprised, among others, vanadium, nickel and molybdenum. Cf. M. Kłys, J. Białka, T. Lech, B. Opolska-Bogusz, B. Próchnicka, J. Zięba-Palus, *Badania fragmentów ...*, pp. 13–25.

³ Cf. A. J. Spencer, *Death in Ancient Egypt*, pp. 119–120.

⁴ Cf. C. Andrews, *Egyptian Mummies*, pp. 16–17.

⁵ There is no evidence to support this fact in the Egyptian religion; the *sacred* nature of the kidneys is, on the other hand, well evidenced in the Bible.

skin maceration can be a proof that, apart from crystalline natron, also its aqueous solution was used. Basing on Herodotus' relation, it was suggested even that the corpse was treated in a *salt bath*¹. Additionally, during that operation a spontaneous depilation of the hair was taking place, due to which the hair on the whole body, except the head, was removed. Exceptionally only, salting of the corpse was abandoned, which is proved by the untouched cells of epidermis with well preserved nuclei.

With the internal organs removed, salt was applied to the corpse and the empty cavities were stuffed with small bags and wads holding loose natron; the bags and tampons were placed in thorax and in the abdominal cavity. Sometimes tampons were soaked with gum arabic. Additionally, small balls of fat mixed with sand and bags with herbs were placed in thorax and in the abdominal cavity. Among various herbs, cynamone and myrrh, mentioned by Herodotus, were certainly in use. He also writes about insence placed in the abdominal cavity². Palm straw cut to pieces, and sometimes ashes, were also used. To make the drying process more effective, the corpse was placed on a mat covered with natron. The aim of all those treatments was to ensure absorption of blood and lymph, preventing at the same time sinking of the abdominal cavity. Due to this, the process of the corpse dehydration could be carried out more effectively from inside and out simultaneously. Thus prepared corpse was heaped up with dry natron and placed on a special table, provided with draining grooves to let the fluids excreted by the corpse flow off to a bowl.

In this condition the corpse was let stay for at least 40 days, losing about 75% of the water contained in it. During all that time the corpse was resting on a low stone table which sloped slightly from head to feet to aid drainage of the body fluids. In the well-preserved table for embalment of the corpse of the sacred Apis bull at Memphis, a special groove was carved, and at the foot of the table a stone reservoir was placed to catch the fluids formed in the process of desiccation. There is every reason to believe that similar systems were used when mummifying the human corpses. After dehydration, the corpse assumed the form of a skeleton covered with parched skin; the provisional bags and wads were removed from the inside, and the body was thoroughly rinsed out and washed down once again, to be subjected next to the application of lotions and ointments rubbed into the skin. The body was now lighter by about 75% of its original weight and was much darker in colour.

Salting dried sufficiently well the skin and the inner cavities of the corpse, but the tissues in the limbs, fingers and neck, which were not exposed to the effect of salt, were changing into a shapeless sludge, composed of liquid and

¹ Herodotus in his *Histories* (transl. by S. Hammer, II, pp. 85–88, Czytelnik, Warszawa 1954) used for definition of the treatment resulting in dehydration of corpse caused by natron the word *ταρίχουσις*, which at that time meant *salting of fish*. Therefore, *salt bath* or *washing in salt* do not seem to be the definitions most adequate. This has been confirmed additionally by modern research, which indicates that natron was used for embalment of the corpse in crystalline rather than dissolved form; as a solution it was used in some exceptional cases only. Cf. C. Andrews, *Egyptian Mummies*, p. 8, B. Brier, *Egyptian Mummies ...*, pp. 64–65.

² The use of insence in mummification practice is also stated by the Cairo *Rhind Papyri*. Cf. B. Brier, *Egyptian Mummies ...*, p. 71.

semi-liquid substances. This caused the undesired deformation of the body. To restore its original shape, the sludge was mixed with fragments of bandages, mud from the Nile, a mixture of mud and cut straw, or a mixture of butter and soda¹. Sometimes, the use of these materials made the mummies *swell*². The mummy of Nodjmet, wife of the High Priest, Herihor, has got stuffed cheeks. To embellish the eye-brow curves, human hair was stuck. An imitation of eye-balls was also made, using for this purpose white and black stones. In the case of the mummy of queen Maatakare, the embalmers introduced under her skin a mixture of fat and soda, making a number of cuts through which the embalmer's hands could separate the skin from the underlying muscular tissue.

The removed internal organs were also salted, and this is precisely the case when natron in the form of an aqueous solution might have been very useful. After salting, the internal organs were thoroughly sprinkled with pulp composition of different species of aromatic trees; they were next modelled and wrapped with bandages. Bandaging was made before drying, because one end of the bandage was usually interwoven with the tissues and thus connected fast to an organ. Between the rolls of bandages, wax images of the four gods which guarded the Canopic jars were placed³.

