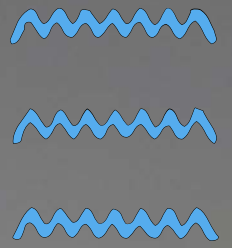


NILE



DISCOVER ANCIENT EGYPT TODAY



NAPOLEON
The Father of Egyptology?

HELIOPOLIS RISES

The age of the
GREAT PYRAMIDS

MAGIC
in ancient Egypt

Saving **ABU SIMBEL**

MYTH, MAGIC & MEDICINE

THE HIPPO



NILE



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OLDEST PROSTHETIC FOUND

Jeff Burzacott

Discovered in a looted tomb on the west bank at Luxor, a wooden toe, still attached to its owner, is surprisingly sophisticated—and very likely to be the oldest working artificial body part in human history.



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HELIO POLIS

Jeff Burzacott

The statue of Psamtek I emerging from the mud of ancient Heliopolis made headlines earlier this year. Dr. Dietrich Raue takes us through the amazing discoveries the Egyptian-German team have made there recently.



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NAPO LEON

Sharon Hague

Every achievement in Egyptology over the past 200 years owes a debt of gratitude to Napoleon Bonaparte and his military-led “study tour” of Egypt. So why isn’t Napoleon given the credit as the “Father of Egyptology”?



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THE ROYAL TOMBS OF ANCIENT EGYPT

Aidan Dodson

PART TWO

Aidan Dodson’s new book is a history of Egypt’s royal burial places—from the very dawn of history down to Egypt’s absorption into the Roman Empire, 3,000 years later. Part Two features the 3rd and 4th Dynasties and the age of the giant pyramids.



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MAGIC

Anand Balaji

In ancient Egypt, magic was very, very real, and it was how you made things happen in everyday life: dreams, hopes, protection from evil—even revenge.



METROPOLITAN MUSEUM OF ART. GIFT OF HELEN MILLER GOULD, 1910.
ACC. NO. 10.130.2037

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THE COVER

THE CURIOUS CASE OF OBAYSCH THE EGYPTIAN HIPPOPOTAMUS

Sofia Aziz

As powerful as it was, and as ill-tempered as it could be, the hippopotamus was both feared and revered by the ancient Egyptians.

Sofia Aziz looks at the hippo in myth and magic, and examines its use in Egyptian medicine. It seems that the hippo produces something quite extraordinary that the ancient Egyptians included in their medical treatments thousands of years ago, but we have only just discovered.

A REMARKABLE WOODEN TOE

SWISS EGYPTOLOGISTS STUDY 3,000-YEAR-OLD PROSTHESIS



© UNIVERSITY OF BASEL, LHFT. IMAGE: MATJAZH KACICNIK

Surprisingly sophisticated. This 3,000-year-old wooden toe prosthesis is from Theban tomb TT 95. Superbly

modelled by an elite craftsman, the toe is now in Cairo's Egyptian Museum (JE100016a).

YES, IT ACTUALLY WORKS. Discovered in 1997 in a looted burial chamber on the hillside of Sheikh 'Abd el-Qurna in Luxor, this wooden toe is very likely to be the oldest working artificial body part in human history.

Egyptologists have found fake body parts before; after all, it was important for the newly-deceased to arrive in the afterlife with a well-preserved body, magically enabled to function just as it had in life. Occasionally, mummies have been found with replacement parts to complete the look: makeshift limbs, false eyes and new teeth. Bodies were even stuffed with sawdust and linen to maintain a lifelike shape. The bottom of this artificial toe, however, shows signs of wear. It appears that this enhancement wasn't just about arriving in the hereafter in one piece, or a cosmetic add-on to solve a confidence issue; it was made of three pieces of wood, exquisitely carved to precisely conform to the shape of the right foot. This toe was designed to help out in life.

The tomb complex in which the "Lady with an Artificial Toe" was found was built around 1410 B.C. as the

family tomb for Mery, the High Priest of Amun under Amenhotep II. It wasn't destined to be a peaceful eternity. Many of the rock-cut tombs in the area—including Mery's—were opened, reused and remodelled several times for burials during the first millennium B.C. Much later, they served as dwellings for locals—a process that began with the early Christian hermits and only ended in the early 20th century.

One of the intrusive burials hewn into Mery's tomb chapel was a shaft tomb, now labelled 95A. It was dug during the Third Intermediate Period (ca. 1069–747 B.C.), and despite the fact that none of the tombs had escaped the attention of robbers, something special was left behind. Discovered in the shaft fill of 95A were the mummified, but disjointed remains of a mature-aged woman. And still attached to her right foot was an artificial toe. The prosthesis, the foot, and some inscribed linen pieces were recently re-examined and recorded by researchers from the University of Basel, the Institute of Evolutionary Medicine at the University of Zurich, and Cairo's Egyptian Museum, where the toe now resides.



© UNIVERSITY OF BASEL, LHTT. IMAGE: MATJAZ KAČIČNIK

The middle aisle of the outer pillared hall of TT 95 (the funerary chapel). The mouth of the intrusive burial shaft

which contained the remains of the “Lady with an Artificial Toe” is in front of the third pillar on the right.

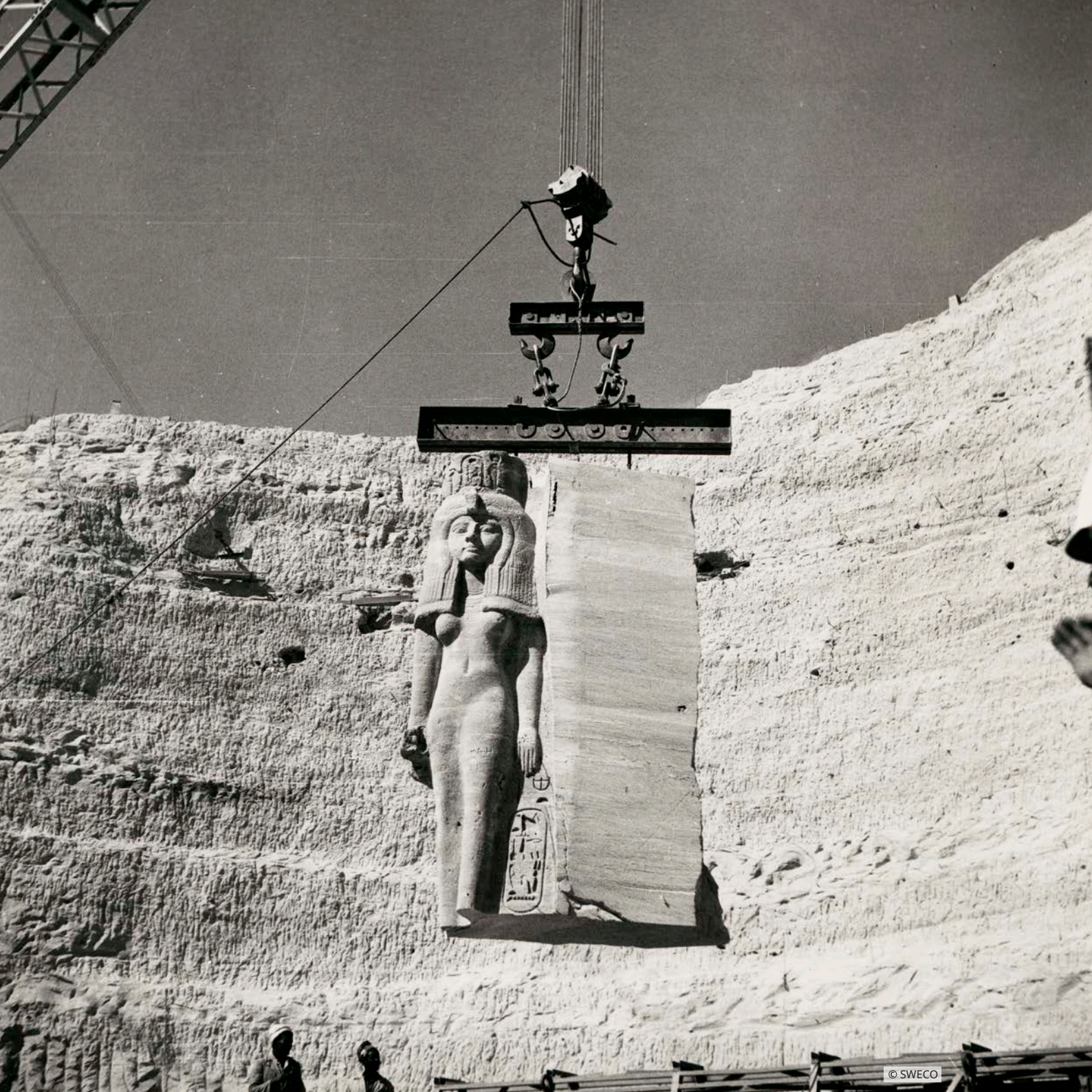
The researchers could determine that the woman’s big toe had been surgically removed during her lifetime, because the amputation site had healed. It was covered with an intact layer of soft tissue, including skin. Her toe was replaced with a wooden one, delicately shaped to resemble a real big toe, including the nail, which allowed her to move about more-or-less normally. The artificial toe was attached to two small wooden plates with leather strings, and the whole device was then tied around the foot, keeping it firmly in place.

