

# Archaeological Diggings

## SUNKEN CITIES

*Egypt's Lost Worlds*

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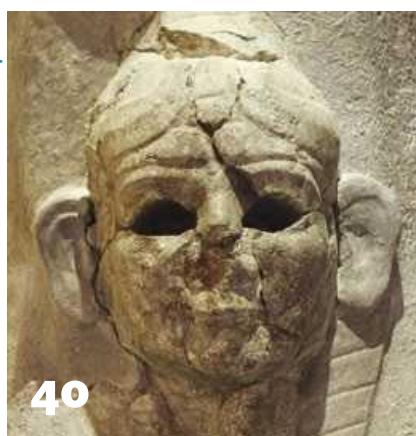
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**ON THE COVER:** A diver brings to light a colossal fourth century BC statue of red granite, 5.4 metres (18 ft) in height, representing the god Hapy, which decorated the temple of Thonis-Heracleion. Hapy was the god of the flooding of the Nile, a symbol of abundance and fertility, and has never before been discovered at such a large scale, which points to his importance for the Canopic region.

Photo: Christoph Gerigk—British Museum



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# Archaeological Diggings



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**EXECUTIVE PUBLISHER**

Kalvin Dever

**EDITOR**

Gary Webster

editor@diggings.com.au

**ASSOCIATE EDITORS**

Lee Dunstan, Melody Tan

**ADMIN ASSISTANT/SUBSCRIPTIONS**

Naomi Hurst

**COPY EDITORS**

Kerri Hillsdon/Tracey Bridcutt

**TOURS COORDINATOR**

Linda Thomas

LindaThomas@adventistmedia.org.au

**DESIGN AND LAYOUT**

Shane Winfield

**PRINTER**

Signs Publishing Company,  
Warburton, VIC, Australia

**AUSTRALIAN DISTRIBUTION**

Gordon & Gotch Australia  
Customer Service 1300 650 666

**ADVERTISING**

Info@diggings.com.au

**SUBSCRIPTIONS**

For subscription information or  
enquiries, write to:

ARCHAEOLOGICAL DIGGINGS  
Subscriptions, Locked Bag 1115,  
Wahroonga NSW 2076, AUSTRALIA

email: subs@diggings.com.au

call: 1800 240 543

fax: 1300 135 411 (Aus only)

If you are outside of Australia please call  
+61 2 9847 2222 Fax: +61 2 5619 2033  
or visit us online at [www.diggings.com.au](http://www.diggings.com.au)

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# A FINAL WORD

**K**ing Alaric, was a key person in European history. Born around A.D. 370, he became king of a group of nomadic, Germanic tribes called the Visigoths. In 395, he sacked the ports of Athens, Corinth and Sparta in Greece, then in 410, the city of Rome.

Following his successful siege of Rome, Alaric moved south through Calabria. However, following a high fever he died in modern-day Cosenza (ancient Consentia) in the toe of Italy.

For years the cause of death of this famous warlord nagged scholars. Now, after combing through historical, medical and epidemiological sources, researcher Francesco Galassi believes that it may have been a severe form of malaria that killed him, after becoming infected when he and his soldiers trooped through the marshy areas of southern Italy.

Having just returned from a three week ARCHAEOLOGICAL DIGGINGS lecture series in malaria-infected PNG, malaria has been on my mind, as, armed with repellent, I attempted to dodge malaria-carrying mosquito dive bombers.

While in PNG, I was pleasantly surprised at the deep impression the discoveries of archaeology, especially in the lands of the Bible, made on the minds of these exceedingly friendly people. And well might any thinking person be impressed by such discoveries. Aside from the confirmation of numerous places, events, cultural practices and religious beliefs mentioned in the Bible, some 50 biblical personalities have been confirmed in authentic inscriptions (see *Biblical Archaeological Review*, March/April 2014, pp. 46, 47). These include people in Egypt, Moab, Syria (Aram-Damascus), Israel (Northern kingdom), Judah (Southern kingdom), Assyria, Babylon and Persia.

Thanks primarily to the vision and passion of ARCHAEOLOGICAL DIGGINGS's founder and first editor David Down, for more than 20 years DIGGINGS shared insights of ancient historical research and discoveries of archaeology in general, and sought to inform readers of the historical veracity and reliability of the biblical record. I first met David in 1990 when he stayed in our home in Western Australia for two weeks while he conducted DIGGINGS seminars. Little did I realize then that I would one day have the privilege of being the editor of the magazine he founded.

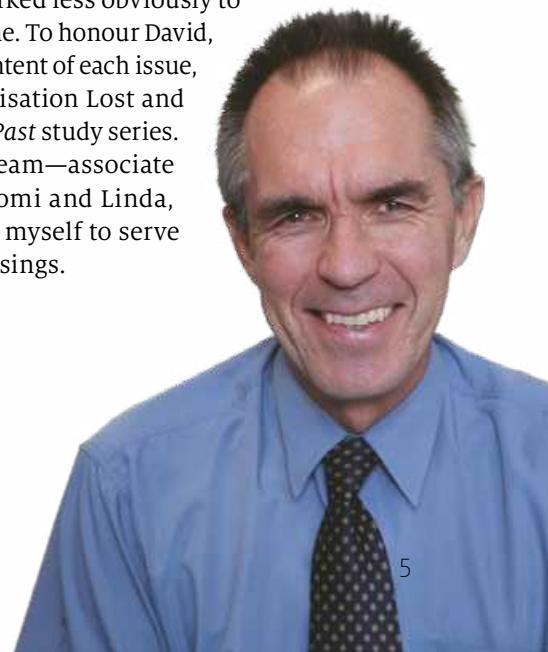
Sadly, now, as outlined in a letter to subscribers, this will be my last editorial and the last issue of ARCHAEOLOGICAL DIGGINGS, as, due to financial constraints we must suspend publication, although it won't be the end of DIGGINGS entirely, as outlined in "The Agora" (page 65). Simply put, costs overwhelmed our limited subscription and retail base.

So, on behalf of founder David Down and former editors David Coltheart and Michael Browning, I thank the many contributors to its pages over 22 years, along with those who have worked less obviously to create an attractive, informative magazine. To honour David, who contributed a huge volume to the content of each issue, we have included "The Hittites: A Civilisation Lost and Found" (page 40) one his *Digging Up the Past* study series.

It has truly been a privilege for our team—associate editors Lee and Melody, assistants Naomi and Linda, designer Shane, copy editor Kerri—and myself to serve you, and we wish you God's richest blessings.

*Gary Webster*

Gary Webster, Editor





**DANNY HERMAN**  
Israeli archaeologist  
and tour guide  
with a passion for  
sharing the history  
of his country with  
visitors.



## BURIAL INSCRIPTIONS FOUND AT SEPPHORIS

Sepphoris today is a large archaeological park located about 10 km (6 miles) northwest of Nazareth, in the lower Galilee, Israel. About 2000 years ago, Herod, and primarily his son Herod Antipas, transformed Sepphoris into a large regional city. Although never mentioned in the New Testament, Jesus must have known the city well, as He joined His parents there to attend the city's weekly market.

Sepphoris became a major Jewish cultural centre around the turn of the third century AD, when its famed resident, Rabbi "Judah the Prince," sponsored the codification of the Mishnah. Sepphoris was also the seat of the Sanhedrin Jewish juridical institution for a period of time, and at least nine rabbis mentioned in the Talmud were from Sepphoris.

Despite its apparent Jewish character, excavations of Sepphoris yielded little remains that can be attributed with

certainty to Jewish presence, and so far only one ancient synagogue was found at the site.

In 1950, a Jewish-Israeli village was founded over the area of the ancient Jewish cemetery of Sepphoris, and so occasionally residents of the village found in their plots remains of ancient burials.

Recently, the Israel Antiquities Authority (IAA) announced the discovery of another Jewish burial cave in the area, which had been found by locals.

Among the remains were three inscriptions, two in Aramaic and indicating the burials of rabbis, and one in Greek, mentioning a person named "Yossei" (Aramaic for "Joseph"). Most of the funerary inscriptions found in the cemetery were in Aramaic, indicating the common language of the region. This is in line with the common assumption that Jesus' first language was Aramaic as well.

**SEPPHORIS BURIAL INSRIPTION** Another Greek burial inscription of "Yossei," found recently in the ancient Jewish cemetery of Sepphoris. The name Yossei or Joseph is further indication to the popularity of this name in Galilee. Joseph was also the name of the (step-) father of Jesus of nearby Nazareth.





**DEAD SEA SCROLL FRAGMENTS** Thousands of the ancient scroll fragments shift from the conservation table to the virtual table in an ambitious collaboration aimed to make sense of 20,000 fragments of the manuscript that have baffled researchers for decades.

# THE DEAD SEA SCROLLS THE NEXT GENERATION

Dead Sea Scroll scholars and computer-science experts are embarking on a new collaborative research partnership with the aim of creating a dynamic virtual work environment for the study of one of the most important discoveries of the 20th century. The conservation laboratory of the Israel Antiquities Authority (IAA) in Jerusalem is dedicated to tending to thousands of approximately 2000-year-old scroll fragments. Almost 70 years since the initial discovery, ongoing technological developments now allow even more innovative analyses and insights into these ancient manuscripts.

The new project, costing €1.6m, is being funded by the Deutsch-Israelische-Projektförderung (DIP) and administrated by the Deutsche Forschungsgemeinschaft (DFG). Through the University of Haifa, Tel Aviv and Göttingen in cooperation with the IAA, the project will develop tools that will enable the creation and publication of a new generation of critical digital editions of the Dead Sea Scrolls, rich in information and updatable.

The dynamic research environment for studying the Dead Sea Scrolls will be achieved by linking the robust databases and resources of the project: the Qumran-Lexicon-project of the Göttingen Academy of Sciences and Humanities and the Leon Levy Dead Sea Scrolls Digital Library of the IAA.

The main outcomes of the project will be an enhanced hands-on virtual workspace that will allow scholars around the world to work together simultaneously, as well as a new platform for

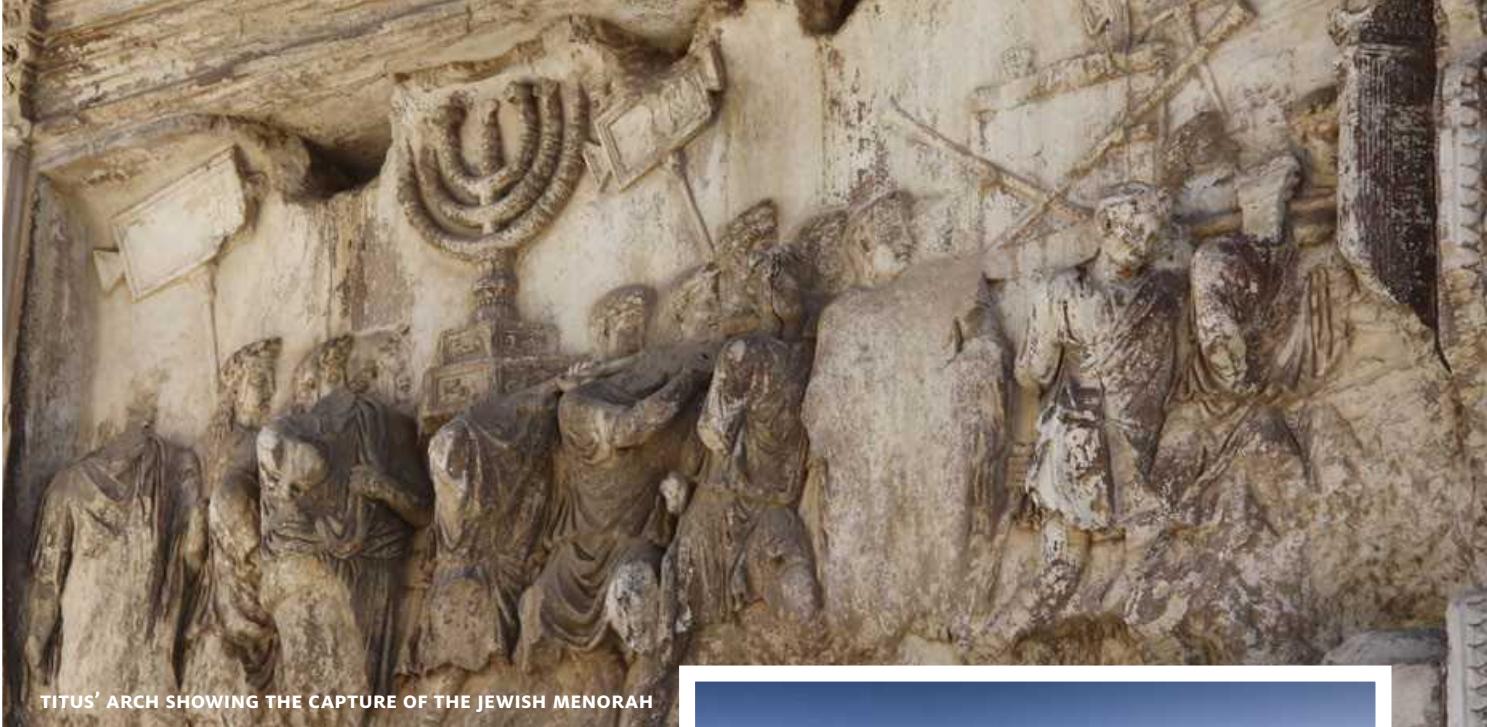
collaborative production and publication of Dead Sea Scrolls editions.

During the 1950s and early 1960s, thousands of scroll fragments were discovered, some of which were only tiny pieces. Since then, many researchers have been working on joining fragments to one another. Now, as part of the project, advanced digital tools will be developed for suggesting new joins. These tools will help researchers to identify connections between various fragments and manuscripts.

The environment will also offer palaeographic tools and an alignment tool connecting text and image that will enable simple transitions between the databases: readers will be able to access the original text of the scroll, up-to-date translations, high-resolution images, dictionary entries and parallel texts. All of these developments will be published on the IAA website.

**THE ADVANCED IMAGING TECHNOLOGY** the Israel Antiquities Authority has developed specifically for the scrolls, allows each fragment of scroll to be photographed in 12 different wavelengths of light, revealing previously undetected physical and structural detail.





TITUS' ARCH SHOWING THE CAPTURE OF THE JEWISH MENORAH

## FINDING THE MENORAH OF JERUSALEM

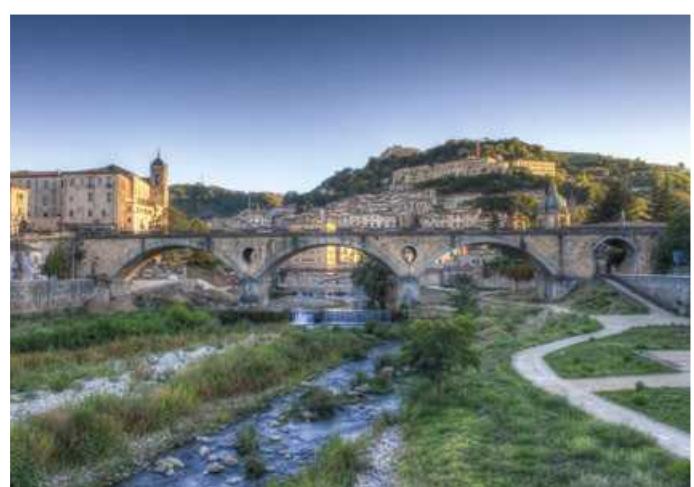
The summer of the year AD 70 marks one of the worst catastrophes in Jewish history. A Roman force suppressing a Jewish rebellion conquered Jerusalem, killed and enslaved most of its residents, sacked the Temple and its treasures and destroyed it. The spoils and the slaves were later presented in triumphal procession in Rome, and to this day one can see the relief inside "Titus' Arch" echoing this event.

The temple utensils were later deposited in the Temple of Peace erected by Vespasian in Rome's forum, but what happened to the items later is less certain. Centuries on, in AD 410, Alaric I, king of the Visigoths, captured Rome, and for three successive days looted it.

However several months later, Alaric died when passing through Cosenza, a city 550 km (350 miles) south of Rome. Historian Jordanes records that his burial, with much of his wealth, was set at the confluence of the Busento and Crathis rivers. The water was diverted to enable the creation of a tomb large enough for Alaric, his horse, and "many treasures" amassed from his conquests. Once the tomb was completed, the river was returned to its original route, and to ensure the location of the tomb would not be known, Alaric's troops killed all the captives involved in the project.

Indeed, no sources record the tomb ever being found, although various attempts were made to retrieve it, including by the Nazis in 1937.

In 2015 the mayor of Cosenza, Mario Occhiuto,



**ALARIC BRIDGE** over the river Busento in Cosenza, Italy. An Italian research team is searching this river for the famed tomb of Alaric.

announced a new interdisciplinary research project that would attempt to track down the famed tomb. Drones, ground-penetrating radar, infra-red technology and electromagnetic instruments will all be used by experts of different fields in the hope of locating the tomb and its legendary wealth.

"The latest technology will be used to track rectangle-shaped anomalies beneath the riverbed," said Amerigo Giuseppe Rota, the geologist leading the project.

By matching historical sources with the local geography, five sites along two kilometres of the Busento River were suggested to be the location of the tomb.

The project began in October 2015, and as of publication, nothing had been found, but my personal expectations are high. Ancient royal tombs have been found in the past (such as in Troy and in Egypt), and it is a possibility the tomb of the famous looter of Rome, with its wealth, including the Jewish Menorah, could be found.

# DANNY HERMAN

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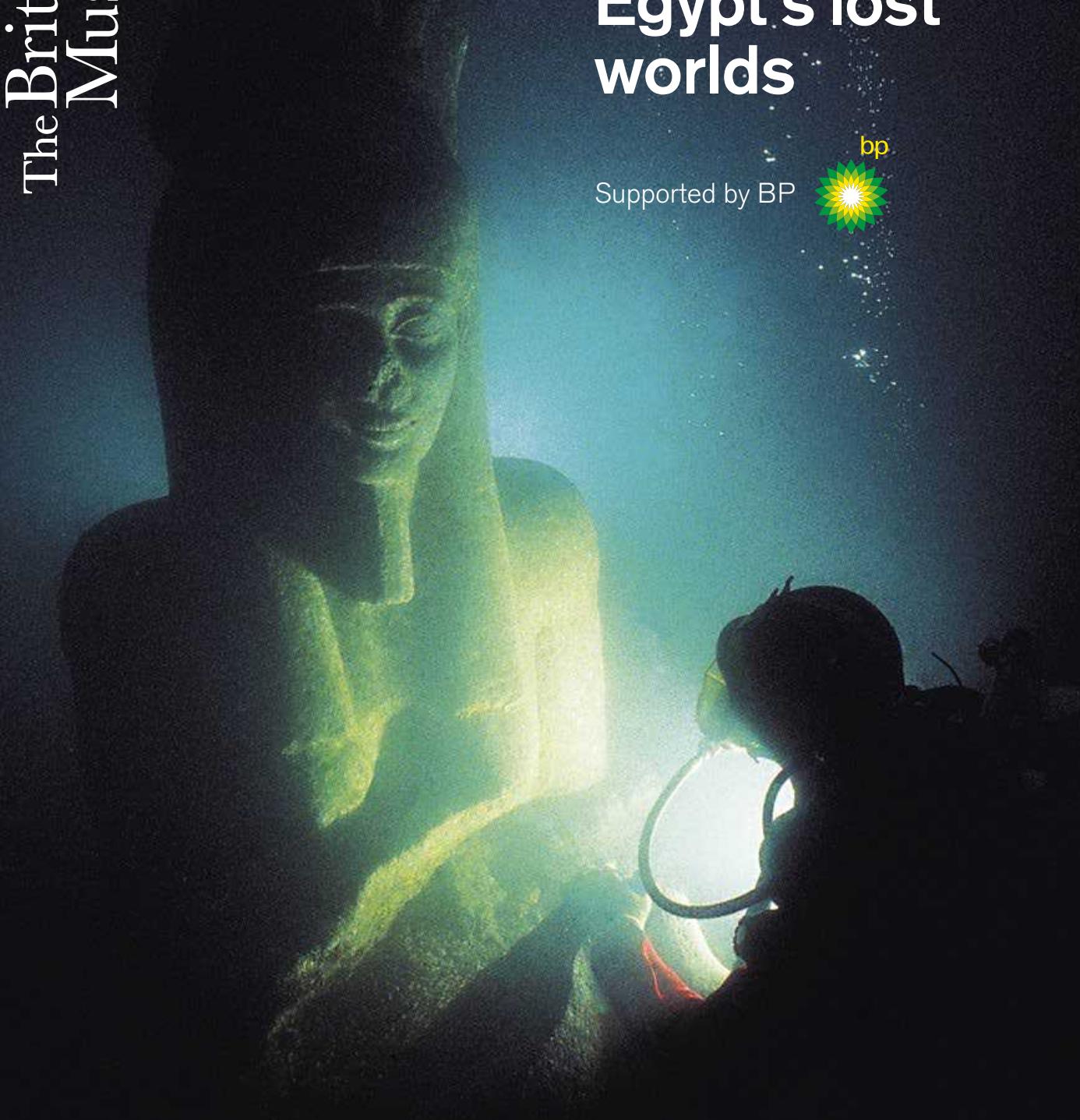
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*The Daily Telegraph*

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# Sunken Cities of the Mediterranean

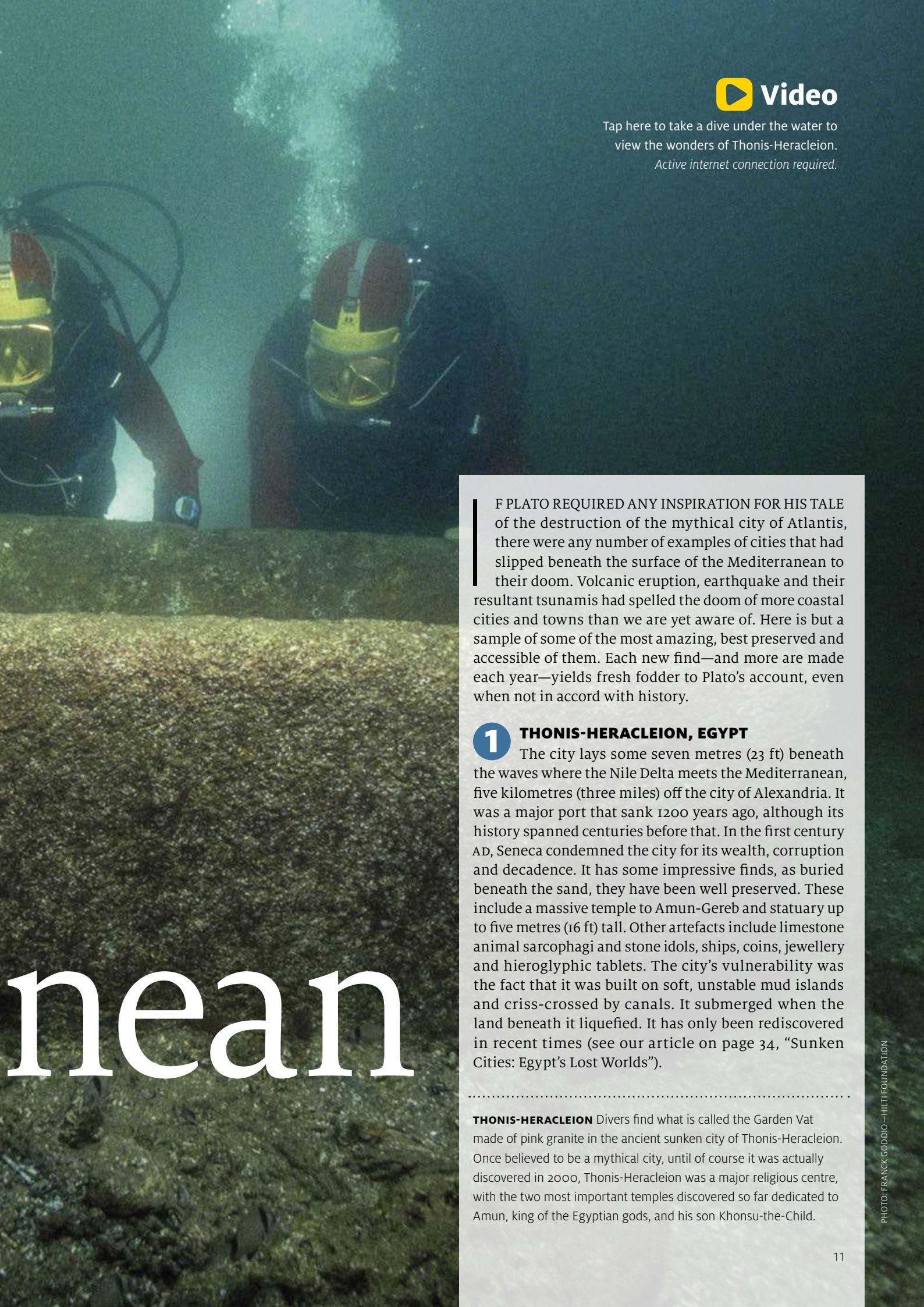
Volcanic eruptions, earthquakes and their resultant tsunamis have spelled the doom of many coastal cities and towns. **Richard Stone** samples some of the most amazing and best preserved sunken cities.



Tap here to take a dive under the water to

view the wonders of Thonis-Heracleion.

Active internet connection required.



# nean

If PLATO REQUIRED ANY INSPIRATION FOR HIS TALE of the destruction of the mythical city of Atlantis, there were any number of examples of cities that had slipped beneath the surface of the Mediterranean to their doom. Volcanic eruption, earthquake and their resultant tsunamis had spelled the doom of more coastal cities and towns than we are yet aware of. Here is but a sample of some of the most amazing, best preserved and accessible of them. Each new find—and more are made each year—yields fresh fodder to Plato's account, even when not in accord with history.

## 1 THONIS-HERACLEION, EGYPT

The city lies some seven metres (23 ft) beneath the waves where the Nile Delta meets the Mediterranean, five kilometres (three miles) off the city of Alexandria. It was a major port that sank 1200 years ago, although its history spanned centuries before that. In the first century AD, Seneca condemned the city for its wealth, corruption and decadence. It has some impressive finds, as buried beneath the sand, they have been well preserved. These include a massive temple to Amun-Gereb and statuary up to five metres (16 ft) tall. Other artefacts include limestone animal sarcophagi and stone idols, ships, coins, jewellery and hieroglyphic tablets. The city's vulnerability was the fact that it was built on soft, unstable mud islands and criss-crossed by canals. It submerged when the land beneath it liquefied. It has only been rediscovered in recent times (see our article on page 34, "Sunken Cities: Egypt's Lost Worlds").

**THONIS-HERACLEION** Divers find what is called the Garden Vat made of pink granite in the ancient sunken city of Thonis-Heracleion. Once believed to be a mythical city, until of course it was actually discovered in 2000, Thonis-Heracleion was a major religious centre, with the two most important temples discovered so far dedicated to Amun, king of the Egyptian gods, and his son Khonsu-the-Child.



