

N 1931, GERMAN ARCHAEOLOGIST Uvo Hölscher, digging for the University of Chicago's Oriental Institute, was excavating the ruins of the funerary temple of King Ay, just north of Ramesses III's temple at Medinet Habu. Foundation deposits at the site revealed that the temple was begun by Ay during his short reign following the early death of Tutankhamun. Above ground, however, the next in line, Horemheb, had done a thorough job of usurping the temple and its fine statuary—rubbing out Ay's cartouches and engraving his own.

Discovered in the dusty rubble were two colossal, striding red quartzite statues, originally thought to have flanked a temple doorway. While they had sustained damage, the faces were, thankfully, largely intact. At the time, Uvo Hölscher made it fairly clear as to who he thought the two statues belonged:

"Everywhere the names of Harmhab [Horemheb] appear over an erasure, where the name of Eye [Ay] had been carved originally and can be read with certainty in places. The face is, however, not that of Eye.... Our statues were apparently made for Tutankhamon but completed, inscribed and set up under Eye and finally usurped by Harmhab."

The statue shown here went to the Egyptian Museum in Cairo (Inv. Cairo JE 59869), while its mate was gifted to the Oriental Institute in the division of finds (No. 14088).

For a long time, it was accepted that the two statues originally belonged to young king Tutankhamun on account of their budding faces and Amarna-style bulging bellies. It was figured that the statues (and the funerary temple in which they were found) had been appropriated firstly by Ay, and then Horemheb. Hölscher's excavations, however, found no evidence at all of a funerary temple of Tutankhamun at Medinet Habu, and Ay's inscriptions on the statues, reworked by Horemheb, contain no trace of Tutankhamun. Today, many believe that the statues were original creations made for Ay before being usurped by Horemheb.

This colossal statue of Ay/Tutankhamun is part of the touring Tutankhamun exhibition now showing in Los Angeles—the largest collection of Tutankhamun artefacts to ever tour the globe. *King Tut: Treasures of the Golden Pharaoh* is showing at the California Science Center until 6 January 2019. You can find out more at *californiasciencecenter. org*, and also check out other exhibitions and events near you from page 62 in this issue of NILE Magazine.



NILE



UPDATE FROM



Jeff Burzacott

The American Research Center in Egypt (ARCE) has been fostering knowledge of Egyptian cultural heritage and preserving its monuments and archaeological wonders for almost 70 years. In this issue we look at the remarkable results of some of their conservation field schools around Luxor.



TOMBOS

Jeff Burzacott

Near the Nile's Third Cataract, a small community of Nubian traders and Egyptian colonists met and mingled, forging a new society and a new identity. Surprising discoveries at Tombos suggest that this blended culture may have eventually led to the rise of the largest empire ancient Egypt had ever known.



AHMOSE

Sharon Hague

Around 1550 B.C. a Theban prince was born in the midst of battle. This was, no less, a battle for Egypt itself.

The war against the Hyksos had cost Ahmose's family dearly, and, bizarrely, may have started with some bellowing hippos.



ARAB TRANSLATORS OF EGYPT'S HIEROGLYPHS

Tom Verde

Jean-François
Champollion and
Thomas Young
were locked in a
battle to unlock the
meaning of
Egyptian hieroglyphs. Yet the
two linguists were
competing in a
race that had
already been run
by medieval Arab
scholars centuries
before.



THE DIVINE FALCON

Lesley Jackson

What is the most frequently-depicted deity in the entire history of ancient Egypt? Is it Osiris? Amun? No—it's a falcon god. Lesley Jackson looks at ancient Egypt's raptor gods and, in particular, the different aspects of the divine symbol of kingship, the Horus falcon.

NILE





THE COVER

MERESANKH III: OUEEN FOR ETERNITY

Rachel Aronin

Digital Archaeology and the (After)life of Meresankh III at Giza.

The *Giza Project* at Harvard University is building a 3D virtual reconstruction of the Giza Plateau as it may have looked when first built. One of the tombs that have been digitally recreated (and preserved for future generations) is that of Meresankh III, the granddaughter of Khufu.

#13 APRIL-MAY 2018

- 4 Map of Egypt
- 4 The NILE Quiz
- 5 Timeline
- **6** Update for ARCE
- 57 NILE Style
- 60 Looking Back
- **62** Exhibitions & Events
- 64 Coming Up
- 64 Contact NILE
- 65 Subscribe to NILE

SUBSCRIBE & SAVE!

Get *Nile Magazine* delivered to your door every two months and save over 20%.

Every 6th magazine is free!

See page 65 for your fabulous subscription offer.



FROM THE EDITOR

Griffin is an Egyptology lecturer at Swansea University in Wales, and in late March, he was looking through photographs of artefacts in the University's Egypt Centre stores for a handling session with students. There was something about one particular limestone relief that caught his eye. "When we realised what it truly was," Dr. Griffin revealed, "our jaws hit the floor." What he had identified was a relief fragment featuring the 18th Dynasty's Queen Hatshepsut. The hairstyle and fillet headband with royal uraeus were a match with similarly-styled reliefs at her funerary temple at Deir el-Bahari in Luxor.

The two-part relief had arrived in Swansea in 1971 and had been in storage ever since. The bottom part of the face is missing, but curiously, the rear of the upper fragment was carved with the head of a man with a short beard (right, below). This appears to be a modern addition designed to enhance the relief's appearance to add value for a potential sale. It seems the instigators of the "enhancement" didn't realise that the piece featured a woman.

The Hatshepsut relief is now on display at Swansea's Egypt Centre, and you can look forward to a full report on Dr. Griffin's fabulous discovery—including the tiny details that tipped him off—in the next issue of NILE Magazine. In the meantime, welcome to issue #13. Enjoy your NILE time!

Jeff Burzacott ≡ editor@nilemagazine.com.au





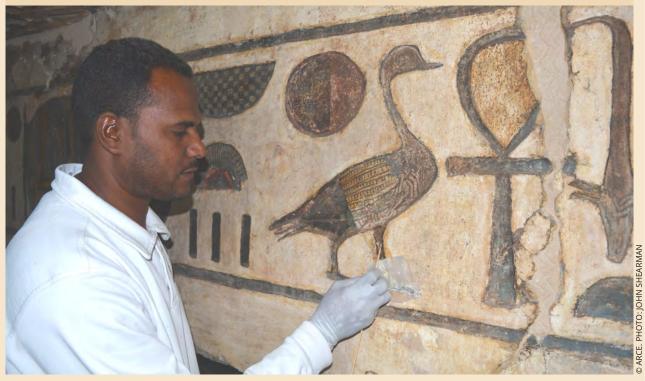


UPDATE FROM ARCE

CURRENT RESEARCH, EXCAVATION AND CONSERVATION PROJECTS IN EGYPT

"From the beginning of the discussions... there has been agreement that any new American school in Egypt should open its doors at all times to qualified students of every country—above all to Egyptians..."

Sterling Dow, Co-founder of the American Research Center in Egypt (ARCE), Archaeology Magazine, Autumn 1948





At the Temple of Khonsu within the Karnak Temple complex, conservation field school trainees under the ARCE directorship of John Shearman are cleaning the walls in several chapels. The slow and careful work is revealing colours which haven't seen the light of day for well over a thousand years.