The liver was usually bandaged along its cross-axis to form a narrow cylinder, open at one end, and resembling in its appearance a cocoon. It seems that in many cases the embalmer was not able to take the liver out without damaging it. If this happened, the embalmer replaced in the body a fragment of the liver only. Small intestines were usually wound several times around each other, forming an oblong packet of parallel coils.

Heart was never removed from the body or subjected to a separate preserving treatment. Always left inside the body cavity, it is in the majority of cases well preserved⁴. Very often the valvules are untouched, and in many cases one can easily recognise the tendinous cord and papillary muscles, the front one and the rear one, while the heart muscle is almost always seriously damaged, as a result of unintended injuries during the removal of lungs and piercing through in direction of the esophagus. An injury encountered most frequently in this organ is full opening of the left heart auricle; sometimes of both auricles. Deep cuts in one or two ventricles are observed⁵. The heart cavities were in many cases tightly filled with mud or with mixture of mud and

¹ It seems that the term *salt bath* should be understood in a sense rather figurative than literal. Probably the corpse was rubbed, first of all, with a salty material in crystalline form; rarely with an aqueous solution. There is no evidence that the corpse was immersed in tanks with salt bath. Cf. A. J. Spencer, *Death in Ancient Egypt*, p. 112.

² This is exactly what happened to the preserved corpse of queen Henttawi. Cf. B. Adams, *Egyptian Mummies*, pp. 47–48.

³ Those were the heads – symbols of the, so called, Sons of Horus. I quote after: M. A. Ruffer, *Histological Studies on Egyptian Mummies* in: *Studies in the Paleopathology of Egypt*, pp. 49–92.

⁴ Heart was an organ so important in Egyptian religion that in the *Book of the Dead* no less than three magic spells were provided to protect it and keep it in the body of a dead person. *Book of the Dead*, § 27–29 [after:] C. Andrews, *Egyptian mummies*, p. 16.

⁵ Cf. M. A. Ruffer, *Studies in the Paleopathology of Egypt*, p. 58.

chopped up reed. The way in which these fillings were made is still unclear.

Female reproductive organs were always removed. Only the *labia major* of pubendum were left. The bladder was sometimes left *in situ*. Penis and the scrotal sac were painted in red and bandaged separately from the remaining parts of the body. In some cases, the genital organs were shifted from the right to the left thigh and bandaged together with the rest of the body. In other cases, penis was laid flat on the croach, which can nowadays give an impression of this organ being entirely removed. It was also practised to fill the around-genitals area with bandages or pieces of cloth and mud, both in the case of female and male corpses.

Flowers and some vegetables played a very important part in the process of mummification. Special popularity enjoyed onion, the bulbs of which as well as other fragments were found inside the mummified corpses, on the surface of the bodies, and in between the reels of bandages.

A serious problem was the reconstruction of eye-balls. Different treatments and, depending on the epoch, different techniques were used in this case. Most often, the eye-balls were painted on a piece of cloth, which was next pressed into the eye-sockets. In other cases onion bulbs were used, and on them the picture of an eye was painted. Another technique was to use artificial eyes with pupils made from obsidian and the white of the eye made from alabaster.

Final washing of the corpse, rubbing of the skin with resin, and cosmetic treatments (make-up made with ochre as well as gilding of the face, breasts and nails) ended proper mummification of the dead corpse. Specially important was to oil the skin again, as it became shrivelled and stiff due to dehydration. To restore its suppleness, the whole body was rubbed with more than one application of a sweet-smelling lotion composed of juniper oil, beeswax, natron, spices, milk and wine. From the Egyptian literature we know the name of *anchi-imi*, which means a plant used for production of fragrant oil applied to the mummified corpses¹. The embalment incisions were sewn together and sealed up with hot wax, often holding an amulet with depicted *Udjat-eye*². In the case of members of the royal family, a bronze or gold label was additionally fastened with gum arabic.

Just before the bandaging began, the soles of the feet and palms of the hands were stained with henna. For women the cheeks would be rouged. Often the whole body was painted with ochre, red colour being preserved for men, yellow – for women. Some mummies had very elaborate wigs placed on their heads; other were dressed in shirts and sandals. With all those treatments completed, the corpse was let stay in that condition for a few days, and then the embalmers proceeded to bandaging of the mummie.

Bandaging took altogether over two weeks. The corpse was swathed in a saffron-yellow shroud, supported by the first layer of bandages. The toes and

¹ Cf. A. Niwiński, *Egipskie mumie w Polsce. Dziewczyna z „rybiego nomu” i jej zagadka* in: *Archeologia Żywa* 1/1999, pp. 29–33.