**4 EXCAVATIONS AT ANCIENT HELIKE.** The city was discovered on the shoreline of a dried lagoon, rather than in the Mediterranean proper. Some think that the city's destruction may have been Plato's inspiration for his tale of Atlantis.

## 2 BAIAE, BAY OF NAPLES

Beneath the Bay of Naples lies a dormant volcano, which over a vast period has at intervals impacted places as far away as Eastern Europe. In the sixteenth century AD, its activity caused the city of Baiae to sink beneath the waves of the Mediterranean. In its heyday, Baiae was a seaside resort on the Bay of Naples frequented by the likes of Julius Caesar, Caligula, Nero and Cicero. It was a luxurious spa town, infamous for its hedonistic lifestyle: its mineral hot springs were fuelled by the very volcanic activity that would later seal its fate. In the eighth century AD, the city fell prey to Arab pirates, but it was something far less romantic or sensational that led to its demise. The blight of malaria saw it long abandoned before its submersion. The waters of the shallow bay closed over most of the city, leaving extensive ruins and statuary hidden unknown for centuries. It now forms part of an underwater archaeological park, which can be explored today. Visitors view the crumbled structures and preserved statuary through glass-bottomed boats, snorkelling, and scuba dives allow people to swim amidst the submarine ruins. Some items excavated on site are preserved at the town's archaeological museum.

## 3 PHEIA, GREECE

Pheia was a small city on the west coast of Greece located on an isthmus connecting the mainland with the Cape of Katakolon. It was conquered by Athens during the Peloponnesian War and became the headquarters of its shipping military supply lines. Unfortunately, it sat in a seismically active area and in the sixth century AD an earthquake saw the city slide into the sea. Today, it lies five metres (17 ft) below the surface. Building remains,

prehistoric pottery and coins are among the many finds made there. In addition to the sunken deposits two Cycladic marble figures from the Bronze Age have been found on the headland, as well as the remains of Roman buildings and tombs on the island of Tigani.

## 4 HELIKE, GREECE

The site of the ancient Greek city of Helike was lost to all but legend for many centuries, as searches of the Bay of Corinth proved unsuccessful. What was known was that in 373 BC, an earthquake and tsunami saw it submerge with little warning. The city was lost for centuries until recent times, when it was discovered on the shoreline of a dried lagoon—rather than in the Mediterranean—which is why it was not found. The city had in fact been visible beneath the waters of the lagoon for 500 years following the disaster; its walls and a statue of Poseidon forming an ancient tourist attraction. But what remained of the site was eventually buried by river siltation.

Its location was eventually confirmed in 2012, discovered beneath later Greek and Roman settlements. Copper coins from the fifth century BC showed the image of Poseidon on one side and his trident on the reverse. Evidence of an even earlier Bronze Age settlement almost 5000 years old has also been uncovered deeper beneath its ruins. Some have thought that the city's destruction may have been Plato's inspiration for his tale of the fate of Atlantis as it was a contemporary event.

## 5 PAVLOPETRI, GREECE

Pavlopetri is named for the small, modern town that lies near this ancient city site, situated off the southern coast of Greece in about four metres (13 ft) of water.

**7** **ATLIT YAM** is regarded as one of the earliest and best-preserved prehistoric settlements of the Mediterranean coast. At the centre of the settlement are these seven stone megaliths (one to two metres high), weighing up to 600 kilograms each, arranged in a semicircle.



**2** **BAIAE** One of many preserved statues in the sunken city of Baiae in the Bay of Naples. Today the ancient remains can be visited in one of the world's few underwater archeological parks.



## Video

Tap here to view the underwater city of Baiae. Active internet connection required.



**1** **THONIS-HERACLEION** A monumental granite statue of a pharaoh from the fourth century BC in the submerged temple of ancient Thonis-Heracleion. While it is unclear how and exactly when the city sank into the sea, the discoveries at Egypt's primary customs port have been astounding.



**6 THE SUNKEN CITY OF OLOUS, CRETE**, situated off the present day town of Elounda. It is thought to have existed as far back as Minoan times. Once a powerful city-state with a stable government, the only visible remnants of the city today are some scattered wall bases.

Disaster struck the Early Bronze Age city some 3000 years ago; its demise possibly due to an earthquake and resultant tsunami. Before its destruction it had thrived as a hub of human activity for 2000 years. What remains is evidence of a road system, a scheme of channels and water pipes, double-storey dwellings with private gardened courtyards, temples, a cemetery and an 800-m<sup>2</sup> plaza. It was an apparently sophisticated civilisation with officials, scribes, merchants, potters and bronze workers, farmers and shepherds, soldiers and sailors among its citizenry. There are many small artefacts in situ, which testify to its long history.

### **6 OLOUS, CRETE**

Olus was one of the many cities of Crete mentioned by Homer, and finds from this sunken city confirm its history stretches back further to Minoan times. Vritomartis, a mermaid goddess of Minoan origin, was revered there until Roman times and coins have been found showing the image of Zeus. The city was populated at different times for extended periods. While there have been more ancient finds at the site, its heyday was in the eighth century AD, before becoming an impracticable capital because of Arab piracy. It experienced a resurgence in the fifteenth century when the Venetians constructed salt pans in the area and the site became commercially viable once again. It was a Greek city of 30–40,000 people at the time of its destruction. It lies in shallow water in Poros Bay, where part of the city wall is visible above water at low tide. Its foundations, built on the sand of the foreshore rather than the limestone rock formations, spelled its inevitable demise when an earthquake precipitated it into the sea.

### **7 ATLIT YAM, ISRAEL**

Atlit Yam lies about a kilometre off the coast of Israel near Haifa, lying in 12 metres (40 ft) of water. It is regarded as one of the earliest and best-preserved prehistoric settlements of the Mediterranean coast. The site is said to date from the late Neolithic era, and there are artefacts of stone, bone, wood and flint. It is regarded as a village rather than a city; nevertheless the finds are impressive. They include large stone houses, paved floors, courtyards, fireplaces and grain storage as well as the remains of prehistoric flora and fauna, including both domesticated and wild animals, and seeds from domesticated wheat, barley, lentils and flax. A stone-lined well is preserved, as are stone altars, and an impressive stone circle still stands around what had been a fresh water spring. Skeletons excavated from graves reveal cases of malaria and tuberculosis. Expert opinion is divided over the cause of the village's demise, however one theory posits that a tsunami caused by the collapse of a side of Mount Etna, may have inundated many coastal settlements, Atlit Yam among them.

The presence of these submerged cities lost beneath the sea indicates how vulnerable coastal sites really are to the vagaries of nature over time. The earth is not as stable as one might like to think. Contemplate the liquefaction and sinking of Christchurch, New Zealand, in very recent times, for example. Coastlines quite often sink (and sometimes rise, such as at Napier, New Zealand) in zones adjacent to tectonic plate activity.

And these sites are but some of many to whet a scuba-diving reader's appetite. So when next in Europe, plan to visit some of these fascinating sites. ♦



# A Handbook for the RECENTLY DECEASED

Dying in ancient Egypt was a complicated process. **Suzette Hartwell** gives a summary of the rules and regulations governing transfer to the afterlife.

N THE 1988 MOVIE *BEETLEJUICE*, THE RECENTLY passed protagonists Barbara and Adam read from a book called “Handbook for the Recently Deceased” as their guide of what to expect in the afterlife. Although an important prop in the movie concept, the concept itself isn’t new. The ancient Egyptians took the idea seriously enough that they wrote books, spells, texts, even made a map of the afterlife showing the route to take and explanations of the realm and recorded it on tomb and temple walls, papyrus, mummy wrappings and directly to sarcophagi. These books were an evolving form of Egyptian

funerary texts, guiding and protecting the deceased as he or she travelled through the afterlife and may have included the reciting of specific spells at certain hours of the night or at guarded doors to gain safe passage.

The earliest funerary writings are the Pyramid texts beginning in the Old Kingdom (2686–2181 BC) from the pharaoh Unas (also known as Wenis) of Dynasty V and were located in the pyramids of the rulers at Saqqara during this era. However by the end of the Old Kingdom, some non-royal tombs were being decorated with various sections of the pyramid texts as well. Their use was not

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**THE INSCRIBED WALLS OF THE PYRAMID OF UNAS** Unas was the first pharaoh to decorate a pyramid tomb with text—having magic spells inscribed on the walls intended to assist with his journey through the afterlife. The concept soon evolved into the Coffin Texts of the Middle Kingdom, and then into the “Book of the Dead” from the beginning of the New Kingdom.



**THE WEIGHING OF THE HEART RITUAL**, from the famous chapter 125 of “The Book of the Dead.” This chapter lists the denials of wrongdoing, and illustrates the god Osiris, ruler of the dead, weighing the heart of the dead individual. The “Book of the Dead” is a contemporary term for about 200 compositions, which were assigned numbers in 1842 for reference purposes.

limited to the Old Kingdom, as they were included in the pyramids of the three queens of Pepi II in Dynasty VI. The ruler of Dynasty VIII, Ibi, also had them included in his pyramid for the safe traversing of the celestial road to the afterlife. The use of pyramid texts was omitted during the Middle Kingdom (2040–1782 BC), as pyramids were not inscribed at this time. However in Dynasty XII of this era, the mastaba of Senwosret-Ankh included the account as found in Unas’s pyramid. Into the Late Period, spells of these texts can be found on sarcophagi and tombs.

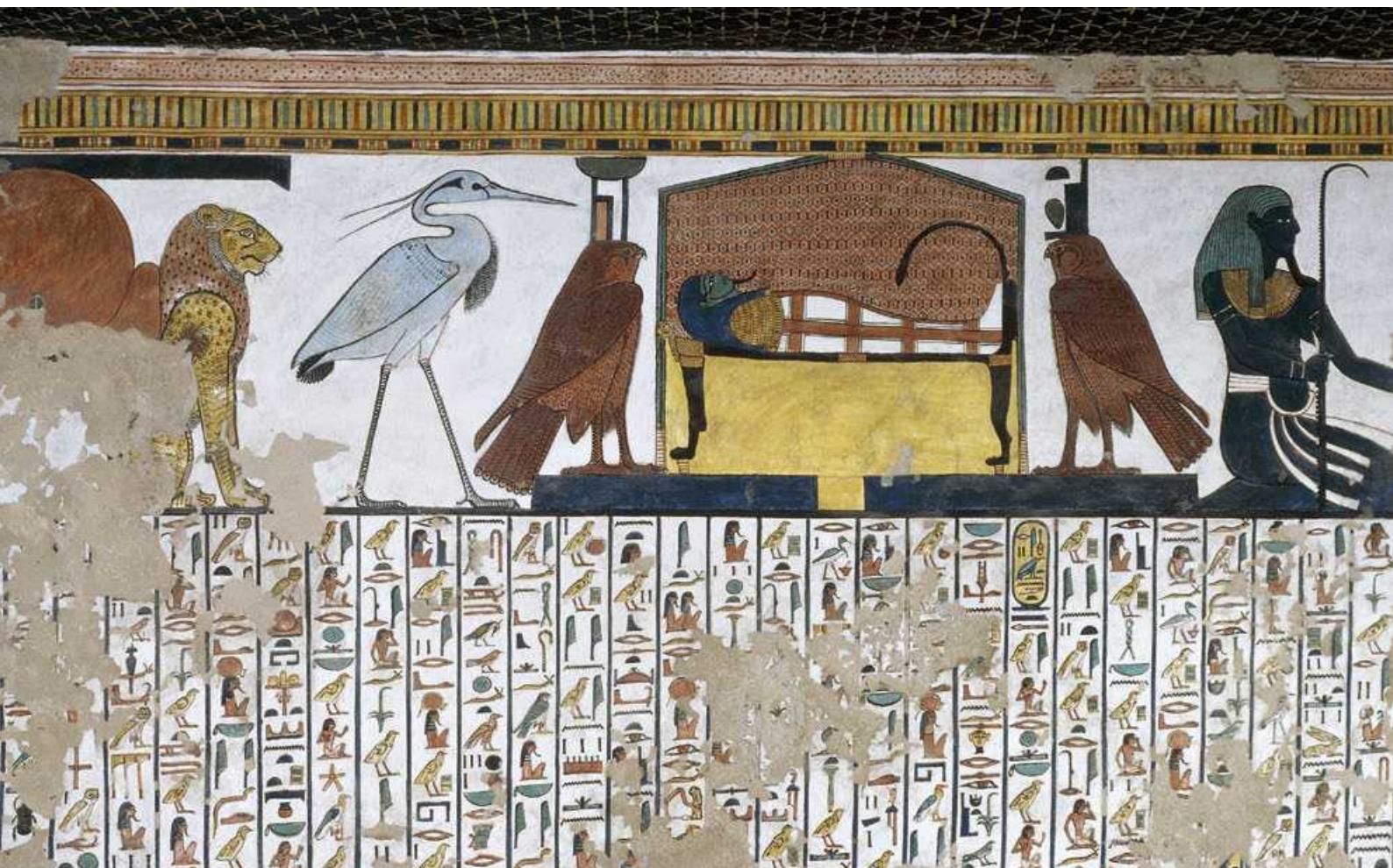
These carved incantations were separated by means of a vertical line and introduction, and have been classified into 228 “utterances” that are formed within three basic components—the reanimation of the deceased from death, the ascension to the sky and finally, acceptance as one with the gods. Coloured green to represent rebirth, the hieroglyphs were positioned in the antechamber, burial chamber and corridors. One of the wonderful aspects of hieroglyphs can be a tangible connotation even if you don’t understand the words. As the purpose of these spells was to ensure the protection and resurrection of the ruler and his ascent into the afterlife (in the sky), the use of key imagery is significant. The metaphors are clear—a ramp to the sky where clouds, tempest storms, the sun, birds, locusts and beetles aid transport all form part of the corpus of these incantations. A prominent god

named was Shu, holding up the sky. It’s like the ancients were saying, “This is the way to the afterlife! Rise above and we will help you!”

Carved onto the sarcophagus chamber wall of the pharaoh Unas are the utterances describing Unas alighting to the sky to the sun god. It reads in part:

*Re-Atum, this Unas comes to you,  
A spirit indestructible  
Who lays claim to the place of the four pillars!  
Your son comes to you, this Unas comes to you,  
May you cross the sky united in the dark,  
May you rise in lightland, the place in which you shine!  
Seth, Nephthys, go proclaim to Upper Egypt’s gods  
And their spirits:  
“This Unas comes, a spirit indestructible,  
If he wishes you to die, you will die,  
If he wishes you to live, you will live!”. . .  
Re-Atum, your son comes to you,  
Unas comes to you,  
Raise him to you, hold him in your arms,  
He is your son, of your body, forever!  
(Lichtheim, M., 1975, pp.30–32)*

Coffin Texts progressed from the earlier pyramid texts and date to the Middle Kingdom and were mostly decorated on coffins, hence their name, but examples have been



**CHAPTER 17 OF THE BOOK OF THE DEAD**, fresco, from the Tomb of Nefertari (QV66), chief royal wife of Ramesses II. From the left there are two lions with the symbol of Atum, the Bennu bird god, the mummy of Nefertari protected by two falcons, symbols of the goddesses Isis and Nephthys, and the genius of the Nile kneeling. Chapter 17, one of the longest individual compositions in the “Book of the Dead,” identifies the deceased individual with the creator-god and promises the formulae for elevation and transfiguration.

found on papyri, mummy masks, canopic chests and on tomb walls. They were designed for all deceased persons, not just royalty, and included the new concept of reunion with loved ones in the afterlife. Within these texts the perception of the afterlife became more tangible and its hazards more intense, indicating a developing, deeper thought process of the Egyptian mind. Transformation spells allowed the pharaoh to change into a bird soaring into the sky and the deceased into numerous gods such as air, fire, crocodile, child or grain. Spell 290, for example, relates this concept as

“... into every god into which one might desire to transform” (Hornung, E., 1999, p.9).

There are more than 1000 spells relating to the Coffin Texts and spell 162 relates to the “Four Winds.” In part its translation reads:

*To gain control over the Four Winds of the sky:  
By these maidens have I been given these winds.*

*North Wind is she who circulates about the Haunebut,  
stretches out her arms to the ends of the Two Lands,  
and subsides after she has brought her beloved's  
needs each day. . . .*

*East Wind is she who opens the celestial window,*

*releases the eastern breezes, and prepares a fair path  
for Re that he may ascend on it. . . .*

*West Wind is he, Ha's brother and Iaau's offspring,  
who lived as a single entity before duality existed  
in this world.*

*South Wind is he, South Wind as a Nubian of the  
South, who brings water and germinates life. . . .*

*Hail to you, you Four Winds of the sky, bulls of the  
sky! I tell [each of] you your name and the name  
of the one who has given them to you. I know your  
genesis. You came into being even before people  
were born and gods existed, before birds were snared  
and bulls lassoed, before the jaws of Matjeret, the  
great god's daughter, were bound up and the wish  
of the Ancient one, lord of heaven and earth, was  
fulfilled . . . .” (Wente, E.F., 2003, pp.265, 266).*

As part of the Coffin Texts a central inclusion is “The Book of the Two Ways,” outlining for the first time a map of the underworld and the safe journey through the *duat* for the deceased by recitation of certain spells. The reference to the Ways is the possible journeys by water or land routes from the eastern horizon at sunrise but it is fraught with danger and obstacles such as guardians, pitch-blackness and a “fiery court” placed around the sun.



**SCENE FROM “THE BOOK OF THE DEAD”** in the Louvre Museum, Paris. The book contains a series of spells devised to generate the resurrection of the deceased while ensuring his safety in the afterlife. This text was developed from the Pyramid and Coffin Texts in the New Kingdom (1570–1070 BC), the Third Intermediate Period (1070–664 BC) and the Late Period (664–332 BC).

The Two Ways lead to the site known as Rosetau located at “the boundary of the sky” and where the corpse of Osiris lies. One of the goals is to reach the Field of Offerings, a place of plenty. However the ultimate goal of the deceased who makes this journey is to look upon the face of Osiris and in doing so cannot die.

A discourse from the sun god Re in the Coffin Texts enlightens the reader to four good deeds he did from the time of creation and two proclamations of significance. He explains that he made every man equal and that he is not responsible for the wrong of mankind; rather it is the individual who has free will. A section from spell 1130:

*Words spoken by Him-whose-names-are-hidden, the All-Lord, as he speaks before those who silence the storm, in the sailing of the court.*

*Hail in peace! I repeat to you the good deeds which my own heart did for me from within the serpent-coil, in order to silence strife.*

*I did four good deeds within the portal of lightland: I made the four winds, that every man might breathe in his time.*

*This is one of the deeds.*

*I made the great inundation, that the humble might benefit by it like the great. This is one of the deeds.*

*I made every man like his fellow; and I did not command that they do wrong. It is their hearts that disobey what I have said. This is one of the deeds.*

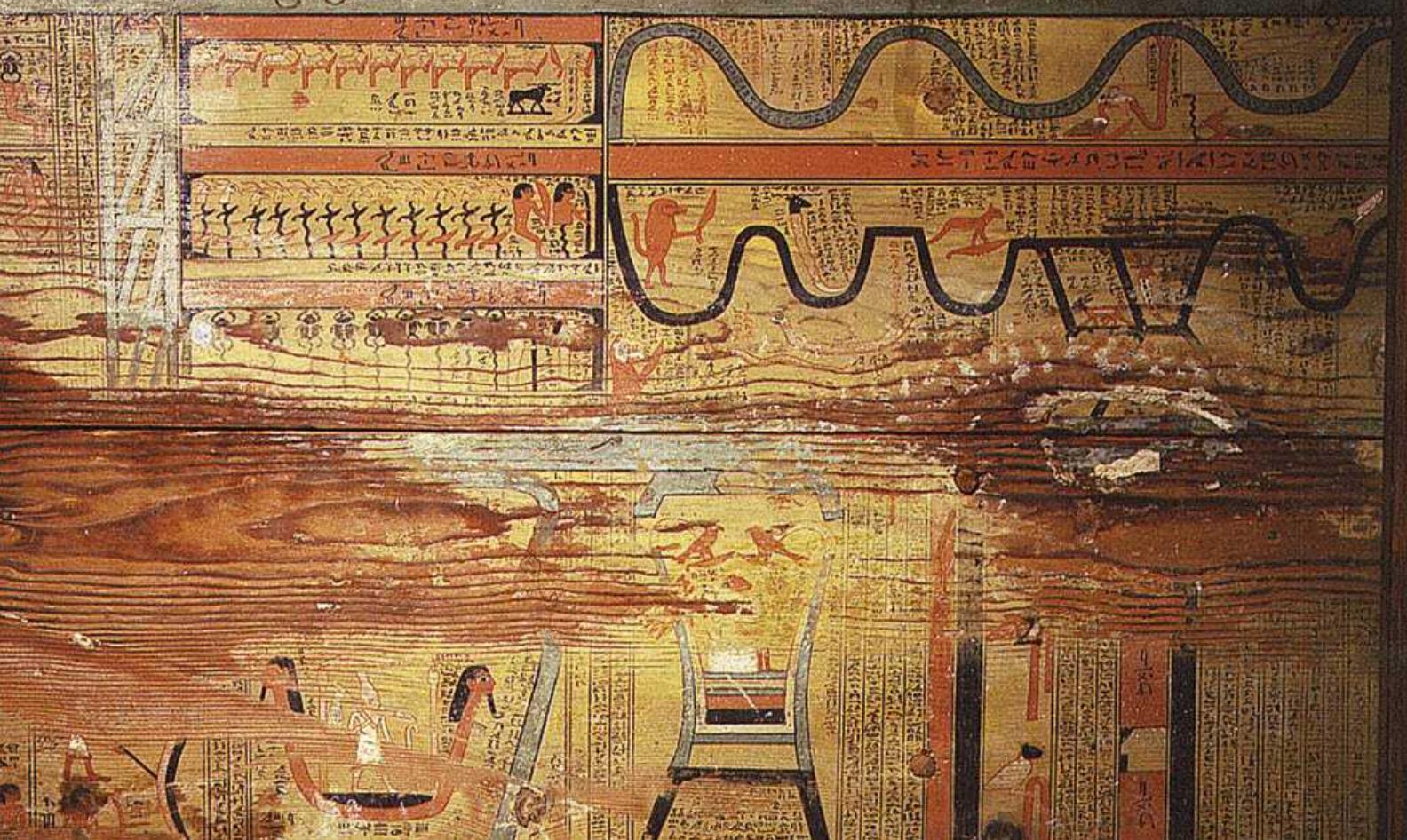
*I made that their hearts are not disposed to forget the West, in order that the sacred offerings be made to the gods of the nomes. This is one of the deeds.*

*I have created the gods from my sweat, and the people from the tears of my eye.*

(Lichtheim, M., 1975, pp.131, 132)

The “Book of the Dead,” also known as “The Coming Forth by Day,” is a series of spells devised to generate the resurrection of the deceased while ensuring his safety in the afterlife. These spells developed from the Pyramid and Coffin Texts with new illustrated chapters dating from the New Kingdom (1570–1070 BC), including the Third Intermediate Period (1070–664 BC) and the Late Period (664–332 BC). As with the preceding Pyramid and Coffin Texts these series of spells were intended for the reciting and ritual enactments both during and after the burial. It was during the short interlude of the Amarna period under the rule of Akhenaten (1350–1334 BC) that the use of this book ceased. However the gilded coffin and several artefacts of Tutankhamun have chapters inscribed on them. The “Book of the Dead” was mass-produced on papyri with the name and titles of the deceased left blank ready for inclusion after purchase. The completed item could be either buried with the deceased, in a sarcophagus or alternatively in a container in the burial chamber.

A highly significant and long chapter, spell 125, is known as “The Judgement of the Dead, the Declaration of Innocence” and contains a section referred to as the



**"THE BOOK OF THE TWO WAYS"** Detail from the floor of the coffin of Gua, chief physician of Djehutyhotep and governor of Bersha. The paintings recall the "The Book of the Two Ways." The two curved lines (top right corner) are its major feature and it is from these that the modern name "The Book of the Two Ways" is derived. The upper path is blue and called the "water way;" the lower is the black "land way." The text that accompanies the scenes are spells to enable the deceased to sail with Re to pass certain doors and their demon keepers, then proceed on one or both of the ways to reach the goal of the afterlife with Osiris.

Negative Confession, a series of 35 lines of sins where the deceased states he has not committed them. The purpose behind this profound declaration recited at the Judgement scene where the deceased's heart is weighed against a feather (*maat*), is to ensure that by having lived a good life without sin eternal life will ensue. The accompanying vignette shows the heart and a feather at equal weight on a scale supervised by the god Anubis. The crocodile-headed Ammit (some images show a dog's head), a composite and fearful animal with a half lion, half hippopotamus body lies in wait ready to devour the heart should the deceased not be free from sin, and this image is a popular symbolic motif with papyrus sellers in Egypt to this day. Consideration has been given to this composite animal of land and water as a representation that the damned had nowhere to escape to. A selection from spell 125 is as follows:

*I have not done crimes against people,  
I have not mistreated cattle,  
I have not sinned in the Place of Truth.  
I have not known what should not be known,  
I have not done any harm.  
I did not begin a day by exacting more than my due,  
My name did not reach the bark of the mighty ruler.*

*I have not blasphemed a god,*

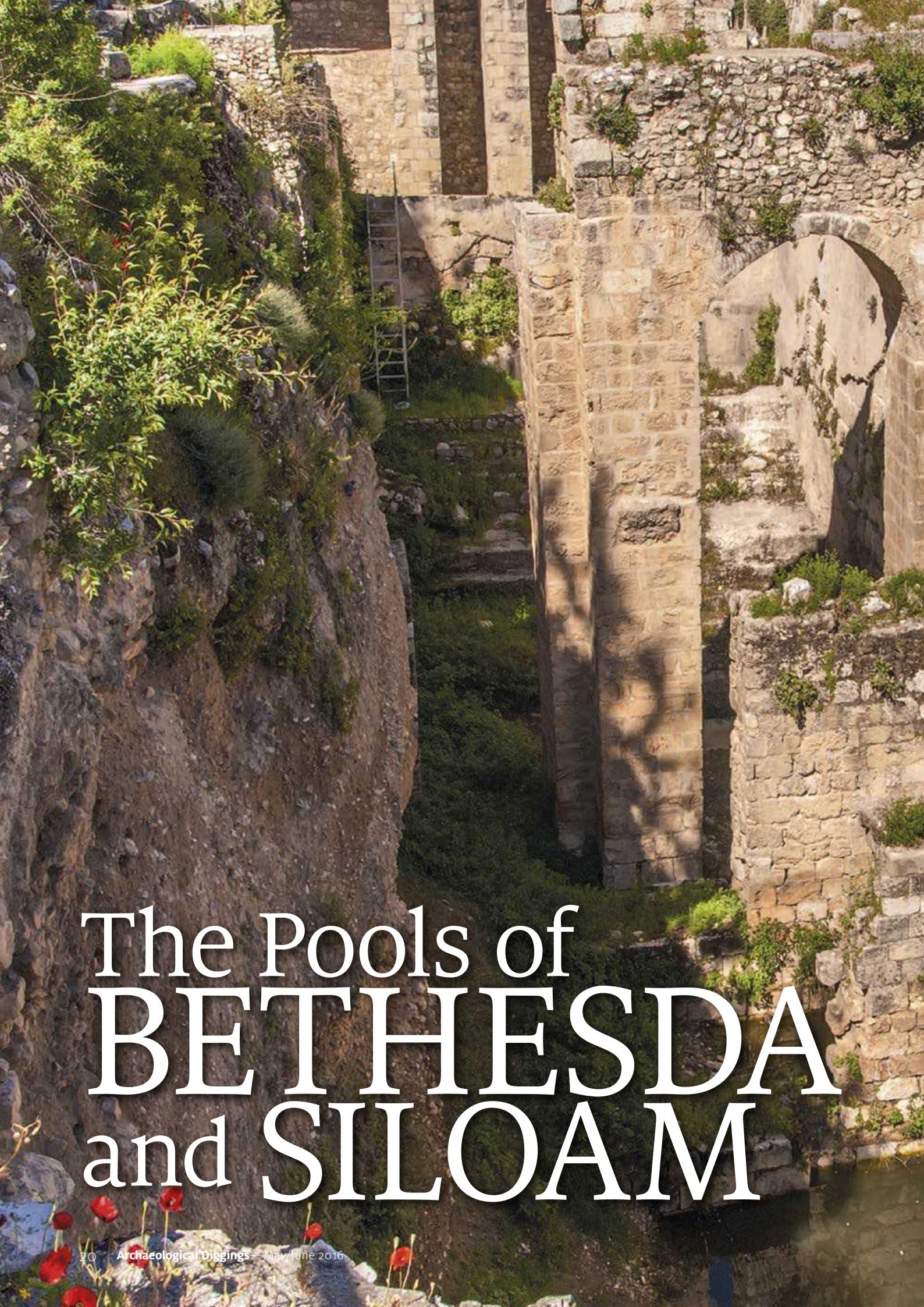
*I have not robbed the poor.*

(Lichtheim, M., 1976, p.125)

Books like "What Is In the Duat?" (the netherworld or underworld), also known as "Guides to the Hereafter," were created in the New Kingdom as a set, perpetual collection of spells. These earlier books concerned themselves with the 12 hours of the night and the journey of the sun god. There are a number of books created in this era with such intriguing titles as the "Book of Gates," "Caverns," "Earth," "Sky," "Nut" and "Day and Night," to name just a few. The last religious book relating to the afterlife in Egypt, the "Book of Traversing Eternity," is preserved in surviving artefacts dating to the Roman Period, first and second centuries AD. ♦

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# The Pools of **BETHESDA** and **SILOAM**



The Bible records two miracles occurring at pools in Jerusalem. Did the pools actually exist? **Titus Kennedy** looks at the evidence—and implications.

