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> RAMESSES III The king's masterpiece

A WOMAN'S AFTERLIFE The Gender Barrier to Eternity

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Dr. Harald Fox Last month,

ScanPyramids announced their discovery of an enormous "void" above the Great Pyramid's Grand Gallery, and of similar size and shape. Already Egypt's largest and most complex pyramid, the Great Pyramid of Giza just got even more intriguing.



FASCINATING PYRAMIDS

Jeff Burzacott

World-class artefacts from museums across Europe form a new exhibition at the Liechtenstein National Museum. Gathered together are amazing pieces spanning the entire length of Egyptian and Nubian pyramidbuilding.



THE SARCOPHAGUS LID OF RAMESSES III

Leslie D. Black

Leslie Black explores the ancient and modern history of a masterpiece of ancient Egyptian craftsmanship, and discovers that one of England's treasures was almost traded for a pretty statue.



A WOMAN'S AFTERLIFE Jeff Burzacott

The Egyptians believed that to be reborn, a deceased woman had to briefly turn into a man! We look at the current Brooklyn Museum exhibition on what it took to get to the afterlife if you happened to be born female.



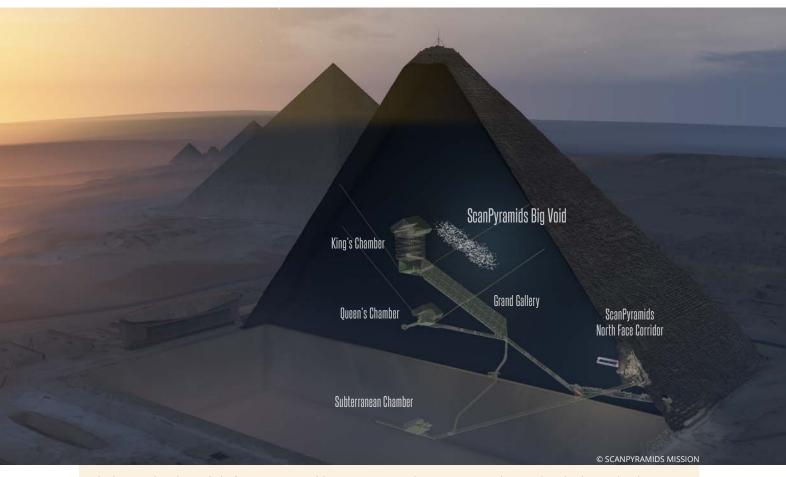
SOULFUL CREATURES

Jeff Burzacott

Modern medical imaging meets ancient Egyptian animal mummies, and sheds new light on the crucial way that animals could get messages directly to the gods.

NILE #11 | DECEMBER 2017 / JANUARY 2018

NEW DISCOVERY **"BIG VOID" DETECTED IN THE GREAT PYRAMID** SCANPYRAMIDS MISSION SHEDS LIGHT ON HIDDEN SPACES



The known chambers of Khufu's 4,600-year-old Great Pyramid of Giza and the newly-discovered voids, revealed thanks to tiny particles, formed at the edge of space, that constantly bombard the pyramid—and everywhere else. "What we are sure about is that this big void is there, that it is impressive, and was not expected by any kind of theory," said Mehdi Tayoubi, President & co-founder of the HIP Institute which runs the ScanPyramids mission.

ISCOVERY OF A BIG VOID IN KHUFU'S PYRAMID by observation of cosmic-ray muons." The title of the research paper was both matter-of-fact and incredible. On November 2 this year, the ScanPyramids mission announced through the science journal *Nature*, their discovery of an enormous "void" above the Great Pyramid's Grand Gallery, and of similar size and shape. Already Egypt's largest and most complex pyramid—busy with tunnels and chambers—the Great Pyramid of Giza just got even more intriguing.

In 2015, the international team of researchers that is the ScanPyramids mission began the most ambitious, high-tech examination the Great Pyramid has ever seen, in an effort to better understand how it was built. By harnessing a type of cosmic particle known as muons, the mission could sense density changes in the body of the pyramid, like an x-ray. In essence, The ScanPyramids team began looking through the stones to detect previously unknown internal structures. And it wasn't long before they started finding them.

This isn't the first void detected by ScanPyramids. Before we explore this latest news in detail, it's important to firstly back-track some twelve months to one of their first big announcements.

The Small Void

Just over a year ago the ScanPyramids mission announced a tantalising discovery: a previously unknown "void" behind the north face of the Great Pyramid. It had been 179 years since a major new space had been revealed within the pyramid (the top four relieving chambers above Khufu's burial chamber, discovered by Howard Vyse in 1837), and



The soaring corbelled corridor known as the Grand Gallery.

The ancient Egyptians solved the problem of the immense weight bearing down and potentially crushing internal rooms by creating devices to effectively transfer the weight to either side of the space. They did this by means of pented limestone rafters that created an inverted vshaped vault, or by creating corbelled vaults, narrowing the gap with each level until they are close enough at the top to be covered by massive slabs of limestone. Khufu's father, Sneferu, built corbelled vaults in each of his three giant pyramids at Meidum and Dahshur (Bent and Red Pyramids)—including the Bent Pyramid's small subsidiary pyramid. The technique was therefore tried and well tested before Knufu built the finest corbelled achievement in ancient Egypt: the Grand Gallery.

intended to take the stress from the corridor."

Drs. Zahi Hawass and Mark Lehner, both part of the scientific committee appointed by the Egyptian Ministry of Antiquities to review the ScanPyramids results, have downplayed the significance of the "Big Void". Lehner, director of the Ancient Egypt Research Association,

who has worked on the Giza plateau for over four decades, said in a press briefing that "the Great Pyramid of Khufu is more Swiss cheese than cheddar," and that he would expect it to be "some kind of weight-relieving space" between the roof of the Grand Gallery and the mass of pyramid above it.

Dr. Hawass, former Minister of Antiquities, points out that there are many voids



Fun tweet by Dr. Donna Yates, Lecturer in Antiquities Trafficking and Art Crime at the University of Glasgow.

around them. This left the workers first in a trench, and then, when it was covered over, a passageway that continued to allow access to the burial chamber and the five relieving chambers stacked above it. By this scenario, a "construction gap" would seem to make sense.

Both Hawass and Lehner have agreed that the Scan-

Pyramids mission should continue soaking up muons to hopefully get greater clarity on both the Big and Litle Voids. This will help advise future decision-making when the time comes to further investigate it.

"What we are sure about is that this big void is there, that it is impressive, that it was not expected by, as far as I know, any kind of theory," declared Mehdi Tayoubi, co-

in the Great Pyramid "because of construction reasons," and told the *New York Times*, "this paper offers nothing to Egyptology. Zero." The "construction gap" idea is that while the pyramid builders worked on the internal structures (burial chambers, Grand Gallery, etc.) the pyramid rose director of the ScanPyramids project.

In hindsight, however, perhaps we shouldn't be all that surprised about the presence of the big and small voids as revealed by the muons. Khufu's architects probably built the very same things for his father, Sneferu.