² An *udjat-eye* represented the eye of the falcon-headed god Horus and was believed to have a healing power. Placed on the embalmer's incision it was a symbol of the magic power of healing a wound.

fingers were individually wrapped in narrow strips; in the case of rulers, gold stalls were additionally fitted over them. Then the head was bandaged. The *Rhind Papyri* supply detailed information on bandaging of the head. Each of the bandages had its own magic name. When the layer of bandages was two fingers thick, they were soaked with *dense oil*, that is with resin, obtained from pine trees. Specially recommended for this case was the pine tree from Aleppo in Syria¹. Next, along the torso the bandages were running diagonally, starting from the right shoulder and maintaining in fixed position numerous wads, placed on temples, eye-lids, mouth, and ears. Between the successive layers, numerous amulets were placed, and the whole was abundantly sprinkled with ritual oils. Then the embalmer's attention focussed again on the hands, which were stuffed so as to make them mobile. At the end, the embalmer was bandaging the abdomen and legs, which were wrapped with special bandages, again soaked with resin. The whole *construction* of the mummie was additionally reinforced and preserved by application of an additional protective coating. The composition of this coating included various, and often used alternatively, materials, like clay, plaster, resin, wax, or glue.

During the Late Period, the – so called – *artificial mummies* or *embalmers' restorations* were provided. In all evidence their presence was a result of the negligence of careless embalmers, whose work often resulted in damaging of the corpse or destroying even some of its parts. In such cases they tried to hide it, repairing, if still possible, the deformed fragment of the body, or completing the lacking fragment with a prothesis. It is not unlikely that protheses were also made by order, if the dead person was cripple or the death was sudden and caused numerous injuries to the body.

The time of the Persian invasion (525–404) marks a border line upon crossing of which a slow, though well visible, decline in the art of the embalment of a human corpse can be observed. The embalmers seem to act in haste, without due observance of the procedures worked out by their predecessors. As an example of the carelessness of the embalmers working in the Persian Period may serve the case of Amentefnacht, a nobleman living during the Twenty Seventh Dynasty. To all the evidence, Amentefnacht's corpse was bandaged and then put in a coffin, on the bottom of which a layer of natron was spread. The coffin was covered with a lid sealed up with plaster, and the whole was placed in a large granite sarcophagus. Upon being discovered in 1941, the coffin inside the sarcophagus was still intact and air-tight. When opened, it could be seen that the corpse was resting in a brownish liquid substance formed by natron combined with the constitutional fluids. The brownish substance covering the bottom of the coffin was some two and a half centimetres high. The bandages were also soaked with this matter, specially the layers covering the rear part of the corpse. Quite often, soaking of bandages with resin was the only treatment done in mummification of the corpse. Much more care was taken to decorate properly the outer layers of the

¹ Cf. B. Brier, *Egyptian Mummies ...*, p. 45.

mummie than to preserve the dead body¹. Therefore large amounts of the resin and plenty of bandages were used, giving the skin a *bituminous* appearance.

On the decline of Egyptian civilisation (the Ptolemaic period 333–30 and Roman period 30 BC – V cent. AD), the art of embalment raised from the fall once again. The papyri (from Cairo and Louvre) describe the process of embalment during the Roman period as the one involving rubbing of the head with incense and other parts of the corpse with holy oil. This treatment was one of the duties of the embalmers called *Treasures of God*. The rear parts of the corpse were coated with unguents, and the skull cavity was filled with aromatic herbs. The arrangement of bandages formed what would be called *diamond* pattern. Often incomplete mummies can be found, which were made complete with bones, pottery and palm fibres. The embalmers did not care to preserve the correct anatomy of the *reconstructed* mummies, which must have been a result of the *democratisation* of embalming treatments and, consequently, of an obvious deterioration of their quality². Masks made from cartonnage were widely used. Canopic jars were replaced with symbolic pictures of the four sons of Horus, painted on the mummie's cartonnage mask³.

After the Roman conquest, the rite of mummification was officially going on until year 392, when it was prohibited by Emperor Theodosius. During the Roman period the custom of ornamenting mummies with portraits of the deceased realistically painted on cartonnage panels became very popular⁴. Rich families from the Greek and Roman period ordered their dead to be buried with the images of tongue and eyes made in gold thin foils.

The rite of mummification was finally abandoned along with the Arab conquest. Still in the Coptic period, though mummies *sensu stricto* were not made any longer, the dead were buried stretched on boards and packed around with salt and vegetables, which was a far remnant of the tradition lasting for nearly three millenia.