ERUSALEM WAS THE STAGE FOR MANY SIGNIFICANT episodes in the ministry of Jesus as recorded in the New Testament Bible. Two of His most memorable miracles occurred at pools in the neighbourhoods of Bethesda and Siloam. According to the Gospel of John, at the Pool of Siloam Jesus healed a lame man, while at Bethesda He healed a blind man. And visitors to Jerusalem seeking its genuine religious sites are interested to know if what is purported to be the pools, are in fact the historical locations. So what is the archaeological and historical evidence that these places mentioned in the Gospels were real.

### BETHESDA

The Pool of Bethesda was the site of Christ's first miracle of healing (see John 5:2–9). The exact name and its meaning has been the subject of discussion, since manuscripts of the Gospel of John from antiquity variously render the name as "Bethesda," "Bethzatha" and "Bethsaida." Although the *Codex Sinaiticus* renders the place name as "Bethzatha," and *Codex Vaticanus* and a few others record the name as "Bethsaida," the majority of ancient manuscripts preserve the name as "Bethesda." Further, other first century AD texts, such as the Copper Scroll from Qumran and the writings of Josephus, also attest to the Bethesda reading and demonstrate that Bethesda was the name of the pool and a particular neighbourhood in Jerusalem.

*Bethesda* is thought to mean "house of mercy." The Gospel of John (5:2) notes that it was a Hebrew place name. The story states that "there is in Jerusalem" the Pool of Bethesda and then adds another architectural clue, which most translations render as "sheep gate." This is helpful in determining the precise location. While there is no word "gate" in the original Greek text of John, sources from antiquity do mention the pool or the *sheep pool*. The biblical book of Nehemiah refers to a sheep gate being built in Jerusalem in the fifth century BC, and it may have even been in the area that the Pool of Bethesda was eventually built, but all available evidence suggests that John was referring to a pool and not a gate. Besides the name and general location, the text of John gives additional details about the pool which are useful in its identification, such

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**THE POOL OF BETHESDA** Archaeologists identified and interpreted this site as the location where Jesus allegedly healed a paralytic man. The purpose of the reservoirs was to collect rainwater, principally for temple use. On the left side, a tall arch is visible. This arch was one of many that supported a fifth century Byzantine church built over the pool in honour of Mary.



**POOL OF BETHESDA WESTERN STEPS** The Gospel of John describes the Bethesda Pool as having five porticoes—a puzzling feature suggesting an unusual five-sided pool, which most scholars thus dismissed as an unhistorical literary creation. Yet when this site was excavated, it revealed a rectangular pool with two basins separated by a wall—thus a five-sided pool—each side having a portico.

as a connection with sheep, the distinct architectural design of five porticoes or *stoas*, use as a pool for bathing or washing, and an association with healing (John 5:2–7).

Eusebius, writing in the fourth century, mentions the “sheep pool” not the sheep gate, and he identified it as a place of twin pools (Eusebius, *Onomasticon*). The Bordeaux Pilgrim in the early fourth century calls them twin pools but mentions no gate, while other writings of the fourth and fifth centuries also mention the site of the pool, demonstrating that the ruins of the pool were visited during the Late Roman and Byzantine periods (*Itinerarium Burdigalense*; Cyril of Jerusalem; Jerome). Josephus, in the late first century AD, mentions the area of Bethesda, and notes that this neighbourhood was north of the Antonia Fortress with a small valley in between, in an area of Jerusalem that became walled at the time of Herod Agrippa around 41–44 AD (Josephus, *Wars*). Therefore, at the time of Jesus, the Bethesda neighbourhood was just north of the city walls, but about a decade later that area of Jerusalem became encapsulated by the third wall. However, the location of the Pool of Bethesda appears to have been lost by the seventh century after the Arab conquest, and only rediscovered through archaeological investigation at the end of the nineteenth century, when a site was identified and excavated adjacent to St Anne’s Church in Jerusalem, north of the Temple Mount.

The pool was constructed in the eighth century BC, probably during the reign of King Hezekiah, and an upper pool in the area of Bethesda seems to be the one mentioned in the Hebrew Bible (2 Kings 18:17; Isaiah 36:2). Around 200 BC, during the time of the Seleucid Empire, it appears that an extension of the original pool was built, essentially making a pair of pools, an upper and a lower division of one large pool. This pool system may have been constructed in order to collect water for the washing of the sacrificial sheep, as the temple was located just to the south of the pool. The association with the washing of the sacrificial sheep could also be the origin of the sheep pool references.

The western side of the southern or lower pool had rows of plastered stone steps that allowed easy entry into the pool, along with multiple landings. The landings and steps for entry into the pool and the configuration of an upper reservoir and lower pool functioning as a ritual bathing pool were features extremely similar to the Pool of Siloam, except that Siloam was fed by the Gihon Spring while the water supply at Bethesda was provided by rain.

Archaeological investigation also clarified the odd description in the text of John describing a pool with five porticoes and demonstrated the accuracy of the architectural description. Excavations revealed a rectangular-shaped pool bounded by porticoes on all four sides. The fourth century church leader in Jerusalem, Cyril, must have been



**THE CRUSADERS CHAPEL** The basilica that covered the Bethesda Pool was destroyed by the Persians in AD 614 and its masonry ended up in the pool. Over part of the ruined basilica, the Crusaders built the Church of the Paralytic. Its façade, main entrance and apse can be seen standing high over the pools, an example of the practice of building one church atop another.

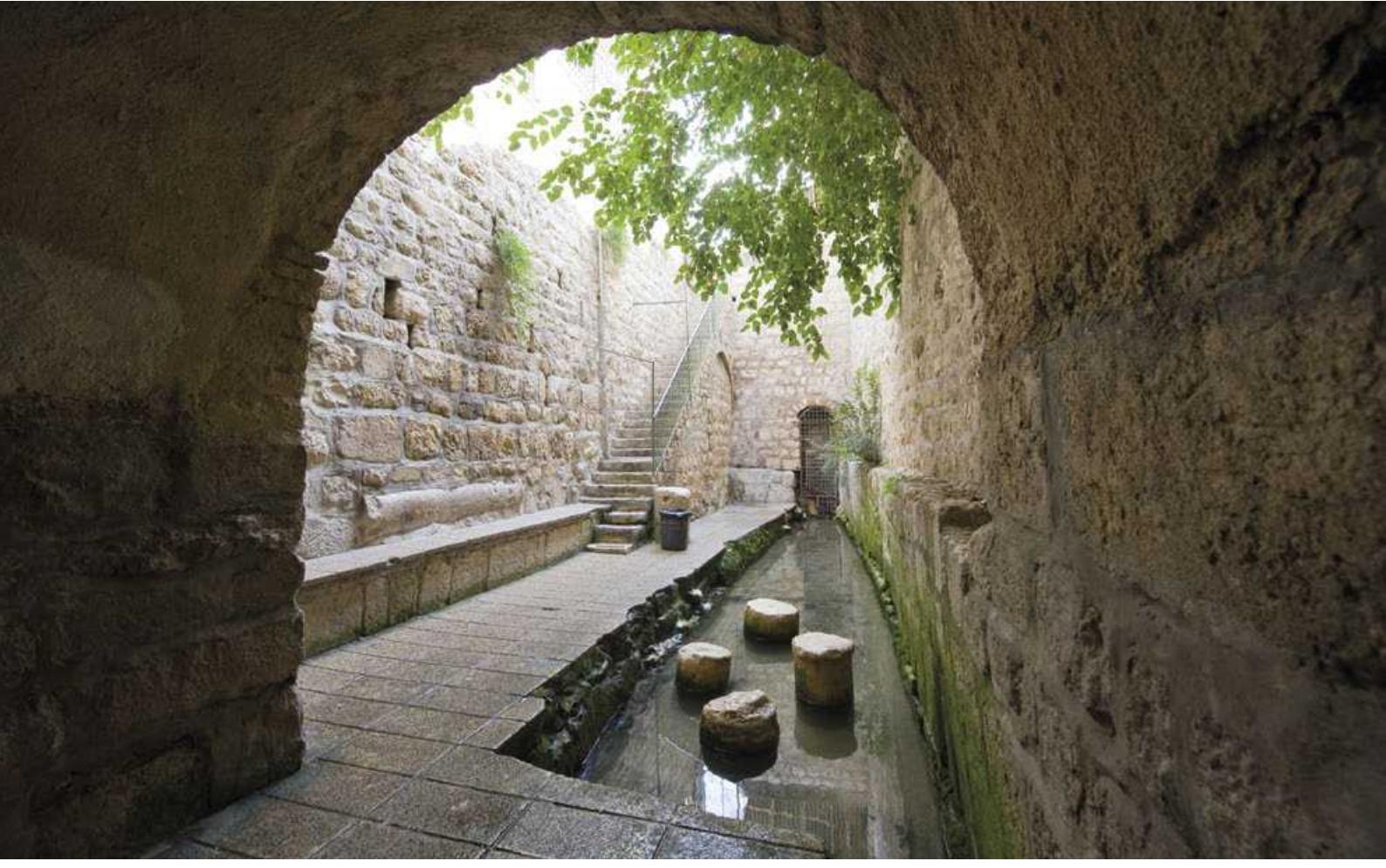
aware of the architecture at the ruins of the pool before a church was built over the site, as he correctly noted the arrangement of the five porticoes to be surrounding the pool on four sides, with the fifth portico part of the division between the upper and lower sections. In the first century AD, the apostle John refers to each of the pools of Bethesda and Siloam as a *kolumbethra*, or pool of water that could be used for bathing or washing. Therefore, it seems to have been used for ritual washing and healing by the first century AD, rather than its older function for washing sacrificial sheep. If the pool had formerly been used for washing of the sacrificial sheep, but by the time of Jesus was instead used for ritual washing, then the description in John as “upon the sheep pool” is another pool with five porticoes is understandable, since the new ritual washing pool seems to have been built over the older sheep pool. This idea is suggested in the Copper Scroll found at Qumran, dating to around 25–70 AD, which mentions the Pool of Bethesda and indicates that people used the smaller section for ritual washing.

Although pools had existed at this location previously, the Bethesda pools of the time of Jesus were probably built relatively recently, around 25 BC. Therefore, in the time of Jesus, the Pool of Bethesda, with upper and lower sections divided by a sluice gate and decorated with five porticoes, functioned primarily as a rainwater-fed bath

system and qualified under the rules of Judaism as a ritual purification pool.

The story at the Pool of Bethesda also makes it clear that there was a healing tradition associated with the pool. Although a few ancient copies of John omit a section in verses three and four, this is found in the vast majority of ancient Greek manuscripts and most of the earliest translations, including texts of second century church fathers, suggesting that the section was probably present in the original text of the Gospel of John. Memories of the healing miracle of the man who was ill for 38 years persisted for decades after Jesus, because during the reign of Hadrian in the early second century, the emperor had a shrine to Asclepius, the Greek god of healing and medicine, built at the southeast side of the pools as part of a campaign to defile or erase sites associated with Jesus and Christianity.

During archaeological excavations, a foot with a dedicatory inscription to Asclepius, as thanks for curing a disease, was discovered above the pool. Then in the fifth century during the time of Bishop Juvenal of Jerusalem, a Byzantine church was built at the pool to commemorate the healing miracle that Jesus performed. This church is also found on the Madaba Map of the middle of the sixth century AD, and the ruins of the church can still be seen today alongside the remains of the Pool of Bethesda.



**TRADITIONAL SITE OF THE POOL OF SILEOM** The water from Hezekiah's Tunnel exits into this pool, traditionally believed to be Siloam. The column bases were once part of a Byzantine church constructed by Empress Eudocia to commemorate the miracle recounted in the New Testament. However, the exact location of the original pool as it existed during the time of Jesus remained a mystery until 2004.

## SILOAM

The Pool of Siloam relates to the healing of the blind man in which Jesus placed clay on the eyes of a man, then instructs him to wash in the Pool of Siloam, after which he returned with sight restored (John 9:1–11). The name “Siloam,” from the Hebrew verb *shalach*, means “sent” (John 9:7). Like Bethesda, the name apparently designated a neighbourhood of ancient Jerusalem, and it is mentioned in the books of Isaiah (8:6), Nehemiah (3:15), Luke (13:4) and John (9:7). While the English translation of the name may vary by book as Shiloah/Shelah/Siloam, all of the renderings come from the same ancient Hebrew name. The Pool of Bethesda was located in northeast Jerusalem, just outside the walls during the time of Jesus and immediately north of the temple complex, while the Pool of Siloam was located on the opposite side of the city, near the southeast corner but within the walls of Jerusalem. Josephus placed the Pool of Siloam in southeast Jerusalem near the turning point of the wall, and his writing served as an important reference from antiquity for correctly locating the remains of the pool (Josephus, *Wars*, 5.140–145).

Ancient sources indicate that the Pool of Siloam was in use during the time of Jesus and Josephus, but that it was eventually covered over after the destruction of Jerusalem in AD 70 and “lost” to history for centuries. The area of the Pool of Siloam was at the low corner of southeast Jerusalem,

down the slope from the rest of the city, which rises to the north and the west. Because of this, deposits of debris, mud and dust from the rains, winds and destruction of the city would have covered the area relatively quickly. Archaeological excavations in the neighbourhood of Siloam demonstrate that an upper pool was originally constructed in the time of King Hezekiah in the eighth century BC, apparently in conjunction with the carving of an approximately 533 m-long (1750 ft) water tunnel. Hezekiah's Tunnel deposited water into this pool system from the Gihon Spring (2 Kings 20:20; Isaiah 22:9). In 587 BC, the Babylonians destroyed Jerusalem, including the area of Siloam. Just after 444 BC, Nehemiah led the returned captives in rebuilding the walls of Jerusalem, as well as a pool in the neighbourhood of Siloam (Nehemiah 3:15). This upper Pool of Hezekiah came to be traditionally considered the Pool of Siloam at least as early as the fifth century AD, when the Byzantine empress Aelia Eudocia commissioned a church to be built there to commemorate the miracle of Jesus. This church was destroyed by the Persians in 614 AD, but ruins of the church indicated to archaeologists that the Pool of Siloam of the time of Jesus had been located there, since in most places Byzantine churches correctly marked the locations at significant events in the life of Jesus, relatively recent history at the time. Archaeology has revealed remains from the second and third centuries AD at this upper pool under

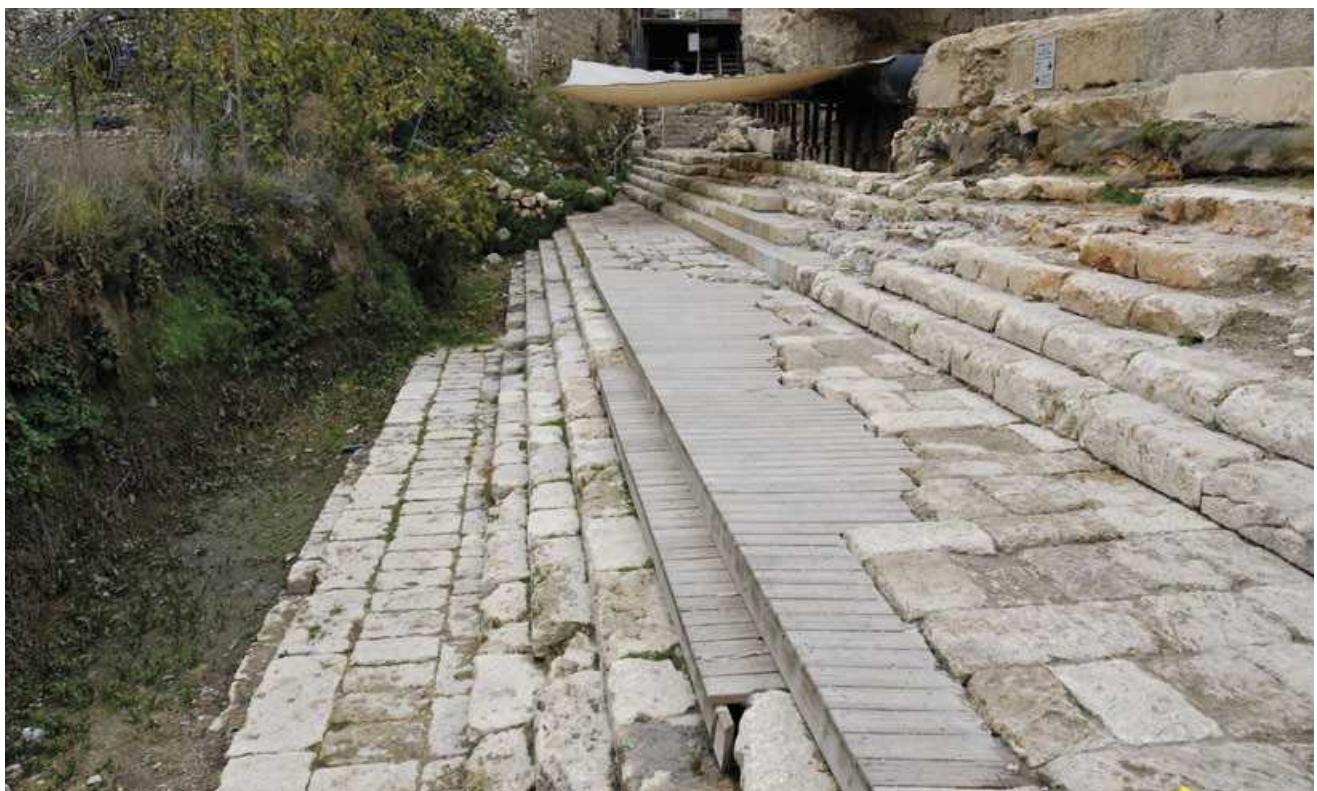


**THE LOWER POOL OF SILEOM** was rediscovered in 2014 during repair work on the contemporary sewer system. The discovery of coins and pottery indicates this pool was in use in the first century AD. This dating makes the site a more likely location for the biblical account of a blind man being directed by Jesus to wash mud from his eyes in the Pool of Siloam in order to receive his sight.

the Byzantine ruins, but no material was found from the first century, indicating that the site had been incorrectly identified as the first century Pool of Siloam. In this case, the confusion was probably a result of the covering of the lower pool after the destruction of Jerusalem. A few scholars thought the Pool of Siloam mentioned in the Gospel of John was slightly southeast of the "upper pool" of Hezekiah due to geographical analysis and descriptions in Josephus, but that it had become covered by the destruction of the city and the ravages of time. Then, in 2004, about 60 metres (200 ft) southeast of the upper pool, the lower Pool of Siloam was rediscovered by accident during repair work on the contemporary sewer system. The existence of this pool had been hypothesised previously, and a few scholars suggested it as the first century Pool of Siloam, but it had not been exposed since antiquity. While only partially excavated, it is likely that the entire pool is relatively intact due to the rapid covering after 70 AD that provided protection to the structure.

The Pool of Siloam was approximately 70 metres (230 ft) long, with widths of about 40 metres (130 ft) and 60 metres (197 ft), roughly rectangular in shape like the Pool of Bethesda, although the corners measuring slightly over 90 degrees and different widths mean it is more aptly described as a trapezoid. The stones used in construction are local white limestone, and these were cut in precise

rectangular blocks. Excavations have revealed a design of three sets of five steps leading into the pool, with an open area just above the lowest set of steps, which may have been built to accommodate varying water levels. The rest of the pool has yet to be excavated, as most of the land above the pool is covered by an orchard, which the Greek Orthodox Church identifies as the King's Garden (Nehemiah 3:15), and has not yet given permission to excavate. In the soil in one corner of the pool, at least 12 coins have been found from both the time of Alexander Jannaeus (ca. 104–76 BC) and the first Judean Revolt against Rome (ca. AD 66–70), with the latest coin bearing the quote "4 years to the day of the Great Revolt," indicating AD 69 as the year of minting. Construction workers building the pool placed four coins minted by Alexander Jannaeus in the original plastered steps, which were later overlaid with stone in the remodelling of the pool, which probably occurred either in the time of Herod the Great or Herod Agrippa I. Pottery of the first century was also discovered in excavations of the pool. Obviously the coins demonstrate that the lower pool was in use from at least the first century BC until the fall of Jerusalem in AD 70, indicating that the pool had begun to be filled in at the time of the Roman destruction or soon after. Earlier remains under the stone steps suggest that it had first been built in the time of the Hasmoneans and then remodelled.



**POOL OF SILEOM STEPS** One side of the pool has been excavated so far, revealing three sets of five stairs along its entire length, each leading down from the street level into the pool. The presence of steps leading into the water basin is an identifying feature of a *mikveh*.

From the upper pool, a channel ran to the lower pool, where the water was held in what seems to have been a ritual washing pool in the first century AD. As the Gihon Spring was the source of water for the pool, it would have been an obvious choice for ritual washing due to the “living water” that flowed into it. While the Siloam pool was supplied by a spring and the Bethesda pool by rainwater, both the stone water containment systems qualified under the Law as eligible for use in ritual purification (Leviticus 11:36; 15:13). The extensive size of the pool, like Bethesda, has led many to suggest that it may have been used by pilgrims visiting Jerusalem before they walked up to the Temple. This is supported by the discovery of a massive first century street consisting of steps that led up to the temple complex, providing easy access from the pool and the southeastern part of the city. Artefact discoveries at the pool, such as a bell that could have been part of the priestly attire and an engraving of a menorah, also indicate ritual use of the pool. This accords with records in the *Talmud* about a tradition performed during the Feast of Tabernacles in which a priest would take a golden vessel to the Pool of Siloam, fill it with water, bring it back to the temple, and then pour the water on one of the sides of the altar as a libation offering while another priest poured a wine libation offering on the other side (*Sukk* 4.9). It is also possible that the Pool of Siloam was turned into the Nymphaeum, or Shrine of the Four Nymphs, by Emperor Hadrian during the building of Aelia Capitolina (*Chronicon Paschale*, 119). While this would be consistent with the pattern of Hadrian building pagan temples and shrines over sites associated with Christianity, the numismatic and ceramic evidence indicates that the pool was not in use from 70

AD until its recent rediscovery. However, remains from the second century AD were discovered at the upper pool. Perhaps the Nymphaeum covered the upper pool section of the Pool of Siloam, while the lower was unknown at that point in time, and that is why the Byzantines later built a church on that location rather than at the “lost” lower pool. Therefore, it appears that the Pools of Bethesda and Siloam, situated to the north and the south of the Temple, were built or redesigned at the time of Herod the Great to be used by the general population as ritual purification baths for Judaism before going on to the Temple. However, Jesus utilised these places of religious ritual to teach lessons about His identity and mission through miraculous works.

Clearly the sites of the Pool of Bethesda and the Pool of Siloam were no invention of the Gospel writers, and were historical sites of the first century at the time of Jesus. And clearly the stories of the Gospels—illustrating the divinity of Christ—as demonstrated by the miracles, were of such strength that they required suppression, which resulted in the construction of pagan shrines above them. However, is there an account outside of the Gospels that records Jesus performing miracles?

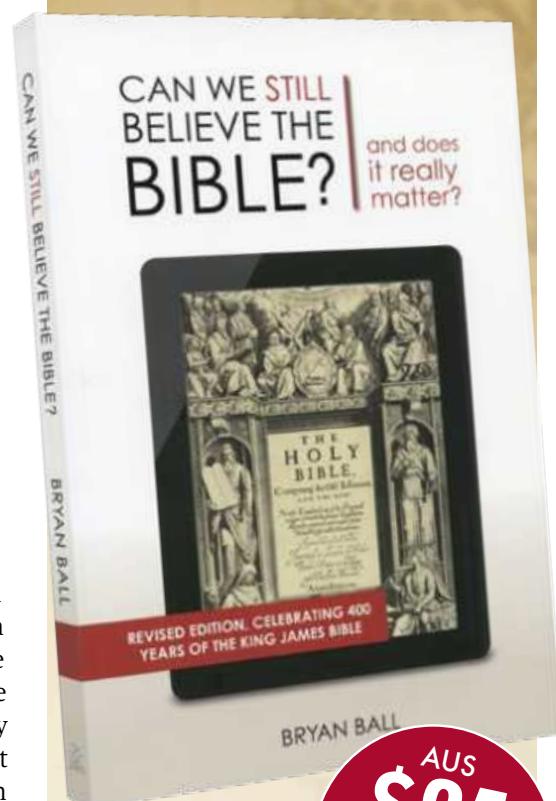
The Gospels describe miracles with words such as *dunamis* (power), *seimion* (sign) and *teras* (wonder). The English word “miracle” comes from the Latin word *miraculum* (wonder) of the Roman period, which came to be used in early Christian literature to describe supernatural acts of God. Due to the inclusion of these works of power, sceptics and higher critics have often therefore portrayed the Gospel accounts as merely unhistorical religious propaganda. Yet, multiple writers from the ancient world, even those who opposed Jesus, acknowledged that He performed miracles.