The Pyramid of Meidum viewed from the southwest

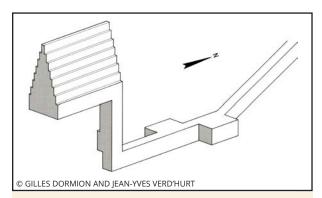
Because of the dramatic collapsed appearance of the exterior, the seemingly simple interior of the Pyramid of Meidum has not seen the level of attention that the more complex Great Pyramid has attracted.

Egyptologists believe that Sneferu's Meidum pyramid started in the same way as those of his forebears: a steppyramid. Apparently, Sneferu wasn't satisfied with this effort, however, and went on to commission two more

The French archaeologists theorised that the ancient architects wouldn't have risked spanning such a space with limestone without providing a relieving system above them, and started looking for clues. In May 1998, on their first day of looking, Dormion and Verd'hurt discovered a blocked-up opening on the north side of the shaft leading from the horizontal corridor to the burial chamber ("That's funny..."). Poking their endoscopic camera (just 8 mm wide) through a 1 cm gap in the blocks revealed a small, empty corbelled cavity, almost three metres long and extending out over the lower horizontal corridor. It appeared to be a relieving chamber for the corridor below it (see diagram on page 12).

This was very encouraging for Dormion and Verd'hurt's hypothesis. As they detailed in their paper presented at the World Congress of Egyptology in April 2000, "if the builders had found it necessary to relieve a corridor 0.75 m wide, such a precaution should have proved particularly essential with regard to both recesses whose span was three times as great (2.10 m).... it is to be architecturally expected that both recesses should be surmounted by a relieving roof."

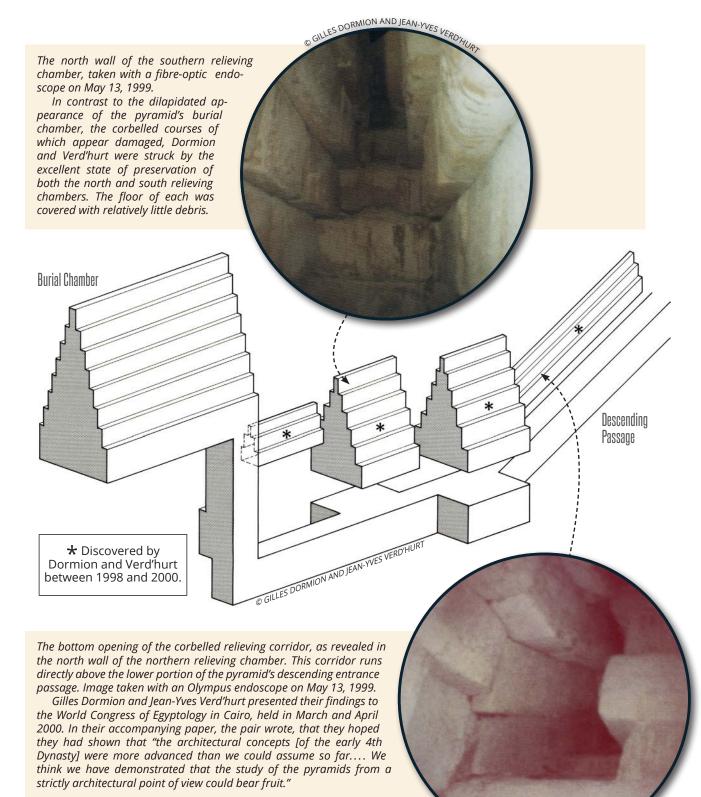
Permission to make a small hole in the north wall of the chamber was sought from and granted by the Ministry of Antiquities. A year later, in May 1999, the French-Egyptian team began drilling. After about a metre, the drill hit empty space. Poking their tiny camera through the hole revealed exactly what they had supposed: a corbelled regiant pyramids at Dahshur, before returning to Meidum and converting the old step pyramid shape to a smoothsided true pyramid. Unfortunately, the original steps weren't built to carry all the extra weight—they were constructed in vertical concentric layers, like an onion. At some stage—possibly even during construction—several steps slid down, leaving the odd-shaped tower surrounded by a piled of debris we see today.



The interior layout of the Pyramid of Meidum prior to Dormion and Verd-hurt's 1998–2000 discoveries.

lieving chamber covering the southern recess and horizontal corridor (see endoscopic photo on page 12). The floor of the chamber was the upper side of the same limestone beams that formed the roof of the recess and corridor below it. In fact, the chamber was exactly the same width as the space it was designed to protect: 2.10 metres.

The northern relieving chamber was discovered in September 1999 and turned out to be almost identical to its southern counterpart, but with one significant surprise. In the chamber's north wall, estimated to be directly above the pyramid's descending corridor, was a hole, roughly 0.75 m wide. ("That's funny...").



The Relieving Corridor

What the French-Egyptian team had discovered was a corbelled relieving corridor, planned by the Egyptian architects to deflect the weight of the pyramid away from the descending passage that connected the entrance to the horizontal corridor. A small hole was drilled, and their fibre-optic camera allowed a glimpse of the top end of the relieving corridor, around 15 metres from its lower opening (see photo above).

Dormion and Verd'hurt's findings have been a big advance in understanding how pyramids were built, even at this early stage. "The builders of the pyramid, perfectly aware of the great weight to be

implemented, were especially afraid of the falling of the empty spaces made inside the monument.... it is thus possible, if not probable, that such systems were used in other pyramids."

Back to Giza

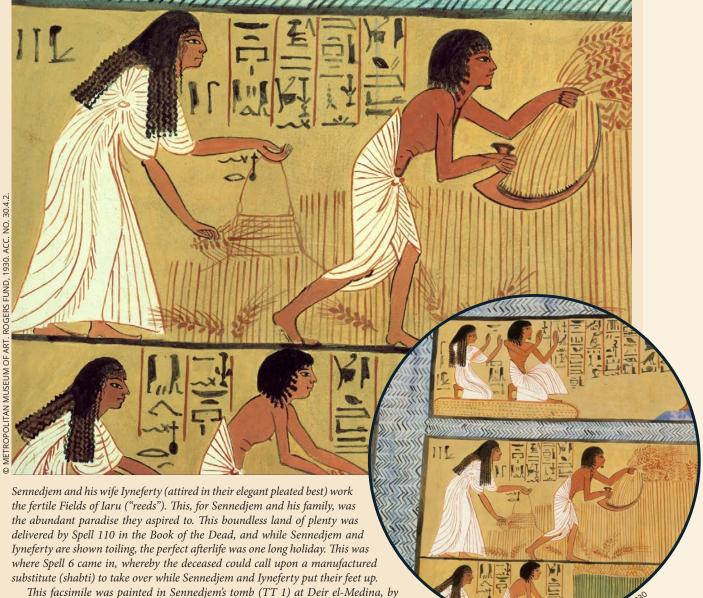
It's fairly safe to assume that Sneferu's architects probably also worked on delivering his son's grand plan, so with the Meidum Pyramid now presenting a surprisingly sophisticated weight-relieving system, perhaps it shouldn't be at

ON THIS DAY

31 January 1886 The Tomb of Sennedjem discovered.

"It was clear that we were in the presence of one of those rare tombs which... had escaped the depredations of the Romans, the Copts and the Arabs."