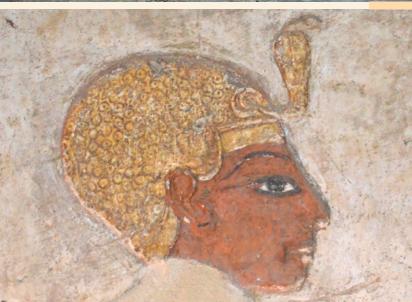
In the top image, the architrave over the doorway to Chapel 2 (see map on page 8) is being meticulously cleaned. The bottom photo showcases the finished work bearing the cartouches of King Ramesses IV—the man who became king after his father was (likely) murdered in a harem conspiracy.

OOKING BACK, THE CLUB OF ODD VOLUMES in Boston seems a fitting site for ARCE's "Big Bang"—its founding meeting in 1948. The Club's intention was to foster a love for literature and scholarship, and it was here, on a damp, foggy Friday in May 1948 that some of America's most distinguished Egyptological

scholars and institutional leaders got together after lunch with a similarly enlightened purpose.

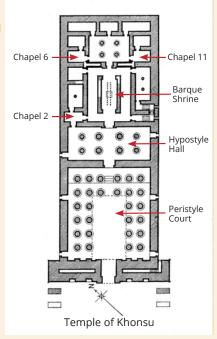
ARCE's first meeting was presided over by Harvard's Edward W. Forbes and Archaeological Institute of America President Sterling Dow. Their vision was to support research in all areas of the history and culture of Egypt.





Throughout Khonsu Temple, the faces of many figures—both statuary and inscription—were defaced by Egypt's early Christians. One place that has escaped willful damage is in the heavily-sooted side-chapels.

It may well be that the very smoke (from cooking fires and incense burners) that smothered the bright colours on the reliefs paid a big part in protecting them by making the scenes less of a target. Today, after cleaning by the ARCE field school, the face of pharaoh is again shining brightly. This before-and-after comparison of Ramesses III wearing the khepresh crown was taken in Chapel 6.



field archaeology, conservation techniques, salvage archaeology, and site management. One of those programs is run by John Shearman, ARCE's Associate Director for Luxor. Since 2007, ARCE has been conducting a field school at the Temple of Khonsu, on the southern side of the great Amun Temple complex at Karnak.

Khonsu Temple was begun by 20th-Dynasty kings Ramesses III and IV, and continued by later rulers, and provides an excellent example of a small but complete Late New Kingdom temple. Here, conservation field school trainees, under Shearman's direction, are cleaning the walls in several chapels, and replacing old cement with lime mortar on the temple walls to ensure stabilisation.

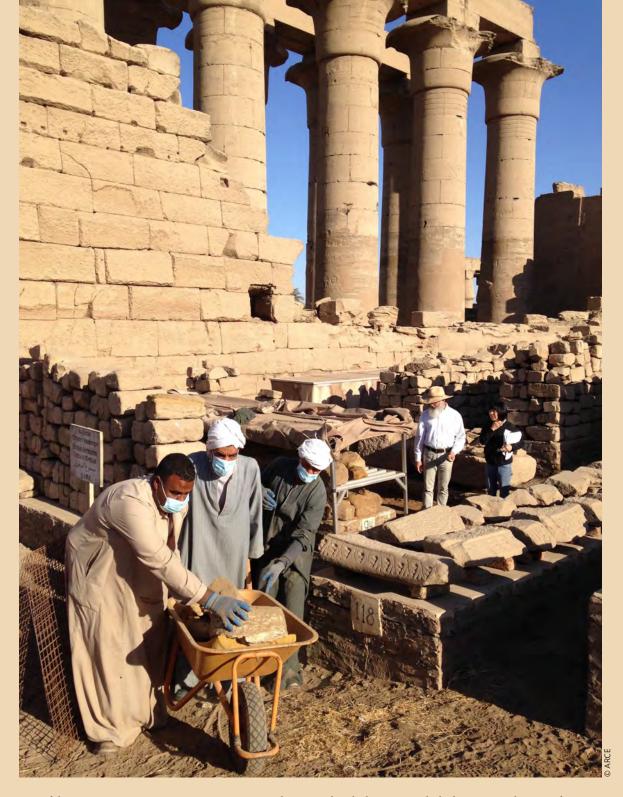
Cement had been used in the past to patch and reinforce walls. As John Shearman explained to NILE Magazine, the problem with cement is that it retains moisture much more than the native sandstone from which much of Khonsu Temple is constructed. This means that it expands and contracts differently to the surrounding stone, and, being much stronger, can cause the sandstone to crack. In contrast, lime mortar is more porous and behaves similarly to the temple's sandstone.

To support the Egyptians' capacity in caring for the monuments, ARCE provided local conservators with their first purpose-built, onsite conservation laboratory, located within the Karnak Temple precinct, near Khonsu Temple. While the interior is hi-tech, the exterior is clad with brick that is very similar to the Roman wall surrounding the complex, allowing the lab to blend into the area.

The ARCE field schools have been an important source of employment income for the Luxor region—particularly during the lean period following the Egyptian revolution. Financial help is shared around to as many families as possible by ensuring that only one person per household is involved in excavation work or in the field school.

New Discovery at the Temple of Khonsu

The cleaning and conservation work at the Temple of Khonsu has led to some important discoveries. It's long been known that the entire Temple of Khonsu was made from reused material; monuments from around Luxor that Ramesses III took down and reemployed for quick construction of the temple complex. Parts of the Memorial Temple of the 18th Dynasty's Amenhotep III were reused



One of the important projects ARCE is supporting is at the Luxor Temple Blockyard. The upper walls of the Temple's Colonnade Hall are mostly missing—quarried away in the medieval period when stone was needed for house, church, or mosque construction. With such a convenient quarry of cut stone, we are fortunate that more of the temple hasn't similarly disappeared over the centuries.

Excavations in the 1950s and '60s, which revealed the southern end of the sphinx-lined processional avenue linking Luxor and Karnak temples, also exposed hundreds of buried reused block fragments used as stone foundations. Excavators stacked the decorated blocks in dozens of rows on the ground around the temple for future study.

The next level of care began in 1999 when raised platforms were created (see above) to lift the sandstone fragments off the ground and away from groundwater and

salts which are particularly damaging to this type of stone.

Today, under the direction of Ray Johnson of Chicago House—the Egypt headquarters for the University of Chicago's Oriental Institute—a team is creating a database of blocks and fragments in the blockyard from the time of Ptolemy I. Next in line are the rows of blocks dating to the reigns of Amenhotep III and Amenhotep IV/Akhenaten.

In time, Chicago House aims to create a complete digital documentation of all 50,000+ inscribed pieces in the Luxor Temple blockyard. Following the massive job of documentation and conservation treatment, the plan is to restore as many blocks as possible back into their original positions.

The above photo shows local team members preparing blocks for photography. Pictured (from left to right), are Saoud, Sayid, Mohamed, Chicago House architect Jay Heidel and head conservator Hiroko Kariya.

TOMBOS A New Society on the Egyptian Frontier



In 2016 the Tombos Project discovered the intact New Kingdom shaft tomb of an elderly woman named Weret. To ensure that her heart would not betray her during the Netherworld's final judgment (and reveal any less-than-pure activity from her life), Weret was buried with an expensive artefact: a heart scarab.

This example was unusual, however, as it came with a human head.

Located on the southern frontier of the ancient Egyptian empire, a New Kingdom-era cemetery provides valuable new insights into the region's funeral customs.