The myth of Osiris

There has never been a full, original version of the myth which would survive until now. A most complete description of the myth was written by Plutarch of Cheronea, and it is dated to the 1st cent. AD⁵. We know, however,

¹ Cf. C. Andrews, *Egyptian Mummies*, p. 12. Therefore a lot of attention was paid to the techniques of bandaging which at that time precisely were in full bloom. Bandaging in the Ptolemaic and Roman periods reached the highest level of skill in the whole history of Egypt. Cf. B. Brier, *Egyptian Mummies ...*, pp. 99–100.

² Cf. A. J. Spencer, *Death in Ancient Egypt*, p. 43.

³ For example, none of the 105 mummies discovered on a necropolis of Baharija dating to the Graeco-Roman period (near the oasis of Baharija, in Lower Egypt) was equipped with Canopic jars. D. Webster, *Valley of The Mummies* in: *National Geographic* 196, October 1999, pp. 80–84.

⁴ The origins of those portraits are to be traced back to an earlier custom of making cartonnage masks. Cartonnage was made from glued waste papyri, which were next coated with plaster. Since most of these portraits were discovered at the settlement of Faiyum, they used to be called *Faiyumic portraits*. The most sophisticated technique of making these portraits was by the, so called, inking. It consisted in mixing paints with beeswax and spreading the hot paint with spatula or brush. Cf. B. Brier, *Egyptian Mummies ...*, pp. 100–101.

⁵ Cf. B. Brier, *Egyptian Mummies ...*, p. 20.

that the main stem of the legend of Osiris had already existed in the period of the Old Kingdom. Fragments of the Osirian myth were often quoted in religious hymns. The figure of the god was found in the circle of Heliopolitan deities, to which he had not belonged at first. Soon, however, he was accepted, probably owing to the quickly spreading fame of his worship.

The parents of Osiris were the earth-god Geb and the sky-goddess Nut. His brother and sisters were Seth, Isis and Nephthys. According to the myth, he was a good king who taught the Egyptians how to build their civilisation. *They say that when Osiris was king he immediately liberated the Egyptians from their primitive and brutal customs of living, taught them how to cultivate corn, made laws for them, and showed them how to worship gods. Later he made the whole world civilised as he travelled all around, without seeking the help of arms, conquering many a nation only by the spell of his eloquent speeches and songs and poetry of all sorts.*¹

Thus Osiris was the benefactor of mankind, the personification of wisdom and good, an ideal ruler, the one who gave law and order to the earth. A faithful companion of Osiris in his rule was his wife Isis, who occasionally could even replace her husband and rule the country herself: *Even when he was far away, Seth did not conspire against him, because Isis was on guard and keeping close watch.*²

The next important personage in the myth was Seth (Set), Osiris' brother, his rival and finally assassin³. With a group of conspirators he was said to lay a trap for Osiris while the latter one was coming back from Egypt and take his life⁴.

According to the *Pyramid Texts* (Old Kingdom) Seth was said to kill Osiris at Nedit, not far from Busiris⁵. The sea carried the chest as far as the coast of Syria, near Byblos. There it grew into a heather tree. King Byblos, enchanted by the beauty of the tree ordered to cut it down and use for columns supporting the roof of his palace, but Isis managed to get the chest back and took it to Egypt. But while in Egypt, she wanted to see her son Horus who, being still a young boy, was growing up in Buto. So, she decided to hide the chest in the swamps of the Delta but Seth, hunting at night, saw the chest in the moonlight: *He recognised the body and cutting it into 14 pieces scattered*

¹ Plutarch of Cheronea, *Traktat o Izydzie i Ozyrysie*, transl. by J. Lipińska, M. Marciniak in: J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, Wydawnictwa Artystyczne i Filmowe, Warszawa 1980, pp. 57–59.

² Plutarch of Cheronea, *Traktat o Izydzie i Ozyrysie*, p. 59.

³ Seth (Set) was the god of deserts and oases. He appeared as an unidentified animal (okapi, desert jerboa, pig ?). He was very closely related with Osiris and Horus. In the Osirian circle he played a definitely negative role, becoming fratricide, regicide and usurper – all in one. Defeated by Horus, he was thrown at Osiris' feet. This is not, however, the only face of this god. Seth is also related with the circle of Re, where as a mighty warrior he helps in fight with the deadly enemy of the sun, the Apopis-serpent. He had already been worshipped in the Predynastic Period at Ombos, near the present Ballas. The places of his cult were also Su near the Faiyum depression (also said to be his birthplace) and Tanis in the Delta, where his cult was particularly vivid during the reign of the Hyksos.

⁴ Cf. H. Te Velde, *Seth, God of Confusion*, E. J. Brill, Leiden 1977, p. 84.