> Spanish Consul-General, Eduardo Toda y Güell (Annales du Service des antiquités de l'Egypte, Vol 20, 1920)



Charles K. Wilkinson for the Metropolitan Museum of Art, New York, in 1922.

ROPOLITAN MUSEUM OF ART. ROGERS

T SEEMS THAT A PERMIT TO DIG AT THEBES was a relatively easy thing to obtain in 1886. In January of that year a local Kurna resident, Salam Abu Duji, along with three associates, sought permission to excavate at Deir el-Medina, the site of the village of craftsmen (and their families) who carved and decorated the New Kingdom royal tombs in the Valley of the Kings and of the Queens.

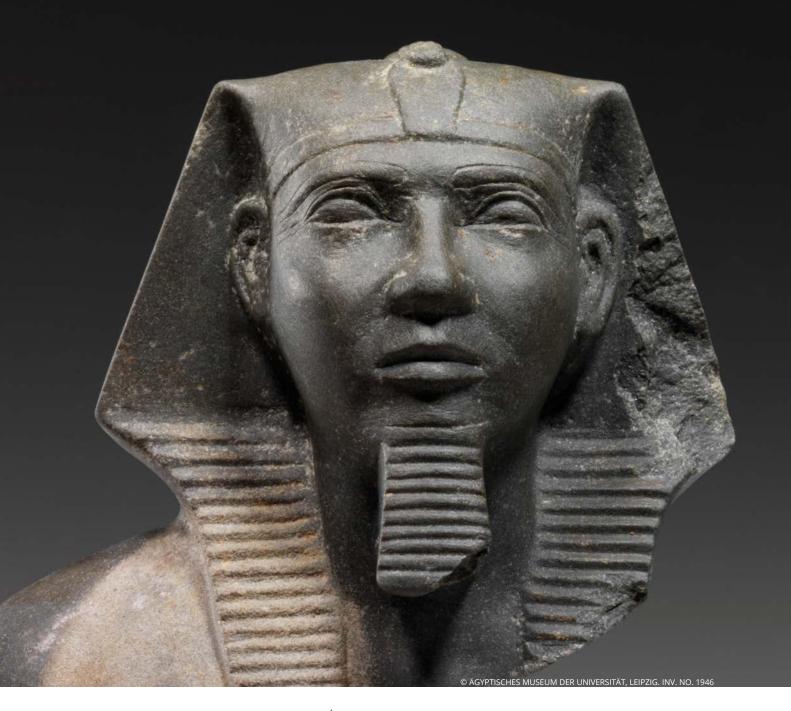
Situated in a small desert valley on the west bank of the Nile, the site wasn't regarded with a great deal of importance and permission was granted, apparently without hesitation. It had been decades since a significant, unplundered tomb had been discovered in Egypt, and the site had seemingly been thoroughly worked over. Apart from a barrage of illicit digging by locals, Deir el-Medina had attracted the



virtually the entire length of the 18th, 19th and 20th Dynasties. During the eight-day week the craftsmen and labourers built magnificent "houses of eternity" for their masters, and on the weekends, their own smaller, but sometimes exquisitely-decorated tombs overlooking the village.

Sennedjem's Deir el-Medina was a thriving community. This was the early 19th Dynasty, when the work crews were called upon to fulfill the spectacular plans of King Seti I (KV 17—the longest and most brilliantly-decorated tomb in the Valley), his son, Ramesses II (KV 7—the largest New Kingdom kingly tomb), and the latter king's wife, Nefertari (the stunningly-decorated QV 66). It is possible that Sennedjem worked on all three. An often-repeated narrative on the final years of Deir el-Medina tells us that, in contrast to Sennedjem's 19th-Dynasty boomtown, by the end of the 20th Dynasty the village was abandoned. During the reign of the final Ramesside pharaoh, Ramesses XI (ca. 1099–1069 B.C.), the villagers were apparently forced to seek refuge from roaming Libyan gangs in Medinet Habu, the fortified memorial temple of Ramesses III. This melodramatic scene certainly fits with the popular picture of decay and lawlessness on the edge of the Third Intermediate Period.

However, a study by Dr. Robert J. Demarée from Leiden University tells a different story. From a study of around 100 ostraca and dozens of graffiti, it appears that, rather than sheltering in Medinet Habu, teams of workmen led



He named his pyramid wer khafre Δ , "Great is Khafre", and today, some 4,500 years later, his Giza monuments—pyramid, Valley Temple and Great Sphinx still command a majestic presence over the plateau. Less than 400 years after his death, however, King Khafre was held in much less reverence.

Around 2100 B.C., during a stretch of disunity known as the First Intermediate Period (Dynasties 7 to 11, ca. 2181–2055 B.C.), the kingly statues that stood between the pillars of Khafre's Valley Temple were torn down and attacked. The wanton violence with which they were hammered wouldn't be seen again until the backlash against Hatshepsut's rule, some 700 years into the future. When found, the above portion from one of Khafre's Valley Temple statues was smashed into seven parts.

The First Intermediate Period saw the divine pharaonic pedigree grind to a halt, with power now divided among regional officials. At some stage, someone decided a demonstration of independence was in order, and Khafre's magnificent statuary was targeted as a symbol of the old regime. This graywacke image of the king was discovered during the 1909/10 excavation season by German Egyptologist Georg Steindorff; its pieces found among debris at the south entrance to the Valley Temple.

Reconstructed, this piece shows Egyptian royalty at its aloof best. The king's gaze peers into eternity—as well it should, for the statue's purpose wasn't to create a true portrait of a blue-blooded Egyptian from the 26th century B.C., but to proclaim the serenity of divine kingship.

Although unfinished, this statue is similar to the king's most famous sculpture, discovered in a pit beneath the temple floor. The enthroned diorite statue, now in Cairo's Egyptian Museum, shows the divine falcon spreading its wings protectively around the king's head. In the second volume of his *A History of Ancient Egypt*, Egyptologist John Romer states that "one might well imagine, therefore, that the diorite statue of Khafre and the hawk had been thrown down the temple well in desperation after the other dozen or so similarly obdurate images of the king had been laboriously smashed into little pieces."



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"Servant in the Place of Truth, Amennakht"

A mennakht was no doubt proud to be a Servant in the Place of Truth forever. He had the words carved on the limestone pyramidion (or capstone) that surmounted the pyramid chapel above his tomb at Deir el-Medina (see Sennedjem's example on page 18). Each morning, Amennakt would be reborn on the eastern sky as the sun burst triumphantly from the underworld and its life-giving rays fell upon the small pyramid and illuminating his name.

The pyramidion was known as a *benbenet* \exists \exists dagharrow symbol of the *benben*—the primaeval hill which rose from the primordial waters and glowed with the warmth of the sun on the first day of creation. The benben stone was venerated at Heliopolis, believed to be that sacred site. A divine stone with a direct link to the beginning of time—it's hard to imagine a more special object.