The mindset of the times did not discount supernatural acts as fairy-tale or myth as we are want to do today, as records from antiquity demonstrate familiarity with these phenomena. A philosopher, pagan and opponent of Christianity named Celsus, who lived in the second century AD, wrote a critical work attacking Christianity and Jesus, to which the Church Father Origen responded in defence. In one passage, Celsus claimed that while Jesus was in Egypt, He somehow acquired miraculous powers, which He later used in Judea to demonstrate that He was a god (Celsus, *The True Word*). Therefore, Celsus confirms that knowledge of Jesus and His miracles had spread throughout the Roman Empire, even to pagan sceptics of Jesus, and he acknowledged that Jesus performed supernatural, miraculous works, but attributed them to Egyptian magic.

Around the same time, a former Roman pagan turned Christian scholar, Justin Martyr, wrote a letter to Emperor Antoninus Pius (about AD 150), in which he mentions the miracles of Jesus. Pius succeeded Emperor Hadrian, who attempted to replace many Christian sites with pagan shrines and temples. But although Pius was a traditional Roman polytheist, he seems to have been an emperor who was not oppressive of Christians (Cassius Dio, *Roman History*). In his letter, Justin used the opportunity to argue the legitimacy of Christianity to the emperor by presenting evidence and referring him to accessible Roman records about the life of Jesus that were recorded during the time of Pontius Pilate in Judea. In one section of this letter, Justin informs the emperor that if he would read the Roman records that he referred to as the Acts of Pontius Pilate, he would see that these writings also attributed various miracles to Jesus (Justin Martyr, *Letter to Emperor Antoninus Pius*). It seems that each Roman prefect or procurator kept records about major events that occurred in the provinces they governed. Those of Pontius Pilate in Judea Province apparently included information about a certain Jesus and His miracles, and these records were still accessible to the Roman government.

The *Mishneh*, a component of the *Talmud*, which was compiled around AD 200 but contains historical information from the previous centuries, appears to preserve a few events associated with Jesus that were likely recorded in the first century AD. One passage in particular mentions how Jesus allegedly practised sorcery or magic and led Israel astray, which is an obvious reference to types of miraculous or supernatural works that Jesus performed (Sanhedrin 43a; Sanhedrin 107b; Sotah 47a). The claim in the *Mishneh* that the powers of Jesus were supernatural, but the accusation that they were derived from an evil source rather than God, is directly paralleled in the claims of the Pharisees recorded in the Gospels (see Matthew 9:20–35, 12:22–29), a rationalisation to deny Jesus' true identity, yet a clear acknowledgement of His miracles nevertheless. Finally, Josephus, a native of Judea turned official Roman historian, writing in the late first century AD, appears to refer to Jesus performing miracles. In a short passage summarising the life of Jesus, the historian wrote that Jesus did works described as incredible, paradoxical or contrary to expectation (Josephus, *Antiquities*, 18.63). These “incredible” works are consistent with the word usage and description of supernatural or miraculous works in other Greek language sources, suggesting that Josephus was also aware of and made reference to the many miracles of Jesus (2 Maccabees 3:30; LXX Deuteronomy 28:59).

People in and near the time of Jesus did not deny that He performed supernatural acts, although they had the opportunity. Rather, four separate sources from a variety of viewpoints in antiquity, dating back to the first and second centuries—Celsus, Justin, Josephus and the *Mishneh*—claim that Jesus performed miraculous works. Therefore, the accounts about Jesus at the pools of Bethesda and Siloam in the Gospel of John are consistent with both the archaeological and historical record, and should be regarded as historical accounts rather than religious propaganda or myth. ♦



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# HADRIAN

## Saviour of the Empire

His reforms reinforced the military, boosted the economy and provided political stability, as **Daryn Graham** explains.

**A**T THE TIME OF THE DEATH OF EMPEROR Trajan, on August 11, AD 117, the Roman Empire was in complete turmoil. The two years Trajan had been absent from Rome, spent extending the Empire to the East, meant that the empire was operating without strong imperial leadership at its core, let alone throughout the rest of the Empire to the West. Not surprisingly, then, many of its provinces rebelled, attempting to break free of the taxing Roman overlords. Among them were the Moors of North Africa, the tribes of Britain, the Sarmatians, the Egyptians and Libyans, and Jews. The feeling was deep, such that even Trajan's recent conquests in Mesopotamia and beyond, failed to quiet it. In short, the empire if it were to endure, needed a saviour. And that was Hadrian.

Hadrian's rise to power was a serendipitous blend of good fortune and talent. Born in Italica in Spain in AD 76, Hadrian had close family ties with Trajan's Ulpius family who lived there: Trajan and Hadrian were cousins. These close ties gave Hadrian a rapid rise through the ranks of the military. Adding to this, when Trajan was adopted by Nerva and proclaimed as Nerva's heir to the purple, Hadrian was appointed governor of Upper Germany, at the head of one of Rome's most powerful legionary armies. The message Nerva and Trajan were sending was clear: at some point Rome's future would lay with Hadrian.

However, Hadrian was not officially adopted as heir by Trajan until just two days before his death on August 9, AD 117. It is possible that Trajan was in denial of his humanity until he was actually dying. But it was a masterstroke to appoint Hadrian as his successor, as things transpired. For,

luck aside, Hadrian managed to not only save the empire but transform it into a thriving entity, as never before.

Of course, not everybody was happy with Trajan's choice. Within the Roman Senate there were several plots hatched to deny Hadrian. But Hadrian dealt with them with a shrewd carrot-and-stick approach. He pardoned some plotters, advertising to all Romans his goodwill to those whom he felt deserved it, while executing others, including four former-consuls, sending a clear message of the consequences of treason.

Having dealt with the plots, Hadrian set about restoring civil and political order. First, he evacuated Rome's army from beyond the Euphrates, redeploying it to those provinces in rebellion, where in quick time revolt was quelled.

Next, he set about stimulating the economy, beginning with the paying off of public and private debt. And not just in Rome. Throughout Italy and the provinces, he literally burned forms of indebtedness, a symbolism not lost on the people, aimed at restoring confidence. Next, he replenished the Senate Treasury, then granted funding to some of its bankrupt senators and lastly, increasing the pay of public servants. This immediately helped the state to more efficiently manage and support itself.

However, true power within the empire resided with Rome's armies. One needed its support to rule. So, Hadrian then set about reforming the army, increasing its prestige, in doing so ensuring the military lent him its allegiance and remained loyal. He also improved its battle-readiness and training, while better arming and supplying it, with, for the first time, the Roman state funding it; he demonstrated his own generalship, even to marching on foot at the head of his legions as a *legionnaire*, enduring the

**EMPEROR HADRIAN** A second century AD statue of Emperor Hadrian on display in Perge, Turkey. Hadrian was emperor from AD 117 to 138. He rebuilt the Pantheon and constructed the temples of Venus and Roma. He is best known for Britain's Hadrian's Wall, a line of fortifications and a wall built across a neck in northern Britain, marking the limit of Roman conquest and rule.





same privations as his men; and he took the time to visit sick and injured soldiers in their quarters. Such measures greatly improved discipline and morale among soldiers and officers, but above all, he never went to war unless it was necessary. There would be no ruinous adventures like those of Trajan under Hadrian.

This policy of not embarking on wars of conquest had a far-reaching legacy. For example, it left us the famous landmark in northern Britain, Hadrian's Wall. A wall of stone and forts runs some 140 km (80 miles) across Britain, which Hadrian built during his visit to the island in AD 122.

But this wall was not only built to defend the Roman Empire from the Picts and other tribes to the north in what is now Scotland. The wall was a symbol of the end of further conquest. Just as Alexander the Great marked the end of his conquests on the Hydaspes River in India by sacrificing to the Greek gods Neptune and Oceanus, now Hadrian himself, almost 450 years later, also sacrificed to these same deities in person, on the British frontier by the Tyne River, and immediately ordered his famous wall to be built from that spot. Building the wall was a huge undertaking: built from Maryport on the west coast all the way to Wallsend on the east coast, it was some 3 metres (10 feet) broad and 4.2 metres (14 feet) high, with a clay and rubble core and encased with cut stone, and defensive battlements erected and ditches dug along its length. This was a monument to Hadrian's break with Rome's monumental conquering past.

But this policy had another, more valuable result: it made the empire wealthier. With the empire now consolidated

and peace assured, business flourished. It became the greatest manufacturing and trading giant the world had seen.

Hadrian was keen to maintain that image of greatness, as well as to advertise it. In order to unite the empire under his rule and promote trade, he spent a lot of time touring all quarters of the empire. He travelled to Germany, Britain, Gaul, Greece, Asia, Syria, Sicily, and Egypt and North Africa—more than any other emperor had. As a result, morale was lifted throughout the entire Roman Empire and economic prosperity soared.

Of great significance was his visit to Palmyra in Syria, the great trading centre at the western terminus of the Silk Road and client-state of Rome. At its zenith Palmyra had a population of some 200,000. Located between the Roman and Parthian Empires, Palmyrenes enjoyed the lucrative status as trade middlemen between the two greatest realms in the world at that time. Hadrian's visit might have been to promote Rome's economic interests there, but the overall feeling in the city was celebration of Hadrian himself. This is attested to in an inscription from Palmyra that commemorates the visit, describing him as "the God Hadrian" (IGR III 1054). Coin-like tokens found by archaeologists in Palmyra depicting Hadrian's wife Sabina indicate that she accompanied her husband and received similar adulation. Today, Palmyra is in ruins, but the size and splendour of those ruins reflect its once proud history.

Hadrian was keen to inform rulers of cities, kingdoms and empires beyond the Empire of Rome's economic credentials too. Once, when the king of Parthia sent



**HADRIAN'S WALL.** Stretching for 120 kilometres from the Solway Firth on the west coast of Britain to the River Tyne on the east coast, Hadrian's Wall was a line of fortifications across northern England making it the largest structure ever made by the Romans. This wall not only defended the Roman Empire from aggressive tribes of Scotland, it was symbolic of the end of further Roman conquest.

Hadrian a gift of gold-embroidered cloaks, Hadrian made light of this by sending 300 criminals into the arena to fight to the death wearing similar gold-embroidered cloaks. Not surprisingly, the rulers of the kingdoms outside the Roman Empire rushed to Hadrian's court in order to become friends and to sample Rome's wealth for themselves, including those as far away as the Caspian Sea, and Bactria in present-day Pakistan.

But Hadrian was no pushover. Once, a man with grey hair came to Hadrian with a request for money, and when that same man returned the following day with dyed hair to disguise himself asking the same request, Hadrian simply, but emphatically, replied, "I have already refused this to your father!"

In respect to religion, Hadrian was a staunch observer of Rome's pagan traditions. But this brought him into conflict with the Jews. Disdainful of the Jewish religion, in AD 132, Hadrian set about building a temple to Jupiter in Jerusalem where the Jewish Temple, destroyed by Titus, had once stood. The Jews rushed to arms under the leader Simon Bar Kokhba, a self-styled messiah who carried on a guerrilla war with Hadrian's disciplined legions in the hope of toppling Rome and creating a temporal empire of his own. Some of Bar Kokhba's letters to his Jewish lieutenants survive, being famously discovered by chance

during excavation in a cave in the Judean wilderness by an archaeological team led by Jewish archaeologist Yigael Yadin in 1960. These letters show that Bar Kokhba employed a mixture of intense religious zealotry and harsh military despotism in his rule over other Jews and throughout his war with Rome. In one letter to Yehonathan and Masabala, two of his army officers, he writes:

*"Let all men from Tekoa and other places who are with you, be sent to me without delay. And if you shall not send them, let it be known to you, that you will be punished."*

In another letter to his officer Yeshua ben Galgoula, he writes in menacing terms:

*"I take heaven to witness against me that unless you mobilise the Galileans who are with you every man, I will put fetters on your feet as I did to ben Aphi'lul."*

Such violent religious fervour worked in Bar Kokhba's interests for a time. But, progressing city by city, and fortress by fortress, Hadrian's armies, using guerrilla tactics together with traditional Roman strategies and fighting techniques, mercilessly crushed this revolt within a few years.

Of course, Hadrian believed that the downfall of the



## Video

Tap here to watch a short video about the history of Hadrian's Wall. Active internet connection required.



**TEMPLE OF HADRIAN IN EPHESUS, TURKEY** The remains of this temple were unearthed in 1956 and rebuilt with some supplementation using modern building material, so as to reproduce the building's precise appearance more fully. An inscription tells us the temple was erected by Publius Quinctilius, who dedicated it to Emperor Hadrian on the occasion of his visit to the city in AD 128.

**BAR KOKHBA PAPYRUS LETTER** Letters such as this one, found in a Judean cave by Yigael Yadin, reveal rebel leader Simon Bar Kokhba's harsh military despotism.

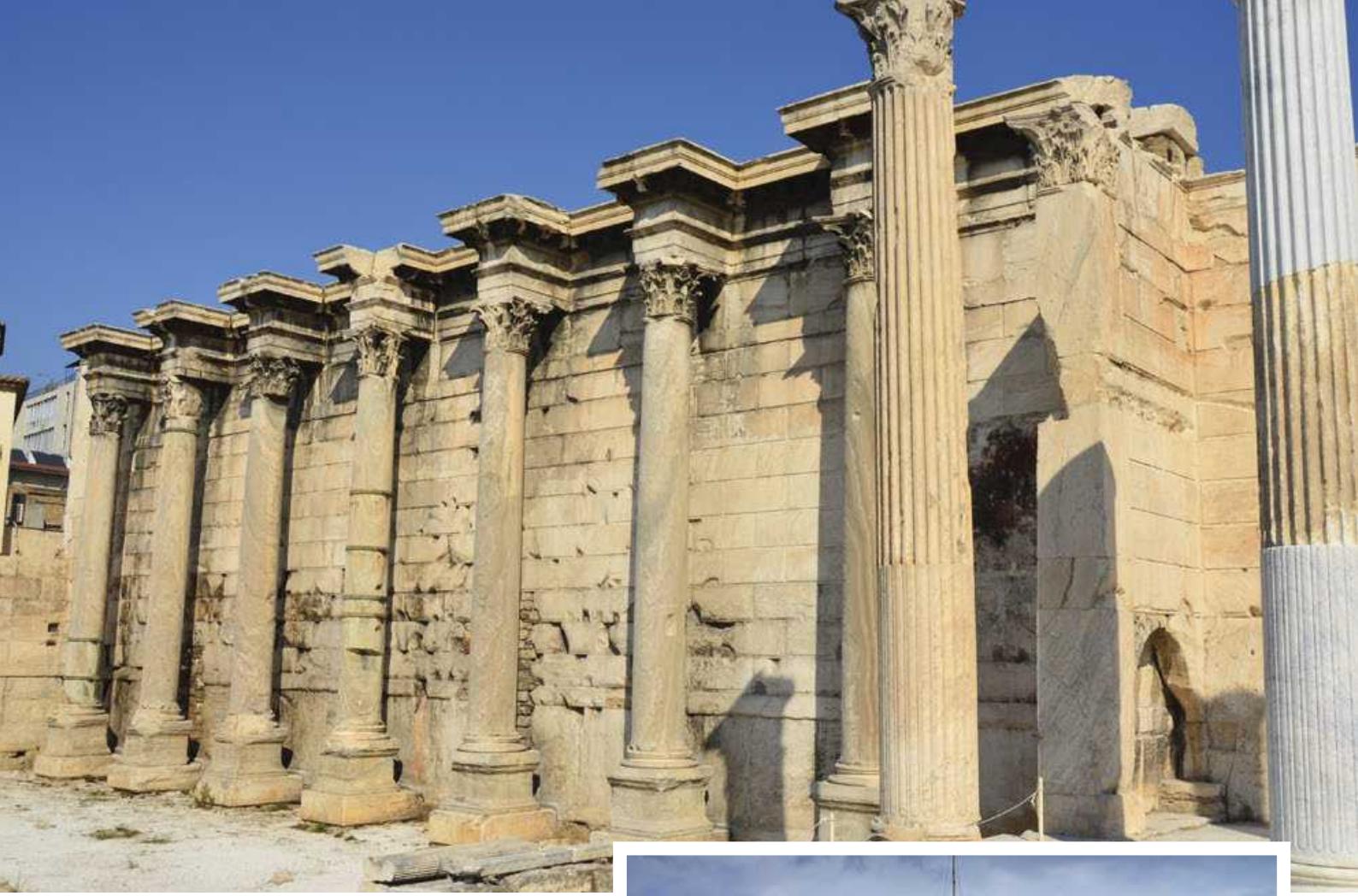
Jews was the fate that the Roman gods had planned all along for them. But many Jews no doubt saw Hadrian's own downfall that followed a few years later, in much the same circumstances as Herod the Great's, as their own God's divine retribution for Hadrian's destruction of the Promised Land. As Herod did before him, when Hadrian aged he became extremely paranoid about plots and schemes to kill and replace him. After becoming sick almost to the point of death, at the age of 60, there was naturally some talk among Rome's senators and generals concerning his replacement, as one would expect. But Hadrian recovered, and he was irate at this.

Although Hadrian had survived this sickness, his health steadily deteriorated, and he saw the glaring need to appoint a successor after all. Accordingly, he chose Arrius

Antoninus, better known as Antoninus Pius, to be his successor, and ordered Antoninus to also adopt Marcus Antoninus and his younger brother Annus Verus. These two brothers are better known to us as Marcus Aurelius and Lucius Verus.

The rest, as they say, is history. Antoninus Pius would prove to be a wise and peaceful ruler and under him the Empire flourished as it had under Hadrian, and as for his two adoptive successors, Marcus Aurelius would also prove to be one of Rome's wisest emperors and Verus one of its most spirited. For all of Hadrian's faults as a ruler, his choice in his successors proved again that his adoption by Trajan was not simply luck, but rather was due to his intelligence and an ability to rule.

As for Hadrian, he passed away on July 10, AD 138, at Baiae on the Bay of Naples, and was buried at Cicero's villa in Puteoli. But that is not quite the end of Hadrian's story, for



**HADRIAN'S LIBRARY** Hadrian was an ardent admirer of Greek culture and regularly visited Athens. Wanting to make Athens the cultural capital of the Roman Empire, Hadrian initiated several building projects in the city, including the construction of this large library.

**CASTEL SANT'ANGELO, THE MAUSOLEUM OF HADRIAN,** was built in AD 123 by Emperor Hadrian as an enormous tomb for himself and his family. However, he died at the resort of Baiae before its completion, leaving Emperor Antoninus Pius to finish the task. Hadrian was buried twice in different places before finally his ashes were laid to rest in his mausoleum. Over the centuries the mausoleum has been modified many times.

after he died, Arrius Antoninus built a temple for Hadrian at Puteoli, declared him a god there, and established a priesthood and ceremonies there in his honour. These acts made many people regard Antoninus as especially pious—hence the epithet “Pius” was attached to his name. But it is telling that this temple was not built in Rome. For there, after Hadrian’s murderous acts performed as his health failed, the Senate wanted to render his actions invalid, and most senators there did not like the idea of deifying him even when Antoninus Pius asked them to. For all of Hadrian’s love for the Empire, and for all his genius and success in helping it thrive, his paranoid murders resulted in his memory becoming forever tarnished. ◆

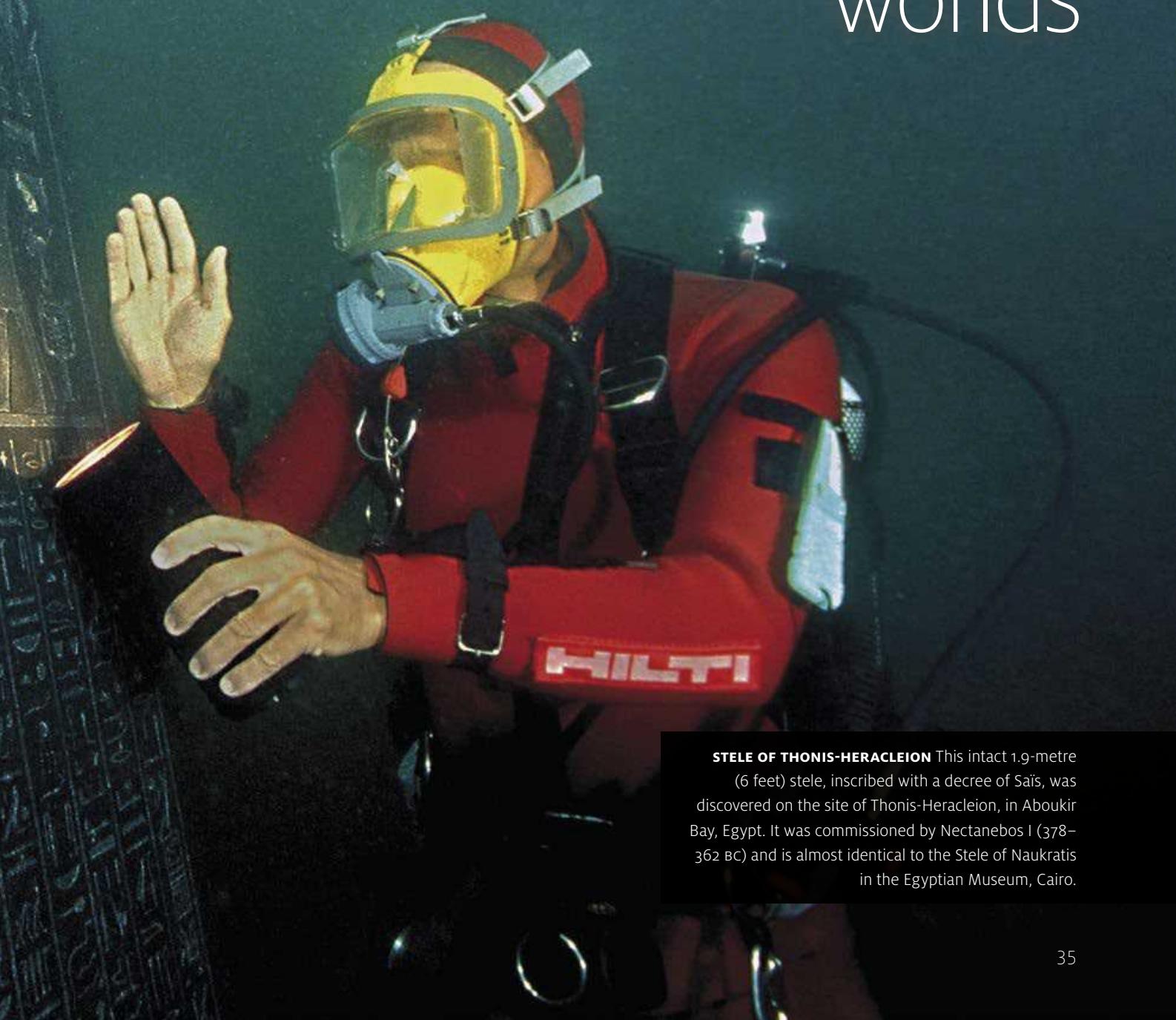




DIGGINGS looks at a unique exhibition launching at the British Museum this month, with photography by Christoph Gerigk.

# SUNKEN CITIES

## Egypt's lost worlds



**STELE OF THONIS-HERACLEION** This intact 1.9-metre (6 feet) stele, inscribed with a decree of Saïs, was discovered on the site of Thonis-Heracleion, in Aboukir Bay, Egypt. It was commissioned by Nectanebos I (378–362 BC) and is almost identical to the Stele of Naukratis in the Egyptian Museum, Cairo.



**COLOSSAL STATUE OF HAPY** An expression of tranquillity radiates from the idealised face of this man with breasts. His headdress bears the bushel of papyrus, the symbol of Lower Egypt and particularly associated with Hapy, the divine personification of the Inundation of the Nile.



THE BRITISH MUSEUM IN LONDON THIS MONTH launches an amazing exhibition of artefacts and history of the long lost cities of Thonis-Heracleion and Canopus, which sank beneath the Mediterranean some thousand years ago off the north coast of Egypt. The exhibition, organised with the Hilti Foundation and the Institut Européen d'Archéologie Sous-Marine, in collaboration with the Ministry of Antiquities of the Republic of Egypt, opens on May 19 and runs to November 27, 2016.

The BP-sponsored exhibition, "Sunken cities: Egypt's Lost Worlds," will be the museum's first large-scale exhibition of underwater discoveries. It will show how the exploration of Thonis-Heracleion and Canopus—submerged at the mouth of the River Nile—is transforming our understanding of the relationship between ancient Egypt and the Greek world and the great importance of these ancient cities.

Some 300 outstanding objects will be brought together for the exhibition, including more than 200 spectacular finds excavated off the coast of Egypt near Alexandria between 1996 and 2012. Important loans from Egyptian museums rarely seen before outside Egypt will be supplemented with objects from various sites across the Delta drawn from the British Museum's collection; most notably from Naukratis—a sister harbour town to Thonis-Heracleion and the first Greek settlement in Egypt.

Likely founded during the seventh century BC, Thonis-Heracleion and Canopus were busy, cosmopolitan cities that once sat on adjacent islands at the edge of the fertile lands of the Egyptian Delta, intersected by canals. After Alexander the Great's conquest of Egypt in 332 BC, centuries of Greek (Ptolemaic) rule followed. The exhibition reveals how cross-cultural exchange and religion flourished, particularly the worship of the Egyptian god of the afterlife, Osiris.

By the eighth century AD, the sea had reclaimed the cities and they lay hidden several metres beneath the seabed, their location and condition unclear. Although well-known from Egyptian decrees and Greek mythology and historians, past attempts to locate them were either fruitless or partial. The exhibition reveals how the pioneering European team led by Franck Goddio in collaboration with the Egyptian Ministry of Antiquities made use of the most up-to-date technologies to find them.

Thanks to the underwater setting, a vast number of objects of great archaeological significance have been astonishingly well preserved. Pristine monumental statues, fine metalware and gold jewellery reveal how Greece and Egypt interacted in the late first millennium BC. The artefacts offer a new insight into the quality and unique character of the art of this period and show how the Greek kings and queens who ruled Egypt for 300 years adopted and

**OSIRIS IN THE WATERS OF ABOUKIR BAY**, on the site of the now submerged ancient town of Canopus, a diver brings to light a first century AD marble Osiris—a statue in the form of a round-bellied recipient covered by a human head. The complex decoration evokes water, the source of life, and assimilated to the humours issuing from the carcass of Osiris.



adapted Egyptian beliefs and rituals to legitimise their reign.

