The amazing Lod Mosaic goes on show at Waddesdon Manor

Enigmatic Etruscans
They are not as dark and mysterious as once thought

Song of Oedipus
Why did Julian Anderson chose this theme for his first opera Thebans?

Meet the ancestors
They lived on the Norfolk coast 900,000 years ago

Temple of Katas
Exploring one of Pakistan’s little-visited ancient sites

Out of the Ark
Noah’s was the wrong shape says Dr Irving Finkel

Consult the oracle
Delving deeper into Delphi with Michael Scott

Mosaic magic
The amazing Lod Mosaic goes on show at Waddesdon Manor
ROMAN MARBLE TOGATE
STATUE OF A YOUTHFUL
MARCUS AURELIUS
AS CAESAR. Given that
title in AD 139 by the
Emperor Antoninus Pius
after adopting him as his heir.
H. 49 in. (125 cm.)
Approximately 3/4 life-size.
Ca. AD 140.
Found near Bath, England.
Ex A. T. collection, Geneva,
Switzerland; J. Turner,
Amsterdam, 1984;
S.G. collection, South
Carolina, acquired from
### Features

**8 Into the Ark**
Noah got it all wrong – the ark was round and made of rope, not wood – but the animals did go in two by two. *Irving Finkel*

**12 The magic of a mosaic**
As part of its ‘world tour’, the extraordinary Lod Mosaic, which was found in Israel, is coming to Britain in June. *Astrid Johansen*

**18 Those enigmatic Etruscans**
Less mysterious and more accessible are how the Etruscans are portrayed in an exhibition on show in Rome. *Polly Chiapetta*

**22 The song of Oedipus**
As his first opera, *Thebans*, opens in London, Julian Anderson explains why he chose to base it on three plays by Sophocles. *Lindsay Fulcher*

**24 Footprints from the deep past**
What do 900,000-year-old footprints discovered on a beach in Norfolk tell us about our ancestors? *Nick Ashton*

**28 The timeless library**
A fascinating exhibition in the Colosseum tells the story of how the first libraries came to be built in ancient Rome. *Dalu Jones*

**32 Which way to Mecca?**
A neat 17th-century Iranian instrument (a *qibla* indicator) told the owner the direction of Mecca and much, much more. *Sebastian Whitestone*

**36 The streets of London**
A time-walk through the metropolis shows the extent that the worship of both God and Mammon have shaped the city’s buildings. *David Miles*

**40 Consulting the oracle**
Academic, writer and broadcaster Michael Scott gives a fully rounded view of the history of Delphi. *Diana Bentley*

**42 The Seven Temples of Katas**
Exploring Hindu, Sikh and Jain temples built around a sacred pool at a little-visited site in Pakistan. *Zahra Aslam and Zulekha Ahmad*

**46 A history of Heronbridge**
The earliest known battlefield in Britain yields a 7th-century tale of treachery, intrigue and revenge. *David JP Mason*

### Regulars

**02 From the Editor**

**03 In the news**

**50 Book reviews**

**54 Calendar**
from the editor

From the Colosseum to the London Coliseum

An arena for brutal combat in Rome holds an exhibition on libraries, while the Coliseum stages an opera based on bloody Greek tragedy

The story of Noah, the Ark and the Flood have been in the news rather a lot this year. First, when extensive areas of Britain were severely flooded, someone made the bizarre connection between the unforgiving deluge and divine punishment.

More recently, the film Noah, starring Russell Crowe, has been released to mixed reviews. Of much greater interest to us though is Dr Irving Finkel’s book, The Ark Before Noah: Decoding the Story of the Flood, in which he asserts that the biblical Ark-builder was preceded by a chap called Atra-hasis, who lived in Mesopotamia many centuries before Noah (if either of them lived at all, that is). Not only that, but Dr Finkel found the instructions for constructing an Ark were markedly different from those in the Bible – forget the traditional box-shape made of ‘gopher wood’, think of something more like a gigantic coracle, made of so much rope it would stretch from London to Edinburgh. But in both accounts the animals went into it ‘two by two’; this phrase is written in cuneiform on the clay tablet Dr Finkel deciphered. This means the story originated not in Judah, but ‘by the waters of Babylon’, before the exiled Jews were released and allowed to return home to write their version with Noah as the hero; see pages 8 to 11.