⁵ Cf. J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 65.

them everywhere.¹

Isis started a long search over the whole territory of Egypt. Finally, she managed to complete the body of her husband. Together with Nephthys, assisted by Re and Nut, Isis restores the body of Osiris to life: *Raise thyself up, Osiris, turn around, it's me, Isis, who hath arrived to take thee and give heart back to thy body. (...) Go and come, wake up and sleep, because thou art alive. Raise to thy feet, look at it, raise thyself (...) raise and sit down, shake the earth that is on thee off, get rid of these two arms that are behind thee and that are called Seth. Pick up thy bones, collect thy members, make thy teeth white, take thy bodily heart, shake the dust that is on thee off. His head was lifted by Re, he hateth the sleep and detests stillness (...) Wake up in peace, wake up, Osiris, in peace; wake up, oh thou, who art at Nedit. Oh, Nut, if thou art alive, Osiris shall live, too. Oh, Osiris, thy mother, Nut, is spreading herself over thee to protect thee from the evil of any kind, to protect thee from anything that is evil, and thou art the mightiest of her children.*² Risen from the dead, Osiris returns from the Underworld to Horus and prepares him for the fight. After a heavy and dramatic struggle Seth is finally defeated.

In the *Pyramid Texts* of king Teti (Dynasty VI), the chief executor of the reconstitution of the dismembered body and the one who made Osiris rise from the dead was Horus. It was Horus who gave Osiris his Eye and thus made the resurrection of his body possible: *Hail, thou Osiris Teta, stand up! Horus comenth, he hath counted thee with the gods, Horus loveth thee. He hath filled thee with his Eye, he hath joined his Eye, he hath joined his Eye to thee. Horus hath opened thine eye that thou mayest see therewith.*³

The *Pyramid Texts* seem to indicate that already in the period of the Old Kingdom Horus was symbol of the living ruler, while Osiris was symbol of the dead king⁴. If those two ideas coexisted, then the burying ceremonies and *animation* of mummies through the *Opening of the Mouth* ceremony would be analogical to the ritual that was observed by Horus in the case of Osiris.

The immortality of Osiris

From what we know, at the very early stage of its existence, mummification was the privilege reserved only for the person of a ruler, considered a live image of god, and for the members of his closest family. At least this is what it looked like during the period of the Old Kingdom. Since pharaoh was the source of all vital strength in Egypt, his death was an event causing in equal measure sadness and threat. The threat mainly because together with the king passing away, the powers which fuelled life could pass away, too. The mere act of inheriting the throne by the king's successor and the power to rule

¹ Plutarch of Cheronea, *Traktat o Izydzie i Ozyrysie*, p. 62.

² The *Pyramid Texts* §§ 1067, 1884–1885, 1916–1917, transl. by M. Marciniak in: J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 71.

³ I quote after: E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, University Books Inc., New York 1961, p. 71.

⁴ Cf. J. Gwyn Griffiths, *The Conflict of Horus and Seth*, University Press, Liverpool 1960, p. 20, A. J. Spencer, *Death in Ancient Egypt*, p. 141.

was more than insufficient. As it was, the successor should also possess the magic power of his predecessor, but to achieve this, the death should be *cheated*, by making the king immortal, which meant inhibiting the process of putrefaction: *The leader and prince should not die; and so, they should not putrefy*.¹ With elapsing time, this rule was applied to a gradually enlarging circle of people, to be finally adopted in the case of every single man, no matter what his origin was. Since then, everybody who could afford paying the embalmers for their work could experience the privilege of becoming immortal². Quite an exceptional role in this *process of democratisation* played Osiris, the ruler of the Underworld.

The ruler of the Underworld is commonly known as Osiris, which is a Greek form of his real name. As written in hieroglyphs, it should rather be pronounced As-Ari, As-Ar, User, Usri, Ausares or User³. Transliterations like Wesir, Weser, Waser were also proposed. In Coptic form it might have sounded like Usiris. Until now, the meaning of the name *Osiris* has not been fully deciphered. In hieroglyphs it was written with the symbol of an *eye* and *throne*. A very probable interpretation, though not at all certain, would be a definition *the one who takes his place*. J. Černý gives his own interpretation (the *Throne of Eye*) and sees in this name the own name of a man who had been once a ruler (prince ? king ?), and was deified after his death⁴.

The origins of the cult of Osiris go back to the remotest past and are today very difficult to reproduce. Though one of the oldest images of this god can be an ebony plate from the times of pharaoh Udemu (Hesepiti), the first mentions about Osiris date back to the period of the Old Kingdom, when the name of Osiris was added to the name of the dead rulers. This emphasizes the high rank of this god who was placed in the pantheon of the most important gods of Heliopolis. At that time precisely, Osiris was also identified with the moon, and the moon phases are usually compared to the cycles of death and resurrection.