Recent discoveries at Tombos in northern Sudan may change the way we think about the relationship and interactions between ancient Egypt and its Nubian neighbours.

The Tombos Project is also finding evidence of the long history of entanglement that began in the New Kingdom and led to the largest empire ancient Egypt had ever known.

Jeff Burzacott



The foundations of Siamun's pyramid; one of ten in the elite Tombos cemetery.

cm

A rectangular funerary "cone" belonging to the Tombos official, Siamun.

As soon as pyramids fell out of royal favour (at the start of the New Kingdom, around 1550 B.C.), wealthy nobles began to include mud brick pyramids as a part of their tombs. The practice quickly spread to Nubia as colonies were established, further and further south. The first pyramids at Tombos were built in the mid-18th Dynasty when the colony was founded, around the reign of Thutmose III.

In 2000 an expedition led by Stuart Tyson Smith uncovered the 3,500-yearold pyramid tomb and chapel of an Egyptian colonial administrator named Siamun, and his mother, "the Lady of the House", Weren.

Although the mudbrick superstructure has mostly disappeared, the pyramid once stood around ten-metreshigh—equal to the largest private pyramids in Nubia. "Our tomb owners," Stuart Tyson Smith states, "were important players in colonial society."

Smith says that "Siamun's pyramid is particularly interesting with its Theban style T-shaped chapel and full complement of funerary cones, including rectangular ones [left]... for himself and his mother Weren.

"These are almost exclusively Theban, which really suggests our guy was sent to Nubia from Thebes."

Funerary cones were set into plaster in a decorative frieze over the entrance to the tomb. The text on Simamun's (left) and Weren's cones read:

Siamun Weren

"Osiris, Scribe and Reckoner of the Gold of Kush, Siamun"

"Osiris, mistress of the house, Weren"

Both the size of his tomb and Siamun's titles reflect his importance in the Tombos bureaucracy. His title, "Reckoner of the Gold of Kush" meant that he was probably in charge of the collection of tribute from the rulers of the still-powerful city of Kerma, just a few kilometres to the south.

Private pyramids continued to be built through the end of the New Kingdom and into the Third Intermediate Period (at least one from the 25th Dynasty). Stuart Tyson Smith believes that it was these smaller, private pyramids that inspired the later Kushite slender-sided royal tombs, and not the Egyptian royal pyramids.

same time, she carried with her something with a distinctly Egyptian flavour: an amulet of the Egyptian household deity who scared away both evil spirits and physical dangers. Smith writes that "She was particularly fond of a rare dancing Bes amulet that had been broken in antiquity, yet was saved and included in her burial."

Near the body of another Nubian woman was a faience scarab carrying the name of Amenhotep III (ca. 1350 B.C.), and a scaraboid plaque featuring a scarab beetle beneath a sun disk, probably representing the Egyptian god of the rising sun (and hence rebirth) Khepri. Smith's conclusion was that "the care taken with her burial suggests she was not a slave, or even a servant, but rather a Nubian woman who had become a vital member of the colonial community through marriage with one of the colonists."

The Nubian-style burials mixed in with Egyptian-style reveal a much closer connection between the two societies than was previously suspected.

SPOILT FOR CHOICE

As they expected for a colonial town, Smith and Buzon encountered fully Egyptian burials with canopic jars, wooden coffins, and bodies wrapped in Egyptian style. They have also found evidence of Egyptian funerary rituals, such as broken red pots. These represented *isfet* (chaos), and ritually smashing the pot or jar had the effect of expelling any evil spirits that might threaten the deceased.

Alternatively, the researchers also found contemporary Nubians buried in Nubian style with no Egyptian influence whatsoever.

What has surprised the Tombos Project team is the extraordinary variety of cultural influences within burials at Tombos. Stuart Tyson Smith explains that "it's not just a matter of the two cultures mash up and then you get this new hybrid thing that's consistent. There seems to be a lot of individual choice— whether or not you want a Nubian bed and/or an Egyptian coffin and/or to be wrapped like a mummy or whether or not you want an Egyptian-style amulet and/or Nubian ivory jewellery."

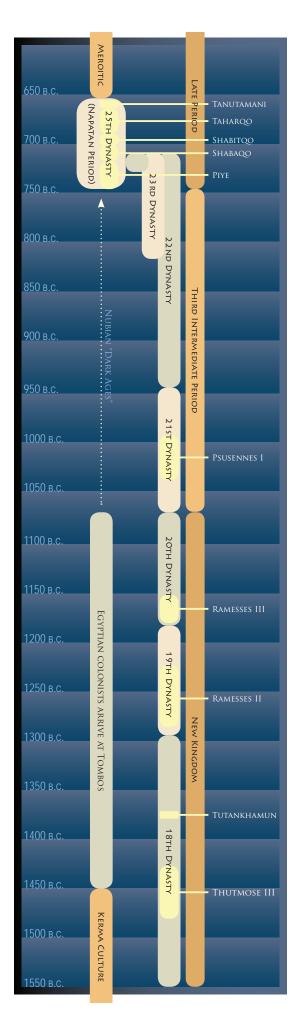
They call it "cultural entanglement": the process by which colonising powers and indigenous people influence one another and change over time.

It is here that we find that out on the frontier, far from pharaoh's political and religious rhetoric, the Egyptians and the "wretched Kush" were getting on just fine.

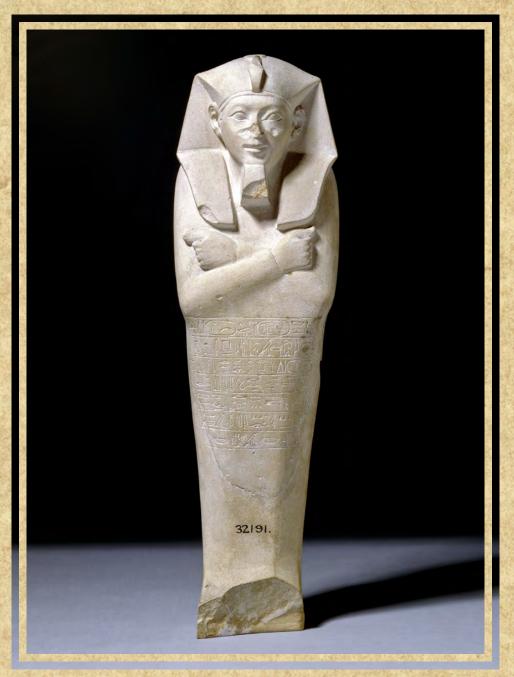
(RIGHT) The timelines of the Egyptian and Nubian royal houses intersect at the 25th Dynasty, where the Nubian Kings, from Napata (between the 3rd and 4th Cataracts), ruled over Egypt as well.

Egyptian arrivals at Tombos appear to have largely stopped by the end of the New Kingdom, around 1070 B.C., and the area enters what has been referred to as a "Nubian Dark Age", of which little has previously been known. Over the next 350 years the Napatan kings slowly grow in power and become a regional political and military force. Within a century they had pushed north and conquered Egypt, establishing the 25th Dynasty.

Perhaps its no surprise that the Napatan kings saw themselves as the true heirs to the Egyptian throne: they were, after all, probably part Egyptian.



AHMOSE: "LET MY PEOPLE GO."



Around 1550 B.c. a Theban prince was born in the midst of battle.

This was, no less, a battle for Egypt itself.