Although not necessarily ‘two by two’, animals of all kinds feature profusely in the decoration of the amazing 3rd-century Roman Lod Mosaic, which you can see both on our cover and on pages 12 to 16.

Next we shed light on a people obliterated by the Romans, the Etruscans, long seen as a dark, mysterious people but now shown, by an exhibition in Rome, to be much more accessible; see pages 18 to 21.

I am fascinated by the different interpretations of ancient myths made by today’s writers, musicians and artists, so I was delighted to interview the renowned composer Julian Anderson about his first opera, Thespians. He based it on the three famous tragedies by Sophocles, one of which (Antigone) turned out to have a very personal resonance for him. I am very much looking forward to the world premiere of the opera at the London Coliseum on 3 May.

Going much further back in time, we arrive on a beach at Happisburgh in Norfolk, where footprints found in the mud turned out to be 900,000 years old. Rather poetically they were soon washed away by the waves, but not before Dr Nick Ashton and his team had taken casts and linked them to the other very ancient finds excavated in that area. Some of these appear, alongside an array of other astoundingly old artefacts, in an exhibition at the Natural History Museum called Britain: One Million Years of the Human Story; see pages 24 to 27.

A rather quiet exhibition, The Infinite Library: The Places of Knowledge in Antiquity, is currently on show at the Colosseum in Rome. As the title suggests, it tells the story of the earliest libraries in the Roman Empire; you can read about them on pages 28 to 31.

Those of you who do not know what a qibla indicator does can find out on pages 32 to 34. I can reveal that it is a sophisticated scientific instrument designed to tell the owner the direction of Mecca wherever he is in the world – but this one, from 17th-century Iran, does much, much more than that.

You might have needed a compass to find your way through the labyrinthine streets of medieval London, but David Miles didn’t use one when he went on his time-walk; see pages 36 to 39. And Michael Scott took a 360-degree view when writing his book on Delphi. Quite apart from the Oracle, he focussed on many other aspects of this ancient city; as you will discover on pages 40 to 41. Our travel feature, on pages 42 to 45, takes us off to see the Seven Temples of Katas in Pakistan. Then we return to Britain, to explore our earliest battlefield at Heronbridge, near Chester, and to hear ‘an early 7th-century tale of treachery, intrigue and revenge’; turn to pages 46 to 49 to find out more.

CONTRIBUTORS

Astrid Johansen is a guest curator of the exhibition of the Lod Mosaic at Waddesdon Manor, which is part of the National Trust. She previously worked at the British Museum where she was project curator for Honor: from Arabia to Royal Ascot exhibition in 2012.

Nick Ashton has been curator of Palaeolithic Archaeology at the British Museum for 30 years. He is Co-Director of the Pathways to Ancient Britain Project that investigates the earliest human occupation of northern Europe, including how climate and environment led to developments in technology that allowed colonisation to occur.

Irving Finkel is a British archaeologist and Assyriologist. He is Assistant Keeper of Ancient Mesopotamian script, languages and cultures in the Department of the Middle East at the British Museum. There, he curates the world’s largest (circa 130,000) collection of cuneiform clay tablets.

Zahra Aslam and Zulekha Ahmad are based at Lahore University of Management Sciences. In addition to the study of the history and archaeology of the Punjab, both are engaged with issues of the conservation of cultural heritage in Pakistan and the wider world.
A future powerhouse of the past

Currently under construction in Jerusalem, Israel’s new national archaeological centre is to include a new library and archive. When completed (scheduled for April 2016), this sparkling complex will house some 2 million artefacts, some of which date back 5,000 years, and include the world’s largest collection of Dead Sea Scroll fragments.

The Israel Antiquities Authority (IAA) has announced that the Mandel National Library for the Archaeology of Israel, located within the complex, will house nearly 150,000 volumes, including 500 rare books, and more than 1,000 periodicals.

The Mandel National Archaeological Archives will contain the Israel Antiquities Authority Archive, including maps and other records from the time of the British Mandate. Together, the library and archive will form ‘the largest of their kind in the Middle East’, the IAA said. They are to be named after a gift from the Jack, Joseph and Morton Mandel Foundation of Cleveland, Ohio. The 35,000-square-metre (377,000 square foot) campus complex, designed by the architect Moshe Safdie, is being built next to the existing Israel Museum, and overlooking the Hebrew University Givat Ram campus.