The exhibition will feature a number of extraordinary, monumental sculptures. A 5.4 m (18 ft) granite statue of Hapy, a divine personification of the Nile's flood, will greet visitors as they enter the space. Masterpieces from Egyptian museums such as the Apis bull from the Serapeum in Alexandria will be shown alongside magnificent recent finds from the sea. One such piece is the stunning sculpture from Canopus representing Arsinoe II (the eldest daughter of Ptolemy I, founder of the Ptolemaic dynasty). The Greco-Macedonian queen became a goddess beloved to both Egyptians and Greeks after her death and is depicted here as the perfect embodiment of Aphrodite, a goddess of beauty "who grants fortunate sailing."

The exhibition will also cover the arrival of the Greeks in Egypt, when they were hosts and not rulers; privileged but controlled by the pharaohs. A complete stela from Thonis-Heracleion advertises a 380 BC royal decree of the Egyptian pharaoh Nectanebo I. It states that 10 per cent of the taxes collected on all goods imported from the "Sea of the Greeks" into Thonis-Heracleion and on all trade operations at Naukratis were to be donated to an Egyptian temple.

A wide range of objects, from modest to grand and costly, bears witness to the piety of both inhabitants and visitors at these major religious centres. Lead models of barges uncovered in the sacred waterway linking Thonis-Heracleion to Canopus are unique finds. They are associated with the Mysteries of Osiris, the most popular festival celebrated annually across Egypt during the month of Khoiak (mid-October to mid-November). Ranging in size from 6 to 67 cm (2.4 to 26 ins), these reproduce in metal a flotilla of 34 papyrus barges that would have been displayed on a waterway to celebrate the first sacred navigation of the festival. According to religious texts, each barge was to bear the figure of an Egyptian god, and would have been illuminated by 365 lamps. The lead barges are lasting testimonies possibly left by people who, long ago, celebrated this festival in the Canopic region.

Only a tiny proportion of these sites have revealed their secrets. The ongoing underwater archaeological mission continues to bring to light new masterpieces and further research every year as the most recent finds from 2012 will show.

Says Sir Richard Lambert, chairman of the British Museum, "It's hugely exciting to be announcing the British Museum's first large-scale exhibition of underwater discoveries and to be welcoming these important loans to London. We are grateful to BP for their ongoing support without which ambitious exhibitions such as these would simply not be possible. We're also delighted to be working with Franck Goddio, his expert team at IEASM, the Hilti Foundation and of course our Egyptian colleagues to bring the extraordinary story of these lost cities to life."

His Excellency Nasser Kamel, Ambassador of the Arab

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**TOP:** Youthful portrait of Alexander the Great (posthumous), from the second to first century BC.

**LEFT:** This statue of the bull god Apis, dating to Emperor Hadrian's reign, was discovered at the entrance to the underground galleries of the Serapeum of Alexandria.



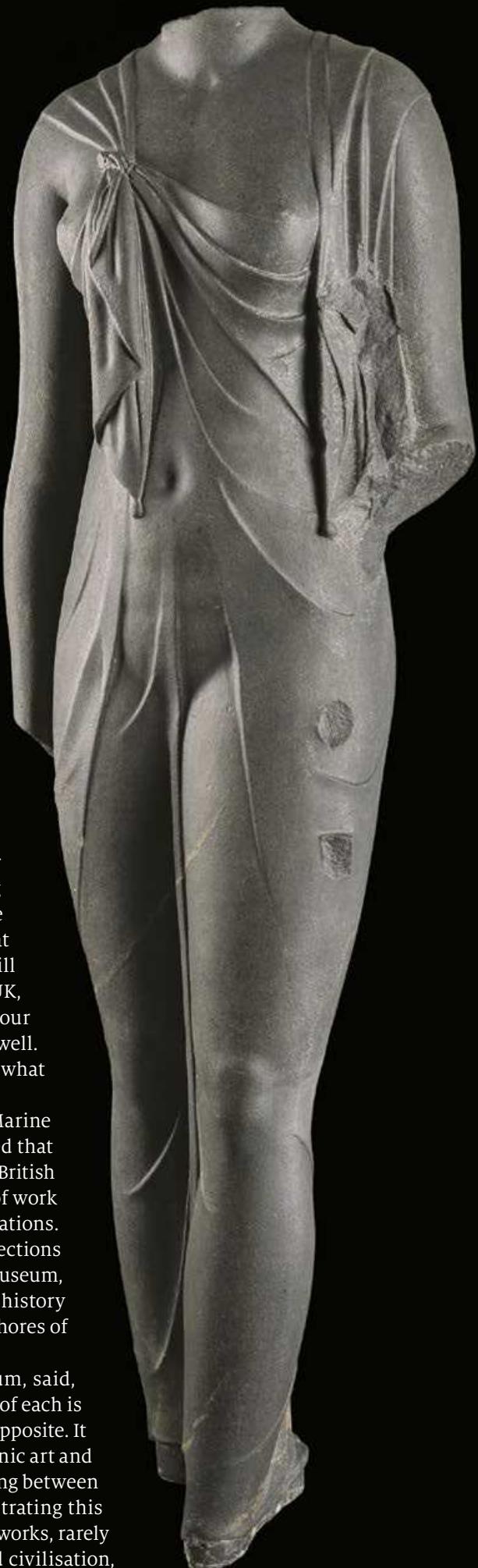
**ABOVE:** A jewel of Pharaoh Sheshonq I (945–925 BC). The pendant represents the solar barque floating on the waters under a starry sky. The sun of lapis-lazuli is protected by the spreading wings of Isis and Nephthys.

**RIGHT:** Statue of Arsinoe made from a hard, dark stone. Originally with a head the statue would have been slightly larger than life-size. The statue is certainly one of the Ptolemaic dynasty queens, most likely Arsinoe II, dressed as the goddess Isis. The statue was found at the site of Canopus.

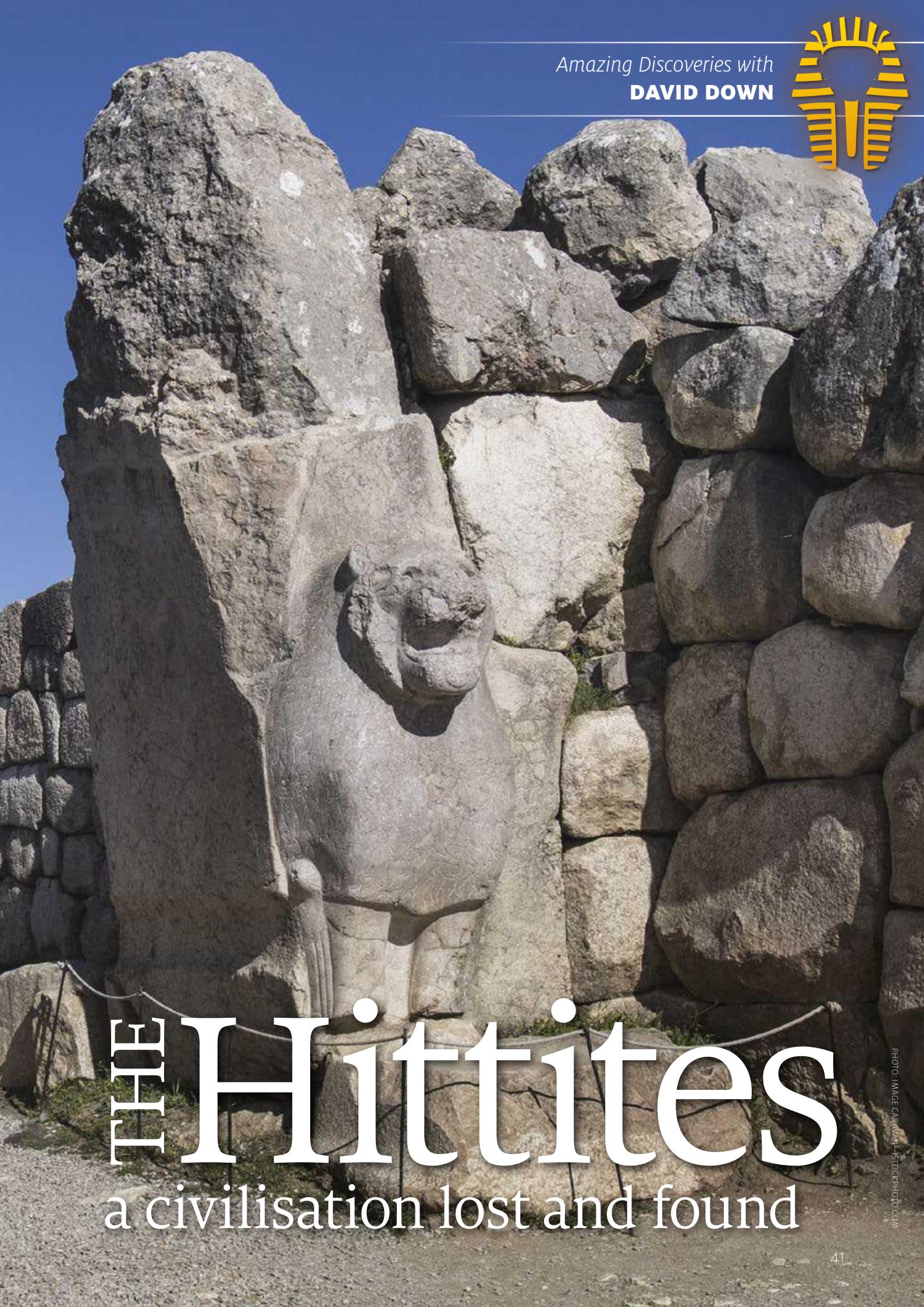
Republic of Egypt to the United Kingdom, said, “As well as looking for partners to invest in the Egyptian economy, Egypt is always searching for partners to help in exploring its heritage and treasures which are still hidden under its lands and waters. This exhibition shows that despite what we know of its tremendous history and culture, Egypt still has a lot more to offer to the world and we thank our partners in the UK, such as BP, for working with us in utilising our resources to develop our economy and through such an exhibition unravelling our history as well. I invite the people of Britain to visit this exhibition to get a glimpse of what Egypt has to offer, and come to Egypt to live that experience.”

Franck Goddio, president of Institut Européen d’Archéologie Sous-Marine (IEASM) and exhibition co-curator, said he and his team are delighted that the exhibition with its underwater discoveries will be on display at the British Museum. “It enables us to share with the public the results of years of work at the sunken cities and our fascination for ancient worlds and civilisations. Placing our discoveries alongside selected masterpieces from the collections of Egyptian museums, complemented by important objects from the museum, the exhibition presents unique insights into a fascinating period in history during which Egyptians and Greeks encountered each other on the shores of the Mediterranean.”

Aurélia Masson-Berghoff, exhibition curator at the British Museum, said, “People sometimes assume that when two cultures mix, the essence of each is diluted and, as a result, weakened; this exhibition demonstrates the opposite. It is a rare opportunity to reveal the beauty and strength of Late Pharaonic art and culture, alongside the latest research on the momentous intermingling between Egyptian and Greek communities in Egypt at this time. We are illustrating this vibrant cosmopolitan world through Egyptian, Greek and ‘hybrid’ artworks, rarely ever displayed side by side. It shows ancient Egypt not as an isolated civilisation, but as the outward looking, influential and inclusive society that it was.” ◆

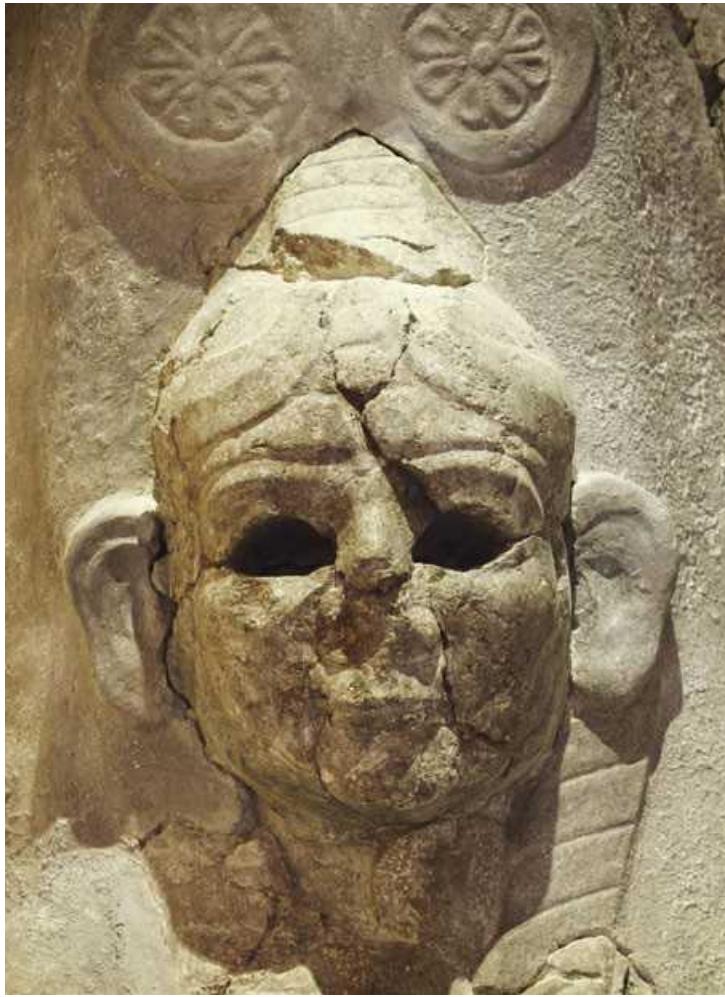




A large, weathered stone sculpture of a lion, part of a larger architectural complex, set against a clear blue sky. The lion is shown in profile, facing right, with its mouth open and tongue out. It appears to be resting on a low wall or platform.

# THE Hittites

a civilisation lost and found



The Hittites were a lost nation whose presence was long denied. ARCHAEOLOGICAL DIGGINGS founder and first editor **David Down** reveals the story of their rediscovery and recognition in history.

SOME 3000 YEARS AGO, THE HITTITES WERE the most powerful nation in the Middle East. Their empire extended from the Black Sea to Damascus, and more than 1000 km (620 miles) east to west across Anatolia, now a part of modern Turkey.

Militarily, they were a foe to be feared. They were masters of strategy and possessed a large number of chariots, which they were able to manoeuvre adroitly. Politically, they were more astute than any of their neighbours. They possessed a very humane code of laws and their women were remarkably emancipated for the times. Yet, this great nation not only disappeared from history, it was lost and forgotten so completely that historians of the nineteenth

century even denied its existence. The 1861 edition of *Encyclopaedia Britannica*, under the subject "Hittites," contains just eight-and-a-half lines, and even then it's but a summary of what is found in the Bible:

"HITTITES: the children or descendants of Heth, formed one of the tribes of Canaanites which occupied Palestine before the Israelites. They lived in the mountains of Judea around Hebron, and retained their nationality even after the return of the Israelites from exile." The "kings of the Hittites" are often mentioned in connection with the kings of Syria; and in the days of Joram their alliance with the Egyptians was an object of dread to the besieged inhabitants of Samaria.

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**ABOVE:** The 3000-year-old Sphinx of Hattusa, one of two unearthed in 1907 outside the modern town of Boğazkale. The sphinx was discovered by German archaeologists and has been on display in the Berlin Pergamon Museum since 1934. In 2011, after more than 70 years of wrangling over the valuable sculpture, it was returned to Turkey following threats to revoke the German Archaeological Institute's permit to excavate in Turkey if it was not returned.

**PREVIOUS PAGE:** The 3250-year-old Lion Gate of Hattusa, one of two grand entrances on the southern side of the ancient city. The entrance takes its name from the two matched lions—popular figures of protection and ornamentation—carved from the arched stones that formed a passageway into the city.

The Bible contains many references to this people, with the word Hittite appearing some 46 times in the King James Version. We read about them in Genesis 23:3, 4, after the death of Abraham's wife, Sarah: "Then Abraham rose from beside his dead wife and spoke to the Hittites. . . Sell me some property for a burial site here so I can bury my dead" (NIV).

And later, when Israel was about to occupy Canaan, the so-called Promised Land, after fleeing Egypt, the nations who were there are mentioned as the "Hittite and the Amorite and the Canaanite and the Perizzite and the Hivite and the Jebusite" (Deuteronomy 20:17).

But an even more significant occurrence is in 2 Kings 7:6. At that time, Samaria was under siege by the Syrians, when suddenly, the Syrians withdrew and retreated, "For the Lord had caused the army of the Syrians to hear the noise of chariots and the noise of horses—the noise of a great army; so they said to one another, 'Look, the king of Israel has hired against us the kings of the Hittites and the kings of the Egyptians to attack us!'"

So, according to the biblical record, the Hittites were a well-recognised and an important and powerful nation. Yet because no ancient historian mentioned them, and because they appeared to leave no archaeological footprint, critics of the Bible relegated them to the realm of myth. But this was about to change.

### PIECING IT TOGETHER

It was in 1812 that the Swiss explorer John Burckhardt discovered the lost city of Petra, returning to Europe with an astonishing tale of the wonders of the red city. In the course of his travels, Burckhardt visited Hamath in northern Syria, and there he noticed in the foundations of a building some large oblong stones on which were inscribed some strange hieroglyphs. They weren't Egyptian. Burckhardt had no idea of their origin, nor did anyone else.

In 1822, Burckhardt published the book *Travels in Syria and the Holy Land*. In it, he described "a stone with a number of small figures and signs which appears to be a kind of hieroglyphic writing, though it does not resemble that of Egypt." His revelation was not pursued.

Then in 1834, the French explorer Charles Texier was travelling through central Turkey in search of the lost Roman city of Tavium. During his search, he came to the village of Boğazköy, modern Boğazkale. He enquired about ancient ruins and was informed of some nearby.

Here were sculptured stones, obvious deserted streets and a surrounding wall 5 km (3 miles) in circumference. It was not Tavium—it was too big for that. But what was it? Who had built and occupied this great city? There was no known nation of antiquity that fitted. He went away baffled.

A friendly Turk then led Texier across a valley to a clump of large rocks jutting from the ground. The place was known as Yazılıkaya. Here, engraved on the side of one of the rocks, was a line of figures



**THE HAMATH STONES** Moved to the Istanbul Museum by Dr W Wright in 1872 amidst outrage from the superstitious local community, these stones became the very first artefacts that attracted modern day researchers to the existence of a Hittite civilisation and language. Some scholars believe these inscriptions form a connecting link between picture writing and alphabetic writing. The translation of these blocks are building inscriptions of the kings of Hamath, Urhilina and his son Uratamis.



with peaked hats. Who were they? Texier was mystified.

The following year, a British traveller, William Hamilton, came to Boğazkale and saw all that Texier had seen and 20 km to the north, he stumbled across another deserted city known to the Turks as Alacahoyuk. Hamilton was equally perplexed by his discovery.

In 1862, a Frenchman, George Perrot, came to Boğazkale. Besides the things that his predecessors had seen, Perrot found among the ruins a rock face known locally as the Nishan Tash, on which there was a lengthy hieroglyphic inscription. Perrot, of course, had no way of knowing what was written on the rock, but he too was bewildered by this strange writing.

In 1870, two Americans, J A Johnson and S Jessup, strolling through the bazaar at Hamath, noticed not only the stones that Burckhardt had reported, but three others. Shortly after, another similar stone was discovered 200 km north in Aleppo. The trail was getting hot.

## **GOVERNOR SUBHI PASHA AND WILLIAM WRIGHT**

Finally, in 1872, a man of a different character entered. William Wright, an Irish missionary, spoke the local language, understood the people and was on good terms with the governor, Subhi Pasha. The governor was an enlightened man and Wright was able to convince him that the stones should be removed and sent to the museum at Constantinople for safe-keeping. But that was when the trouble began.

It appears that the local people had a superstitious belief in the stones' curative properties for eye diseases, of which there were no shortage in the area. When the governor's men began to chisel the stones from the building, the people protested, but the governor, having the military on his side, was able to complete the task and remove the stones to his palace. Then the problems really started in earnest.

That night, Whirling Dervishes raced through the streets stirring up the emotions of the frenzied crowd. To make matters worse, there was a shower of falling stars, which heightened the superstitions of the crowd, and they stormed the gates of the palace. Had it not been for the protection of the soldiers, Wright and the governor would not have lived to see the sunrise.

In the morning, the crowd was still there and the governor admitted a delegation to present their complaints. He listened to their objections, especially to their assertion that Allah had shown his displeasure in the display of falling stars. He settled the mob, and the stones were removed to the Istanbul Museum where they are still on display.

Wright was able to take impressions of the writing and send it to the British Museum.

## **GAINING PAGES**

In 1876, excavations commenced in the ancient site of Carchemish, 100 km north-east of Aleppo, near the border between Turkey and Syria. Numerous impressive monuments of the same style as those in Turkey and more stones inscribed with the same mysterious hieroglyphic characters were discovered there.

Indecipherable inscriptions were found as far away as Smyrna on the west coast of Turkey. One thing was apparent: some great and cultured nation had once occupied this area and scholars needed to identify it.

Finally, in 1880, archaeological mystery burst. At a meeting of the Society for Biblical Archaeology in London, a young but well-known orientalist scholar, Archibald Henry Sayce, announced his conviction, despite the critics, that the monuments were to be attributed to the biblical Hittites.

Sayce was unmoved by the backlash that followed. He had carried out considerable research on the subject and had done some on-the-spot inspections in Turkey. He threw himself into further study. The debate was not only rife among scholars but in the press and among the British public, whose imagination has always been easily fired by archaeological discoveries.

The next year, a new edition of *Encyclopaedia Britannica* was published, and this time, under the heading "Hittites," were not the eight-and-a-half lines, but two whole pages. The article concluded,

*"We wait longingly for a confirmation of Professor Sayce's view that the Hittites were the authors of the Hamathite hieroglyphics. . . . If this be proved . . . this wonderful nation steps into a position hardly surpassed by that of any of the nations of the distant East."*

Those were almost prophetic words.

Finally, in 1884, Wright published a book, *The Empire of the Hittites*, in which he presented a mass of scholarly evidence that defied resistance. The Hittites had not only been positively identified, but had taken their place as one of the great nations of antiquity.

## **AN INDO-EUROPEAN CONTROVERSY**

But the search for truth had really only just begun. To be sure, the Hittites had been identified, but nothing was yet known of their history. That could not be clarified until the Hittite language and writing were understood.

The breakthrough came not from Turkey or Syria, but nearly 2000 kilometres away in Egypt. In 1887, the Tel el-Amarna Letters were discovered. These were clay tablets on which messages in Assyrian cuneiform were addressed to Pharaoh Akhenaten of Egypt.

One of the letters was from the Hittite king Suppiluliumas to Akhenaten, congratulating him on his accession to the throne. This was important, for it not only gave the name of a Hittite king, but it provided a synchronism by which he could be dated. For the first time, a date could be affixed to a Hittite king.

Two of the Tel el-Amarna Letters were of special importance: Known as the Arzawa Letters, they were written in readable cuneiform but included a hitherto unknown language in parallel. Scholars surmised that this might be the Hittite language, and went to work unravelling it.

In 1902, a Norwegian scholar, J A Knudtzon, announced his opinion that the Hittite language was of Indo-European origin. This suggestion was greeted with derision: Semitic, yes; Hamitic, possibly; Indo-European, never. Such was the push-back and academic argument against him that Knudtzon recanted his assertion, but time would later



**BÜYÜKKALE**, meaning “Great Fortress,” was the site of the Hittite acropolis and the state archives, on the east side of Boğazkale. These archives have played a most important role in learning about Hittite history, with hundreds of tablets, not only contracts and official documents but prophecies, instruction in cult practice, folklore, collections of legal decisions and historical texts being discovered.

prove him correct.

#### **HUGO WINCKLER**

Another significant development occurred in 1906. Hugo Winckler was a German with an unfortunate personality. He was the type of person who made an instant enemy of anyone he met. He was unfit for the work of archaeology as he was ill at ease in a foreign culture. In fact, he was not an archaeologist at all—he was a philologist, a scholar in writing, and in his field, he was brilliant. He could read the Assyrian cuneiform like we read a morning newspaper.

Winckler arrived at Boğazkale and immediately began digging. He was naturally more interested in inscriptions than monuments. And he found them—some 10,000 clay tablets in all. Many were written not only in readable cuneiform, but in the known Babylonian language. Winckler feverishly went about translating them.

Naturally, many of the tablets were in both cuneiform and Hittite languages. With this added material, scholars made great progress in understanding the Hittite language. In 1915, Friedrich Hrozny, a Czech linguist, caused a sensation by announcing that Hittite was indeed an Indo-European language, producing such a volume of evidence that scholars could not argue against his conclusion.

How the Hittites, of Hamitic ethnic origin and coming from Palestine, spoke a European-type of language was the subject of much speculation. By 1929, it was well

enough understood that a manual of the Hittite language was published.

#### **THE MISSING SEAL**

So the Hittites had been identified and the Hittite language translated. Now there remained one more problem: deciphering the Hittite hieroglyphs. No-one imagined it was going to be so easy.

Archibald Sayce—the scholar who first announced the mysterious monuments found in Turkey should be attributed to the biblical Hittites—faced the problem many years earlier. One day, Sayce discovered a report that mentioned a seal that had been found in western Turkey and sent to the British Museum. The seal was reported to include cuneiform writing and some unknown figures. Sayce believed it to be a bilingual document, something a philologist must have to crack an unknown language. He went in search of the seal.

At the museum, Sayce was told that while the seal was offered to the museum, it had been rejected as spurious because the strange figures on it were unknown. Sayce was flabbergasted, but fortunately, the official recalled that a copy of the seal had been made before it left the museum.

The copy of what became known as the Tarkendemos Seal was duly produced and Sayce went to work. He made some progress, being able to work out the word for king and the name of the king, but he could not go beyond

that—the seal was too brief.

In 1934, Kurt Bittel was excavating in Boğazkale when he discovered no less than 100 bilingual documents. The scholastic world was delighted and it seemed that cracking the Hittite hieroglyphs was only a matter of time. But alas, their hopes were dashed. Some progress was made, but the bilingual documents were only seals, too brief to provide the key.

### BILINGUAL BREAKTHROUGH IN KARATEPE

It was not until 1947 that the long-sought key was found, when Helmuth Theodor Bossert, a German philologist and archaeologist, accepted an invitation to teach at the Istanbul University. In the same year, Bossert took time off from his teaching to lead an archaeological party to Karatepe, a remote ruin in southern Turkey. He achieved dramatic success, discovering some fine Hittite reliefs.

Near the end of the dig, Bossert unearthed the top of a slab of stone on which was some Phoenician writing. He did more probing and uncovered another stone nearby on which he identified some indistinct Hittite hieroglyphics. It seemed he had discovered the all-important bilingual document. But there was no time to pursue the matter further, and as he saw no point in raising the expectations of his companions, he quickly reburied his finds and said nothing to his associates.

Five months later, Bossert was back at Karatepe. He was a likeable character who seemed to possess a sense of the dramatic. He set his party to work at the site where he had previously reburied the stones and stood back to watch. He didn't have long to wait. His party soon unearthed the stone on which there was the Phoenician inscription.