It is believed that the benben gave its shape to both the pyramids and the pyramidal apex of the obelisk. James Henry Breasted, founder of the University of Chicago's Oriental Institute, described an obelisk as *"simply a pyramid* upon a lofty base.... The pyramidal form of the king's tomb therefore was of the most sacred significance. The king was buried under the very symbol of the Sun god which stood in the holy of holies in the Sun-temple at Heliopolis...."

Towards the end of the 18th Dynasty, long after the New Kingdom pharaohs had forgone pyramids for the perceived security of the Valley of the Kings, the benben went private. Steep-sided mud-brick pyramid chapels began appearing above private tombs like Amennakht's. On his pyramidion, the royal tomb builder had himself shown praising Ra-Horakhty ("Ra who is Horus of the Horizon", referring to the god rising in the east at dawn).

Like Sennedjem, Amennakht would have worked on the tomb of the 19th-Dynasty's Ramesses II. Given the cosy environment of Deir el-Medina, it's unlikely that they didn't work together.

Amennakht's spectacularly decorated tomb (TT 218) was excavated by French Egyptologist Bernard Bruyère in 1928 and is one of the must-sees at Deir el-Medina today. The Old Kingdom rulers of the 5th and 6th Dynasties (ca. 2494–2181 B.C.) chose to raise their pyramids in Abusir and Saqqara, both part of the great west bank necropolis of ancient Memphis. While the mastaba tombs of the royal retinue huddled in as close as possible to the king, this man, instead, chose to be buried in Khufu's Western Cemetery at Giza (Mastaba S 466/467). It's therefore likely that he served in the ongoing funerary cult of the great king who had died a number of decades earlier.

By the 4th Dynasty, mummification had developed to where the deceased's internal organs were removed and the body dried before being wrapped in linen. Sometimes facial features were modelled using the linen or painted directly on the cloth.

It was during the 5th Dynasty that a shortlived funerary practice appeared: coating the deceased's mummified body with a layer of gypsum plaster. Only six examples have survived antiquity—all from the 5th or 6th Dynasties. A little more common was plastering and modelling the head of the mummy only, and modelling it with life-like features. Twenty-nine plaster mummy masks have been found—almost all of them from Giza.

The fashion of coating the head or entire body with a layer of plaster died out during the 6th Dynasty—coincidentally, at around the same time that the first cartonnage (plaster and linen) mummy masks started appearing. It may be that the purely plaster versions were the direct precursors of what are recognised as the first mummy masks. It's hard to deny that cartonnage masks had a convenient advantage: they could be fashioned separately well before the burial (and presumably to the owner's satisfaction), rather than having to apply plaster directly to the mummified and bandaged head.

INV. NO. ÄS 7800

KUNSTHISTORISCHES MUSEUM, VIENNA, EGYPTIAN-ORIENTAL COLLECTION.

Great care has been taken to give the deceased a natural appearance; the thin straight nose, pronounced nasolabial folds and sharply-outlined, subtly smiling lips give the plaster face great expression. The open, heavy-lidded eyes appear less defined, however, and a straight hairline, or perhaps a headcloth, runs across the forehead.

The shaft of Mastaba S 466/467, in which this plaster mask and body covering was discovered, was excavated by German Egyptologist, Hermann Junker, who was Director of the German-Austrian expedition to Giza between 1911 and 1929.

Fascinating Pyramids, at the Liechtenstein National Museum (Liechtensteinisches Landes Museum) in Vaduz, runs through until 14 January, 2018.



NILEMAGAZINE.CO.UK

Leslie D. Black The Sarcophagus Lid of DAMESSE DAMESSE DAMESSE

The Valley of the Kings, A.D. 1817

A team of workers struggle to slowly manoeuvre an immense granite sculpture from the yawning mouth of a royal tomb, as the dust settles; for the first time in almost three thousand years the scorching sunlight illuminates the serene semblance of an ancient king.

The sarcophagus lid of Egypt's last great warrior king was about to continue its long journey.

(THIS PAGE AND FACING PAGE) The Sarcophagus Lid of Ramesses III. Acc. No. E.1.1823. THIS PAGE © LESLIE D. BLACK FACING PAGE © THE FITZWILLIAM MUSEUM, CAMBRIDGE



"One was saying, 'The hawk has flown to heaven"" Text from an ostracon found at Deir el-Medina announcing the passing of King Ramesses III.

> This detailed image of Ramesses III adoring Ra-Horakhty (not shown) comes from the king's tomb, KV11.

The image portrays Ramesses as the divine ruler, flawless and ageless, with the falcon behind his head identifying Ramesses III as the "Living Horus". The king wears the royal linen nemes headdress with a crown of rearing cobras. The pleated folds that fall over his shoulders also end in royal cobras. In the original scene, the uraeus crown is topped with the hemhem crown: an elaborately embellished triple atef crown set on long spiral ram's horns.

The first three corridors of KV 11 were created for Ramesses' father, Setnakhte, but the tomb was abandoned when the cutting of the third corridor broke into the earlier tomb of the 19th Dynasty's Amenmesse (KV10), who had been buried there just 16 years earlier. KV11 was restarted on a different axis by Ramesses III.

This depiction is from the 1878 Atlas of Egyptian Art by French Egyptologist, Emile Prisse d'Avennes.

THE NEW YORK PUBLIC LIBRARY



"The Osiris, King of Upper and Lower Egypt, Lord of the Two lands, Strong is the Justice of Re, Beloved of Amun, Son of Ra" From the left side of the sarcophagus lid of Ramesses III.



The goddess Nephthys on the "head end" of Ramesses III's sarcophagus, now in the Louvre (Acc. No. D 1). The "foot end" features a matching winged figure of Isis.

While impressive, the exterior decoration of Ramesses' sarcophagus—the seventh and eighth chapters of the Book of Amduat—was a second-rate job. The Louvre states that "phrases (and individual words) are cut up into incoherent elements that cannot be understood without referring to the correct version featured in other tombs."

Research by Professor Eric Cline at George Washington University has shown that the decades leading into Ramesses III's reign were hit hard by what he calls a "perfect storm": crippling drought, widespread famine, swept through the Hittite, Mycenaean and Mitanni cultures around the Mediterranean, before advancing on Egypt. Ramesses III invested vast resources in repelling the Sea Peoples, just as the 19th-Dynasty's King Merenptah had done three decades earlier. While Ramesses III finally saved Egypt from the

and waves of invaders. A mass migration of "Sea Peoples"

confederation of invaders, the unrelenting drought and loss of thriving trade routes caused great hardship (and discontent) for an empire built on both. The slap-dash inscriptions on Ramesses III's sarcophagus—apparently not checked or corrected—may be evidence of a workforce under great stress (and flagging care-factor).

From the hieratic script of the Great Harris Papyrus, the second ruler of Egypt's 20th Dynasty, Ramesses III, posthumously proclaims, "Behold, I have gone to rest in the Nether World... Amun-Re has established my son on my throne". Discovered at Deir El-Medina, an ostracon announces that the great king, whom, it seems, had fallen victim to a murderous plot instigated by members of his own harem, succumbed to his injuries in the third month of Shemu, day 15 in year 32 of his reign (around 1155 B.C.). This small shard of pottery mourns the passing of "The Horus" by lamenting "The hawk has flown to heaven".