Since the times of the Twelfth Dynasty, Osiris has been presented while sitting in a chapel with canopy. Later, it was also popular to depict this god in straightened position. No matter, however, what was the position of his body, a typical and common feature in the iconography of this god was to present him as a mummified man. At that time, a distinct centre of his cult was forming in Upper Egypt, and in the period of the Middle Kingdom it was Abydos which played this role. At that time also rumours were spreading about the mysteries which took place in that town as a sign of his worship. In the period of the New Kingdom the cult of Osiris was spreading very rapidly, as was very distinctly proved by the fact that the Ruler of the Underworld started *assimilating* the features of the up till then most mighty gods of Egypt, Re

¹ L.-V. Thomas, *Trup. Od biologii do antropologii*, p. 154.

² Herodotus in the *Histories* (II, 83–86) enumerates three types of mummification made in Egypt. From his description it follows that the choice of a specific type of mummification depended only on the financial means of the person who was ordering this treatment.

³ Cf. E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, p. 24.

⁴ Cf. *Lexicon der Aegyptologie*, Harassowitz, Wiesbaden 1982, t. 4, p. 624.

included¹.

In the Late Period the cult of Osiris was in full bloom, slowly but steadily pushing other ancient gods of Egypt aside. An apogee of this process falls to the time of the reign of Ptolemei I, and so to the epoch of Greece. At that time precisely, the ruler from the new Greek dynasty, having asked the opinion of the two experts in religious problems – Greek Timothei and Egyptian Mene-thon – decided to create a syncretic god named Serapis. Serapis came into being as a combination of the cult of Apis bull, worshipped under the name of Usar-Hape by the Egyptians at Memphis, and under the name of Ozorapis by the Greek colonists also settled in that town. In its main embodiment Serapis was supposed to be a god who, while preserving the tradition of the aboriginal population of the Nile Valley, was also meant to satisfy the spiritual needs of the newcomers from Hellada. Serapis was additionally connected with other two gods from the Osirian circle, i. e. Isis and Anubis². The most famous temple district devoted to Serapis was without any doubt the Alexandrian Serapeum. In the Roman period, his cult was gradually losing its importance, decaying completely with the rise of Christian faith.

The nature of the beliefs related with Osiris is very complex and probably has never been ultimately defined by the Egyptians, since Osiris is a syncretic god assuming various forms and *usurping* the worship due to other numerous local gods with such ferocity that for most part even the names of those gods are quite unknown to us today. There is some evidence which indicates that the original place of his cult was at Busiris, the capital of Nom IX in Lower Egypt, where previously a deity named Anedjti had been worshipped³. This deity was presented in human form and with a typical crown of feathers. His characteristic attribute was a hooked stick, resembling sheep-hooks. All those features were included later in the iconography of Osiris, whose name had been known at least from the times of the Fifth Dynasty.

It seems that at first Osiris and Anedjti were coexisting, at least until the moment when Osiris desired to take over the insignia of power and usurped the title of the Master of Busiris. This must also have been the place where the *djed* pillar (*god's backbone*) existed⁴. Probably, originally, Osiris might be represented only by means of this sign. Diodorus testifies that Osiris appeared before Horus and Isis as a wolf. It is quite possible that we have here an emanation of Osiris, which could be Chenti-Amenti or Wepwaut, that is the guide of the dead, since both those deities were closely related with the cult of Osiris and both were seen as black dogs or jackals, that is, the animals closely related with wolves. The third god who played very important role in the cult

¹ Cf. *Lexicon der Aegyptologie*, t. 4, p. 629.

² Cf. J. Gwyn Griffiths, *Osiris in: The Oxford Encyclopedia of Ancient Egypt*, The American University in Cairo Press, Cairo 2001, pp. 615–619.

³ Anedjti had the title of the Master of Nom or Chief of His Nom. We know that in this particular case this was Nom IX of Lower Egypt. There is an indication that the title Anedjti refers to a leader of nom who did exist and was deified after the death. Cf. J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 51.

⁴ *Djed* lub *Djedu* was an original Egyptian name of the capital of Nom IX of Lower Egypt, since Busiris was a Greek name. Cf. E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, pp. 46–52.

of Osiris was Anubis (egypt. *Anpw*). He was also worshipped as a black animal from the family of Canidae¹.

Chenti–Amenti had had his own sanctuary already in the Predynastic Period. His name means *Leader Amenti* or *Leader of Those who are in the West* (meaning: in the Other World)². To him relates the myth of a ruler who perished to rise from the dead later. As early as in the times of the Fourth Dynasty some hints clearly alluding to his person, though never referred to by name, could be traced. This god is often represented with two white feathers in the white crown of Upper Egypt³. In the period of the Twelfth Dynasty (Middle Kingdom) Chenti–Amenti was merged with Osiris, and the outcome was a syncretic god Osiris–Chenti–Amenti⁴.