So, who was the “Lady with an Artificial Toe”? We’re not absolutely sure. Dr. Andrea Loprieno-Gnirs, co-ordinator of the *Life Histories of Theban Tombs (LH TT)* project, told *NILE Magazine* that, when found, “an inscribed linen cloth was still attached to the torso of the mummy. The ink inscription mentions the daughter of a Theban priest by the name of Tabaknetmut. This may, indeed, be the name of the owner of the prosthesis, if we assume that it referred to the dead person and not to a donor of clothes for this person’s burial.”

On the woman’s possible age, Dr. Loprieno-Gnirs

cautioned that “precise age identification is difficult for human remains of adult individuals. The anthropologists who had unwrapped and examined the mummy parts of the female burial in the 1990s have suggested that the owner of the prosthesis was 50–60 years old at the time of her death, according to the morphology of the cranial sutures of the skull and of the symphysis pubis.”

While the TT 95A prosthetic isn’t the first to be found, it is certainly the oldest so far. Another artificial big toe, the British Museum’s “Greville Chester Toe” (named after the collector who acquired it for the museum in 1881), is tentatively dated to around 600 B.C. That one is made from cartonnage—a mixture of linen, glue, and plaster—and also displays signs of use. Yet another fake toe was surprisingly revealed in 1988 during an X-ray of a female mummy in the Albany Institute of History and Art, New York. That toe, attached to the mummy’s right foot, appears to be made of some kind of ceramic. The mummy is still wrapped, so it is not known if the toe was used for getting about, or was introduced during the mummification process solely to create a complete mummy.



September 1965

Queen Nefertari is loosened from her place at the leg of her royal consort. To support her slender figure, a substantial amount of rock was cut out along with her.

It is likely that Nefertari never saw the finished Abu Simbel. Ramesses II's first Great Royal Wife had

probably already died when the temples were dedicated in the 24th year of Ramesses' reign. She is noticeably absent from reliefs marking the dedication ceremonies. Instead, Ramesses is depicted with their daughter Meritamun, who is identified as queen.

had begun, the Egyptian government knew that Abu Simbel was in trouble. The lake created by the dam would inundate some 500 km of priceless archaeological territory in what was once ancient Nubia. This meant more than 20 temples would disappear beneath the water. The

Governments of the United Arab Republic and the Sudan presented their first official request for help to UNESCO on 6 April 1959. The international appeal was launched the following year, "asking all men of imagination and good will to join us in saving the monuments of Nubia".



September 1965

Hand-saws were equipped with special teeth of hard metal to ensure that each cut was kept to a maximum width of 6 to 8 mm. VBB's careful work was demon-

strated in their final report, which concludes with the triumphant claim that "Every piece of stone sculptured in the rock more than 3,200 years ago still does exist!"

part of the intent behind Abu Simbel's great bulk was simple "shock and awe"; to rattle the spirits of any southern invaders and give them cause to think again.

Ideas and plans poured in from individuals and institutions around the world, and UNESCO formed judging committees to assess the merits of each scheme. Some took longer to evaluate than others. One idea from Britain was to let the ancient temples drown, and then

give visitors underwater access via glass tunnels!

In the end, a 200-page plan developed by the Swedish geological engineering firm Vattenbyggnadsbyran (VBB) was chosen, which meant that VBB also received the commission to act as consulting engineers and architects for the whole salvage operation. Long after the Abu Simbel rescue, VBB merged with engineering consultancy company Sweco, and it is through the latter firm's



© SWECO

20 October 1965

The great face of Ramesses II; still managing to face his situation with serenity. In 1873 British Egyptologist Amelia B. Edwards wrote in awe of Abu Simbel: "They took a mountain, and fell upon it like Titans, and

hollowed and carved it as though it were a cherry-stone, and left it for the feeblers of after-ages to marvel as for ever." She could have been describing the rescue effort that has ensured we keep on marvelling.

beautiful island was once the jewel of Egypt. With your help, we hope that it may become so again." The appeal worked. Today, Philae Temple stands safely on Agilkia Island in Lake Nasser, close to its original location. Some 50 nations came to the rescue of Abu Simbel. One can

imagine the immense sense of relief, satisfaction and pride that Sarwat Okasha felt when, at the start of his re-inauguration speech in 1968, he had the opportunity to say, "Your Excellencies, Ladies and Gentlemen, Welcome to Abu Simbel!"

FRONTISPIECE FOR "VOYAGE DANS LA BASSE ET LA HAUTE ÉGYPTÉ. PENDANT LES CAMPAGNES DU GÉNÉRAL BONAPARTE", VIVANT DENON, 1807
("TRAVELS IN UPPER AND LOWER EGYPT DURING THE CAMPAIGNS OF GENERAL BONAPARTE")



HELIOPOLIS

The City of the Sun Reemerges

The Heliopolis Project, a joint Egyptian-German mission, is slowly revealing the great temple complex at the centre of ancient Egypt's universe. In this article, we help you make sense of the fragmented finds unearthed each season at Heliopolis.



The Obelisk of Senusret I was once part of a pair. When Abd al-Latif al-Baghdadi, an Arab historian, visited the ruins of Heliopolis around A.D. 1195, one of the two obelisks had fallen: "It was broken in two pieces by the fall, owing to its excessive weight. The copper which had covered the top had been taken away." It seems that even

after centuries of plundering for finely dressed stone, Heliopolis was still thrilling to see. Al-Baghdadi wrote that he was impressed by the colossal stone statues, in both standing and sitting postures, which still looked down on the ruined temples. This hand-tinted slide of a very rural-looking Heliopolis was made in 1860.



The earliest king attested at Heliopolis is the 3rd-Dynasty's Djoser, builder of Saqqara's Step Pyramid, ca. 2660 B.C. Around 1907 Ernesto Schiaparelli discovered the remains of a chapel of Djoser's that had been used in the foundations of a later building. This fragment depicts a seated god bearing the features of Djoser, stating that the god "gives life, stability, dominion and happiness eternally."

close to a previously discovered temple courtyard built for Ramesses II, and so speculation flew that a new colossus could be added to the king's prolific tally. The hieroglyphs on the torso's back pillar told a different story: this giant statue was carved for an altogether different pharaoh—the 26th-Dynasty's Psamtek I (ca. 664 B.C.), who ruled some 550 years after the great Ramesses. This would make the statue the largest Late Period sculpture ever discovered, and a significantly more interesting find for Egyptologists. Being able to command the manpower required to create such a sculpture speaks volumes about the power of the king. It was much easier, of course, to simply "renew" a predecessor's statue by replacing the old name with one's own. Ramesses II was particularly given to appropriating other king's grand designs (the earlier-mentioned courtyard, for example, was adorned with large statues of the Middle Kingdom's Senusret I that Ramesses had moved there to add some splendour). So had Psamtek I usurped an older statue in a time-honoured tradition, or was this an original work? Dietrich Raue provides the answer:

"After Dr. Simon Connor, a member of our Egyptian-German Team had checked the parallels of several stylistic and iconographic features, there can be little doubt that the colossal statue is really dated to the 7th-century B.C. This was not that easy since the face of the sculpture itself was missing.