Delighted with their find, Bossert put them to work a few metres away where he knew they would find the Hittite inscription. In a few moments, they found that also, but as it emerged from its dusty bed in the fading light of that late afternoon, Bossert realised that what he had thought to be Hittite hieroglyphics were nothing more than cracks in the stone caused by the passage of time. His heart sank.



But the party continued digging and to Bossert's delight, not far away, they found another stone, which proved to be the dreamed-of bilingual document. It was then only a matter of time for the code to be broken and the secret of the hieroglyphics known.

Although there are some characters that are still not completely understood, most Hittite hieroglyphics can be read and scholars have been able to put together the history of this once great empire. Their hieroglyphics were originally credited as Hittite, because they were found in Hittite cities like Hattusa, but it is now recognised that the Hittites actually adopted the Luwian script. The Luwians were related to the Hittites and were the dominant group in the Late Hittite culture.

### KINGS OF THE HITTITES

According to biblical records, the Hittites were strongly represented in Palestine but either migrated or were forced out to Anatolia. Apparently, a migratory wave swept down from the north and conquered the Hittites, imposing their Indo-European language and culture upon them, while adopting the Hittite name.

The first king of this new people was Anittas, who conquered Hattusas, now called Boğazkale, and pronounced a curse upon it. The curse did not work very well, because it was soon rebuilt and became the capital city of the great Hittite empire.

The king who united the Hittites into a consolidated nation was Labarnas. He became such a legendary figure that later kings took his name as a title, much as how Egyptian kings were known as Pharaohs. A later king, Mursilis I, led his armies in foreign conquests, marching them as far as Babylon, which they plundered, making off with the golden image of the god Marduk.

But it was Suppiluliumas who took the Hittites to the pinnacle of their power. He rebuilt Hattusas and he was responsible for the inscription on the rock face known as the Nishan Tash. It was actually a king list and he, of course, was the last king listed, perhaps to help establish his right to rule as well as to perpetuate his memory.

Suppiluliumas developed his army into a formidable military machine with a strong chariot force. He established his rule over all of what we now call Turkey and northern Syria. It was he who sent a message of congratulations to Akhenaten on his accession to the Egyptian throne.

While Suppiluliumas was campaigning in Syria, a dramatic incident occurred. An Egyptian delegation arrived at his camp with a message from Ankhesenamun, the widowed queen of Tutankhamun. The message read,

*"My husband has died and not one son do I have. But of you it is said that you have many sons. If you will give me a son of yours he could be my husband, for how can I take one of my slaves and make him a*

**TARKENDEMOS SEAL:** Hittite hieroglyphs surround a figure in royal dress, with an inscription repeated in cuneiform around the rim. The text identifies Tarkummuwa as the owner and Hittite ruler. This famous bilingual inscription provided the first clues for deciphering Hittite/Luwian hieroglyphs.



**KARATEPE BILINGUAL INSRIPTION** When scholars excavated Karatepe in 1947, they discovered the first-known bilingual inscription in Luwian Hieroglyphic and Phoenician. The inscription was carved over two stone gates stretching over many elements ranging from plain to ornamental blocks, covering a figure of a lion and sphinx and relief sculptures.

*husband and honour him?"*

Suppiluliumas felt the request was too good to be true, so he dispatched a delegation of his own to ascertain whether the offer was genuine. The delegation returned confirming the offer and also brought with them another plea from the Egyptian queen for a Hittite prince to be sent to Egypt. Suppiluliumas hesitated no longer and sent one of his sons. But his delay proved fatal, as by then, the statesman-priest, Eye, had seized the throne and the young queen. Before the Hittite prince arrived, he was assassinated.

It is intriguing to speculate how the course of history might have been changed had Suppiluliumas acted promptly. Egypt may have become a province of the Hittite Empire, with a Hittite seated upon the throne of Egypt.

## WIPED OUT

A confrontation between the two great superpowers of the then known world was inevitable and it came in the days of Muwatalli II. His opponent was Rameses the Great of Egypt. The clash was the well-known Battle of Kadesh in which Rameses was fortunate to escape with his life. A few years later, Rameses was content to sign a non-aggression

pact with Muwatallis' successor, Hattusilis III.

But the sun was about to set on the great Hittite empire. Tudhaliyas IV was the last great Hittite king. He was a devout religious reformer and was responsible for the rock carvings at Yazilikaya. A small stone temple was built at the entrance to the natural rocks. The foundations of this temple have been excavated by archaeologists and can be seen by visitors today. There is also a well-preserved relief of Tudhaliyas in the embrace of his god. The Hittite worship was polytheistic and the line of figures copied on the rock face depict some of their gods.

But the so-called People of the Sea were on the march and they swept over the Hittite empire, obliterating it from memory. A few pockets of resistance remained but, they too, soon disappeared and the Hittites were lost and forgotten. Only in the Bible was there preserved a knowledge of this great nation, again underscoring its veracity as, at the very least, an accurate history of humankind and a useful tool of archaeology, and something not to be ignored or scoffed at. ◆

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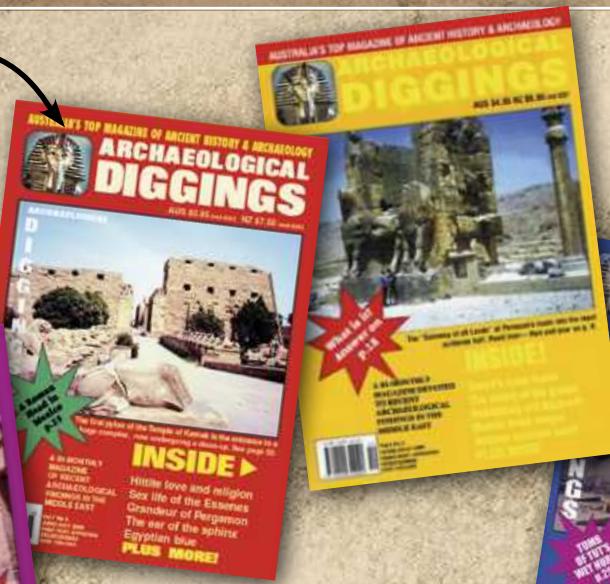
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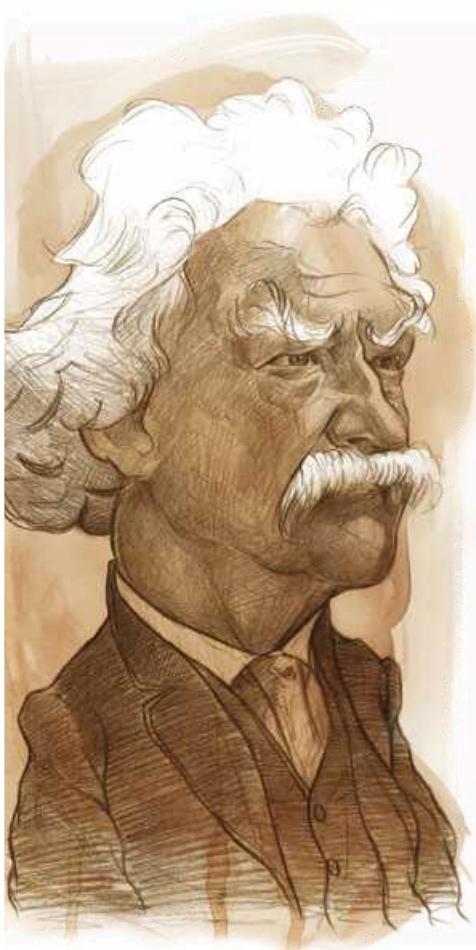
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**APRIL/MAY 1994.** After nine years of producing a successful monthly newsletter on archaeology, founding editor David Down publishes the first edition of ARCHAEOLOGICAL DIGGINGS. The magazine is single-colour with a cover price of \$3.95.





# Part II Cairo and Home

Mark Twain's *The Innocents Abroad* chronicles the author's (Samuel Langhorne Clemens) "Grand Tour" to Europe and the Levant. Originally written as a series of newspaper dispatches, it is a humorous and satirical account. Travelling aboard the steamer *USS Quaker City*, the travellers—or pilgrims—visit France, Italy, Greece, Turkey, the Holy Land and, finally, Egypt. In this episode, the final in the series, the pilgrims arrive in Egypt and their final port of call before heading home.

**W**E VISITED ALL THE HOLY PLACES ABOUT Jerusalem which we had left unvisited, and then, about three o'clock one afternoon, we fell into procession and marched out at the stately Damascus gate, and the walls of Jerusalem shut us out forever. We paused on the summit of a distant hill and took a final look and made a final farewell to the venerable city which had been such a good home to us.

We followed a narrow bridle-path which traversed the beds of the mountain gorges, and when we could we got out of the way of the long trains of laden camels and asses. We crossed the brook which furnished David the stone that killed Goliah, and no doubt we looked upon the very ground whereon that noted battle was fought. We passed by a picturesque old Gothic ruin whose stone pavements had rung to the armed heels of many a valorous Crusader, and we rode through a piece of country which we were told once knew Samson as a citizen.

We stayed all night with the good monks at the convent of Ramleh, and in the morning got up and galloped the horses a good part of the distance from there to Jaffa, or Joppa, for the plain was as level as a floor and free from stones.

It was from Jaffa that Jonah sailed when he was told to go and prophesy against Nineveh. The timbers used in the construction of Solomon's Temple were floated to Jaffa in rafts, and the narrow opening in the reef through which they passed to the shore is not an inch wider or a shade less dangerous to navigate than it was then. Such is the sleepy nature of the population Palestine's only good seaport has now and always had. Jaffa has a history

and a stirring one.

So ends the pilgrimage. We ought to be glad that we did not make it for the purpose of feasting our eyes upon fascinating aspects of nature, for we should have been disappointed—at least at this season of the year. A writer in *Life in the Holy Land* observes:

*"Monotonous and uninviting as much of the Holy Land will appear to persons accustomed to the almost constant verdure of flowers, ample streams and varied surface of our own country, we must remember that its aspect to the Israelites after the weary march of forty years through the desert must have been very different."*

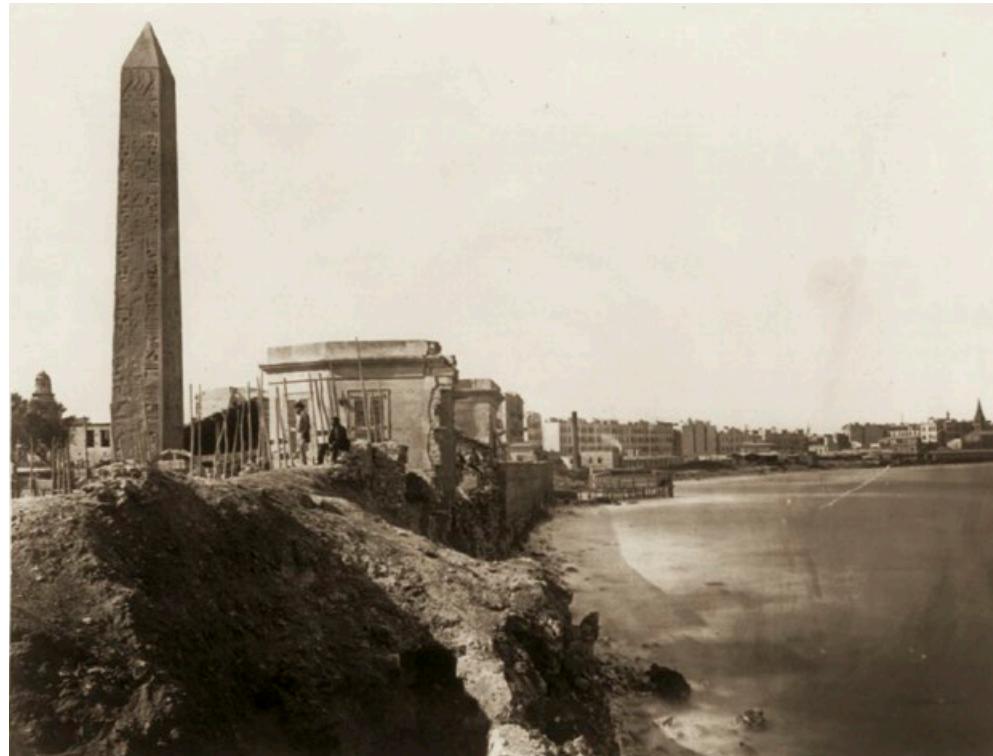
Which all of us will freely grant. But it truly is "monotonous and uninviting," and there is no sufficient reason for describing it as being otherwise.

## INTO EGYPT

After a pleasant voyage and a good rest, we drew near to Egypt and out of the mellowest of sunsets we saw the domes and minarets of Alexandria rise into view. When we reached the pier we found an army of Egyptian boys with donkeys no larger than themselves, waiting for passengers—for donkeys are the omnibuses of Egypt. We found the hotel and secured rooms, and were happy to know that the Prince of Wales had stopped there once. They had it everywhere on signs. No other princes had stopped there since, till Jack and I came. We went abroad through the town, then, and found it a city of huge commercial buildings, and broad, handsome streets brilliant with gas-light. By night it was a sort of reminiscence of Paris.



**POMPEY'S PILLAR, ALEXANDRIA, CIRCA 1870.** At a height of 27 metres (88.5 ft), it is the primary landmark of an ancient Egyptian village called Rhakotis. Contrary to popular belief, the pillar did not belong to the great Roman leader Pompey, but was erected in the Greco-Roman period by the people of Alexandria to honour Emperor Diocletian.



**CLEOPATRA'S NEEDLE, ALEXANDRIA, CIRCA 1875.** One of three ancient Egyptian obelisks which have since been relocated to London, Paris and New York City. This one was re-erected in Central Park in 1880, offered by the Egyptian Khedive to America in exchange for funds for Egypt. The name is a misnomer, as the obelisk has no connection with Queen Cleopatra of Egypt, being originally made during the reign of Thutmoses III.

[We] went in picturesque procession to the American Consul's; to the great gardens; to Cleopatra's Needle; to Pompey's Pillar; to the palace of the Viceroy of Egypt; to the Nile; to the superb groves of date-palms. One of our most inveterate relic-hunters had his hammer with him, and tried to break a fragment off the upright Needle and could not do it; he tried the prostrate one and failed; he borrowed a heavy sledge hammer from a mason and tried again. He tried Pompey's Pillar, and this baffled him. Scattered all about the mighty monolith were sphinxes of noble countenance, carved out of Egyptian granite as hard as blue steel, and whose shapely features the wear of five thousand years had failed to mark or mar. The relic-hunter battered at these persistently, and sweated profusely over his work. He might as well have attempted to deface the moon.

Alexandria was too much like a European city to be novel, and we soon tired of it. We took the cars and came up here to ancient Cairo, which is an Oriental city and of the completest pattern. We are stopping at Shepherd's Hotel, which is the worst on earth except the one I stopped at once in a small town in the United States.

We are about starting to the illustrious Pyramids of Egypt, and the donkeys for the voyage are under inspection. The donkeys were all good, all handsome, all strong and in good condition, all fast and all willing to prove it. They had all been newly barbered, and were exceedingly stylish. Several of the white ones were barred like zebras with rainbow stripes of blue and red and yellow paint.

These were indescribably gorgeous.

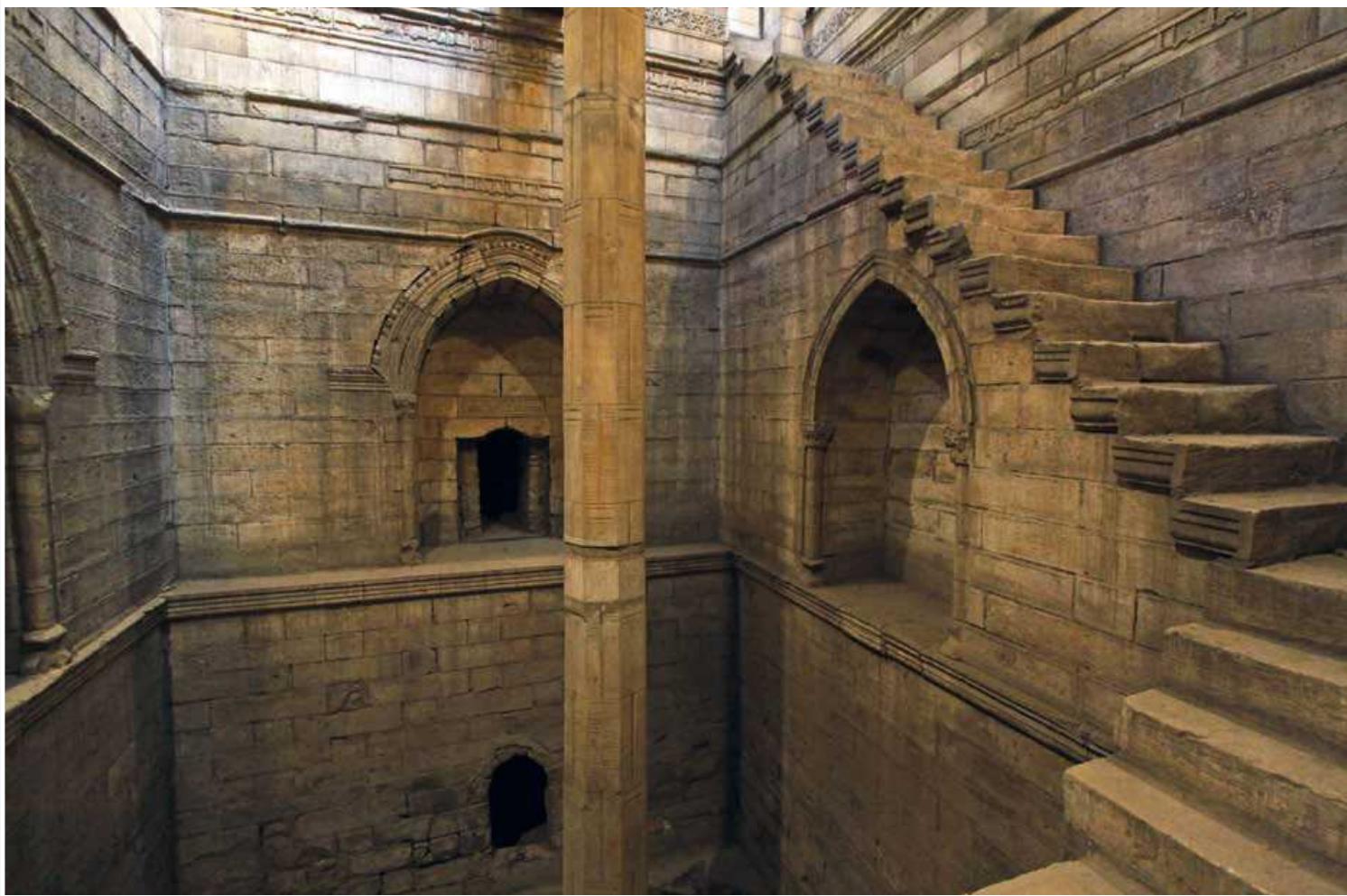
When we turned into the broad avenue that leads out of the city toward Old Cairo, there was plenty of room. The walls of stately date-palms that fenced the gardens and bordered the way, threw their shadows down and made the air cool and bracing.

Somewhere along this route we had a few startling exhibitions of Oriental simplicity. Occasionally we saw stark-naked men of superb build, bathing, and making no attempt at concealment.

## CAIRO

Arrived at Old Cairo, the camp-followers took up the donkeys and tumbled them bodily aboard a small boat with a lateen sail, and we followed and got under way. The deck was closely packed with donkeys and men; the two sailors had to climb over and under and through the wedged mass to work the sails, and the steersman had to crowd four or five donkeys out of the way when he wished to swing his tiller and put his helm hard-down.

On the island at our right was the machine they call the Nilometer, a stone-column whose business it is to mark the rise of the river and prophecy whether it will reach only thirty-two feet and produce a famine, or whether it will properly flood the land at forty and produce plenty, or whether it will rise to forty-three and bring death and destruction to flocks and crops—but how it does all this they could not explain to us so that we could understand. The Nile at this point is muddy, swift and turbid, and does



**THE ANCIENT NILOMETER.** This stone-column, called a Nilometer, was used to mark the rise of the River Nile and predict either a coming famine, a flood, a year of plenty—or death and destruction to flocks and crops. This very Nilometer, which Twain saw on Roda Island, was built in AD 715 and remained in use until the 1920s. And since then, the building of the Aswan High Dam has rendered it fully obsolete.

not lack a great deal of being as wide as the Mississippi.

We scrambled up the steep bank at the shabby town of Ghizeh, mounted the donkeys again, and scampered away. For four or five miles the route lay along a high embankment which they say is to be the bed of a railway the Sultan means to build for no other reason than that when the Empress of the French comes to visit him she can go to the Pyramids in comfort. This is true Oriental hospitality.

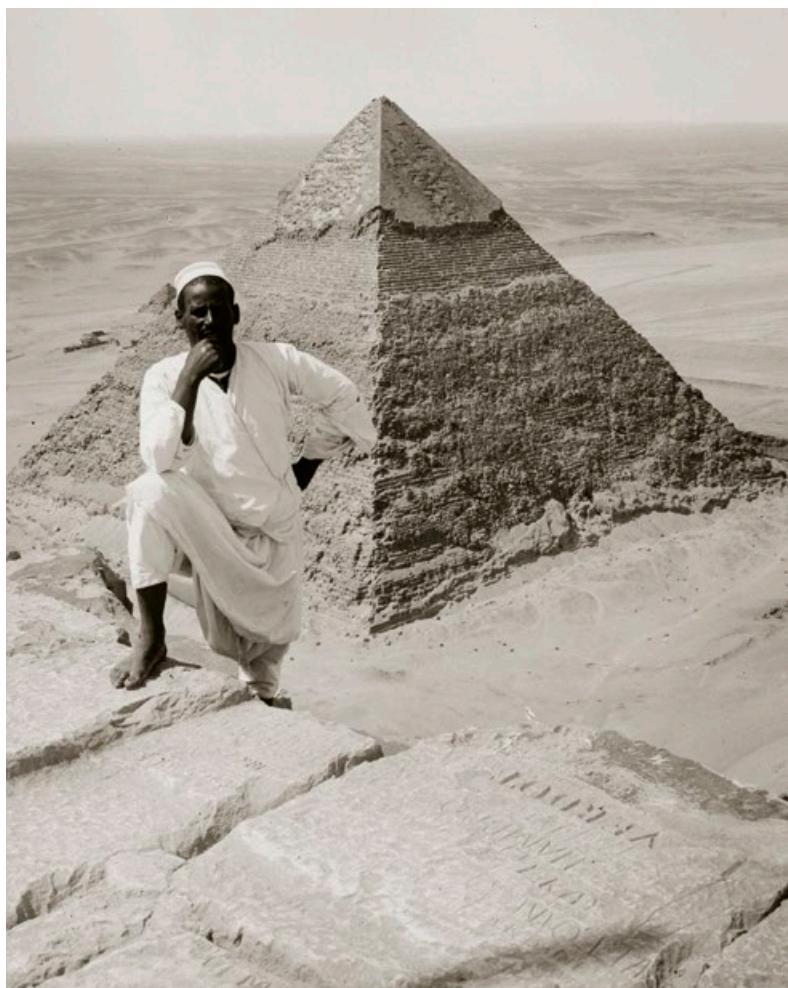
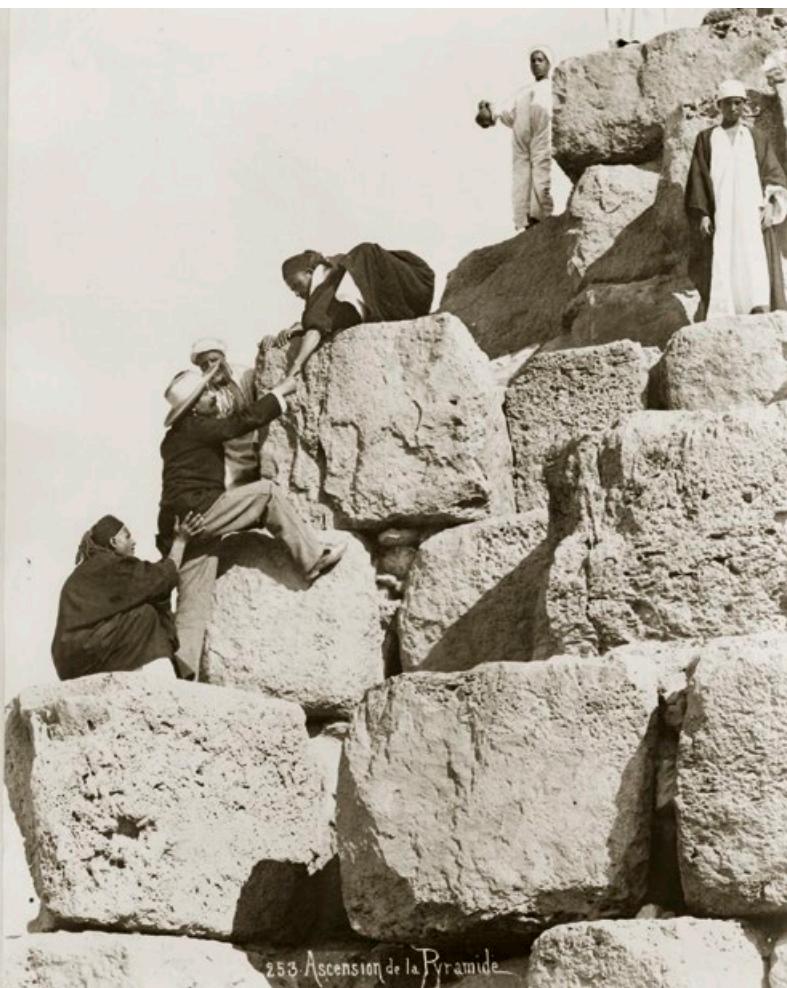
At the distance of a few miles the Pyramids rising above the palms, looked very clean-cut, very grand and imposing, and very soft and filmy, as well. They swam in a rich haze that took from them all suggestions of unfeeling stone, and made them seem only the airy nothings of a dream—structures which might blossom into tiers of vague arches, or ornate colonnades, may be, and change and change again, into all graceful forms of architecture, while we looked, and then melt deliciously away and blend with the tremulous atmosphere.

At the end of the levee we left the mules and went in a sailboat across an arm of the Nile or an overflow, and landed where the sands of the Great Sahara left their embankment, as straight as a wall, along the verge of the alluvial plain of the river. A laborious walk in the flaming sun brought us to the foot of the great Pyramid of Cheops. It was a fairy vision no longer. It was a corrugated, unsightly mountain

of stone. Each of its monstrous sides was a wide stairway which rose upward, step above step, narrowing as it went, till it tapered to a point far aloft in the air. Insect men and women—pilgrims from the *Quaker City*—were creeping about its dizzy perches, and one little black swarm were waving postage stamps from the airy summit—handkerchiefs will be understood.