The prince's name was Ahmose, and history remembers him for driving out the hated Hyksos occupiers from the north, reunifying the Two Lands, and installing himself on the ancestral throne. Considered a seminal moment in the history of Egypt, this reunifica-

tion marks a watershed for a renaissance in the arts, economy and military might of Egypt. Ahmose's victory heralds the golden 18th Dynasty, It begins with the long-awaited victory over the Hyksos, which echoes a Biblical narrative, but in reverse.

SHARON HAGUE

THE 18TH DYNASTY

Once it was over, however, the kings of the next dynasty—the 19th—looked back with a dim view of over a third of their 18th-Dynasty forebears. It was time to rewrite history. The

offensive Amarna-era kings were excluded from official king lists (such as the one on the Second Pylon at the Ramesseum, below), as was Queen Hatshepsut's illegitimate reign.



Museum in Cairo—a grim testament to that time. Covered in axe wounds, hands raised as if to ward off blows, it is a sobering reminder of human conflict. While there is debate about how Tao II died—whether in battle or by execution—there is no doubt Hyksos axe marks cover the body and are a sign that Tao's confrontation with Apepi did not go the way he planned.

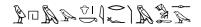
THE SECOND ATTEMPT

Following in his father's footsteps, Ahmose's older brother, Kamose, attempted to oust the enemy, and succeeded in making inroads to their cities and plundering their ships.

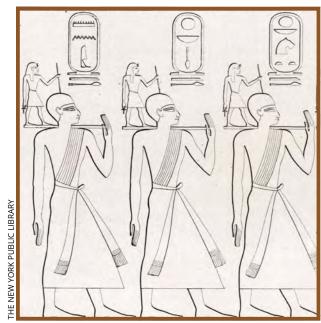
Kamose erected two stelae at Karnak Temple detailing his ongoing fight against the Hyksos. Here we learn that the devious Hyksos king had offered an alliance with Nubia to simultaneously invade Egypt from both the north and south:

"Come north! Do not hold back....There is none who will stand up to you in Egypt. See, I will not give him a way out until you arrive Then we shall divide the towns of Egypt."

At grave danger of being hemmed in and overpowered, Kamose launched a successful attack on the Nubians and thoroughly ruined Apepi's joint strike plans:



"Does your heart fail, O you vile Asiatic?"



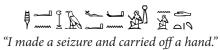
The decoration of the Second Pylon at the Ramesseum features a procession of statues of past pharaohs, held aloft by priests. Assembled together (above) are the revered founders of Egypt's three great eras (from left to right), Meni (Old Kingdom), Mentuhotep II (Middle Kingdom), and Ahmose I (New Kingdom).

This drawing was made around 1845 by German artist Otto Georgi on the Prussian expedition to Egypt and Nubia under Richard Lepsius.

later! While Ahmose fought, his mother Ahhotep, who acted as co-regent in the early part of his reign, continued to hold the reins of power. In gratitude, Ahmose dedicated to her a stela in Karnak Temple, where he praised Queen Ahhotep for her role in winning the war of liberation against the Hyksos:

"She has pacified Upper Egypt, and subdued its rebels...."

Much of what we know originates from the account of the king's namesake, Ahmose son of Abana (who used his mother's name to differentiate himself from his king). This Ahmose was a naval commander whose exploits spanned the successive reigns of Ahmose, Amenhotep I and Thutmose I, and was a highly decorated hero of his day. Part of the passage of his account reads, "When the town of Avaris was besieged I fought bravely on foot in his majesty's presence." His account of one skirmish with the Hyksos continues with a graphic description of battlefield accounting:



So, a lot of slaughter. As an interesting sidebar, Ahmose's mummy shows signs of arthritis. Since he did not die of advanced old age, one can surmise that he may not have been as active in battle as one might think. Certainly, he would have been present to direct the battle and to encourage his troops, although he may not have engaged in handto-hand combat.

Ahmose was also motivated enough to expand Egypt's borders. Not only did the southern Thebans expel the Hyksos, but they also invaded Nubia which held rich resources for the young dynasty. Egypt's royal family was now poised for a phenomenal stage in its history.

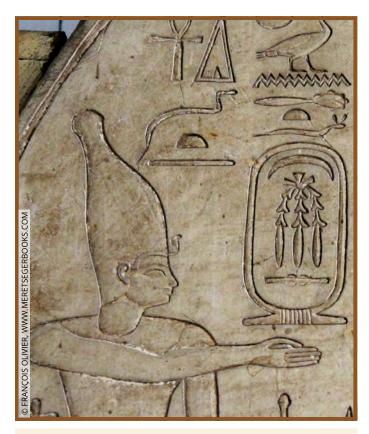
THE RISE OF THE 18TH DYNASTY

If Ahmose reunified Egypt, the Thutmosides expanded its borders. Thutmose III, popularly known as Egypt's greatest warrior pharaoh, pushed his armies to the Euphrates. Booty flooded into Egypt and much of it into temple coffers. Amun's priests at Karnak enjoyed gold, land and influence on an unprecedented scale.

More than one historian has noted that the oppressed Egyptians (if in fact they were under Hyksos reign), themselves became oppressors of foreign lands. We do not know if or when the Exodus occurred, but some have placed it in the 18th Dynasty when pharaohs waxed mightily and back-breaking building projects dotted Egypt.

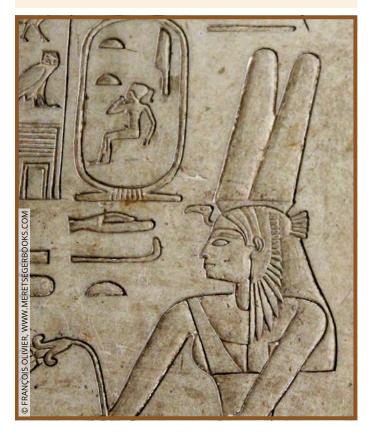
At the same time as the great temple of Amun was receiving unprecedented levels of support from tribute and war booty, there was a slow shift towards the sun. While the sun disk creator god, Aten, may have gained prominence in Akhenaten's time, solar devotion was rekindled in earnest some 50 years earlier when Thutmose IV erected his "Dream Stela" between the paws of the Great Sphinx. Thutmose saw in the Sphinx a powerful solar icon with the power to grant a divine mandate to rule.

As the 18th Dynasty progressed, Egypt reached its zenith as a political power. Amenhotep III-often dubbed "the Magnificent"—was as wealthy as Solomon and in charge



Around 600 metres from his Abydos pyramid, Ahmose erected a pyramid shrine to his grandmother, Queen Tetisheri. Inside was a large stela (details above and below) featuring Tetisheri wearing the queen's vulture headdress and her grandson presenting her with offerings. The text below the lunate describes how Ahmose planned to build for his grandmother a pyramid and temple near his. Ahmose clearly felt that this was an extra special effort:

"Never did earlier kings do the like of it for their mothers."



Arab Translators of Egypt's Hieroglyphs

Tom Verde

On September 27, 1822, 31-year-old Egyptologist and philologist Jean-François Champollion stood before the members of Paris' *Académie des Inscriptions et Belles-Lettres* and proclaimed that "after ten years of intensive research... we can finally read the ancient monuments."

HAVE... A FIRM BASIS ON WHICH TO ASSIGN a grammar and a dictionary for these inscriptions used on a large number of monuments and whose interpretation will shed so much light on the history of Egypt," Champollion informed his astonished audience.