(LEFT)

In September 2016 the Egyptian-German mission at Heliopolis announced the discovery of the first evidence of a new temple belonging to Ramesses II. The mission had unearthed a number of blocks from the temple courtyards and sanctuary, along with fragments of the temple statuary. At the time, Dr. Ayman Ashmawi said that the find “confirms the hypothesis that Ramesses II showed special interest in Heliopolis in the later decades of his long reign of almost 70 years.”

This block, showing Ramesses II anointing a deity with fragrant oil, using the little finger of his right hand, was determined to be from the temple’s innermost rooms, privy to only the highest priests and the king himself. The block features an incredibly rare variant of the king’s birth name, “Paramessu-Meriamun”.



(LEFT)

Although Ramesses II’s grandson, King Seti II, reigned for just six short years (ca. 1200–1194 B.C.), he clearly prioritised establishing a regal presence at Heliopolis. The desire to share in the benben’s powers of creation would be a strong pull. This limestone statue of Seti II was found earlier this year near the colossal statue of Psamtek I in the ruined forecourt of Ramesses II’s westernmost temple (Area 200).

UNLESS OTHERWISE ATTRIBUTED, PHOTOS ARE
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OF THE UNIVERSITY OF LEIPZIG

NAPOLEON, THE FATHER OF EGYPTOLOGY

SHARON HAGUE



NATIONAL GALLERY OF ART. SAMUEL H. KRESS COLLECTION. ACC. NO. 1961.9.15.

"The Emperor Napoleon in His Study at the Tuileries", 1812, oil on canvas, by Jacques-Louis David.

"Commit to the canvas the features of the Great Man, and represent him in one of the historic moments that have made him immortal."

Alexander, Marquess of Douglas and Clydesdale (Scotland) and commissioner of the portrait in a letter to Jacques-Louis David, 1811.

Jean-François Champollion is heralded as the father of Egyptology due to his decipherment of Egypt's ancient hieroglyphic system. However, every achievement in Egyptology over the past two hundred years owes a debt to Napoleon Bonaparte, who took over 150 scholars and scientists to Egypt to record and study its ancient monuments.

While Champollion is a son, it is Napoleon who deserves the credit as the "Father of Egyptology", a fact which has steadfastly been ignored due to the controversy which surrounds the emperor who lost the Battle of Waterloo.



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The challenges experienced by Napoleon's "Commission des Sciences et des Arts" was lampooned in England by the caricaturist and printmaker James Gillray.

This one, titled "Siege de la Colonne de Pompee" (Siege of the Column of Pompey) is dated 6 March 1799. Here he depicts the French scholars who later produced the *Description de l'Égypte*, attempting to measure the Column of Pompey while in a difficult situation with the native Egyptians.

Gillray rewarded the keen-eyed with fun little details, such as the name of one of the projects falling from the column: "Fraternizing with the Bedouins," which, regrettably lands on the head of the Bedouin in the bottom left of the scene. Other pamphlets being dropped include two that are titled, "Aerial Navigation" and "The Velocity of Falling Bodies." The unfortunate Frenchman who is losing his grip has a "Plan for Making Man Immortal".

Off in the distance are the pyramids of Giza—impossible to see from Alexandria, but they remind one that the action is in Egypt.

than Julius Caesar and Alexander the Great combined. He had an amazing win-loss ratio; losing only eight battles out of 60, including his retreat at Waterloo. What many people don't know is that on the eve of Waterloo, which he nearly won, Napoleon was so ill that lesser men would have been hospitalised. In the end, Napoleon was seen as a failure, resorting to pleading for the "hospitality of the British people" and dying in damp exile on the remote island of St. Helena.

Whatever the politics of the day or one's view of them, however, Napoleon Bonaparte's actions saw the foundation of modern Egyptology. So how did Napoleon get to the position of crusading through Egypt and making the first steps into creating this new discipline?

Napoleon's Expedition

After Napoleon Bonaparte's successful Italian campaign the ruling body of France decided he was to invade England. Wisely avoiding the suggestion, Napoleon instead decided to attack her route to India; that is, Egypt. It would be a blow to the British economy and was also a good excuse to follow in Alexander the Great's footsteps. Napoleon greatly admired Alexander and, like his hero, was young and curious about other lands. Napoleon, however, outdid his hero, as the world had never seen the like of the scientific operation mounted for the war against Egypt in 1798.

Following in the wake of Napoleon's "Army of the Orient" was a second army of scholars, surveyors, architects, engineers and scientists. The men that Napoleon recruited read like the Who's-Who of science, history and mathematics. Napoleon himself was a keen mathematician who, while members of his party engaged in a race to the top of the Great Pyramid, relaxed at its base and did what we would call a "back-of-the-envelope" calculation. He is said to have calculated that the stones in the Great Pyramid of Giza would build a wall around France "ten feet high and three feet wide". Upon returning from the summit, Gaspard Monge, a brilliant mathematician who Lieutenant Bouchard (Rosetta Stone) had studied under, apparently concurred.

During the Battle of the Pyramids and confrontation with Nelson, these scientists worked to study the geography, natural history, culture and, crucially, the antiquities throughout Egypt. While the burning and explosive sinking of the French flag ship *L'Orient* was Europe's hottest news, French academics considered the zodiac in the Temple of Dendera. As Mamelukes fell in the Battle of the Pyramids, they made way for the discovery of the tomb of Tutankhamun's grandfather, Amenhotep III, near the Valley of the Kings. Scholars made pencils out of lead bullets and drew amid gunshot and canon balls flying. Karnak Temple inspired a standing ovation from Napoleon's troops as it swept into view before the savants



GALLIA · VICTRICE · AEGYPTVS · REDIVIVA
 MDCCXCVIII.
 FABRIE PECTIT 1826.