When it opens much of Israel’s state antiquities collection will go on view, including many items currently stored in warehouses that are closed to the public. Israel’s collection of some 15,000 Dead Sea Scroll fragments will also move from a government-operated facility on the Israel Museum campus to a new, state-of-the-art conservation laboratory at the centre where, newly restored, they will also be displayed.

Written some 2,000 years ago, the Dead Sea Scrolls are the earliest copies of the Hebrew Bible ever found, and the oldest written evidence of the roots of Judaism and Christianity in the Holy Land. But the Israel Museum’s seven Dead Sea Scrolls, among the most famous and complete in existence, will remain at the Shrine of the Book, a gallery built specially for them.

Greg Neale
A shadow falls

Once a major Etruscan and Roman city, today Volterra is a picturesque hill-town built on high cliffs and commanding views over the magnificent and quintessentially Tuscan landscape. Its steep, narrow streets are lined with forbiddingly austere but elegant buildings that retain medieval and Renaissance façades and still follow the city’s original Etruscan and Roman grid.

Walking through the centre of Volterra (Etruscan Velathri, Roman Volaterrae), the visitor enters a time-warp. So it is not surprising that this town was chosen as the location for the home of the Volturni, a coven of powerful and ancient vampires, in Stephenie Meyer’s Twilight movies. Volterra’s medieval core, its fortress, the Roman theatre (where plays are still performed in the summer season) and the imposing walls that surround it have survived countless enemy invasions. Even the Second World War spared the town, yet what men have not destroyed is now put in jeopardy by climate change – exceptional rainfall in January and March triggered dramatic landslides.

As a result entire sections of the city wall have fallen down, damaging buildings and blocking roads. It was feared that the city’s acropolis, which is now an archaeological park, was also at risk, but disaster was prevented just in time by the municipality’s emergency rescue teams. Local institutions are currently busy buttressing the walls to protect the archaeological site.

The good news for the inhabitants of...
in Volterra and Pompeii

Volterra is the announcement that the famous bronze sculpture L’Ombra della Sera, or ‘Evening Shadow’ – which represents the elongated shadow of a man cast as the sun sets – has at last been firmly identified as Etruscan and dated to the 3rd century BC.

Until this news was recently made public, controversy about the date and origin of Evening Shadow, the Giacometti-like votive statue of an elongated male figure which is an emblem of the town, had raged among scholars for years. Some thought that it was a 17th-century or 18th-century fake, cast by forgers to satisfy the demands of international collectors fascinated by newly discovered artefacts of the long-forgotten Etruscan civilisation, obliterated by the conquering Roman empire.

Last December the statue, which was beginning to show signs of corrosion, was sent to the Nello Carrara Institute of Applied Physics in Florence to be restored. Thanks to the use of special laser techniques, it soon became clear that the statue was made 2,300 years ago. The bronze alloys were subjected to Lips (laser induced plasma spectroscopy) analysis, which proved that they were of types used by the Etruscans – and that the statuette had been buried for a great many centuries.

‘This is great news,’ said Fabrizio Burchianti, Director of Volterra’s Guarnacci Archaeological Museum, where the statue is a major attraction. ‘There are very few single works of art like Evening Shadow that can become the symbol of a whole culture.’

The statue became famous in 1737 when a Florentine scholar, Anton Francesco Gori, published it in his Museum Etruscum. At the time the statue belonged to an erudite antiquarian, Filippo Buonarroti, a nephew of Michelangelo.

It subsequently entered the vast and important archaeological collection of Monsignor Mario Guarnacci (1701-1785), who bequeathed it, together with his highly prized library, to the citizens of Volterra in 1761.

The museum, which is named after him, was one of the very first private museums in Europe to be open to the public.

Dalu Jones

A section of fresco in the ancient Roman city of Pompeii has been stolen by art thieves in the latest in a series of events that have damaged the archaeological site of one of the world’s most celebrated ‘lost cities’.

The thieves made off with a 20cm-wide section of fresco depicting the goddess Artemis, according to a statement by the Pompeii archaeology service. The fresco was taken from the House of Neptune and Amphitrite, which is not currently open to the public. News of the robbery – thought to have taken place on 12 March – was not made public for a week, police said, so as not to hamper ‘particularly delicate’ investigations.

The theft is the latest embarrassment for Italian politicians and archaeologists responsible for the site, which attracts more than 2 million visitors a year, but which has become a symbol of the mismanagement and neglect of many Italian antiquities.