Among those seated was Champollion's chief rival and former collaborator, English physician and polymath Thomas Young. Since parting company in 1815, Young and Champollion had engaged in a contentious race to unlock the tantalizing secrets of the hieroglyphs.

Yet the two linguists were competing in a race that had already been run by medieval Arab scholars and scientists. While Champollion's discoveries were groundbreaking at the Académie, previous European scholars were familiar with a 10th-century Arabic work attributed to Ibn Wahshiyya al-Nabati, an alchemist and historian from what is now Iraq. In his study titled *Kitab Shauq al-Mustaham fi Ma'irfat Rumuz al-Aqlam (Ancient Alphabets and Hieroglyphic Characters Explained)*, Ibn Wahshiyya exhorted, "Learn then, O reader! The secrets, mysteries and treasures of the hieroglyphics, not to be found and not to be discovered anywhere else... now lo! These treasures are laid open for thy enjoyment."

Egyptologist Okasha El-Daly of the Institute of Archaeology at University College London (UCL) points out that Joseph Hammer, an Austrian scholar who, in 1806,

translated Ibn Wahshiyya into English and published his work in London, mentioned in his introduction that French savants "were aware of the existence of Arabic manu-scripts on the subject of decipherment." Champollion's own teacher, Baron Silvestre de Sacy, was a famed professor of Arabic who produced several Arabic grammars and was among the earliest French scholars to attempt to translate the hieroglyphs.

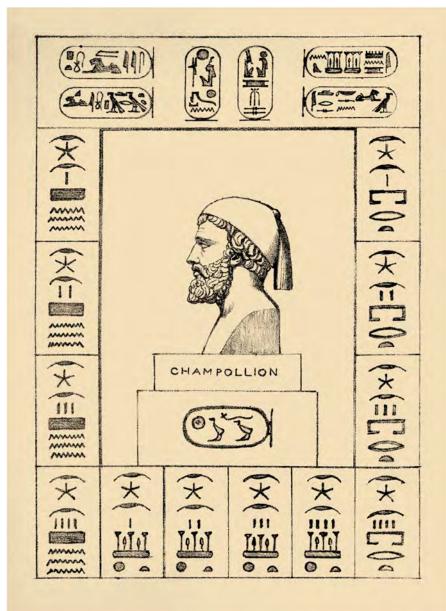
While Ibn Wahshiyya's work was familiar to de Sacy, who reprinted an edition in 1810, it is uncertain if its contents were known to his famous student. However, as El-Daly points out: "In his own letters to his brother, Champollion complained about the pain of having to learn Arabic so he must have thought it was of value in his research."

Though pharaonic Egypt is one of history's most enduringly popular periods among scholars, study of medieval Arabic texts concerning what we now call "Egyptology"—including the hieroglyphs—remains sparse. This attracted El-Daly's curiosity. "I read at a very young school age an encyclopedic work known as *Khitat* of the medieval Egyptian author al-Maqrizi, who died in A.D. 1440, in which he displayed a great deal of interest and knowledge of ancient Egypt. Yet when I started my formal Egyptology studies at Cairo University in 1975, I didn't see any reference to medieval Arabic sources," El-Daly says, "and I began to make my own inquiries."

(FACING PAGE)

Dr. Okasha El-Daly: "I came across a letter written by Jean-François Champollion to his older brother Jacques-Joseph, saying that he had to learn Arabic, complaining about it: 'I learnt Arabic to the point that it hurt my throat.' He must have found it important to him."

Medieval Arabic scholars took a keen interest in ancient Egypt. It may be that Champollion was looking for some insight into their scientific studies of Egyptian hieroglyphs.
On the left is a page from an 18th-century copy of a
13th-century book on alchemy called the Book of the
Seven Climes. The author has drawn inspiration from
an ancient Egyptian stela belonging to the 12th Dynasty's
Amenemhat II, erected over 3,000 years earlier. See page
37 for an explanation of the page's various elements.



THE EGYPTOLOGY LIBRARY OF PEGGY IOY

palaces, temples and tombs were awash in hieroglyphs rendered in the vibrant colours of the natural world: Nile blue, palm-frond green and the dusk-reddened sky of the western desert, where mummified pharaohs awaited their journeys into the afterlife.

"The beauty of the colouring of these intaglios no one can describe," observed Florence Nightingale on her visit

to the richly decorated tomb of Seti I in 1850. "How anyone who has time and liberty, and has once begun the study of hieroglyphics, can leave it till he has made out every symbol ... I cannot conceive."

(LEFT) The frontispiece from the third volume of Christian Bunsen's "Egypt's Place in Universal History", published in 1848 and dedicated to Champollion.

Bunsen was a German philologist and diplomat, and had met Champollion some 20 years

earlier (1826) in Rome. Champollion had arrived there to copy the inscriptions on the city's obelisks and was given access to the exquisite Vatican collection of Egyptian antiquities. He had earlier been granted an audience with Pope Leo XII, who had told Champollion that he had delivered "a beautiful, great and good service to the Church". The pontiff was particularly pleased that Champollion had been able to demonstrate that the famed Dendera Zodiac, which had arrived in Paris in 1821, was a product of Egypt's

Roman Period.

years old.

Today the Zodiac is thought to have been commissioned around 50 B.c., but in Champollion's day, some scholars believed it was up to 15,000 years old, which undermined the Church's belief

that the world was only 6,000

This illustration was made for Bunsen by Joseph Bonomi, an English artist who had recently returned from Richard Lepsius' Prussian expedition to Egypt. Bonomi was later appointed as curator of Sir John Soane's Museum—the home of Seti I's fabulous alabaster sarcophagus.

Historians and philosophers of the Classical Era were among the first to take up the challenge, including first-century B.C. historian Diodorus Siculus. According to Maurice Pope, author of *The Story of Decipherment: From Egyptian Hieroglyphic to Linear B*,

Diodorus was among the first "to suggest the ideographic nature of the hieroglyphs." Diodorus's supposition that hieroglyphs do "not work by putting syllables together... but by drawing objects whose metaphorical meaning is

His pursuit of early Arabic texts on Egyptian history—in both public and private collections, over two decades and across several continents—culminated in his 2005 discourse, *Egyptology: The Missing Millennium: Ancient Egypt in Medieval Arabic Writings*, published by UCL Press.

El-Daly's research raises intriguing questions: Were 9th-century Western scholars indeed the first to unveil the

"secrets" of the hieroglyphs, and to what extent were hieroglyphs already known to their medieval Arab counterparts?

The earliest hieroglyphs, dating to the end of the fourth millennium B.C., appear on pottery and ivory plaques from tombs. The last known inscriptions date from A.D. 394, at the Temple of Isis on the island of Philae in southern Egypt. "But the glory of hieroglyphs," observed the late Michael Rice, author of Egypt's Legacy: The Archetypes of

Western Civilization: 3000 to 30 B.C., evolved during the Old Kingdom (2686–2181 B.C.), achieving their highest level of development in the Middle Kingdom (2055–1650 B.C.). This was a monumental age when the walls of Egypt's



What Ibn Wahshiyya's classical predecessors did not grasp was that hieroglyphics are more than simple ideograms, that is, pictures representing concepts or ideas.

(BELOW) This 18th-century copy of alchemist Abu al-Qasim al-Iraqi's 13th-century Book of the Seven Climes reflects Arab interest in hieroglyphs, largely inspired by long-held beliefs that Egypt was a source of lost wisdom—a motive that was later shared by Europeans who sought to translate the symbols.