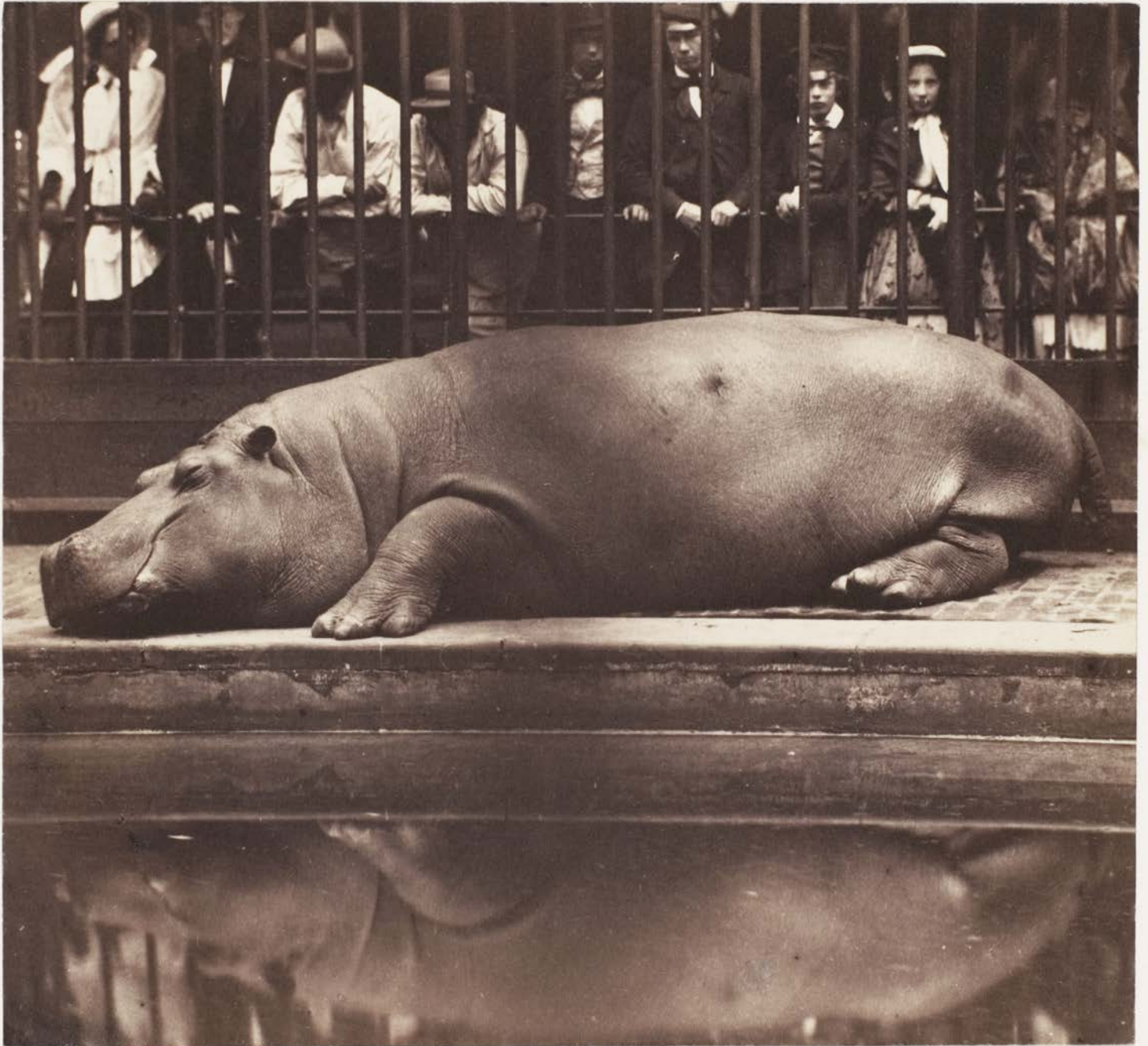
DESCRIPTION DE L'ÉGYPTE MEDAL

This medal was issued by Charles Panckoucke in 1826 as an incentive to get people to buy his new edition of that publication; if you subscribed to his entire set, you got yourself a medal. These were very large (covers the palm of your hand), very heavy, and very rare.

(ABOVE) The obverse design is an Egyptian-inspired, but still very neoclassical portrayal of Gaul discovering Egypt, with the personification of France lifting the veil of a seemingly appreciative Egypt, who wears the vulture headdress of a queen; her left hand clasps an ancient Egyptian sistrum, and her right elbow rests upon a crocodile, a familiar symbol for Egypt.

(LEFT) The reverse design presents an Egyptian zodiac, with a pantheon of deities present. This takes inspiration from a bas-relief which once formed the ceiling of a chapel dedicated to Osiris in the Hathor temple at Dendera. Sketched by Vivant Denon in 1798 during the Napoleonic expedition, an engraving of his drawing later appeared in *Description de l'Égypte*. The text within the inner lotus wreath border notes that the French King Louis XVIII has ordered this edition of *Description de l'Égypte* be printed.





METROPOLITAN MUSEUM OF ART. GILMAN COLLECTION, PURCHASE, ANN TENENBAUM AND THOMAS H. LEE GIFT, 2005. ACC. NO. 2005.100.14

This photo of Obaysch the recumbent hippo was taken by Spain's Prince Juan de Borbón, while in exile, in 1852. Queen Victoria and Prince Albert acquired the same photo

for their personal collection. The Queen had inspected Obaysch shortly after his arrival and, strangely, compared his swimming gait to that of a porpoise.

The Curious Case Of OBAYSCH the EGYPTIAN HIPPOPOTAMUS

Sofia Aziz





The affectionately-named "William", the hippopotamus at the Metropolitan Museum of Art. William was found in a shaft associated with the tomb chapel of the Middle Kingdom Steward Senbi at Meir, Upper Egypt, dated to the reigns of Senusret I, Amenemhat II and Sensuret II, ca. 1965–1874 B.C.

The plants painted on the body are an indication of William's marshy habitat in which flourished a wide

variety of plants and animals. In this way, faience figures like this one symbolised life and rebirth. When William was found in Senbi's tomb chapel, however, three of the legs were missing (now replaced by modern reconstructions). They had been deliberately broken off so that his presence could deliver all of the fertility and renewal benefits, while neutralising the dangerous aspects of having a hippopotamus in one's tomb.

component in the medical papyri. Furthermore, this oil is produced in response to heat and facilitating healing so may not always be visible in hippos in captivity.

It has also been assumed that animal fat was found in prescriptions partly to make a greasy ointment and partly in the hope of transferring desirable characteristics of the animal to the patient. One has to question this assumption in regard to hippopotamus remedies. Ebers 465 for example, describes a concoction of hippopotamus, crocodile, serpent, cat, and ibex fat to smear on the head of a bald person with the promise of hair regrowth. Ironically, the hippo itself is almost completely hairless. It is unlikely that the hippo secretion aided hair regrowth, but the antibacterial properties could have been effective in eliminating problem dandruff. Experiments carried out on hippo secretion have confirmed its lasting resistance to yeast, bacterial or fungal contamination, even after several months of storage.

For those who already enjoy a full head of a hair, Ebers 712 provides a treatment for dandruff and possibly boils of the head. In this remedy, ground barley flour which can be effective in the treatment of boils is mixed with soft ox fat and made into a mass. The hippo oil/fat ingredient is applied on the third day of the treatment.



Another skin-related remedy including the hippo is Ebers 114. Here instructions are given on the treatment of erysipelas, which is an acute infection typically with a skin rash. It can occur on the legs, toes, face,

arms, and fingers and is caused by streptococcus bacteria on scratches or otherwise infected areas.

Hippo oil/fat is even included in a compendium of recipes for healing, drying and dressing wounds, such as Ebers 531. This particular prescription includes barley and dung. Could it have been hippo dung? We do not know the answer, but it is interesting that the Egyptian pharmacopeia consisted of an array of animal excrements



This scene from the Book of the Dead of Anhai shows the last and most important test she faced on her journey to the afterlife: the Weighing of the Heart. If the heart was light, then Anhai was led by Horus to a glorious eternity with Osiris. If, however, her heart was heavy with dreadful deeds, a fearful goddess awaited—Ammut. This creature has the head of a crocodile, the forepart of a lion, and the

hindquarters of a hippopotamus. Ammut was ready to devour the heart, and Anhai's hopes of an afterlife would vanish—a second death.

Anhai was a temple singer at Karnak during the 20th Dynasty (ca. 1186–1069 B.C.). Her papyrus (EA 10472) was discovered in the wooden base of a figure of Osiris which the British Museum had acquired in 1888.

Taweret (see page 32). She was an odd-looking deity with the head of a hippopotamus, limbs of a lion, tail of a crocodile and pendulous human breasts. She was initially conceptualised as a dangerous malignant force before evolving into a favourable deity associated with childbirth and warding off evil spirits. Her composite form occurs in amulets as far back as the third millennium B.C. and provides an early example of the practice of combining all the fierce and protective powers of a deity in one image. Taweret continued to be popular in amuletic jewellery right down to Roman times.

There is one particular supernatural being that deserves mention. She was known as Ammut (Devourer of the Dead) and in appearance was a combination of hippopotamus, crocodile and lion. She was the demon that was encountered squatting by the scales at the place of judgment. Unfortunately for the deceased, her role was to eat them up unmercifully if they failed the test. In some traditions, she was said to stand by the lake of fire into which unworthy hearts were cast away. Some scholars have linked this demon with the goddess Taweret because of the similarities in their appearance and their role in warding off evil. In principal, however, Ammut was not a goddess and therefore was never worshipped.