In accordance with the traditions of his illustrious ancestors, Ramesses III was interred in the "The great field", known today as the Valley of the Kings. Regrettably, the deterioration in the kingdom's political and economic fortunes during the latter years of his tenure, and the period following Ramesses' death, led to increased looting of the valley's tombs. After a relatively short period, the pinkgranite sarcophagus and displaced lid were virtually all that remained of the king's fabulous grave goods.

Purportedly for its own protection, the mummified body of Ramesses was exhumed along with those of many other New Kingdom rulers by the Theban priesthood and hidden in the now-famous Deir el-Bahri TT320 cache, where it would eventually be discovered in a replacement cartonnage coffin secreted inside that of Ahmose-Nefertari, wife of King Ahmose I and the 18th Dynasty's first queen. So it was, the magnificent tomb of Ramesses III, arguably the last great pharaoh of the New Kingdom lay vacated and largely forgotten.

"Her gaze was pleased by it. Then she drank and it pleased her heart. She returned, drunk...."

his text forms part of the tale of the Destruction of Mankind, a New Kingdom text dealing with Ra's brutal suppression of a rebellious human plot against the sun god. In his wrath he decided to punish mankind by sending forth an aspect of his daughter, the "Eye of Ra": "Let your Eye go, that it may smite them for you, the schemers of evil.... May it descend as Hathor." Thus the nurturing goddess of the good things in life (love, sex and music) set about slaughtering the scheming humans and wading in their blood. The story continues with Ra suddenly having a change of heart after seeing how much enjoyment Hathor was gaining from the carnage: "I have overpowered mankind, and it was pleasure to my heart." With Hathor planning on returning for a second bout of butchery, this time in the form of a raging lioness, Sekhmet, Ra hatches a plan to stop her. When dawn broke the goddess came to the place "of which she had said 'I will slay mankind *there,*" and found that the fields were flooded with blood. Ra's way of stopping his bloodthirsty daughter was to inundate the fields with beer mash stained with haematite (a reddish mineral) to look like human blood. A delighted Sekhmet (see text above) gorged on this and promptly passed out. When she awoke her bloodlust had dissipated and humanity was saved.

The name Sekhmet $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$ was derived from the word sekhem $\begin{bmatrix} 1 \\ 0 \end{bmatrix}$, which means "power". In ancient Egyptian mythology Sekhmet was the lion-headed goddess who, with her husband Ptah and son Nefertem, completed the Memphite triad of deities. But Sekhmet was not only a goddess in her own right, as we've seen, she was also an instrument of the fiery wrath of her father, Ra.

Her volatile reputation meant that great efforts were made to appease Sekhmet and invoke her not to use her powers for evil. With the goddess sedated by a constant flow of adoration, and, as we'll read later, drunken ritual, one could be placed under the goddess' protection. Simply by withholding her destructive potency (as in the above tale), she bestowed life.

One of the 22 statues of Sekhmet in the collection of the Museo Egizio of Turin. The goddess has the head of a lioness atop a woman's body. Behind her wreath of fur, and forming an effective juncture to the body is a wig. She also wears jewellery: a large beaded collar, as well as anklets and bracelets. Above her head is a large sun-disk, representing Sekhmet's association with her father, the sun god.

Sekhmet was a particularly ferocious goddess; a bringer of violence and illness. On the other hand, her left fist on her lap clutches an ankh, the symbol for 'life'. While her fury could bring terrible suffering, she was also the one called upon to protect and heal.

The 18th Dynasty's Amenhotep III especially revered (or feared) Sekhmet as he had an enormous number of her statues erected in his memorial temple in Thebes. Why did the king feel the need to appease Sekhmet to such an extent? Theories range from rallying her support during his ritual rejuvenation ceremony, to helping an ailing king by providing a supernatural defence against plagues raging across the Near East.

PHOTO: NICOLA DELL'AQUILA/MUSEO EGIZIO. ACC. NO. C.253.



Dynasty reign of Amenhotep III (ca. 1390–1352). A staggering 700 or more statues of the lion-headed goddess that once stood around three sides of the first court of the Temple of Mut in Luxor are a testimony to the king's devotion to Sekhmet. In fact, most of the Sekhmet statues that inhabit museums around the world come from this temple. Although most of the statues bear the name of Amenhotep III, some belong to Ramesses II (19th Dynasty) as well as the high priest Pinedjem (21st Dynasty)—probably reinscribed. Egyptologists generally believe that most—if not all—of these statues did not originally stand in this district, but were moved after the memorial temple of Amenhotep III was devastated by an earthquake during the 19th dynasty. It was also during this time that Mut and Sekhmet became more closely associated.

The sheer magnitude of the production of these statues has held the attention of both scholars and the general public for two hundred years. Why did Amenhotep III have so many statues of the goddess Sekhmet? Many have speculated that it could have been because he was suffering from ill health. His mummy was found in 1898 in a side chamber of KV35 along with several other mummies and was identified by dockets on the mummy's wrappings and coffin. Egyptologist Dr. Aidan Dodson informed this author that "his mummy shows major dental problems, but there are no obvious signs of pathology. The severe damage to the mummy, and its unusual technique, make any definitive views problematic. The idea that he was 'ill' (other than through bad teeth) has been promoted through the fact that a statue of Ishtar was sent from Babylon to Egypt during his reign (as revealed in the Amarna Letters). Many have stated that this was to improve his health, but this is purely a modern assumption and may or may not be right."

Another theory is that Amenhotep III acted in response to a series of epidemics that ravaged the Near East during his reign; the statues were made to either ward off the epidemics or give thanks for being delivered from them.

Alternatively, we know that towards the end of his reign, Amenhotep III increasingly identified himself with the sun—particularly the life-giving energy of the sun represented by Aten, the sun-disk. Dr. Hourig Sourouzian, Project Director of the Colossi of Memnon and Amenhotep III Temple Conservation Project, states that Sekhmet played an important role in Amenhotep III's royal jubilee, in which she would "protect the sun-king against the enemies of the sun".

What is clear from Amenhotep III's reign is his close association with lions and felines. In fact he marked the 10th anniversary of his accession to the throne by issuing two commemorative scarabs one of which praised his great skill as a hunter of lions: he boasts that he killed a staggering 102 lions during these ten years. The second scarab announced his marriage to Princess Kiluhepa the daughter of King Shuttarana II who ruled the powerful Syrian state of Mitanni. Amenhotep III reigned at a time of relative peace, and the veneration of Sekhmet could have been to retain this political stability. Sekhmet, after all, personified the most destructive aspects of solar energy in ancient Egyptian myth and was thus invoked in magic rituals to protect the state.



METROPOLITAN MUSEUM OF ART. PURCHASE, EDWARD S. HARKNESS GIFT, 1926. ACC. NO. 26.7.264.

During the reign of Amenhotep III (ca. 1390–1352 B.C.), a series of large glazed steatite scarabs were issued to glorify the king and his wife Tiye, and commemorate his accomplishments. This scarab, now in the Metropolitan Museum of Art, commemorates the king's prowess as a lion hunter—and hence victory over chaotic forces during his first ten years as king. The final three lines contain the details of his mastery of the bow:

"List of the lions brought in His Majesty by his own shooting, beginning with year one up to year ten. Lions fierce 102".