### THE PYRAMIDS

Of course we were besieged by a rabble of muscular Egyptians and Arabs who wanted the contract of dragging us to the top—all tourists are. Of course you could not hear your own voice for the din that was around you. Of course the Sheiks said they were the only responsible parties; that all contracts must be made with them, all moneys paid over to them, and none exacted from us by any but themselves alone. Of course they contracted that the varlets who dragged us up should not mention bucksheesh once. For such is the usual routine. Of course we contracted with them, paid them, were delivered into the hands of the draggers, dragged up the Pyramids, and harried and be-deviled for bucksheesh from the foundation clear to the summit. We paid it, too, for we were purposely spread very far apart over the vast side of the Pyramid. There was no help near if we called, and the Herculeses who



## Video

Active internet connection required.

**CLIMBING CHEOPS, CIRCA 1860.** A tourist from the time of Mark Twain's visit being helped up the Great Pyramid by Egyptian men. One tour guide frustrated Twain by racing from the top of one pyramid to an adjacent one and back up again in under nine minutes. Climbing the pyramids has been illegal since 1951, in an effort to protect the ancient monuments, but it is also exceedingly dangerous with many people having slipped to their death ascending the summit. Today, anyone caught scaling the pyramids could face up to three years in an Egyptian jail. This law didn't stop a young German tourist climbing to the top earlier this year, capturing his illegal actions on video. Tap here to view his climb.

dragged us had a way of asking sweetly and flatteringly for bucksheesh, which was seductive, and of looking fierce and threatening to throw us down the precipice, which was persuasive and convincing.

Each step being full as high as a dinner-table; there being very, very many of the steps; an Arab having hold of each of our arms and springing upward from step to step and snatching us with them, forcing us to lift our feet as high as our breasts every time, and do it rapidly and keep it up till we were ready to faint, who shall say it is not lively, exhilarating, lacerating, muscle-straining, bone-wrenching and perfectly excruciating and exhausting pastime, climbing the Pyramids?

Twice, for one minute, they let me rest while they extorted bucksheesh, and then continued their maniac flight up the Pyramid. They wished to beat the other parties. It was nothing to them that I, a stranger, must be sacrificed upon the altar of their unholy ambition.

On the one hand, a mighty sea of yellow sand stretched away toward the ends of the earth, solemn, silent, shorn of vegetation, its solitude uncheered by any forms of creature life; on the other, the Eden of Egypt was spread below us—a

broad green floor, cloven by the sinuous river, dotted with villages, its vast distances measured and marked by the diminishing stature of receding clusters of palms. It lay asleep in an enchanted atmosphere. There was no sound, no motion. Above the date-plumes in the middle distance, swelled a domed and pinnacled mass, glimmering through a tinted, exquisite mist; away toward the horizon a dozen shapely pyramids watched over ruined Memphis: and at our feet the bland impassible Sphynx looked out upon the picture from her throne in the sands as placidly and pensively as she had looked upon its like full fifty lagging centuries ago.

We suffered torture no pen can describe from the hungry appeals for bucksheesh. The traditional Arab proposed, in the traditional way, to run down Cheops, cross the eighth of a mile of sand intervening between it and the tall pyramid of Cephron, ascend to Cephron's summit and return to us on the top of Cheops—all in nine minutes by the watch, and the whole service to be rendered for a single dollar. In the first flush of irritation, I said let the Arab and his exploits go to the mischief. But stay. The upper third of Cephron was coated with dressed marble, smooth as glass. A blessed



thought entered my brain. He must infallibly break his neck. Close the contract with dispatch, I said, and let him go. He started. We watched. He went bounding down the vast broadside, spring after spring, like an ibex. He grew small and smaller till he became a bobbing pygmy, away down toward the bottom—then disappeared. We turned and peered over the other side—forty seconds—eighty seconds—a hundred—happiness, he is dead already!—two minutes—and a quarter—"There he goes!" Too true—it was too true. He was very small, now. Gradually, but surely, he overcame the level ground. He began to spring and climb again. Up, up, up—at last he reached the smooth coating—now for it. But he clung to it with toes and fingers, like a fly. He crawled this way and that—away to the right, slanting upward—away to the left, still slanting upward—and stood at last, a black peg on the summit, and waved his pygmy scarf! Then he crept downward to the raw steps again, then picked up his agile heels and flew. We lost him presently. But presently again we saw him under us, mounting with undiminished energy. Shortly he bounded into our midst

with a gallant war-whoop. Time, eight minutes, forty-one seconds. He had won. His bones were intact. It was a failure. I reflected. I said to myself, he is tired, and must grow dizzy. I will risk another dollar on him.

He started again. Made the trip again. Slipped on the smooth coating—I almost had him. But an infamous crevice saved him. He was with us once more—perfectly sound. Time, eight minutes, forty-six seconds.

I said to Dan, "Lend me a dollar—I can beat this game, yet."

Worse and worse. He won again. Time, eight minutes, forty-eight seconds.

We descended, hot and out of humour. The dragoman lit candles, and we all entered a hole near the base of the pyramid, attended by a crazy rabble of Arabs who thrust their services upon us uninvited. They dragged us up a long inclined chute, and dripped candle-grease all over us. This chute was not more than twice as wide and high as a Saratoga trunk, and was walled, roofed and floored with solid blocks of Egyptian granite as wide as a wardrobe, twice as thick and three times as long. We kept on climbing,



**THE GREAT SPHINX OF EGYPT, 1867.** Men and camels stand atop the paw of the Sphinx, near the Great Pyramid. It is the largest single-sculpted statue in the world, carved from the bedrock of the plateau. The first attempt to dig it out dates back to 1400 BC, by Thutmose IV. In 1817, the first modern dig uncovered the Sphinx's chest completely, with the entirety finally revealed in 1925—measuring 20 metres (65.5 ft) high and 74 metres (243 ft) long—substantially larger than Twain records.

the rear of the procession and in due time arrived again with a newly-invented delinquent list for liquidation.

Each side of the Pyramid of Cheops is about seventy-five feet [23 m] higher than the cross on St Peter's, for it is four hundred and eighty feet [146 m] high. I could conjure up no comparison that would convey to my mind a satisfactory comprehension of the magnitude of a pile of monstrous stones that covered thirteen acres [5.3 hectares] of ground and stretched upward four hundred and eighty tiresome feet [146 m], and so I gave it up and walked down to the Sphynx.

After years of waiting, it was before me at last. The great face was so sad, so earnest, so longing, so patient. There was a dignity not of earth in its mien, and in its countenance a benignity such as never anything human wore. It was stone, but it seemed sentient. If ever an image of stone thought, it was thinking. It was looking toward the verge of the landscape, yet looking at nothing—nothing but distance and vacancy. It was looking over and beyond everything of the present, and far into the past. It was gazing out over the ocean of Time—over lines of century-waves which, further and further receding, closed nearer and nearer together, and blended at last into one unbroken tide, away toward the horizon of remote antiquity. It was thinking of the wars of departed ages; of the empires it had seen created and destroyed; of the nations whose birth it had witnessed, whose progress it had watched, whose annihilation it had noted; of the joy and sorrow, the life and death, the grandeur and decay, of five thousand slow revolving years. It was the type of an attribute of man—of a faculty of his heart and brain.

### THE SPHYNX

The Sphynx is grand in its loneliness; it is imposing in its magnitude; it is impressive in the mystery that hangs over its story. And there is that in the overshadowing majesty of this eternal figure of stone, with its accusing memory of the deeds of all ages, which reveals to one something of what he shall feel when he shall stand at last in the awful presence of God.

While we stood looking, a wart, or an excrescence of some kind, appeared on the jaw of the Sphynx. We heard the familiar clink of a hammer, and understood the case at once. One of our well-meaning reptiles—I mean relic-hunters—had crawled up there and was trying to break a "specimen" from the face of this the most majestic creation the hand of man has wrought. But the great image contemplated the dead ages as calmly as ever, unconscious of the small insect that was fretting at its jaw. Egyptian granite that has defied the storms and earthquakes of all time has nothing to fear from the tack-hammers of ignorant excursionists—highwaymen. He failed in his enterprise.

through the oppressive gloom, till I thought we ought to be nearing the top of the pyramid again, and then came to the "Queen's Chamber," and shortly to the Chamber of the King. These large apartments were tombs. The walls were built of monstrous masses of smoothed granite, neatly joined together. Some of them were nearly as large square as an ordinary parlour. A great stone sarcophagus like a bath-tub stood in the centre of the King's Chamber. Around it were gathered a picturesque group of Arab savages and soiled and tattered pilgrims, who held their candles aloft in the gloom while they chattered, and the winking blurs of light shed a dim glory down upon one of the irrepressible memento-seekers who was pecking at the venerable sarcophagus with his sacreligious hammer.

We struggled out to the open air and the bright sunshine, and for the space of thirty minutes received ragged Arabs by couples, dozens and platoons, and paid them bucksheesh for services they swore and proved by each other that they had rendered, but which we had not been aware of before—and as each party was paid, they dropped into



**THE RIVER NILE, CIRCA 1898.** Egypt was the last port of call for Mark Twain and his fellow travellers on their five-month Mediterranean tour aboard the steamer *USS Quaker City*, in 1867. From Cairo they travelled several weeks across the Atlantic bound for America.

We sent a sheik to arrest him if he had the authority, or to warn him, if he had not, that by the laws of Egypt the crime he was attempting to commit was punishable with imprisonment. Then he desisted and went away.

The Sphynx: a hundred and twenty-five feet [38 m] long, sixty feet [12.3 m] high, and a hundred and two feet [31 m] around the head, if I remember rightly—carved out of one solid block of stone harder than any iron. I only set down these figures and these remarks to suggest the prodigious labour the carving of it so elegantly, so symmetrically, so faultlessly, must have cost. This species of stone is so hard that figures cut in it remain sharp and unmarred after exposure to the weather for two or three thousand years. Now did it take a hundred years of patient toil to carve the Sphynx? It seems probable.

#### HOMeward Bound

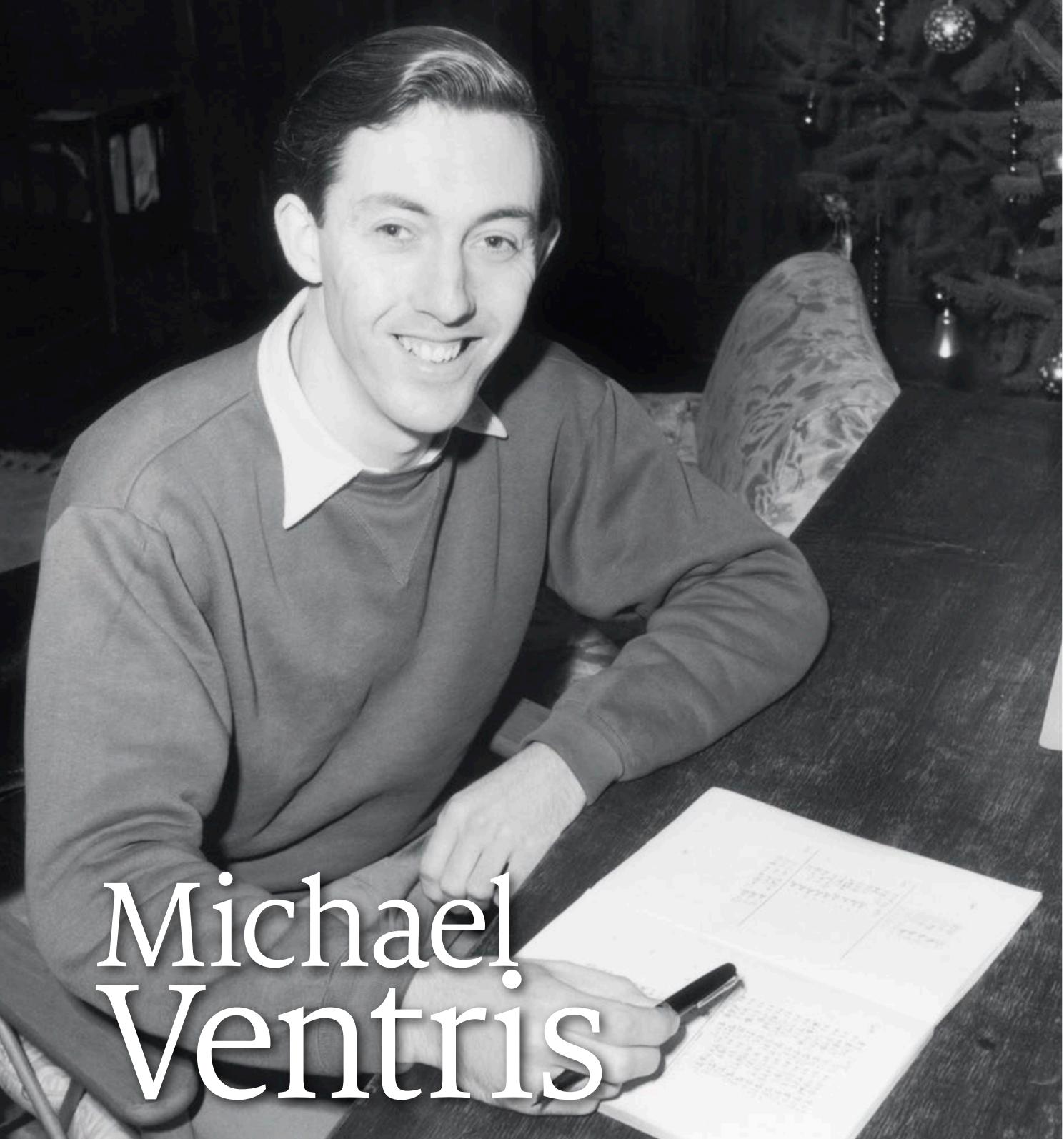
We were glad to have seen the land which was the mother of civilisation—which taught Greece her letters, and through Greece Rome, and through Rome the world; the land which could have humanised and civilised the hapless children of Israel. We were glad to have seen that land which had glass three thousand years before England had it, and could paint upon it as none of us can paint now; that land which knew, three thousand years ago, well nigh all of medicine and surgery which science has discovered lately; which had all those curious surgical instruments which science has invented recently; which had in high excellence a thousand luxuries and necessities of an advanced civilisation which we have gradually contrived and accumulated in modern times and claimed as things that were new under the sun; that had paper untold centuries before we dreamt of it; that had a perfect system of common schools so long before we boasted of our achievements in that direction; that so embalmed the

dead that flesh was made almost immortal—which we cannot do; that built temples which mock at destroying time and smile grimly upon our lauded little prodigies of architecture; that old land that knew all which we know now, perchance, and more.

We were at sea now, for a very long voyage—we were to pass through the entire length of the Levant; through the entire length of the Mediterranean proper, also, and then cross the full width of the Atlantic—a voyage of several weeks.

We cannot forget Florence—Naples—nor the foretaste of heaven that is in the delicious atmosphere of Greece—and surely not Athens and the broken temples of the Acropolis. Surely not venerable Rome—nor the green plain that compasses her round about, contrasting its brightness with her grey decay—nor the ruined arches that stand apart in the plain and clothe their looped and windowed raggedness with vines. We shall remember St Peter's: not as one sees it when he walks the streets of Rome and fancies all her domes are just alike, but as he sees it leagues away, when every meaner edifice has faded out of sight and that one dome looms superbly up in the flush of sunset, full of dignity and grace, strongly outlined as a mountain.

We shall remember Constantinople and the Bosphorus—the colossal magnificence of Baalbec—the Pyramids of Egypt—the prodigious form, the benignant countenance of the Sphynx—Oriental Smyrna—sacred Jerusalem—Damascus, the “Pearl of the East,” the pride of Syria, the fabled Garden of Eden, the home of princes and genii of the Arabian Nights, the oldest metropolis on earth, the one city in all the world that has kept its name and held its place and looked serenely on while the Kingdoms and Empires of four thousand years have risen to life, enjoyed their little season of pride and pomp, and then vanished and been forgotten! ◆



# Michael Ventris

SOMETIMES CHANCE GIVES IT TO THE PROFESSIONAL archaeologist like Howard Carter to make a history-making discovery. But at other times, it's an amateur, a mere enthusiast whose lot it is. And it was to the latter, one Michael Ventris, a humble architect, that chance gave acclaim: the person who deciphered Europe's oldest known written script, Linear B, opening up history's annals.

Born in Britain in 1922, Ventris's interest in ancient Europe was sparked at age 14, by a museum exhibition in London showcasing Minoan artefacts discovered by Sir Arthur Evans, while on a school excursion. It was sheer chance that Ventris and Evans met at the museum, the seasoned then-86-year-old archaeologist igniting the lad's

**MICHAEL VENTRIS trained and worked as a successful architect, but the work for which he is remembered, he did in his spare time—deciphering and translating Linear B, an ancient and more abstract linear style of writing of the Minoan civilisation.**



**(LEFT) LINEAR B MINOAN CLAY TABLET** The Linear B script is characterised by about 90 different characters interspersed with signs for numbers (represented below, left), as well as the depiction of everyday objects and commodities such as pots, cloth and grain. In the early 20th century, archaeologists excavated some of the most famous sites of Ancient Greece finding large numbers of clay tablets inscribed with this type of script, which baffled them as they were significantly different to any other known script. For more than a decade, Ventris worked to decipher the script, succeeding in 1952, and opening up the understanding of Europe's oldest known written language.



impressionable imagination. During their encounter, the conversation naturally turned to ancient languages—Ventris was already fluent in both modern French and German—a topic that fascinated Ventris, who, as a mere seven-year old, had taken up the study of Egyptian hieroglyphs as his hobby.

But despite Evans' old age and a lifetime of experience as an archaeologist, which many envy to this day, when it came to reading Minoan writings and glyphs he'd found in Crete—the aforementioned Linear B—he was at a loss. The years spent trying to decipher it had proved futile. In the course of their conversation Evans mentioned this to the young Ventris, and showed the youth some undeciphered clay tablets from the Minoans. Immediately Ventris was hooked, and from that point it became his life's quest to decipher them.

Ventris would never become a professional archaeologist, nor even an historian. Instead, he trained as an architect at the Architectural Association School in London. Yet, his mathematical bent and expertise helped him to recognise patterns underpinning the raw symbols, the very quality required for the task.

But to achieve this, Ventris had first to be trained in the ancient languages and texts, including Greek, which he did. However, he believed that Linear B and Greek were two separate languages and that Linear B was not an Indo-European language as was Greek, but rather more like ancient Etruscan, from Italy. These beliefs he set out in his first journal article, published in *The American Journal of Archaeology* in 1940, when he was aged just 18.

For more than a decade Ventris tried to decipher the script, with the breakthrough needed coming in 1952.



**THE TRIPOD TABLET** is one of the most famous Linear B inscriptions. Discovered by Carl Blegen in 1952 at the ancient site of Pylos, this tablet was instrumental to Michael Ventris's deciphering of Linear B. The "document" consists of three lines of text separated by two horizontal lines, read left to right. The name "Tripod Tablet" was given to it, as the tripod (a form of cauldron) symbol appears repeatedly in the text as part of an inventory of items.

Observing grammatical inflections in three similar-looking symbols of the kind used in classical Greek and other Indo-European languages, Ventris concluded that Linear B must be a form of archaic Greek but centuries older than Homer's Iliad and Odyssey. In a private letter to a friend at the time, he gushed with excitement over this revelation: "During the last couple of days I have been carrying on with the fantasy I discussed in my last note; and though it runs completely counter to everything I've said in the past, I'm now almost completely convinced that the [Linear B] tablets are in Greek."

Several days after making his groundbreaking discovery, Ventris announced it to the world on BBC Radio. Listening in was one John Chadwick, an expert in early Greek, who got in touch with Ventris and offered to collaborate on the translation of Linear B texts. Ventris agreed and the two set about the project.

As this was unfolding, another archaeologist, Carl Blegen, chanced upon a new collection of Linear B tablets at the ancient site of Pylos, on the western coast of the Peloponnesian Peninsula of southern Greece, providing a physical connection between the two languages.

Ventris and Chadwick learned of Blegen's discovery and immediately widened their collaboration to include him and his trove. To their pleasant surprise the way opened, for the Linear B scripts of Crete and Pylos contained many identical or similar symbols and words, indicating close cultural links between the two locations in Minoan times. These were of the kind about which Homer had described at the time of the Trojan War, which was around 1200 BC.

Between 1953 and 1956, Ventris, Chadwick and other scholars produced the seminal book on the language, *Documents in Mycenaean Greek*, in which they laid out their case that Linear B was the written form used by the Mycenaeans and Minoans from around 1450 BC onwards, making it Europe's oldest known written language. The book, or at least its thesis, was acclaimed.

However, Ventris would not enjoy his success for long, for later in 1956, he died in a car accident, aged just 34. But he lives on thanks to his contribution to history. His gravestone is inscribed, "Michael Ventris who first read the Minoan Linear B script as Greek 1922–1956." It is a fitting reminder of Ventris's brilliance and achievement and contribution to the study of humanity's heritage. ♦

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## GOLD IN THEM THERE HILLS

**GALILEE, ISRAEL** While hiking in eastern Galilee in Israel, Laurie Rimon noticed something shiny in the grass. It was a rare 1900-year-old Roman gold coin minted by Trajan, who reigned from AD 98 to 117.

This coin was minted to commemorate Augustus, the first emperor of Rome; its reverse decorated with a legionary eagle flanked by two military standards (symbols of the Roman army), and on the obverse an inscription, "Divus Augustus," with a portrait of the deified Augustus, the first emperor of the Roman Empire.

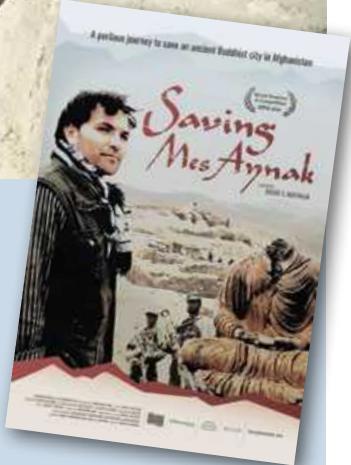
The coin, being found in Galilee, possibly reflects the presence of the Roman army in the region some 2000 years ago—and possibly in the context of activity against Bar Kokhba supporters in Galilee.



**THE GOLD COIN** with a portrait of Augustus and on the reverse side, an eagle flanked by two military standards.



Director Brent E Huffman preparing to interview archaeologist Qadir Temori, filming at one of the many villages that will be destroyed due to the mining.



## FILMMAKER WORKS TO SAVE ANCIENT SITE

**EVANSTON, USA** A Northwestern University (USA) professor and documentary filmmaker is using the medium of film to save a 5000-year-old archaeological site. Brent Huffman's movie investigates a Chinese mining company's plans to raze an ancient Buddhist site in Afghanistan, which sits atop an estimated \$100 billion of copper. His movie, *Saving Mes Aynak*, follows the frantic efforts of archaeologists working to protect the site, where mining is scheduled to begin this year. The open pit process would destroy Mes Aynak and 90 per cent of the artefacts, of which to date just 10 per cent has been excavated.

Huffman, an assistant professor in the Medill School of Journalism, Media, Integrated Marketing Communications, has also examined China's international presence in Africa and Pakistan.

—Newswise



### Video

Tap here to watch the trailer to *Saving Mes Aynak*.  
Active internet connection required.

**AN ANCIENT BUDDHIST STUPA** dwarfs director Brent E Huffman as he films *Saving Mes Aynak*. Stupas often house Buddhist relics, and are used as places of meditation.



# DRONES AID RESEARCH/CONSERVATION

**CHICAGO, USA** Unmanned drones monitoring the landscape on the Dead Sea Plain in Jordan over the past three years, reveal that looting continues at the archeological site of Fifa, though at a measurably reduced pace, according to Morag Kersel, a DePaul University archaeologist.

"Drones are proving to be powerful new tools to archaeologists for documenting excavation, mapping landscapes and identifying buried features. They also can be applied to monitor site destruction and looting," said Kersel, an assistant professor of anthropology at DePaul.

Kersel, whose research focus is on trade and antiquities, describes drones as an emerging tool for archaeology.

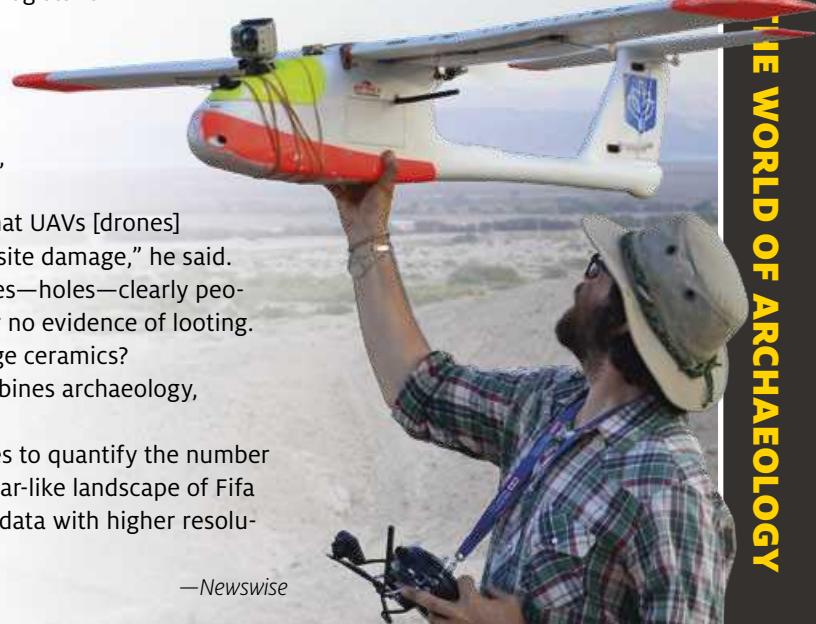
"Three seasons of monitoring at Fifa have demonstrated that UAVs [drones] can provide quantifiable evidence for the rate of ongoing site damage," he said.

"Between 2013 and 2014, we had 34 new looting episodes—holes—clearly people were still looting. In the next year, there's very little or no evidence of looting. Why? Is it because there is no demand for Early Bronze Age ceramics?

"Ours is a holistic approach to the landscape, which combines archaeology, ethnography and the drones," Kersel said.

Archaeologists for years have been using satellite images to quantify the number of looted graves. "Comparing satellite images with the lunar-like landscape of Fifa led us to the revolutionary idea of using drones to gather data with higher resolution from areas of our own choosing," Kersel explained.

—Newswise



## Video

Tap here to watch a short movie about preserving the Ad-Deir Monument.