Conclusions

The ancient Egyptians were ambivalent towards the hippopotamus and associated it with both chaos and protection. The destructive aspect of the hippopotamus was associated with the god Seth, while the nurturing and protective aspects manifested themselves in his consort, the goddess Taweret. The Egyptians lived amongst the hippopotamus both fearing and revering it. In death, a demon that was part hippo would seal their fate of either eternal bliss or doom. We will be forever grateful to Obaysch, the first-ever captive hippo, for both enduring the celebrity status he was subjected to and for allowing us to get so close to such an intriguing animal. He and others that followed him finally helped scientists solve the ancient puzzle of the oily red secretion hippopotami produced. It is remarkable to think that although we are only just learning of the medicinal properties of hippo secretion, the ancient Egyptians could have been experimenting with it thousands of years ago.



SOFIA AZIZ is a researcher on the medicine of the ancient Egyptians. She has written articles on this subject for several magazines and journals and holds degrees in Human Sciences and Egyptology.

SAQQARA
DJOSER

EL-DEIR, ABU ROWASH
SANAKHTE

SAQQARA
SEKHEMKHET

ZAWIYET EL-ARYAN
KHABA

MEIDUM—DAHSHUR
SENEFERU

GIZA
KHUFU

ABU ROWASH
DJEDEFRE

GIZA
KHAEFRE

GIZA
MENKAURE

SAQQARA SOUTH
SHEPSEKAF

THE ROYAL TOMBS of ANCIENT EGYPT

Aidan Dodson

(Abridged for Nile Magazine)

Part 2: Dynasties Three and Four

PHOTO © M.R. THEKLAN



PHOTO BY ROBERT FLETCHER FOR THE ABYDOS EXPEDITION, INSTITUTE OF FINE ARTS, NYU

The Shunet el-Zebib—King Khasekhemwy's great funerary enclosure at Abydos

At the end of the 2nd Dynasty (ca. 2700 B.C.) Khasekhemwy commissioned the largest and most elaborate of the Early Dynastic royal monuments at Abydos. The mud-brick walls of the main enclosure are five metres thick and still stand impressively to near their original height of 11–12 metres.

While the funerary enclosure was close to the alluvial plain, overlooking the ancient town, the king's tomb was dug into the bedrock in a more remote royal cemetery, further west at Umm el-Qa'ab. The tomb centred on a limestone burial chamber, the earliest of its kind known in a royal tomb.

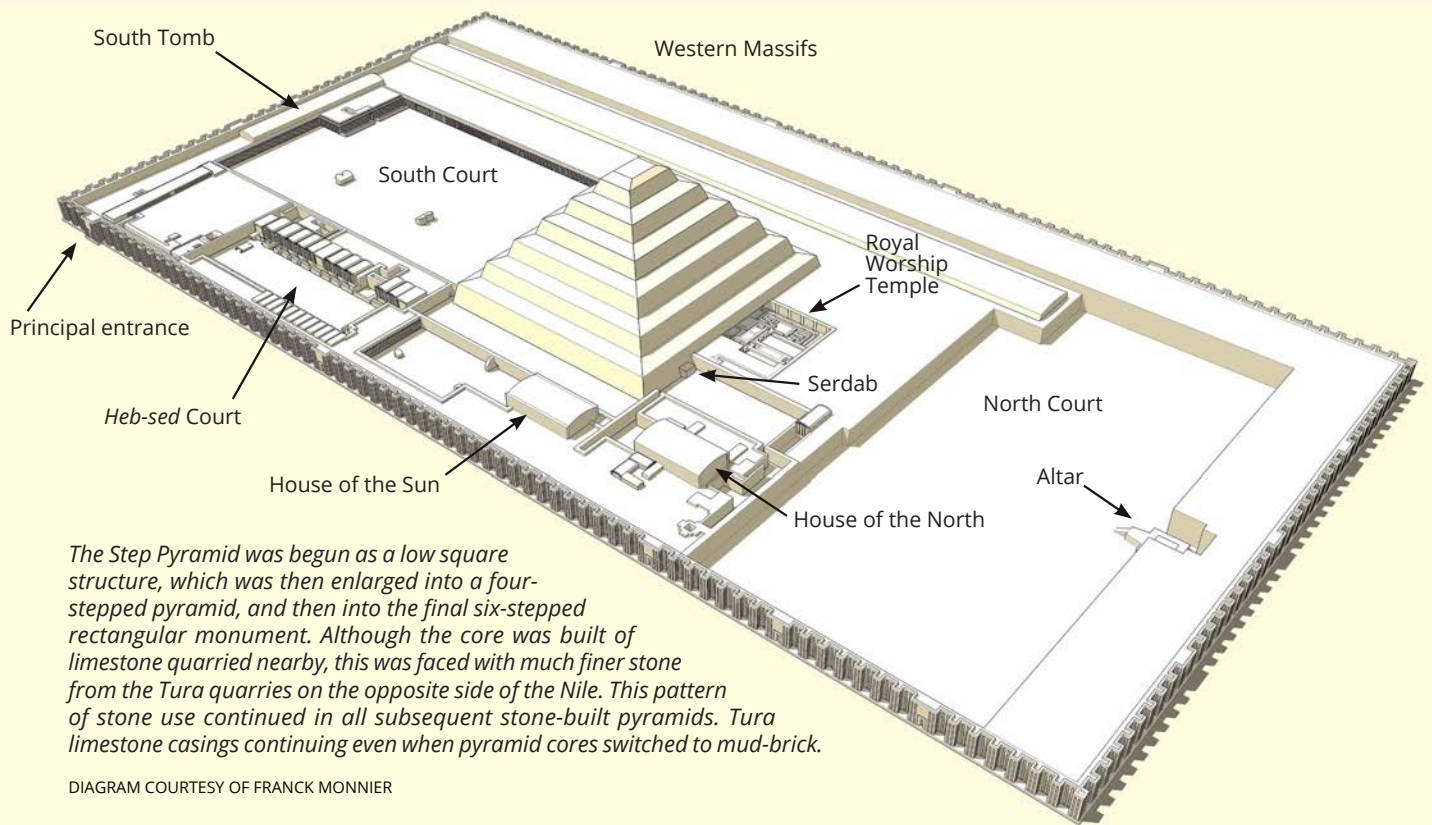
NILE MAGAZINE CONTINUES the series of abridged highlights from *The Royal Tombs of Ancient Egypt*; a history of the burial places of the rulers of Egypt from the very dawn of history down to the country's absorption into the Roman Empire, three millennia later. In the last issue we explored Egypt's formative years—the Early Dynastic Period—now, discover the age of the giants: the Old Kingdom's colossal pyramids.

At the end of the 2nd Dynasty (ca. 2686 B.C.), the basic form of the royal tomb had been set for some four centuries as a burial structure, supplemented by a rectangular enclosure some distance away. With the beginning of the 3rd Dynasty, however, there occurred a major conceptual and technological leap forward, which included the erection of the world's first known pyramid. It was the precursor of a series that would only come to an end nearly 3,000 years later.

The Third Dynasty

Khasekhemwy was succeeded by a ruler known to history as Djoser (although during his lifetime as Netjerkhet), the builder of the Step Pyramid at Saqqara. Conceptually, this monument combined in one monument the previously-separate burial-place and monumental enclosure. The enclosure followed the basic model seen at the Shunet el-Zebib, with a panelled exterior and a principal entrance at the southern end of the east wall. This led via an elaborate colonnade to an open courtyard, containing elements associated with the ritual run that formed part of the royal jubilee (*heb-sed*) ceremonies. A

complex of shrines in the adjacent "*heb-sed* Court" was also associated with these activities, while many of the other structures within the pyramid enclosure also seem to belong to jubilee or coronation ceremonies. Taking the former elements together with the presence in the subterranean portions of the the complex of reliefs of the king taking part in *heb-sed* ceremonies, it seems possible that the jubilee ceremonies (which were intended to refresh the vitality of an aging king) may have formed a basis for the conception of the dead king's revivification at this point in Egyptian history. Given the clear affinities



The Step Pyramid was begun as a low square structure, which was then enlarged into a four-stepped pyramid, and then into the final six-stepped rectangular monument. Although the core was built of limestone quarried nearby, this was faced with much finer stone from the Tura quarries on the opposite side of the Nile. This pattern of stone use continued in all subsequent stone-built pyramids. Tura limestone casings continuing even when pyramid cores switched to mud-brick.