As the tale of the Destruction of Mankind relates, both Hathor and Sekhmet could operate as the "Eye of Re", and were capable of the most violent rage. E.A. Wallis Budge wrote that Sekhmet, in particular, was "a destroying element, and in texts of all periods she plays the part of a power which protects the good and annihilates the wicked. Clearly, you wanted to be this goddess' good side.

We've seen how the fiery power of the sun (and wanton slaughter of mankind) was only subdued through the judicious use of alcohol. Only by getting the goddess rolling drunk was disaster averted, and the myth likely inspired

"THE TOMB OF NEFER-HOTEP AT THEBES: VOL. I", NORMAN DE GARIS DAVIES, 1933

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Too much of a good thing?

This lively banqueting scene with well-dressed guests and dancing musicians comes from the New Kingdom tomb of Neferhotep (TT 49) at Luxor. Neferhotep was a Chief Scribe of Amun during the brief reign of Ay (ca.1327–1323 B.C.), and likely Tutankhamun before that.

The register above features one female guest in particular who seems to have overly-indulged in Neferhotep's hospitality. Another part of the larger scene includes the image on the right, where a woman, having clearly decided to not waste time with a wine cup, drinks straight from the pouring jar instead!

In 1933 when Scottish Egyptologist Norman de Garis Davies described this "moment of care-free merriment", he wrote that the feast had "so far advanced that the more delicate stomachs of the ladies refuse further strain, and one of them has already over-estimated her powers of absorption. The serving maid is provided with the needful vessel, but though she does not wait to slip on the sandals she carries on her arm, she is too late even to modify the unseemliness of the accident."

Modern scholarship by Egyptologist Dr. Cynthia Sheikholeslami, however, suggests that this untidy moment was no accident. Notice that there is no food at this party—only alcohol. Far from such overconsumption being frowned upon as bad behaviour, it seems that getting drunk was the whole point. What we see represented here is a communal banquet of drunkenness.

Just like the larger Festival of Drunkenness at Mut Temple, the purpose of the rollicking banquets portrayed in tombs was to be woken abruptly from a drunken stupor to receive a vision of the goddess, who brings with her the promise of new life

for their deceased ancestors.

It's likely that these revellers also commemorated the pacifying of a bloodthirsty Hathor/Sekhmet by similarly getting rolling drunk.

The tomb of Pahery at Elkab features a scene whereby the guests are settling-in for a bout of heavy drinking. One female guest makes her intentions for the night very clear: She says to a servant: "Give me 18 jars of wine. To be drunk is what I continually desire. The place within me is of straw."





The vaulted ceiling of the burial chamber in KV 9, the tomb begun for Ramesses V and then continued by Ramesses VI. The sky goddess "Nut" is drawn twice, dividing the ceiling into two spaces, depicting the Book of the Day in the east (on the left in the picture above), and the Book of the Night in

the west (right, above).

The Book of the Day proclaims the names and epithets of Ramesses VI, and shows a description of the sun god Ra's daily journey on his barge. Through the daytime, he sails along the sky goddess' body through the heavens. In the evening Ra

In carved and painted reliefs and statues, a woman's skin was usually painted a yellow ochre, whereas for men it was a richer red ochre. This is thought to not only show which gender traditionally spent more time outdoors in the sun, but also highlighted the fundamental Egyptian belief in *ma'at*. The two skin shades distinguished men and women as opposites and thus supported the concept of a balanced cosmos. In Nefertari's tomb, however, but for a single exception, the queen is shown with a range of more masculine, reddish tones.

Throughout the queen's tomb are phrases such as "Osiris Nefertari" and "Justified with Osiris" to emphasise her transformation into Osiris to achieve rebirth. However, to become Osiris, a woman—even a queen—had one extra hurdle to deal with: she had to temporarily become a man.

The ancient Egyptian word for "coffin", $swht \parallel$ is the same as the word for "egg", which, in ancient Egypt, acted as a womb when being reborn. Men, with their natural creative potency, could just recreate themselves without a woman being involved. For a woman, the way

approaches Nut's mouth to be swallowed. During the night, the sun, shown as a red disk, travels with the stars through Nut's body, before being reborn in the morning. Every sunrise really was a new beginning.

This daily solar cycle was equally reliant on the sun god's male sexual potency: the impregnation of the "Lady of Heliopolis", Nut, by the creator god Ra.

The Egyptians saw creation not as a one-off event, but as an ongoing, daily cycle. Every night Nut swallowed the setting sun to whom she had given birth at dawn.

around this problem was to change her gender in the coffin. This required having the woman represented on the coffin with masculine red skin, and having a priest recite spells that addressed the woman with masculine pronouns to become Osiris. It was because of Nefertari's necessary gender fluidity that Ramesses goes missing from the tomb decoration. The presence of her husband (or her children) in the tomb would force Nefertari back into the traditional feminine role as the king's opposite, as well as highlight the sexual roles of their relationship.

Once she had become Osiris in the afterlife, Nefertari was able to return to her original female state with the help of the feminine elements in her tomb images. She could now incubate herself in the coffin for rebirth into the afterlife as a woman.

In ancient Egypt, a tomb was not simply a place of burial, but rather the site of a literal rebirth. By having his wife portrayed with masculine reddish tones, and by excluding himself from the tomb decorations, Ramesses was giving his wife the opportunity to achieve eternal life.

An Amarna King, probably Akhenaten.

During the Amarna Period (18th Dynasty, ca. 1352–1336 B.C.), artists portrayed the king and queen as beings who combined male and female traits. The king's gender-flexibility ensured the fertility of the earth and all living creatures.

A royal male with female sexual characteristics was the source of the belief that individuals could assume both male and female traits in the tomb.

In this limestone statue, the king's distended belly, hanging over his belt, reveals that he is pregnant. In fact, all of Akhenaten's statues feature this swelling, teardrop-shaped stomach from his colossal figures at Karnak in the early severe style, to the softened statuary of his later years

This feminised vision of a king has narrow shoulders, a soft torso, and female breasts. The king's red skin, understood to be the colour of the disk of the sun, associated him with the sun god Ra.

The Egyptians did not accept death as final. Taking their inspiration from the sun, which "died" each night at dusk only to be "reborn" at dawn, they believed that all humans could be reborn after death and exist throughout eternity. To achieve this, after death, the Egyptians hoped for transformation into Re-Osiris to travel to, and then live in the glorious afterlife. In the Amarna period, however, the traditional Osirian afterlife no longer became an option-it had ceased to exist. Only the life-giving light of the Aten provided hope for life after death. For the royal couple, the ability to appear both male and female wasn't about becoming Osiris, but rather emphasising their omnipotent power.

This figure of the king wearing the blue *khepresh* crown was unearthed in a private house (Q44.1, Room 8) at Amarna in 1923 by the Egypt Exploration Society.

PHOTO: BROOKLYN MUSEUM. GIFT OF THE EGYPT EXPLORATION SOCIETY. ACC. NO. 29.34



For an ancient Egyptian woman, being represented with male and female characteristics was a tricky business. Getting the balance right was crucial for a successful transformation into the male Osiris, conceiving her own rebirth in the afterlife, and yet still being able to retain her feminine identity.