Al-Iraqi was an alchemist who was inspired by earlier Arabic alchemical and magical texts, as well as ancient Egyptian sources, believing that he could interpret and decode their mysterious symbols to reveal ancient secrets.

Egyptologist Okasha El-Daly was the first to suggest that one of al-Iraqi's sources was a stela erected for the 12th-Dynasty

king Amenemhat II. While al-Iraqi believed he was interpreting a secret alchemical process, he was inadvertently recording for posterity a pharaonic artefact that is now lost.

Elements from the Seven Climes page have been numbered and explained below, thanks to Bink Hallum, Arabic Scientific Manuscripts Curator at the British Library, and Marcel Marée, Assistant Keeper in the Department of Ancient Egypt & Sudan at the British Museum.

While some of the hieroglyphs have been creatively interpreted, most are legible enough to allow a partial recreation of Amenemhat II's stela (after M. Marée, 2016).

PAGE FROM THE BOOK OF THE SEVEN CLIMES.

PARTIAL RECONSTRUCTION OF THE NOW LOST MIDDLE KINGDOM STELA OF AMENEMHAT II.





- Al-Iraqi: "This (material) comes from what Hermes, triplicate in wisdom and crowned with grace, depicted symbolically in the Hidden Book.
- Al-Iraqi: "Eagle on a tree".
 Ancient model: possibly the vulture goddess Nekhbet perched on a lily.
- 3. Al-Iraqi: "The second eagle, with a golden beak."
 Ancient model: the bird and the 'rack' below may be based on a Horus falcon atop a royal serekh (a palace façade motif enclosing a king's Horus Name). Perhaps this image was inspired by an object bearing the name of the 1st Dynasty's King Aha, in which the falcon is shown clasping a mace.
- 4. Al-Iraqi: "Distillation furnace, and the sage operating".
- Al-Iraqi: "Raven of intense blackness".
 Ancient model: Horus falcon atop a serekh containing the Horus Name of Amenemhat II.
- Al-Iraqi: "Roasting".
 Ancient model: royal epithets "the great god, lord of the Two Lands (Upper and Lower Egypt)".

 Al-'Iraqi: "Maria's bath (bain-marie)".
 Ancient model: cartouche surrounding the throne name of Amenemhat II.

ģ

- 8. Ancient model: hieroglyphs stating that the pharaoh is "given life forever".
- 9. Ancient model: hieroglyphs stating that the pharaoh is "beloved" of a deity. On the original stela this word would have stood further to the left than al-Iraqi's illustration suggests, below the name of the deity in question.
- 10. Ancient model: two hieroglyphs from the name of Wepwawet, a jackal god.
- 11. Ancient model: hieroglyphs expressing divine blessings conferred on the king: "life, stability, dominion".
- Al-'Iraqi: "Bird with clipped wings".
 Ancient model: as yet uncertain, but the bird was a hieroglyph forming part of a deity's name or epithets.
- 13. Ancient model: one of two divine sceptres (symbolic of "dominion") that often support a heavenly vault shown at the top of royal inscriptions.



LESLEY JACKSON

The most commonly-depicted deity in the entire history of ancient Egypt is the falcon god, Horus Behdety

He appears above nearly every temple doorway as a winged sun disc (representing the union of Horus and the sun god), and in a large percentage of temple scenes in the form of a falcon hovering protectively above the king.

However, Horus Behdety was only one of a number of gods who took the form of the falcon. Curiously, while raptors were revered throughout the ancient world, the Egyptians focused on the relatively small falcon rather than the eagle beloved of other empires. In the second of her four-part series on bird symbolism (part one is in NILE issue #10), Lesley Jackson explores the appeal of the Divine Falcon.

(ABOVE)

This delicate inlay, 30 cm wide, is thought to have been made for the 30th-Dynasty pharaoh Nectanebo II (360–343 B.C.). The falcon may have presided over an elaborate inlaid scene on a large wooden shrine, appearing directly above the king or his royal cartouche, as protector and guarantor. It's not hard to see why this piece caught the eye of Lord Carnarvon, who purchased it—along with a collection of accompanying inlays—from a Cairo dealer in 1918.

METROPOLITAN MUSEUM OF ART. PURCHASE, EDWARD S. HARKNESS GIFT, 1926. ACC. NO. 26.7.991.



A black granite statue Horus of Behdet—one of the many manifestations of Horus —at the Temple of Edfu.

There were cities named Behdet in both Upper and Lower Egypt. The most famous is the large and well-preserved Ptolemaic Period temple at Edfu in Upper Egypt. Also named Behdet and dedicated to Horus was a temple at Tell el-Balamun in the Nile Delta.

It may be that having cult centres in Upper and Lower Egypt helped reinforce Horus' position as a national god, and the king's position as "Lord of the Two Lands".

Nekhen (Hierakonpolis) near Edfu may have been the original Predynastic cult site of Horus, known there as Nekheny. During the Old Kingdom, however, Horus of Behdet began taking over as the protector of the king.

NATURAL HISTORY

The members of the falcon family (Falconidae) show the same characteristics as all raptors; hooked bill, keen vision, strong flight, powerful legs and feet with curved talons. Two areas, in particular, characterise the falcons; their eyes and their method of hunting and this gave falcons great symbolic importance.

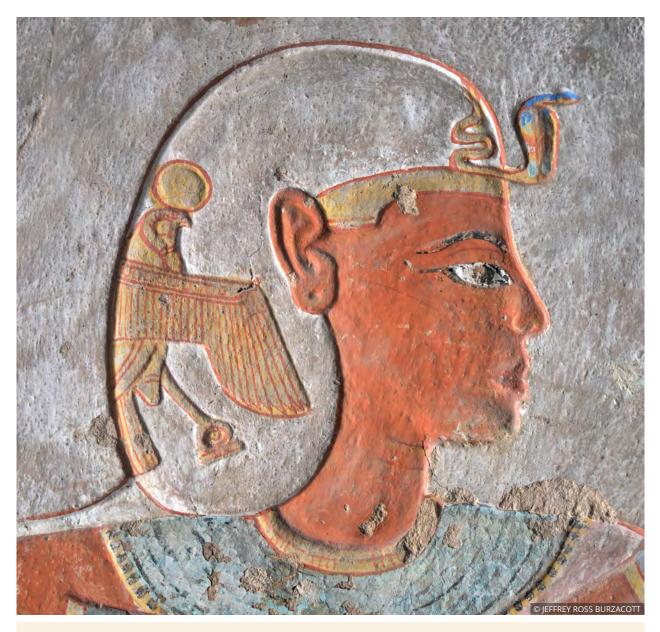
A falcon's wings are long and pointed, a shape fine-tuned for high speed and agility but which also allows them to soar with ease. Their wing muscles are powerful; in level flight they can reach speeds of up to 100 kph. They usually attack their prey from above in a rapid dive, often from a great height. The peregrine falcon can reach speeds of over 160 kph during its dive. At this speed, they usually kill their

prey on impact or at least stun it. Frequently they attack with the sun behind them.

Such a method of attack requires precision and the falcon's sensory and nervous systems operate at high speed. This gives them very fast reactions because their prey appears to move slowly.

A rapid focus is essential when chasing prey at this speed. Falcons have very large eyes and densely packed visual sensory cells resulting in a visual acuity four to eight times that of humans. It is believed that falcons can see both polarised and ultraviolet light and they have four different colour sensors compared to our three.