DIAGRAM COURTESY OF FRANCK MONNIER

between the Step Pyramid complex and the enclosures associated with earlier royal tombs, it may be that these were also intended as the venues for a posthumous *heb-sed*. Unfortunately, the lack of any textual material relating to the king's posthumous destiny prior to the appearance of the Pyramid Texts at the end of the 5th Dynasty makes any assessment of the beliefs potentially underlying the earliest royal funerary monuments problematic.

A temple built against the north face of the pyramid, but entered from the east, followed a plan known (in private tombs) since the 1st Dynasty, and included a statue of the king, enclosed in a windowless room known as a *serdab*. A *mastaba* was built into the south enclosure wall (dubbed the South Tomb), with chambers mirroring those of the pyramid, but on a smaller scale. It was found empty and no clue as to its purpose exists, but it seems to be the direct ancestor of the later subsidiary pyramids—also lacking in any firm indication of their purpose.

The entrance to the tomb chambers lay within the temple. These centred on a burial chamber constructed at the bottom of a vertical shaft. In the substructure's final form, the royal mummy was to be placed in a cavity in a structure of granite blocks, entered via a hole in the roof, blocked by a piece of stone similar to a sink plug, above which was apparently a limestone chamber at the end of the passage that descended from the entrance. A series of galleries surrounded the burial chamber, some decorated with blue faience plaques, others also with reliefs of the king running the *heb-sed* course—apparently the first and last time a king would be shown in his tomb until the New Kingdom.

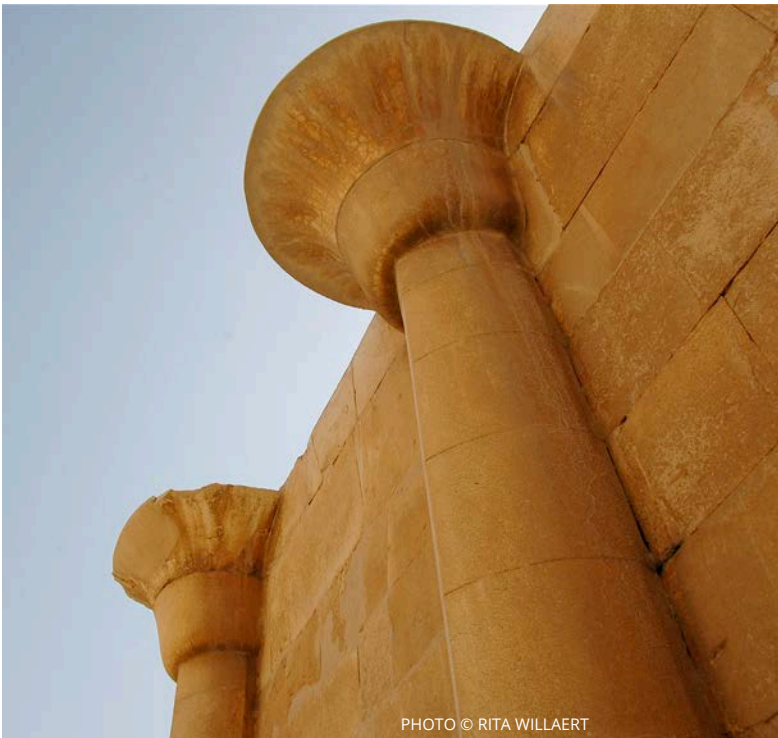


PHOTO © RITA WILLAERT

Most of the buildings in Djoser's enclosure were solid dummies, and imitated construction in plant materials, suggesting that their prototypes may have been temporary structures of such, erected within the Early Dynastic enclosures of Abydos and Saqqara. These papyriform columns are from the complex's North Court, representing the king's dominion over Lower Egypt.

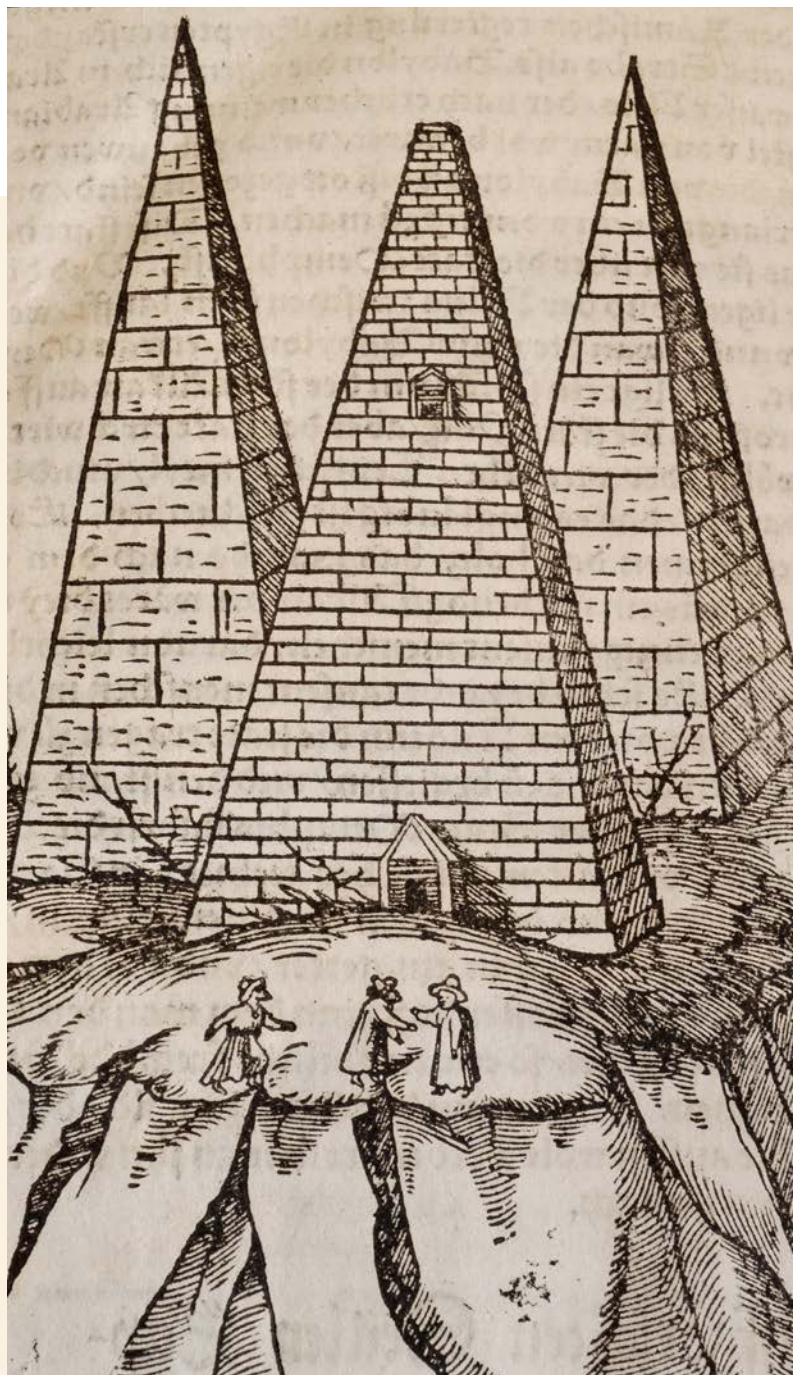
This image of the three great pyramids of Giza comes from the 1564 edition of Sebastian Münster's "Cosmographia", an illustrated encyclopaedia of the world, and one of the most popular works of the 16th century.