Professor Roth believes that the beautiful feminine tomb paintings of Nefertari in her translucent linen may have been designed with a view to helping stimulate her—in the queen's male, deceased aspect—and assist in her self-regeneration.

A Woman's Afterlife also features a number of sensual objects such as this one on the left, representing women with elaborate wigs and close-fitting dresses to indicate a subsequent return to their female state in the afterlife.

The unknown woman's long, elaborate wig and skin-tight garment would have been seen as erotic in ancient Egypt and connected to the sexual union necessary for birth and rebirth. The size and two different textures of her wig, would have been considered especially elaborate and therefore had additional connotations of beauty and sexual appeal.

A Woman's Afterlife: Gender Transformation in Ancient Egypt, is ongoing at the Brooklyn Museum, New York.

(LEFT) The Egyptian ideal of feminine, erotic beauty. This wooden figure would have been placed inside a tomb in order to help the deceased female occupant (who had been temporarily masculinised) return to her natural gender. Although the name of the woman is unknown, stylistically the statuette is dated to the 18th-Dynasty reign of Amenhotep III (1390–1352 B.C.).



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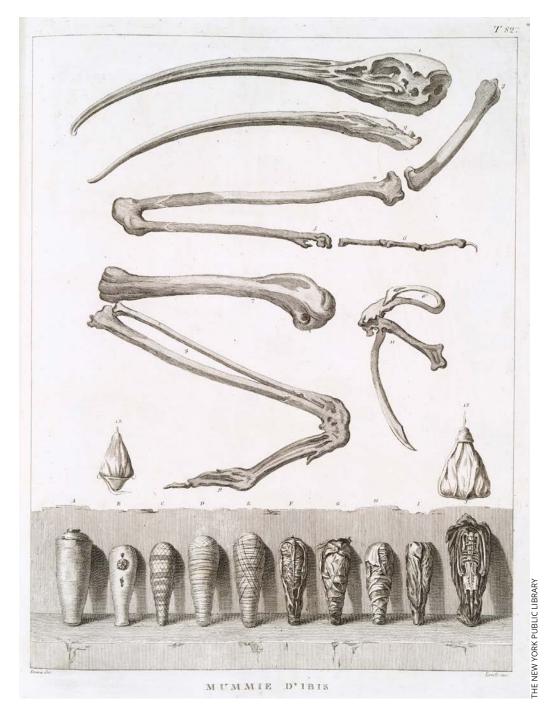
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SOULFUL CREATURES

ANIMAL MUMMIES

This statue was the container for a mummified falcon one of millions placed in vast catacombs. But why?

PHOTO: GAVIN ASHWORTH, BROOKLYN MUSEUM. CHARLES EDWIN WILBOUR FUND. ACC. NO. 05.394



French artist Vivant Denon was part of the troupe of artists, scholars and scientists who accompanied Napoleon's invasion of Egypt in 1798. Denon's drawing (above) of a collection of ibis mummies, along with the remains of one that he unwrapped, was included in Description de l'Égypte—a monumental 26-volume record of everything the scholars encountered. The Description contains some of the earliest depictions of these strange animal mummies to reach the West.

"I went half a mile north of the pyramid with steps, to the catacomb of the birds, call'd the well or pit of the birds.... These catacombs are much more magnificent than the others, being the sepulchres of those birds and other animals they worshipped; for when they happen'd to find them dead, they embalm'd them, and wrapped them up with the same care as they did human bodies...."

--A Description of the East, and Some Other Countries, 1743, Richard Pococke

A round sixty years before Napoleon's attempt to grab Egypt for France, English gentleman Richard Pococke, arrived in the country on his second Grand Tour. At Saqqara, Pococke was led to the entrance of the vast ibis catacombs, sacred to

god Thoth. While he was certainly impressed with what he encountered in 1737, Richard Pococke couldn't have imagined the true extent of the birds he glimpsed—and the real reason they were there. A new exhibition at the Brooklyn Museum explores these soulful creatures.



The Egyptians of the first millennium B.C. believed that they could appeal to the god Thoth to intercede in human affairs. Mummified ibises—the god's sacred animal—allowed such a petitioner to send a message to the god.

This ibis mummy was retrieved from the vast ibis cemetery at Abydos by the Egypt Exploration Fund (now Society).

The CT scan of this mummy reveals that the wrappings of this mummy directly reflect the position of the ibis's bones and its beak, curving over its breast as if asleep. The length of the



beak indicates that this bird was a male.

The style of the mummy's wrappings indicates that it dates between the latter part of the Late Period (ca. Dynasty 28, around 400 B.C.) and the mid-Ptolemaic Period (ca. 200 B.C.). Carbon 14 dating of a sample taken from the linen, however, places this mummy in a period earlier than suggested by the wrapping style. Future testing will include a sample from the animal itself, to determine whether old, recycled linen was used in preparing the mummy.

The numbers are simply staggering. One cemetery in Saqqara held four million mummified ibises. Another contained seven million embalmed dogs. In 1888, at Beni Hasan (midway between Cairo and Luxor) a local farmer uncovered a massive repository of cat mummies. A visiting British professor, William Martin Conway, described the dense layer of cats as "a stratum thicker than most coal seams...ten to twenty cats deep, mummy squeezed against mummy, tight as herrings in a barrel...."

Edward Bleiberg, Senior Curator, Egyptian, Classical, and Ancient Near Eastern Art at the Brooklyn Museum reveals that animal mummies are the most numerous artefacts preserved from ancient Egypt—yet they are only slightly better understood today than they were by Richard Pococke in the early 18th century. The museum's current exhibition, *Soulful Creatures: Animal Mummies in Ancient Egypt*, aims to reveal the how and the why of animal mummies—and they are using some hi-tech artilliery to help get some answers after some 300 years of fascination.

Messengers to the Gods

It's certainly true that, in line with popular thinking, some animals *were* worshipped during their lifetimes as sacred incarnations of a deity. They lived a pampered existence, and when they died naturally, were mummified and buried with great ceremony. Most animal mummies, however, were made for our benefit, not theirs. These animals had one job: to carry our pleas to the gods as votive offerings. Today, these mummified messengers are giving us an insight into the ancient Egyptian way of thinking.



PHOTO: SARAH DESANTIS, BROOKLYN MUSEUM. CHARLES EDWIN WILBOUR FUND. ACC. NO. 37.1381E

16,000 dogs were mummified and buried here every year.

The 2nd-century B.C., priest of Thoth, Hor, described in his ostraca diary the system whereby mummies were collected all year, stored in a "house of waiting" within the temple. Once a year, in great procession, the mummies were interred in the great catacombs—the "house of rest". Here they were stacked carefully to whisper in the dark, their allotted messages to the god.

Some 30 other sites have been located that contained up to 70 million mummified animals. Each one is a prayer. Late in Egypt's history, millions and millions of believers went to the temple, bought a mummy, and hoped that the animal's soul would carry their message to the gods. Edward Bleiberg explains that "These messages were often sent through accompanying hand-written letters that frequently requested good health for a sick relative or help with problems at work. The *Soulful Creatures* exhibition even includes an example from a child who complained to a particular god about their parent's behaviour."