Wepwawet (Wepwaut, Upuaut) – his name means *The one who opens the way*, that is, a guide who is leading the souls of the dead to the Kingdom of the Underworld – is represented as a jackal (wolf? dog?), placed on a banner of one of the Egyptian provinces, called – a nom⁵. His city was Sjut (Lykonpolis). Later he was combined with Anubis. W. B. Emery suggests that: (...) *he appears originally to have been a war-god who led the king to battle*.⁶

In the period of the Middle Kingdom, Wepwaut played an important role in the, so called, Mysteries of Abydos. During celebrations, the statue of Wepwaut was preceding the statue of Osiris to remove hidden dangers lurking everywhere. Osiris also made a composite divinity with Ptah and Sokaris from Memphis⁷.

A very important role in the cult of Osiris played Anubis (eg. *Anpew*), the ancient god appearing as an unidentified dog or jackal. He was most often presented in lying position, sometimes with an ostrich feather on his back spine. He took part in all the events connected with Osiris' death, operating next the balance used in the final judgement conducted on the soul of a dead in the Kingdom of the Underworld. It was also him, according to some sources, who embalmed the body of Osiris.

According to Plutarch, Anubis was said to be the son of Osiris and Ne-

¹ Black was the symbol of death and resurrection. Therefore the colour ascribed to Anubis and Osiris they used to call *black*.

² His name can be interpreted as *The First among the Western* [I quote after:] J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 199.

³ Cf. E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, p. 31.

⁴ This has been proved by the first lines of the text written in the, so called, stella of Oxford. Cf. J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 82.

⁵ This was the Lycopolitan Nom. The oldest picture of jackal as a totem on banners was found on *Narmer's Pallet*. It is very probable that what we can see there is Wepwaut's picture. Cf. J. Gwyn Griffiths, *The Conflict of Horus and Seth*, p. 136. At the same time it is worth noting that guides of this type were often pictured as dogs, wolves or jackals. The Greek Charon was in iconography represented by a dog. In the Hellenistic period, an attribute of Hermes Psychopompos (the guide of souls) was a dog. The Aztec god Xolotl was dog-headed and lead the dead through a *ninefold river*.

⁶ W. B. Emery, *Archaic Egypt*, pp. 126–127.

⁷ Sokaris was Master of Duat (the ancient world of the dead) or Master of the Underworld at Memphis. A well-preserved picture of Osiris–Sokaris was found on *Papyrus Ani*. Cf. E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, pp. 55–58.

phthys: *For when Isis found out that Osiris loved her sister and had sexual relations with her in mistaking her sister for herself, and when she saw a proof of it in the form of a garland of clover that he had left to Nephthys – she was looking for a baby [from that relation], because Nephthys abandoned it at once after it had been born for fear of Seth; and when Isis found the baby helped by the dogs which with great difficulties lead her there, she raised him and he became her guard and ally by the name of Anubis.*¹

Anubis was patron of cemeteries and mummification. He was called *master of the place of purification*, that is, of the house of embalment². His by-names *The one who lives in a booth* and *The one who is on a hill* prove that, for most part, the embalment-related activities would rather be performed in fresh air or in airy compartments, due to the unbearable odour accompanying working on a corpse. It is Anubis who makes the odour of the dead become pleasant, which means stopping the process of putrefaction. The Egyptian embalmers used to put the mask of Anubis during the ritual embalment of a dead body, because Anubis was the archetype of a *man who is in charge of embalment*³ and at the same time the one who is in charge of weighing on a balance the heart of the dead against the *feather of truth (maat)*. He was the main god of the Kynopolitan Nom, where his feminine counterpart was the goddess Input. Kynopolis (Gr. *The City of Dogs*) was the capital of Nom XVII in Upper Egypt. At Szaruna, a cemetery of the mummies of dogs was discovered, which could be somehow related with the cult of Anubis. In the temple of Hatszepsut at Deir-el-Bahari Anubis had his own chapel. He was also worshipped at Memphis, where during the Ptolemeic period he became a part of the cult circle of Serapis, Abydos and Dender. Greeks identified him with Cronos.

So, it is clearly seen that Osiris is very closely related with the circle of funeral gods, and first signs of his existence can be traced back in the fundamentals of Egyptian civilisation. But Osiris taking part in the *rite of death* would be the god incomplete. Incomplete, because Osiris is, first of all, the god of resurrection; the one who leads to immortality and the personification of eternal life. He denies the ultimate nature of death, combats the death, and is triumphant with the vital strength of nature.

Already in the *Pyramid Texts* Osiris was identified with the Nile or rather with its beneficial floods⁴. Since the period of the Eighteenth Dynasty, very close relations have been existing between Osiris and Nepri, the goddess of corn. On one of the bas-reliefs from Fyle, Osiris-Nepri are seen together with wheat growing out from their bodies⁵.