Münster was a German map-maker who never visited Egypt, but studied Classical descriptions, contemporary accounts, and was possibly inspired by the steep-sided examples built 15 centuries earlier for Rome's Imperial elite.

Despite his lack of first-hand knowledge, Münster does have some details correct: these pyramids ARE situated on a plateau (albeit a rather severe one), the central pyramid—presumably Khufu's Great Pyramid—DOES have the flat top we see today, and the gabled roof of the entrance COULD be reminiscent of the huge pented limestone beams placed above the original entrance to the Great Pyramid. If you squint, you might even be able to imagine that the niche, two-thirds the way up MIGHT recall the Great Pyramid's burial chamber and its relieving chambers above.

The first scientific study of the Great Pyramid was published by the Oxford professor, John Greaves, around 80 years after this edition of "Cosmographia", and transformed the earlier fanciful images into the first detailed diagrams the world had ever seen.

Image courtesy of the John J. Burns Library, Boston College.



As for Khufu's own tomb, the pyramid had the now-standard mortuary temple on its east side, directly south of which lay the subsidiary pyramid. This was a change from the previous location of the subsidiary tomb opposite the south face of the main pyramid; during the remainder of the dynasty, its position would vary from reign to reign, before finally coming to rest back in Khufu's position early in the 5th Dynasty. A number of boat pits were constructed on the south and east sides of the pyramid, two still containing wooden boats when investigated in modern times.

The pyramid's substructure seems to have been constructed in three phases. First, a rock-cut descending passage was built, leading to what was intended to be the first of a series of chambers deep under the centre of the pyramid. This seems to have been abandoned when it was desired to include a stone sarcophagus in the burial, the passages being too low and narrow to introduce such a piece. An ascending corridor was thus added, appar-

ently cutting through extant masonry, giving access to the so-called Queen's Chamber. This could have received the sarcophagus before its walls were built, but plans seem to have changed again. The chamber is interesting, in that it replaces the corbelled roof with a new pointed type, which is subsequently standard for such rooms.

To allow plug-blocks to be slid down the ascending passage after the burial, a corbelled room had been begun, beyond the entrance to the passage leading into the Queen's Chamber, to store the blocks. A shaft was also built to allow workmen to exit down to the descending passage after releasing them. The corbelled room was then apparently greatly extended to become the Grand Gallery, to give access to the final burial chamber—the King's Chamber—approached via an antechamber with portcullis slabs. Above the King's Chamber was built a series of relieving chambers, while it and the Queen's Chamber both had narrow (20 cm square) channels angled upwards from their north and south walls,



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Menkaure's Queen's Pyramids and Subsidiary Pyramid

Menkaure's subsidiary pyramid (GIIIc) is in the unusual position of being near the south-west corner of the main monument (the rightmost, denuded pyramid in this photo), a position previously used by Djedefre, and later only by Userkaf. Two queens' pyramids (GIIIa-b) were built

directly east of it. These small pyramids had mud-brick chapels attached to their east sides, although stonework may originally have been intended. The chapel of GIIIa contained fragments of a lady's calcite statue, but no names were forthcoming from any of the small pyramids.



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The "Fourth Pyramid" at Giza: Khentkawes I


The last royal tomb to be built on the Giza Plateau was for a queen. The giant mastaba tomb of Khentkawes I sits at the southern edge of the Giza necropolis and just east of the pyramid of King Menkaure. Khentkawes I was possibly Menkaure's daughter and may have ruled in the name

of one of her young sons, Shepseskaf or Userkaf, until he came of age. The tomb is half conventional mastaba and half step-pyramid. The base was carved from the Giza bedrock and then topped with limestone blocks to create a simple two-step pyramid.

to have undergone at least two changes of plan (see diagram on page 49). The initial small pyramid had a simple descending passage and burial chamber but, with the enlargement of the superstructure, a new entrance corridor was provided, while a new granite burial chamber—uniquely oriented north-south—and a niched storeroom were added at a lower level.


A monument whose owner's status is somewhat unclear is one sometimes dubbed the "Fourth Pyramid". It lies just north of the valley building of Menkaure and comprises a square masonry construction atop a rock-cut podium, in which was excavated a chapel and, below it, a burial chamber. It is possible that the tomb's owner, the King's Mother Khentkawes I, may have been mother of



MAGIC PERSONIFIED. This is the goddess Weret-Hekau “Great of Magic”, as indicated by the hieroglyphs above her head: . The fragments were discovered in the ruins of the Middle Kingdom pyramid temple of King Senusret III (ca. 1874–1855 B.C.) at Dahshur.

... to me belonged the universe before you gods had come into being.
You have come afterwards because I am Heka.


Coffin Texts, Spell 261.

Magic has always been there. A cosmic force drawn upon by the creator gods to form the world. The Egyptians called it Heka .

His powers put fear into the gods who came into being after him...
It was Heka who came into being of himself...
and through the sweet savor of whom the gods live....

Coffin Texts, Spell 648.

Heka was the power harnessed by the gods. Priests, through the power of sacred utterances, could glimpse that power and use it to address the hopes, dreams and passions of the ancient Egyptians. These weren't a whole lot different from those we share today: the desire for health and wellbeing, protection from evil—even revenge. Of course, death was a mystery for the ancient Egyptians as well, but with the right utterances delivered on their behalf, the deceased could look forward to being transfigured into an *akh*, or glorified spirit, and enjoying eternity in the company of the gods in the afterlife.

The days when magic existed in the form of spoken words alone began to vanish around 3200 B.C. when the written word gained prominence. The walls of the Giza tomb of the 6th Dynasty scribe, Ankhudja, confidently affirm, “I am an excellent spirit who knows his utterances.” The first appearance of the god of magic, Heka,  is on a wall of the Abusir temple of the 5th Dynasty King Sahure (ca. 2487–2475 B.C.), where Heka leads a procession of nome deities bringing offerings to the



Even the all-powerful sun-god needed magical help as he journeyed through the Underworld in his solar boat. This unfinished scene is an illustration from the *Book of the Gates* in the tomb of Horemheb (KV 57), ca. 1295 B.C. Throughout the night, the ram-headed figure of Ra in his shrine-like cabin is surrounded and protected by the coiling body of the Mehen serpent. The sun-god's onboard protection is made up of Sia, the personification of creative knowledge, standing on the prow, and Heka 𓆎𓅓 , the power of magic, on the stern.

Horemheb's tomb workers evidently ran out of time, and parts of his tomb weren't finished in time for the king's burial. This, however, provides us the opportunity to see how the painted reliefs were created. First, the lines were sketched in red, possibly by a junior artist, before being corrected and confirmed in black by the master. Then a sculptor removes the background to create the raised reliefs. You can see how the person responsible for the initial sketching had made a blunder by facing the quail chick on the right-hand-side around the wrong way.

3100 B.C., monarchs were attributed with magical powers and given the epithet *wer-heka* "great of magic". "While the king and the high priests used magic to maintain cosmic order, the common man engaged in the practice for protection both in this life and the next," says Egyptologist, Peter Lacovara.

CONTROL ISSUES

In an interview with **NILE** Magazine, Professor Joann Fletcher of the University of York explains, "Magic was a fundamental part of Egyptian life and death and played a key role in rites marking everything from birth to burial. And since the ancient Egyptians believed their world was controlled by hidden forces—be they the gods or souls of the dead—they sought to control these through specific rituals, either carried out on a large scale within temples on behalf of the state, or, on a more personal level within the home." Egyptologist Dr. Bob Brier agrees: "The ancient world was not understood in terms of science, so it was a frightening place. Things happened, without the known causes. Magic was an attempt to control what was not understood."