Two weeks before the theft, Dario Franceschini, the recently appointed minister for culture in the new government of Prime Minister Matteo Renzi, had called an emergency meeting of officials after heavy rain earlier in the year had caused the wall of a tomb in the necropolis of Porta Nocera and part of an arch in the Temple of Venus to collapse.

After these two unfortunate events Mr Franceschini was prompted to pledge 2 million euros (£1.6 million) in special funding to support the much-needed conservation work at Pompeii, which is a UNESCO World Heritage Site.

Pompeii, together with the nearby Roman town of Herculaneum, was preserved under volcanic debris when nearby Mount Vesuvius erupted in August AD 79, killing thousands of their citizens. The 55-hectare site was rediscovered in the 18th century and some two-thirds has been excavated, with many antiquities being removed to the relative security of museums. But last year a UNESCO report catalogued a series of failings at the site, and the Italian government announced a new ‘Great Pompeii’ restoration project – which is also designed to boost visitor numbers to 2.6 million a year by 2017.

Dalu Jones
Scientists at the University of Durham and the British Museum have discovered that metastatic carcinoma affected significant areas of the skeleton of an ancient Egyptian man, aged 25 to 35. His remains were unearthed at the Amara West site, north of the Sudanese capital, Khartoum, last year. He was buried in a painted wooden coffin with a glazed faience amulet of the god Bes.

Using radiography and electron microscopy, the investigators found traces of the cancer in the man’s collarbones, shoulder blades, upper arms, vertebrae, ribs, pelvis and thigh bones.

The researchers believe the discovery will help to explore underlying causes of cancer in ancient populations and provide insights into its evolution.

DNA analysis of ancient human remains with evidence of cancer can be used to detect mutations in specific genes known to be associated with particular types of cancer.

Very little is known about the antiquity, epidemiology and evolution of cancer in past human populations apart from some textual references and a small number of skeletons with signs of cancer,’ said Michaela Binder, a PhD student in the department of archaeology at Durham University, who excavated the skeleton.

‘Insights from archaeological human remains like these can really help us to understand the evolution and history of modern diseases. Our analysis showed that the shape of the small lesions on the bones can only have been caused by a soft tissue cancer, even though the exact origin is impossible to determine through the bones alone.’

‘Until now there have been only three examples of metastatic cancer in human remains that predate the 1st millennium BC. But those were excavated in the early 20th century, when only the skulls were retained, thus making a full re-analysis of each skeleton, to generate differential (possible) diagnoses, impossible.

Dr Neal Spencer, of the Department of Ancient Egypt and Sudan at the British Museum, said: ‘From footprints left on wet mud floors to the healed fractures of many ancient inhabitants, Amara West offers a unique insight into what it was like to live – and die – in Egyptian-ruled Upper Nubia 3,200 years ago.’

The tomb’s architecture is evidence of a hybrid culture blending Pharaonic elements, such as burial goods and painted coffins, with Nubian culture, where a low mound marks the tomb.

Pottery recovered from the tomb has allowed archaeologists to date it within the 20th Dynasty (1187–1064 BC), a period when Egypt ruled Upper Nubia, endured conflicts with Libya, and pharaohs, such as Ramses III, were being buried in the Valley of the Kings.

Footless wench in Wessex

The skeleton of an Iron Age woman with her feet amputated has been discovered near West Knole, Wiltshire.

The skeletons of a child aged about 10, and two males, both with apparent sharp wounds to their hip bones, found nearby are probably unconnected and from the late Roman period. Their bones will be sent for radiocarbon dating offsite.

The burial site was discovered by archaeologists from AC Archaeology who had been surveying the route of a new Wessex Water pipeline being laid to bring treated water from Dorset. Andrew Holmes, the archaeological works manager for the pipeline scheme, said:

‘The site is clearly on the periphery of a settlement of possible late Iron Age date (circa 100 BC), with multiple inter-cutting quarry pits and storage pits scattered across the area, normally outside of the main settlement itself. We believe the occupants were extracting chalk for possible construction use.

‘Within one quarry-pit cluster a grave outline seems to have been cut and a female buried in a flexed position with her feet cut off – one placed near to her thigh, and one underneath her head. On top of her skull were found the remains of up to three possible sheep or goat skulls and some further animal remains within the burial, along with late Iron Age pottery.