One letter appeals to Thoth for help in a particularly nasty work dispute involving a bitter rivalry with a coworker. The note continues that the pilgrim is convinced that his colleague is maligning him to their boss. The situation must have become so troubling that the man is willing to pay for an animal mummy to carry his plea to Thoth to make his colleague stop.

Very, Very Big Business

By 500 B.C. the personal ritual of offering an animal mummy to a god had become a national obsession. Massbreeding and rearing programs sprung up throughout Eygpt (probably attached to temples) for the different kinds of animals. The mummification of these creatures also created a second set of personnel: the people who did the embalming, and the people who supplied all of the materials, such as bandages, resins etc.

Salima Ikram states that great fortunes were no doubt made by the temple priests who sold the finished product: a mummified animal (or at least, something resembling that). It was also a gold mine for skilled workers, such as those who mixed the resins and oils or created the elaborately patterned bandaging that still wows people today. Their talents would have been rewarded particularly highly.

Embalming resins and spices, including frankincense and myrrh, were imported from distant places, such as Syria and Ethiopia, while the tonnes of natron (naturallyoccurring salt) needed to mummify such large numbers of animals boosted the local economy.

While the 1st millennia B.C. probably wasn't a great time to be an ibis, cat or dog in Egypt, the millions of pilgrims needing furry and feathered messengers to the gods created an opportunity that savvy businesspeople were more than happy to make the most of.



PHOTO: BROOKLYN MUSEUM. CHARLES EDWIN WILBOUR FUND. ACC. NO. 37.1478Ea-b

The canine-shaped god Anubis welcomes visitors to the Soulful Creatures exhibition at the Brooklyn Museum. The Egyptians may have seen dogs and jackals frequenting

the western desert, and were thus perhaps considered animals of areas between worlds, between life and death. This may be why Anubis was the god of cemeteries and

embalming, and hence a principal agent of resurrection. His title, "he who is upon his mountain" presents him as a god

In 2011 the Brooklyn Museum took their collection of animal mummies to the Animal Medical Centre in New York so they could be x-rayed and CT scanned. The latest imaging techniques have given Egyptologists a clearer peek into the minds of the ancient Egyptians.

When it came to animal mummies, appearances could certainly be deceiving. Modern imaging has revealed that votive mummies are not as well made as other kinds of animal mummies, as they were mass-produced in a kind of animal production line. It suggests that the embalmers struggled to keep up with the surging demand from visiting pilgrims.

The virtual peeks beneath the bandages have revealed that, as we have discussed, many mummies contain just a meagre ensemble of random body bits—and sometimes, nothing at all. The most scandalous (and hence most keeping watch over the necropolis from a vantage point. Wooden statues of Anubis jackals or dogs, like the Late Period to Ptolemaic Period example above, were sometimes perched on the lids of coffins or sarcophagi, where they served a watchful, protective purpose.

Various seals from both royal and private tombs show Anubis dominating nine bound prisoners—symbolic of Egypt's enemies and, on a broader level, all harmful forces.

popular) theory is that unscrupulous priests had no qualms about swindling pilgrims by selling them fake mummies. Yet, closer analysis has revealed that more care and expense may have been taken than initial impressions suggest. Even the fake mummies used expensive embalming agents like imported resins.

This sheds a light on the embalmers' possible intentions. To go to the expense of using exotic resins, perhaps the strongest explanation is that even a bone fragment, or a mummy with no animal parts at all, but shaped to look like one, was still sacred and a worthy gift.

Soulful Creatures: Animal Mummies in Ancient Egypt is showing at the Brooklyn Museum, New York, until January 21, 2018.

LOOKING BACK Vintage Images of Ancient Egypt

"Seeking hidden treasure among the tombs of kings: Lord Carnarvon's men at work in one of the numerous side valleys which yielded no results—a weird and shadowy scene." —The Illustrated London News, Jan. 13, 1923.

"Lord Carnarvon's fine photographs... reveal the picturesque and romantic side of excavation at the foot of the rocky cliffs in the desolate Valley of the Kings, where the tomb of Tutankhamen was discovered. The place where it was found is situated immediately below and in front of the important tomb of Rameses VI., which during the season is much visited by tourists, and consequently that particular spot had not been available for digging until the tourist season was over. Meantime, as shown [here], work proceeded at another point not far away. Prior to the great discovery, Lord Carnarvon wrote in December: 'We came across much untouched ground, but beyond the finding of some alabaster vases and a few minor and mostly broken objects, nothing had rewarded our efforts until this autumn.'"

U.S.

SUNKEN CITIES



St. Louis Art Museum From 25 March 2018 (6 month season) After touring Europe, the incredible submerged treasures of the lost city of Thonis-Heracleion arrive in the U.S.

THE FUTURE OF THE PAST MUMMIES and MEDICINE



Legion of Honor Museum San Francisco Showing until 26 August 2018 State-of-the-art scientific techniques help explore two of the Fine Arts Museums' mummies.

DIVINE FELINES CATS OF ANCIENT EGYPT



Smithsonian's Freer | Sackler, Washington, D.C. 14 October 2017 - 15 January 2018 Explores the role of cats and other felines in Egyptian mythology, kingship, and everyday life.

THE DISCOVERY OF KING TUT



St. Louis Science Centre Showing until 7 January 2018 A recreation of Tutankhamun's tomb and his gilded funerary goods, including replica coffins and that iconic gold mask.

KING TUT TREASURES OF THE GOLDEN PHARAOH



California Science Center, Los Angeles From 24 March 2018 – January 2019 The largest collection of artifacts and gold

from Tutankhamun's tomb ever to go on public display outside of Egypt.

PAST IS PRESENT REVIVAL JEWELRY



Museum of Fine Arts, Boston Showing until 19 August 2018 Features a number of beautiful Egyptian revival pieces, as well as the original styles that inspired the revivals.

MUMMIES IMAGES OF THE AFTERLIFE

American Museum of Natural History, New York

Showing until 7 January 2018 Features rarely-exhibited Egyptian and Peruvian mummies, as well as rare artefacts and cutting-edge imaging.

SOULFUL CREATURES ANIMAL MUMMIES IN ANCIENT EGYPT



Brooklyn Museum 29 Sept. 2017 – 21 January 2018 The first major exhibition on one of the most fascinating aspects of Egyptian religion—mummification of animals.

AEGYPTUS EGYPT IN THE GRECO-ROMAN WORLD



Bowdoin College Museum of Art, Brunswick, Maine Showing until 15 July 2018 Explores Egypt in the time of the Greeks and Romans, and its long-lasting hold on the culture of its conquerors.

A WOMAN'S AFTERLIFE



Brooklyn Museum Ongoing Women had an extra hurdle to deal with before they could access the afterlife: they had to first become a man.

BOOK OF THE DEAD BECOMING GOD IN ANCIENT EGYPT



Oriental Institute, University of Chicago

3 Oct 2017 – 31 March 2018 Presents the newest research on the Book of the Dead, and how they sought to live forever as gods.