PHOTO: MORAG KERSEL COURTESY OF THE FOLLOW THE POTS PROJECT

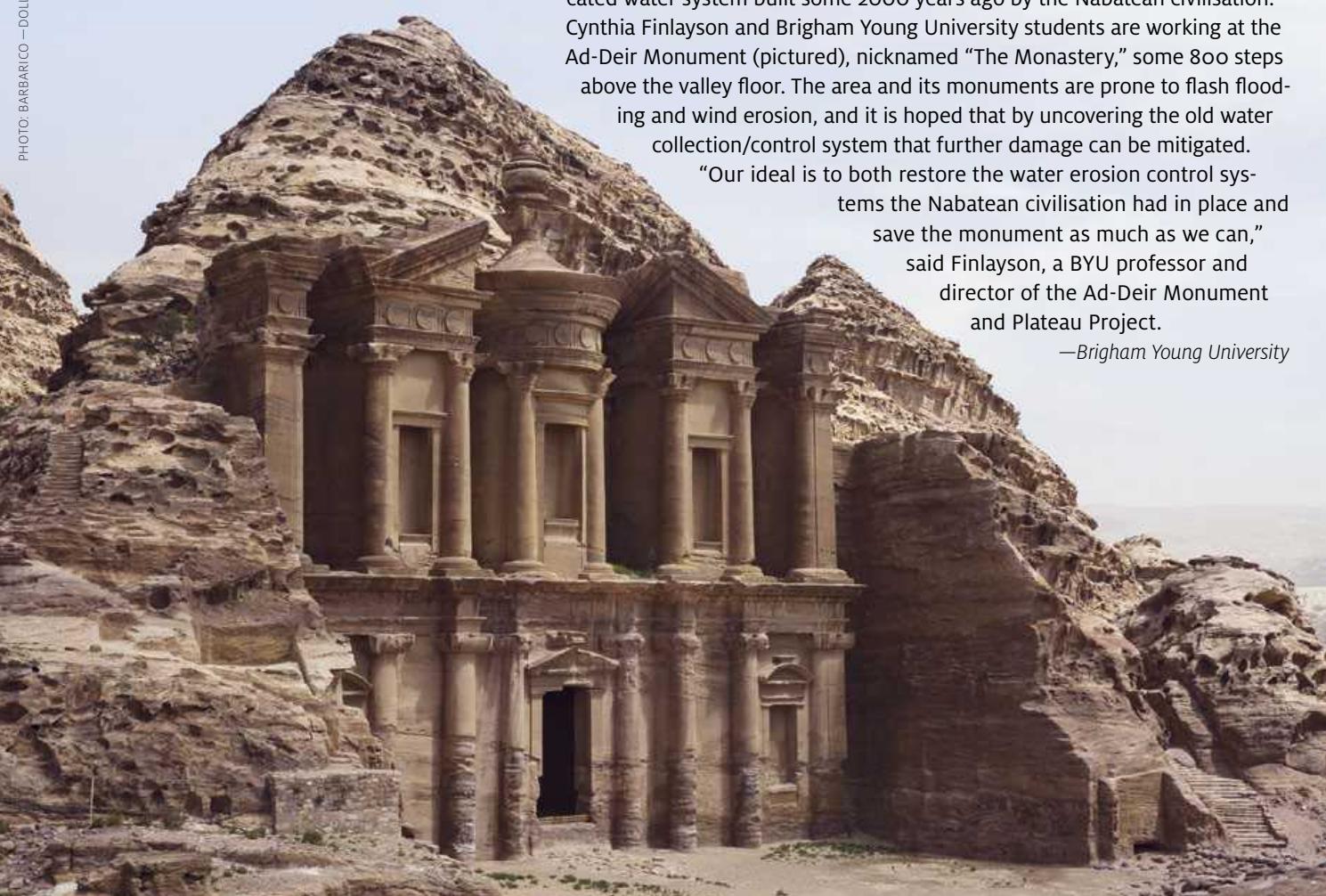
PHOTO: BARBARICO — DOLLARPHOToclub

# HELP FOR CLASSIC SITE

**PETRA, JORDAN** A team of archaeologists is recovering part of the sophisticated water system built some 2000 years ago by the Nabatean civilisation. Cynthia Finlayson and Brigham Young University students are working at the Ad-Deir Monument (pictured), nicknamed "The Monastery," some 800 steps above the valley floor. The area and its monuments are prone to flash flooding and wind erosion, and it is hoped that by uncovering the old water collection/control system that further damage can be mitigated.

"Our ideal is to both restore the water erosion control systems the Nabatean civilisation had in place and save the monument as much as we can," said Finlayson, a BYU professor and director of the Ad-Deir Monument and Plateau Project.

—Brigham Young University



# NEFERTITI'S TOMB FOUND?

**LUXOR, EGYPT** Radar scans of King Tutankhamun's burial chamber have revealed two hidden rooms, its north and west walls containing concealed doors leading to other rooms. Initial analysis suggests that the unexplored chambers contain organic and metallic objects. However, experts say that while the scans might reveal another tomb behind the false walls, it is unlikely they will be crammed with gold. It is thought that the spaces may be the tomb of Nefertiti, whose 3300-year-old bust on display in Berlin is one of the most famous symbols of ancient Egypt and classical beauty.

British Egyptologist Nicholas Reeves speculates that Tutankhamun, who died at age 19, may have been rushed into an outer chamber of what was originally Nefertiti's tomb, one of the wives of Tutankhamun's father, Pharaoh Akhenaten.

Reeves reached his theory after high-resolution images discovered what he said were straight lines in Tutankhamun's tomb. These lines, previously hidden by the colour and texture-plastered and painted stones, indicate the presence of a sealed chamber, he said.

For many, Tutankhamun embodies ancient Egypt's glory, because his tomb was packed with the glittering wealth of the rich 18th Dynasty, from 1569 to 1315 BC. Nefertiti was the primary wife of the Pharaoh Akhenaten, who unsuccessfully tried to switch Egypt to a form of monotheism.

—The Associated Press [March 17, 2016]

Journalists are shown a radar used to scan King Tutankhamun's tomb revealing two hidden rooms that some believe may hide Queen Nefertiti's remains.



## BRITAIN'S AMATEUR ARCHAEOLOGISTS

**OXFORDSHIRE, UK** Since 1997, amateur history sleuths have made approximately one million archaeological discoveries in the UK, the most recent of note was the discovery of objects dating to AD 870, the age of Vikings and Anglo-Saxons, by retired advertising executive Jim Mather. While searching farmland near Watlington, Oxfordshire, he came across Viking buried treasure—"a greasy haggis with bits of treasure sticking out at the corners," as he described it.

When researchers at the British Museum broke open the clump, they found it contained chopped up gold, 15 silver ingots, three Viking arm bands and 186 silver coins, a find estimated to be worth more than £1m.

Before this discovery, archaeologists had recovered only one coin bearing the likeness of Ceolwulf II, the ruler of a large kingdom in central England called Mercia. What the new coins show is that Alfred the Great of the neighbouring kingdom of Wessex (871–899), who conquered Mercia, was probably in alliance with Ceolwulf, as the coins depict the two rulers side by side and were minted in both kingdoms.

Another significant stash of artefacts was discovered by Graham Vickers, a metal detectorist, who found a stylus, an ornate silver writing implement, in a field near Little Carlton, Lancashire, in 2011. According to a press release, after alerting the authorities, 20 more styli, 300 dress pins, coins from the 7th and 8th centuries as well as pottery from Germany and other trade goods from continental Europe were recovered at the site.

—Smithsonian



## MORE OF POMPEII

**POMPEII, ITALY** More buildings than ever are now accessible to visitors to Pompeii. The extra sites include the house of Julia Felix, an extravagant ancient spa, the Little House of the Orchard, which is home to colourful frescoes, and the gardens of the House of Venus in the Shell. Tourists will also be able to see some human casts, shown for the first time. New routes around the site will also be opened, allowing access to these new areas and also ensuring that the usual routes do not get worn out by the some three million visitors who come to Pompeii each year.

Concerns have been raised about the pressures placed on the site by so many visitors, many of them from cruise tours, the entrance steps of the Temple of Apollo, in particular. Cruise tourists have only a limited amount of time and take the same routes, concentrating their impact. The area open to the public is now some 22 hectares, about half of the excavated area.



## OLDEST GLASS KILNS

**JEZREEL VALLEY, ISRAEL** The remains of the oldest glass kilns in Israel have been discovered during the construction of the Jezreel Valley Railway Project between Ha-'Emekim Junction and Yagur Junction.

These kilns, dated at 1600 years old, indicate that Israel was one of the foremost centres of glass production in the ancient world.

According to the Israel Antiquities Authority (IAA) Glass Department, historical sources dating to the Roman period indicated that the Valley of Akko was renowned for its excellent quality sand, which was highly suitable for the manufacture of glass. Chemical analyses conducted on glass vessels from this period, which were discovered in Europe and in shipwrecks in the Mediterranean basin, have shown that the source of the glass is from this region.

This site was discovered by chance by an inspector with the IAA, while overseeing infrastructure work being conducted on the new railway line from Haifa to the east, who observed chunks of glass, a floor and an ash layer inside a trench.

Excavation revealed kilns consisting of two built compartments: a firebox where kindling was burnt to create a very high temperature, and a melting chamber into which the raw materials for the glass (clean beach sand and salt) were inserted and melted together. The glass was heated for up to two weeks, producing large chunks of glass, some of which weighed in excess of 10 tonnes. The large glass chunks were then broken into smaller pieces and sent to workshops where they were melted again to produce somewhat more exquisite glassware.

Glass was utilised in the construction of public buildings in the form of windows, mosaics and lighting fixtures. Consequently, large quantities of raw glass were required which were prepared on an industrial scale. The installation discovered in the excavation is an example of one of these ancient production facilities.



### Video

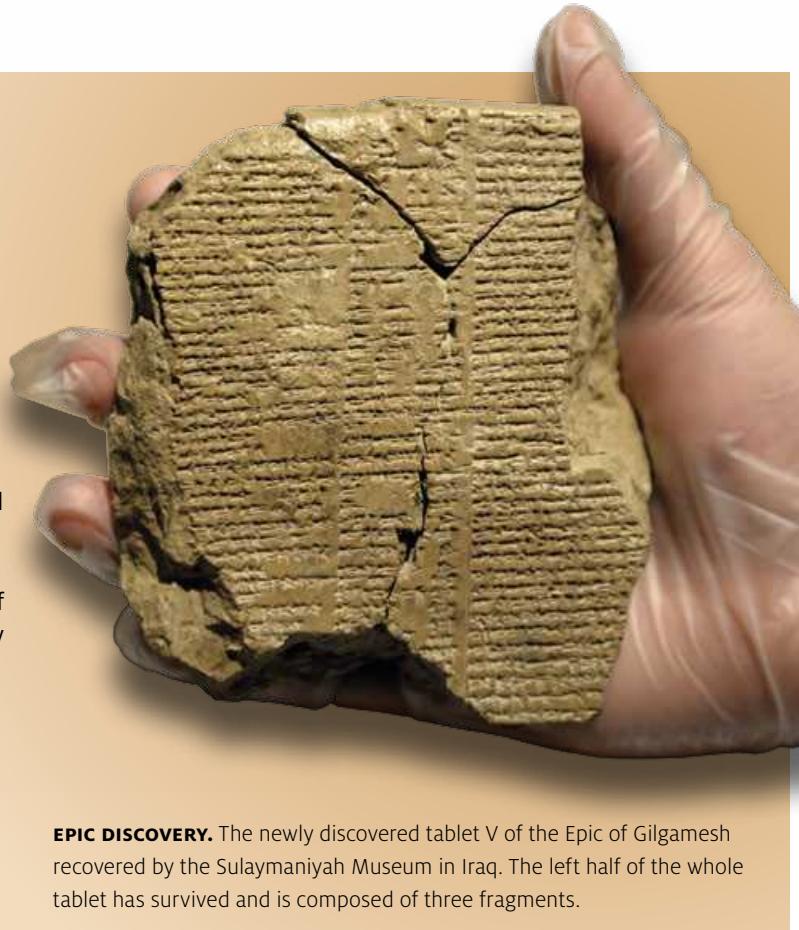
Tap here to watch a short movie about the oldest glassworks ever found in Israel.

# MISSING LINES FROM THE EPIC OF GILGAMESH

**KURDISTAN REGION, IRAQ** A deal between the Sulaymaniyah Museum in Slemani and a smuggler has recovered a portion of the Epic of Gilgamesh, a Mesopotamian poem dating to 2100 BC.

During the Iraq war, the museum purchased ancient artefacts that would otherwise have been sold on the black market and taken out of the country. The clay tablet, consisting of 20 lines, from a collection of 80–90 tablets, was identified as a section of the ancient poem. Its translation adds 20 previously unknown lines to the epic story, recounting details of the journey of the Sumerian king Gilgamesh and a travelling companion Enkidu as they travel to the Cedar Forest to defeat the ogre Humbaba. The new tablet fills in some of the details about how the forest looked and sounded.

Countless thousands of cuneiform tablets await excavation in the ruin-mounds of Iraq and Syria.



**EPIC DISCOVERY.** The newly discovered tablet V of the Epic of Gilgamesh recovered by the Sulaymaniyah Museum in Iraq. The left half of the whole tablet has survived and is composed of three fragments.

## ANCIENT LITERACY LEVELS

Scholars have long debated how much of the Hebrew Bible was composed before the destruction of Jerusalem and the Kingdom of Judah in 586 BC. While scholars agree that key biblical texts were written from the seventh century BC, the exact date of the compilation of these books remains in question. As the proliferation of literacy is considered a precondition for the creation of such texts, ancient inscriptions provide important evidence of the level of literacy at the time.

Now a study by the Tel Aviv University (TAU) suggests that widespread literacy was required for this massive undertaking and provides evidence of such in the final days of the Kingdom of Judah. A profusion of literate individuals in Judah may have set the stage for the compilation of biblical works that constitute the basis of Judahite history and theology, such as the early version of the books of Deuteronomy to Second Kings, according to the researchers, Professors Israel Finkelstein of TAU's Department of Archaeology and Ancient Near Eastern Civilizations, and Eliezer Piasezky of the School of Physics and Astronomy.

But what were the literacy rates in Judah at the end of the First Temple period? And what were the literacy rates later on, under Persian rule?

Using computerised image processing and machine learning tools, 16 inscriptions unearthed at an excavation in the remote fort of Arad were analysed, and deduced that the texts had been written by at least six authors. The content of the inscriptions disclosed that reading and writing abilities existed throughout the military chain of command, from the highest echelon to the deputy quartermaster of the fort.

The inscriptions found at Arad consisted of instructions for troop movements and the registration of expenses for food. The tone and nature of the commands precluded the role of professional scribes. Considering the remoteness of Arad, the small garrison stationed there and the narrow time period of the inscriptions, this finding indicates a high literacy rate within Judah's administrative apparatus—and provides a suitable background for the composition of a critical mass of biblical texts.

Extrapolating from Arad to a broader area, the researchers estimate that in a kingdom of some 100,000 people, at least several hundred were literate. However, following the fall of Judah, there was a large gap in production of Hebrew inscriptions until the second century BC, the next period with evidence for widespread literacy. This reduces the odds for a compilation of substantial biblical literature in Jerusalem between ca. 586 and 200 BC.



Ancient Hebrew inscriptions such as this 2500 year old one provide ancient evidence of the widespread high level of literacy required to produce the Bible.

**THE LAST EDITION** Sadly, this is the final issue of ARCHAEOLOGICAL DIGGINGS. And we owe you, our long-time and loyal readers, an explanation. Subscribers will receive an explanatory letter by mail along with a refund of the balance of their subscription.

The publisher, Adventist Media Network, attempted a rescue of the magazine some three years ago, taking it over from its founder David Down, who for some 20 years had produced the great magazine that you came to love. (David was by then in his nineties and unable to continue.). However, times and events have conspired against us and DIGGINGS has succumbed to the same pressures that afflict the whole print industry. And then some.

Having refurbished the magazine and launched a new interactive digital edition, we then built a state-of-the-art subscriptions system. However, and sadly, we were not able to build sufficient subscriptions to maintain it. This was compounded by the loss of our US distributorship and sales in 2014; then the crises in the Middle East of the past two years resulted in the cancellation of DIGGINGS tours. Income was well below expenses, and having searched for some months for an alternative publisher, suspension of publication was the only option.

As to the future, we will continue our online presence, adding back-issue content and news to the ARCHAEOLOGICAL DIGGINGS website. We also plan an email newsletter, which if supported, will launch in July. It will replicate DIGGINGS' "News From the World of Archaeology" feature and be edited by Gary Webster, who will continue to run DIGGINGS seminars (see right) and tours. To receive the newsletter, register your email address online at [diggings.com.au](http://diggings.com.au). If you have a DIGGINGS online account, you are already registered and will receive the first newsletter automatically. Then, if you do not wish to receive it, you can simply "UNSUBSCRIBE." It will include news of archaeology, and also DIGGINGS events and seminars, offers and tour information, as well as your feedback.

DIGGINGS also has a stock of most back issues, which we will supply on request. Contact us via phone, email or online. Likewise we have a limited range of apparel, including T-shirts, shirts/blouses and caps (see advertisement page 59).

So it is with sadness that we must say goodbye—the DIGGINGS team—editors Gary, Lee and Melody; designer Shane; and assistants Naomi and Linda, and volunteer Callan Keegan.



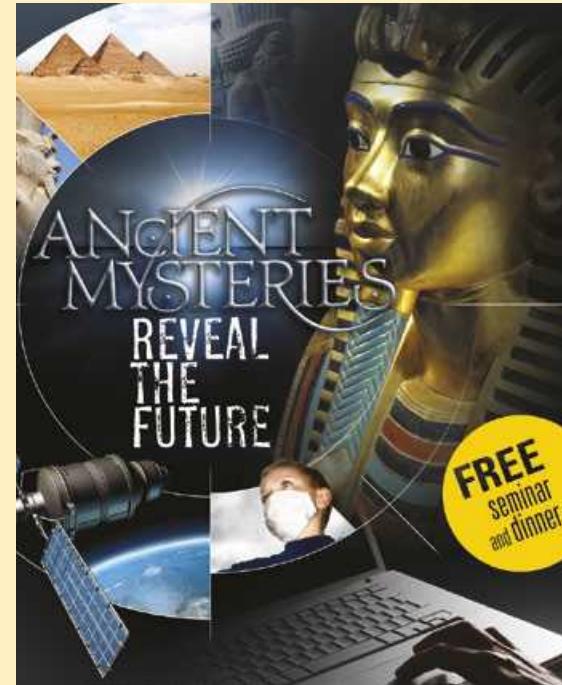
#### **FREE DIGGINGS CAP!**

Send us a letter, and if published in the new DIGGINGS Newsletter, receive a DIGGINGS cap. (Include your postal address.)

#### **CONTACT US** Have kudos or a question?

Then write and tell us:

Diggings Newsletter, Locked Bag 1115, Wahroonga NSW 2076, or email [editor@diggings.com.au](mailto:editor@diggings.com.au). Include your full name and address (and email, if possible). Keep your letter brief—around 100 words or so. Letters may be edited for clarity and length.



## **EVENTS**

### **2016 DIGGINGS SEMINARS**

ARCHAEOLOGICAL DIGGINGS editor Gary Webster's "Ancient Mysteries Reveal the Future" seminars continue despite the suspension of publication. For the latter part of this year they include:

**Bairnsdale, Victoria:** Bairnsdale Seventh-day Adventist Church, 455 Princes Highway Bairnsdale (next to the Archery Park). Monday, August 8, 7pm. Booking or more information, phone 0434 734 753

**Haymarket, Sydney CBD:** University of Technology Sydney (UTS) Law Building (Quay Street, Haymarket), Lecture Theatre 5B.01.11. Friday, August 5, 7pm and Saturday, August 6, 2pm. Bookings essential before July 29. For bookings and more information phone 0414 431 677

For more information regarding these seminars or to have one in your area, please contact DIGGINGS and we will do our best to accommodate any request.

**Tour update.** Even though ARCHAEOLOGICAL DIGGINGS is suspending publication, its 2016 tour is going ahead. It is a "hop on-hop off" tour, which allows you to join or depart at any of a number of points, taking in only those destinations that appeal to you or that suit your budget. It is an exciting itinerary, with the options of visiting archaeological and historical sites in Iran, Jordan, Israel and Turkey in Asia, and also Greece and Italy in Europe. See back page for more information and contact details.

Keep up to date with future ARCHAEOLOGICAL DIGGINGS events at [www.diggings.com.au](http://www.diggings.com.au)

# BUY A VOWEL

Add the missing vowels to the names of people and places mentioned in the features in this month's DIGGINGS. Once you have deciphered the word, locate it in the word finder puzzle.

- |                    |                 |
|--------------------|-----------------|
| 1. _KH_N_T_N       | 14. _NTR_S      |
| 2. _N_B_S          | 15. ___S_B___S  |
| 3. _PHR_D_T_       | 16. J_N_H       |
| 4. _R_M__C         | 17. J_S_PH_S    |
| 5. B__LB_C         | 18. K_KHB_      |
| 6. B_RCKH_RDT      | 19. M_N_R_H     |
| 7. C__S_R          | 20. N_PL_S      |
| 8. C_L_G_L_        | 21. N_F_RT_T_   |
| 9. C_LS_S          | 22. N_R_        |
| 10. CH__PS         | 23. _M_R        |
| 11. C_C_R_         | 24. _S_R_S      |
| 12. CL__P_TR_      | 25. P_MP_       |
| 13. C_NST_NT_N_PL_ | 26. P_MP_Y      |
|                    | 27. Q_MR_N      |
|                    | 28. R_M_S_S     |
|                    | 29. S_B_N_      |
|                    | 30. S_YC_       |
|                    | 31. S_PPH_R_S   |
|                    | 32. TR_J_N      |
|                    | 33. T_T_NKH_M_N |
|                    | 34. Y_D_N       |
|                    | 35. Z__S        |



**ANSWERS:** 1. Akhenaten 2. Annibis 3. Aphrodite 4. Aramaic 5. Baalbec 6. Burckhardt 7. Caesar 8. Calligula 9. Celsius 10. Cheops 11. Cicero 12. Cleopatra 13. Constantinople 14. Ennits 15. Eusebius 16. Jonah 17. Josephus 18. Kokhba 19. Menorah 20. Naples 21. Neferiti 22. Nero 23. Omer 24. Osiris 25. Pompeii 26. Pompey 27. Qumran 28. Ramesses 29. Sabina 30. Sayce 31. Sepphoris 32. Trajan 33. Tutankhamun 34. Yadi 35. Zeus



# LAST CHANCE

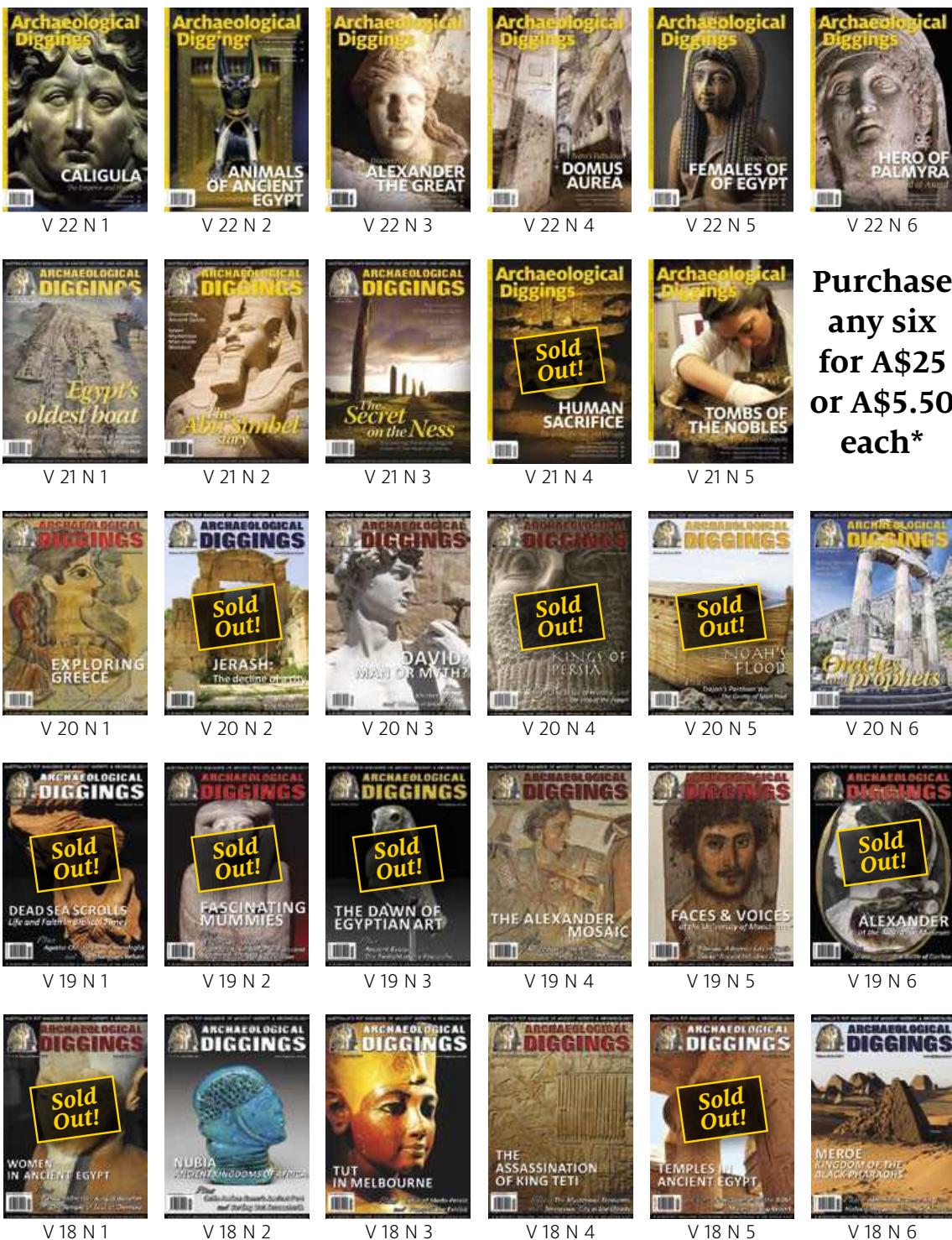


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# Archaeological Diggings

## TOURS 2016

*“Hop on and hop off” at any point  
in our tours to suit your time and budget!*



### DISCOVERIES IN ANCIENT EMPIRES

September 25–October 24, 2016

(Iran, Jordan, Greece, Turkey, Israel & Italy)

Take a journey through Iran to see the ancient Persian capital of Persepolis. In Jordan marvel at the wonders of Petra, the city carved from rock. Walk in the footsteps of Alexander the Great and the apostle Paul in Athens, Corinth, Delphi and Thessalonica. Sail the beautiful Aegean Sea to the delightful island of Patmos, site of John’s Apocalypse. See the incredible ancient cities of Ephesus, Pergamos, and Sardis. In Israel ascend the heights of Herod the Great’s fortress of Masada, and visit Caesarea. Wander the streets of Jerusalem and take a boat ride on the Sea of Galilee, as did Jesus of Nazareth. Visit Pompeii and Herculaneum to understand the last tragic moments of these Roman cities. Journey to the ancient sites of the city of Rome

*NB. You can also link this tour to the Ancient Wonders Tour (see above)*



**Go with someone who knows the way!**



For more information & bookings contact us at:

Post: Locked Bag 1115, Wahroonga, NSW 2076

Email: [editor@diggings.com.au](mailto:editor@diggings.com.au)

Free-Call: 1800 240 543 (Australia only)

Fax: 61 (2) 5619 2033