They are also excellent judges of distance, using head bobbing to aid this. Such technical facts might not have



Wrapped protectively around the back of Ramesses III's khat headdress is a small falcon bearing a sun disk. Because of the solar reference, this is likely a representation of Ra-Horakhty and a symbol of divine rebirth.

While no actual headdress bearing this sort of design have survived, it is believed to have been part of the actual headwear rather than an artistic device added afterwards.

This example continues a long tradition of the falcon god appearing behind the pharaoh or attached to the

back or top of crowns. A well-known example is the 4th-Dynasty diorite statue of Khafre (builder of the second pyramid at Giza), now in the Cairo Museum (CG 14). The sculpture portrays Khafre with a falcon perched on the back of his throne. The bird's outstretched wings curve around the king's head to show how Khafre has become Horus on earth.

The above image comes from the Tomb of Ramesses III's son, Khaemwaset (QV 44), in the Valley of the Queens.

Wings in general were associated with protection and the generation of wind and through that breathing. In vignettes depicting the conception of Horus, the Isis kestrel hovers over the mummy of Osiris. Isis is she "who creates air (for breathing) with her wings, who makes jubilation and revives her brother (Osiris)":

Keen observers of nature, the Egyptians linked the kestrel's distinctive hovering flight with Isis.

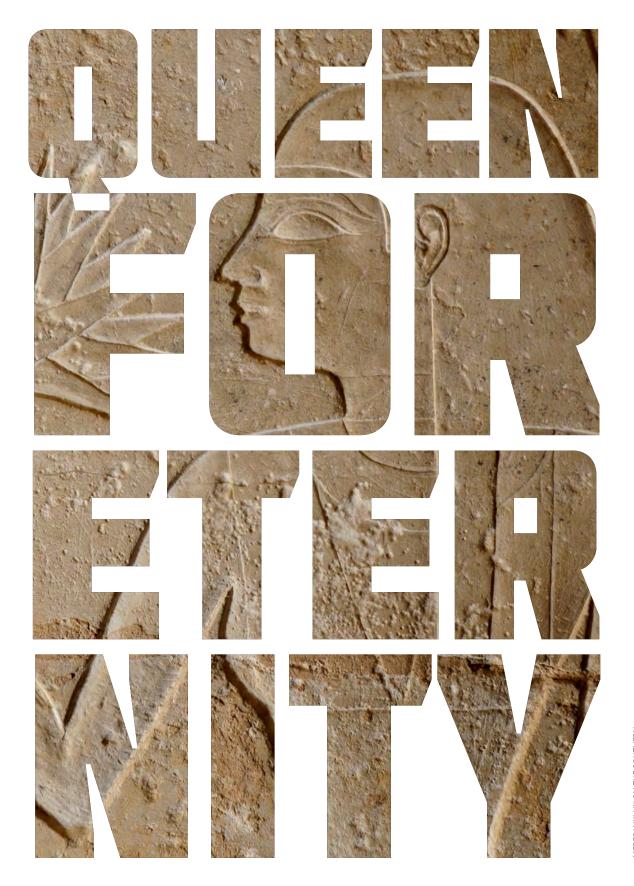
THE KITE

The kite is a type of hawk from the Accipitridae family. They wander the countryside in search of carrion and adapt well to human habitats. Two species have been suggested

from depictions of Isis and Nephthys; the Black Kite and the Chanting Goshawk. Chanting Goshawks are often seen hunting in pairs, alluding to the bond between Isis and Nephthys. They have a melodic song which may have suggested temple singers to the Egyptians.

As with the kestrel, Isis and Nephthys are depicted as kites in funerary scenes especially when they are mourning Osiris. They are often referred to as "the Two Kites".

Kites have a shrill piercing cry which suggested the wailing of mourners and their wanderings replicated those of Isis as she searched for the body of Osiris. Utterance 535 of the Pyramid Texts reads: "Thus said Isis and Nephthys: The screecher comes, the kite Comes, (namely) Isis and Nephthys; they have come seeking their brother Osiris, seeking their brother the King (Osiris)."



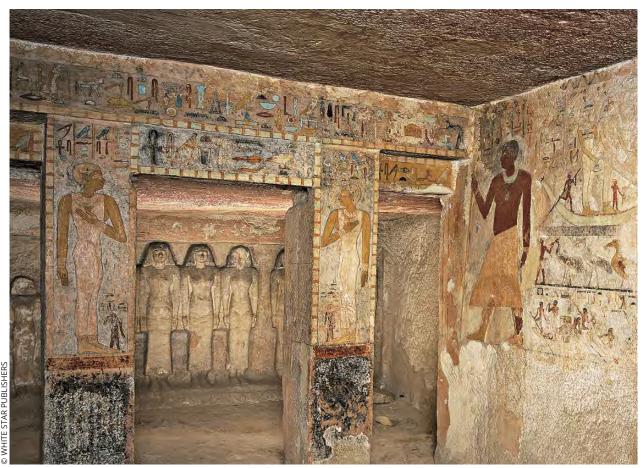
DIGITAL ARCHAEOLOGY AND THE (AFTER)LIFE OF MERESANKH III AT GIZA

MERESANKH III ON THE SOUTHERN DOOR JAMB TO HER TOMB. PHOTO © JEFREY ROSS BURZACOTT

RACHEL ARONIN

The Giza Project, Harvard University

On April 23, 1927, American Egyptologist George Andrew Reisner made one of the most spectacular discoveries in a forty-year career of spectacular discoveries.



A 2002 photo of the northern part of the decorated interior of the tomb of Meresankh III (G 7530-7540), looking from Room A into Room C, which has as its centerpiece a row of ten rock-cut female statues.

HE LONG-TIME DIRECTOR of the joint Harvard University-Boston Museum of Fine Arts (HU-MFA) Expedition to Egypt was finishing up the very last day of a nearly three-month long dig season at the Giza Plateau, five kilometres southwest of Cairo, when he uncovered an unexpected doorway on the eastern side of a large stone-built tomb. Designated G 7530-7540, the tomb was comparable to a number of such 4th Dynasty (c. 2575–2465 B.C.) monuments built in the so-called Eastern Cemetery at Giza, in the shadow of the Great Pyramid of King Khufu, for the famous ruler's immediate family members.

However, what made this new doorway so intriguing was that it was built, not into the eastern façade of the tomb as was normally the case, but rather under it,

reached by a pair of stairways descending about two meters from the street east of the structure. This entryway led downward to a subterranean offering chapel consisting of three magnificently carved and painted chambers. A shaft and burial chamber were sunk even more deeply into the bedrock. Reisner's astonishment as he first poked his head into the main room was similar to that felt by excavators at their first glimpse into the tomb of King Tutankhamen, discovered only five years previously.

As he wrote in a 1927 article published in the *Bulletin* of the *Museum of Fine Arts* (vol. XXV, p. 64) six months after his find: "Our eyes were first startled by the vivid colors of the reliefs and inscriptions around the northern part of this large chamber. None of us had ever seen anything like it."