In the *Coffin Texts* (Middle Kingdom) Osiris is closely related with the re-

¹ Plutarch of Cheronea, *Traktat o Izydzie i Ozyrysie*, p. 60.

² The title of Anubis in exact meaning is *The One in Charge of the Divine Booth*, i. e. of the place where proper embalment treatments were carried out.

³ E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, p. 305.

⁴ Cf. *Lexicon der Aegyptologie*, t. 4, p. 628.

⁵ Cf. E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, p. 58.

covery of plants. *I live, I die, I am the wheat, I am endless.*¹ This may be the genesis of creation of the, so called, Corn–Osiris, which was the shape of mummified Osiris made in wood; hollow inside, it was filled with soil and sown with corn grains. When the soil was soaked with water, the grains were germinating, shooting green sprouts of corn through the holes in the lid. Another technique was also used, and it consisted in moulding the shape of Osiris from the Nile mud on a piece of linen cloth. The cloth was spread on a mat made from reed and fastened to a wooden framework².

As we can see, the person of Osiris was very complex, and his cult over the entire history of the Egyptian civilisation was undergoing various metamorphoses and transformations. But what was most important in him was well grasped by Černý who wrote: *The person of Osiris from the adored king who resurrected after the death and returned to a primary form of being turned out to be a symbol of the resurrection of life in general. This return to life was referred to all the nature, and in particular to the two most common phenomena: water floods and growth of plants. Thus Osiris became the symbol of personality and life not ending after the death.*³ For this reason precisely the name of Osiris had been added to the names of the dead kings already during the reign of the Fifth and Sixth Dynasties. In the *Pyramid Texts* we can find Osiris–Pepi and Osiris–Teti. In such cases one can speak about the deification of a ruler, or his identification with the god and the tragic death followed by a recovery. The ultimate aim of these transformations is always immortality.

The Wenis (Unas)⁴ text states: *Thy heart belongth to thee, Osiris, thy feet belong to thee, Osiris, thy arms belong to thee, Osiris, the heart of Wenis is only his heart, his feet are only his feet, his arm is only his arm*, while the Teti text says: *Hail, hail, raise up Teti! Thou hast got thy head, thou hast taken thy bones back in possession, thou hast collected thy body ... Raise up Teti, thou art not the dead king any longer.*⁵

Both texts indicate fragmentation of the corpse, which was next put together into one whole, referring directly to the Osirian myth. They also recommend the mummification techniques, which guarantee unity and intactness of the corpse, and by similarity to the resurrection bestow immortality. Like Isis collecting the scattered members of her dead husband and Horus creating of them a human body anew, in the same way are acting the embalmers, transforming the dead corpse into a mummie.

For Egyptians the decomposition of the corpse was equal to the decompo-

¹ *Teksty Sarkofagów IV*, § 169 [I quote after:] J. Lipińska, M. Marciniak, *Mitologia starożytnego Egiptu*, p. 54.

² The techniques of moulding as well as the types of materials used to shape Corn–Osirises were described *in extenso* by M. J. Raven, *Corn–Mummies* in: *Oudheid Kundeige Mede Delingen* 63, 1982, Leiden, pp. 7–33.

³ J. Černý, *Religia starożytnych Egipcjan [Ancient Egyptian Religion]*, transl. by E. Dąbrowska-Smektała, PIW, Warszawa 1974, p. 77.

⁴ Wenis (Unas) was ruler of the Fifth Dynasty.

⁵ I quote after: E. A. Wallis Budge, *Osiris. The Egyptian Religion of Resurrection*, p. 69.

sition of all the vital elements in man's personality (like the fragmented body of Osiris) and only proper treatments preventing putrefaction of the temporal remains were capable of saving the unity of a person after the death. Therefore for Egyptians preserving complete shape of the physical body was the indispensable condition of immortality: *The importance of an intact corpse is demonstrated by Isis's search for all the pieces of her deceased husband's body. (...) Isis hovers over a complete body. Finally, and most important, she speaks the proper words and he resurrects. He retains after death the same body he inhabited alive. Mummification thus becomes essential to immortality; the body must be preserved for the afterlife.*¹

At this point coincide the rational need to stop putrefaction of the corpse (the reasons of hygiene and aesthetics) dictated by the experience of numerous generations, the emotional need to push away the fear that the dead corpse must evoke, and the hope of resurrection, which has its origin in religion. The unprotected corpse falls to pieces in the same way as the body of Osiris dismembered by Seth has fallen to pieces. And then the triumph of death is ultimate, and the eternity is lost for ever. Therefore mummification of a corpse repeats the ritual embalment of the body of Osiris, due to which, like the god himself, he can have his own share in eternal life.

¹ B. Brier, *Egyptian Mummies ...*, pp. 21–23.