And who or what were the ancients fighting? The answer is forces both of this world and beyond. On earth it was the enemies of Egypt who were often depicted bound hand and foot on palace and temple walls, as well as on furniture and jewellery too. Scores of vases,



The wedjat, or "Eye of Horus", represents a human eye with its brow, but with two lines below that identify with the facial markings of a falcon—sacred animal emblem of the god Horus. The wedjat was a popular and protective amulet that represented the restored eye of Horus, which had been damaged by Seth. The wedjat symbolised health and protection. In a modern connection to medicine and healing, it is from where we derive our symbol for prescription: Rx . This object is one of 81 magical objects featured in the *Magic in the Ancient World* exhibition at the Penn Museum.



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Perhaps the most powerful magic of all: the ankh—symbol for “life”. Pharaohs often had themselves portrayed as being given life by a god. This extends to the king the god’s immortality, as well as endorses their divinely-sanctioned right to rule. Here Horus, in his form of the divine falcon, holds the ankh towards the sign for “god”, part of a phrase where Senusret I is called the “perfect god, lord of action”.

This beautifully-detailed relief is from the “White Chapel” of Senusret I (ca. 1965–1920 B.C.), built to record the jubilee (heb-sed) festival of the king. Senusret I was one of the earliest known kings to add to the temple of Amun-Ra at Karnak. Almost 600 years later, the chapel was dismantled by Amenhotep III (ca. 1390–1352 B.C.) and used as fill in his newly-constructed Third Pylon, which preserved the fine relief work from the elements.



PENN MUSEUM. OBJECT # 29-128-2137

Practitioners of magic sought to harness supernatural powers by using rare objects or secret rituals. The sages of the first century A.D. reimagined ancient magic when pagan philosophy mixed with early Judaeo-Christian wisdom, into what is called Gnosticism, or “secret knowledge”. The Gnostic gods were often associated with Egypt, such as Chnoubis, depicted as a lion-headed serpent or “solar snake”. Chnoubis gems were often used on charms to protect physical health and to prevent stomach problems.

potsherds and voodoo dolls have been found with religious formulae and curses written on them in red ochre (as that colour symbolised the powers of destruction) by priests and sorcerers on behalf of their clients.

Even during the “heretic” pharaoh Akhenaten’s reign (ca. 1352–1336 B.C.), magical practices continued unabated, albeit on a lesser, more secretive scale. Professor Fletcher: “Although so much evidence was destroyed after Akhenaten’s death, it’s clear that some aspects of Egypt’s traditional belief system continued during his reign. [There is] evidence at Amarna for the household deities Bes and Taweret, for example, both of whom are usually associated with the world of magic, together with objects categorised as (apotropaic) ‘wands’ (see opposite). Likewise, medical texts dated to ca.1350 B.C. continue to recommend the use of both magical incantations alongside medicinal ingredients to combat serious illness.”

Given its harsh climate and terrain, and all manner of venomous nasties, ancient Egypt could be a hostile place. But there was no relaxing once you had left the earthly realm behind—you were now entering the treacherous realm of the gods. Here you would face a series of tests and challenges to determine your worthiness of a glorious forever after with the gods. However, your “Book of the Dead” would provide you with a practical guide to the next world, with magical spells to avoid the many



This 1924 scarab brooch, on loan to the Boston Museum of Fine Arts from Cartier, is carved in smoky quartz with emerald eyes, wings in Egyptian blue-glazed faience, and pavé-set diamonds with black enamel outlines and cabochon emeralds.

Photo: Vincent Wulverryck, Cartier Collection © Cartier. Courtesy Museum of Fine Arts, Boston.

COURTNEY AHLSTROM CHRISTY is a fine art and antiques appraiser, and has seen a lot of Egyptian scarabs; they have been a favourite of fine jewelry designers since Napoleon's Egypt campaign in 1798.

In the era following the grim days of the Revolution, 1798 Paris was eager for some renewed grandeur. In his memoirs, French ambassador Count Miot de Melito wrote that now "women could indulge their passion for dress, fashion had regained its ascendancy, and there was a pronounced cult of antiquity." Designers were now looking back to the softer, flowing lines of classical Greece and Rome—a more feminine silhouette—partly as a reaction to the over-the-top excesses of the extravagant courtly costumes before the Revolution.

The Empress Joséphine wrote that she was "no more exempt from a little coquetry than any other woman, but in her case it is excusable, given that all she desires is to please the emperor". Napoleon imagined himself as the proud successor to Alexander the Great and Caesar Augustus, and encouraged her love of ancient art. When Joséphine's vast collection of jewelry and antiquities was inventoried after her death in 1814, the list included "earrings mounted with eleven scarabs with pearls" and a "necklace with matching earrings of scarabs."

Christy says that "No two scarabs are alike. The uniqueness of beetle-inspired designs was true for both the amulets of Ancient Egypt and modern jewelry of the nineteenth and twentieth centuries.

"The description of a black beetle rolling a ball of dung hardly suggests an inspiring image to be evoked for millennia. Yet scarabs were a powerful symbol of rebirth in ancient Egyptian culture. The Egyptian perception of the beetle's behaviour was viewed as a parallel to the morning sun-god Khepri's daily shepherding of the sun across the sky. Both the dung beetle and Khepri were believed to be self-created. While the beetle dug underground with his ball of dung and later resurfaced as newly-born beetles, so did the sun submerge in the west and reappear every dawn. Since the perceived life cycle of the beetle affirmed the Egyptians' religious belief of rebirth and transformation, the insect became one of the most popular motifs for amulets. These first appeared in the 13th Dynasty (ca. 1795 B.C.) and continued to be used into the Roman Period.

"As the nineteenth century continued, France, in particular became increasingly intrigued with the Egyptian past." In 1822 a young French genius, Jean-Francois Champollion, became the first modern person to understand the Egyptian hieroglyphic system. Then, in 1858, French archaeologist, Auguste Mariette, convinced the

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A black beetle rolling a ball of dung hardly suggests an inspiring image to be evoked for millennia.

NILE

—• 1953 •—



© DON CHURCH

Fran Church and Khafre's Great Sphinx in 1953. It took 11 years for the Department of Antiquities director, Pierre Lacau, and French architect Émile Baraize to finally free the Sphinx from the sand. They began excavations here in 1925.

Calotype for travel. It was relatively small and easy to carry around, and used readily available, high-quality writing paper as the media for its negatives.

“The big drawback was that while the Daguerreotype is incredibly detailed, a Calotype print is much softer because the print is made from a paper negative. However, by shooting paper negatives, Du Camp could make any number of contact prints from them upon his return to Paris. By comparison, the Daguerreotype was a singular photograph—an image on a metal plate—from which no copies could be made. Du Camp was planning ahead to produce multiple copies of his travel albums.”

Just over a hundred years later, in 1953, Mrs. Fran Church was photographed with a profiled Sphinx by her husband Don (above). This, no doubt, was a much quicker, easier process than that used by Maxime Du Camp.

Don Church ran a training centre at Cairo Airport for the United Nations' International Civil Aviation Organization. His son Jon, who was seven at the time, recalls that the Egyptian posting was “perfect for someone who

was very interested in both archaeology and photography.”

Photography buffs might be interested to know that Don Church used both Agfa and Kodachrome film. Jon says that it “really is amazing how well the Kodachrome survived the years. Agfa did not fare so well.”

Right from the beginning it seems, photography was addictive—and frustrating. There were no light meters at that time and Du Camp had to work by trial and error to determine the appropriate exposure time: “If, some day, my soul is condemned to eternal damnation, it will be in punishment for the rage, the fury, the vexation of all kinds caused me by my photography.” The payoff was instant fame. Du Camp's prints caused, as he put it, “a furore and revolution.” Besides, photography gave a young Frenchman the opportunity to stand before the Sphinx at a time when relatively few had.



I am pale, my legs trembling. I cannot remember ever being moved so deeply.

Maxime Du Camp, standing before the Great Sphinx, 1849.