HOW TO BUILD A (VIRTUAL) ANCIENT EGYPTIAN TOMB

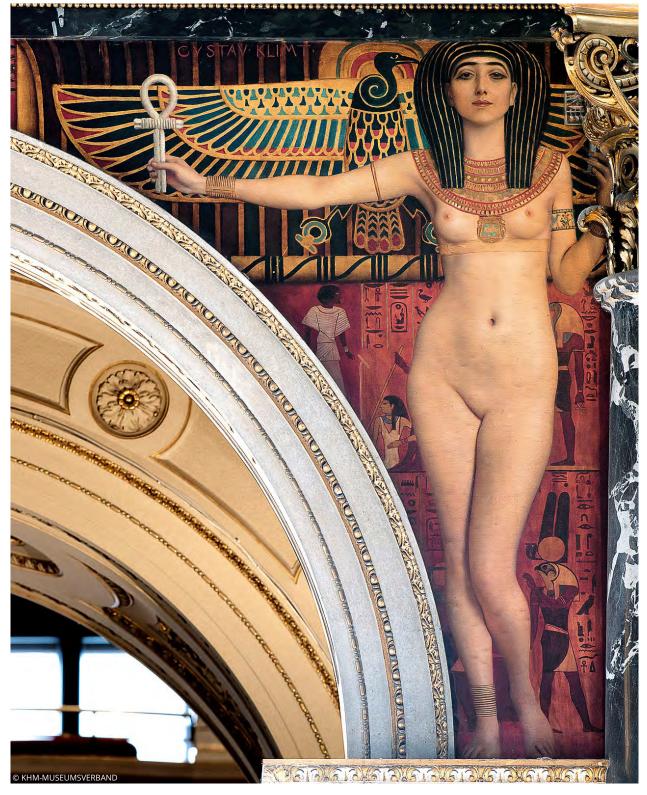
Working from archaeological plans and sections to construct the tomb's architecture, and examining 90-year-old black and white excavation photographs alongside more recent images and drawings for details of decoration and color, the Giza Project has built a digital model of the magnificent tomb of Queen Meresankh III.

The stages of creating the tomb model were probably fairly similar to those carried out by the ancient Egyptians themselves in constructing the original tomb. We may illustrate this process by examining the western wall of the main chamber. Firstly, a 3D framework of the interior tomb structure was built (top right), onto which the relief drawings of each wall were laid flat in outline. Next, the reliefs were modeled to give them depth. Some preliminary coloring was then applied to the walls and ceiling, including the layer of pinkish-tan plaster on the walls, into which the reliefs were actually carved (right, middle). Finally, the reliefs and hieroglyphs were meticulously painted to evoke the original polychromatic splendor of the tomb (below).









ANCIENT EGYPT I

Filling the spandrel of the central archway above the Museum's Main Staircase is a radiant nude figure—presumably a priestess. Her right hand clutches an ankh, the Egyptian sign of eternal life. Indeed, the figure appears to be benefitting from a healthy glow. Her left hand is holding what may be a sistrum—a ritual rattle.

In the background are elements of tomb and temple scenes. Klimt also seems to have happily brought together private tomb scenes (a noblewoman sits at the feet of her husband) and royal texts. While some of the groupings of hieroglyphs appear to have been chosen for style over substance (they don't make a lot of sense), others are fairly accurate. Cartouches containing the Birth and Throne names of the 18th Dynasty's Amenhotep III can be seen:

Klimt has given his priestess the same striated wig as that which adorns the coffin in the accompanying scene (opposite). Perhaps

the artist was pointing to the woman's inevitable earthly fate.

Needing reference material to paint a passable rendition of an ancient Egyptian coffin, Klimt turned to a contemporary source: the first catalogue of the Egyptian Museum in Cairo. It had been published in 1872 by Auguste Mariette, Egypt's first Director of Egyptian Monuments.

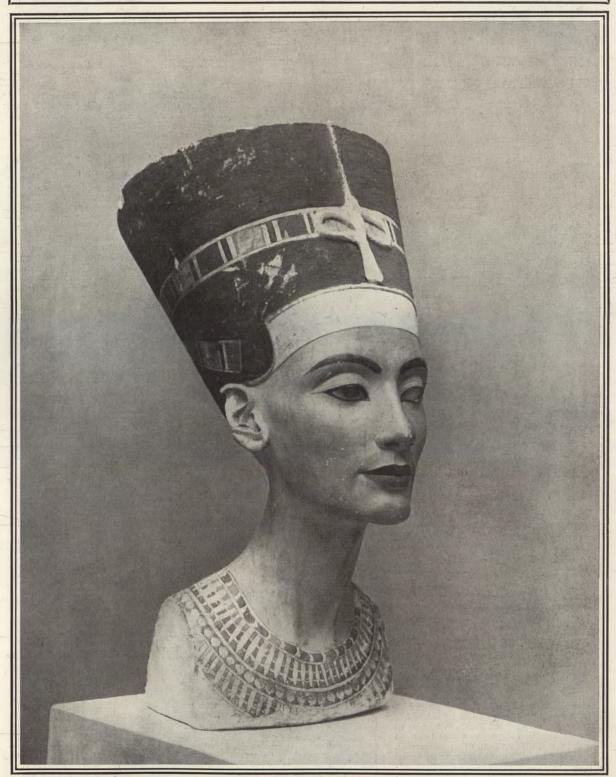
The commission for the Kunsthistorisches Museum gave Gustav Klimt the opportunity to paint a subject that he relished above all others: women, preferably in various states of undress or, as in our example above, full nudity. This personal inclination may be why Klimt drifted so conspicuously from Egyptian artistic convention. While women are often sensuously portrayed in tomb chapel scenes wearing barely-there diaphanous gowns (as an aid to male post-mortem arousal and hence, fertility and rebirth), usually only children, dancers and prisoners depicted in the nude.

AN ILLUSTRATED NEWSPAPER FOR THE HOME

Volume XCII. No. 1204.

Price One Shilling.

Postage { Inland 1 d.; Canada and Newfound- } London, February 17, 1923.



THE EGYPTOLOGY LIBRARY OF PEGGY JOY

THE WONDER HEAD OF EGYPTIAN ART-THE PORTRAIT BUST OF QUEEN NEFERTITI

We are now able to present to our readers, by courtesy of the editor of "The Manchester Guardian," this splendid work of Egyptian sculpture, made public for the first time in this country. It is now in Berlin, having been taken there from Tel-el-Amarna in 1912 by the German archæologists who had been working on the site of Akhnaton's sacred city. The crown alone identifies the head as that of the wife of Akhnaton, the "heretic" king. One hardly knows what to admire most—the modelling of the chin, the sensitive mouth, the ears, or the tapering neck with its muscles so admirably modelled. Further notes appear on a following page

NILE

BACK ISSUES

JUST LIKE YOU

WE LIVE, BREATHE AND DREAM ANCIENT EGYPT



Amazing **photography**. The latest **discoveries**. Smart **historical articles**. Purchase back issues by calling **01202 087629**, or head to *nilemagazine.co.uk*

SUBSCRIBE

DISCOVER ANCIENT EGYPT TODAY

Subscribe and receive every issue delivered to your door.



can vary slightly according to the current exchange rate.

Call our order hotline on +44 (0)1202 087629

Lines are open 9am–5pm, Monday-Friday (excluding bank holidays)

Or visit *nilemagazine.co.uk* to choose your subscription options and start your NILE time!

U.K. subscribers can now pay by Standing Order

Visit *nilemagazine.co.uk* or call **01202 087629.**



IS YOUR SUBSCRIPTION UP FOR RENEWAL?











Never miss an issue. You can now pay your Nile Magazine subscription with Paypal!

Your subscription *includes* postage and handling, delivered to you, anywhere in the world.