‘Such burial practice is known during the Iron Age – at Danelbury hillfort in Hampshire and Cliffsend in Kent, for example – but the placing of sheep or goat remains within the grave are unique to this individual. Iron Age burial practice is not common in general, but where found they are often represented by disarticulated bodies, together with other animal bones, and often placed in former grain storage pits or quarry pits outside settlements, as here.

‘The cutting off of lower limbs is possibly a ritual act and may reflect a wish to prevent the individual from being mobile in the afterlife,’ added Mr Holmes.

‘The site was clearly still being used through the Roman period, with three further late Roman graves, possibly 3rd- or 4th-century AD, close by. Two were adults, with possible knife or sword wounds, one of which had a minim coin in his mouth (presumably to pay the boatman to cross the River Styx into the afterlife), and one a juvenile. The latter adult and juvenile graves showed evidence of coffins and were aligned East/West, suggesting Christian burials. They were buried within a ditch-bounded field, as is common practice at rural settlements, and so may be linked to a nearby farmstead.’

‘The exact location of the site is not being released, to prevent any unauthorised excavation.

Greg Neale

Minerva May/June 2014
EXTRAORDINARY GREEK ANTIQUITIES

ΚΑΛΛΟΣ
PASSION. AUTHENTICITY. BEAUTY.

EXQUISITE TREASURES OF ANCIENT GREECE
drawn together by Baron Lorne Thyssen-Bornemisza
presented in Mayfair for your pleasure and acquisition
oxford expertise and world-class research
impeccable client care and advisory service

THE STORY UNFOLDS MAY 2014
WWW.KALLOS GALLERY.COM

SCAN FOR AN EXCLUSIVE GALLERY PREVIEW
In the year 1872 one George Smith, a banknote engraver turned assistant in the British Museum, astounded the world by discovering the story of the Flood – much the same as that in the Book of Genesis – inscribed on a cuneiform tablet made of clay that had recently been excavated at far-distant Nineveh (in present-day Iraq). Human behaviour, according to this new discovery, prompted the gods of Babylon to wipe out mankind through death by water, and, as in the Bible, the survival of all living things was effected, at the last minute, by a single man.

For George Smith himself the discovery was, quite plainly, staggering, and it propelled him from backroom boffin to worldwide fame. Much arduous scholarly labour had preceded Smith’s extraordinary triumph, for his beginnings were humble. Endless months of star-gazing into the glass cases that housed the inscriptions in the gallery resulted in Smith being ‘noticed’ and eventually, in around 1863, he was taken on as a ‘repairer’ in the British Museum. The young George exhibited an outstanding flair for identifying joins among the broken fragments of tablets and a positive genius for understanding cuneiform inscriptions; there can be no doubt that he was one of Assyriology’s most gifted scholars.

At first Smith was unable to decipher the tablet that would change his life, because a lime-like deposit obscured the text. Only once this...
had been painstakingly removed—an agonising wait for the highly-strung Smith—could all the words be read. A contemporary observer reported what happened next:

‘Smith took the tablet and began to read over the lines which… had [been] brought to light; and when he saw that they contained the portion of the legend he had hoped to find there, he said, “I am the first man to read that after more than two thousand years of oblivion”.

‘Setting the tablet on the table, he jumped up and rushed about the room in a great state of excitement, and, to the astonishment of those present, began to undress himself’!

George Smith’s dramatic reaction achieved mythological status, to the point that all subsequent Assyriologists keep the tactic in reserve just in case they too find something spectacular.

He announced his discoveries at a meeting of the Society of Biblical Archaeology in London, on 3 December, 1872. August dignitaries were present, including the Archbishop of Canterbury—since Smith’s findings had serious implications for church authority—and the Classically disposed Prime Minister, WE Gladstone. For Smith’s audience, as it had been for the man himself, the news was electrifying.

In 1872 everyone knew their Bible backwards, and the announcement that the iconic story of the Ark and the Flood existed on a barbaric-looking document of clay in the British Museum that predated the Bible and had been dug up somewhere in the East was indigestible. Some 113 years after Smith’s breakthrough, a similar episode of British-Museum-curator-meets-amazing-cuneiform-flood-story befell me.

People bring all sorts of unexpected objects to the British Museum to have them identified. In 1985 a cuneiform tablet was brought in by a member of the public already known to me, for he had been in with Babylonian objects before. His name was Douglas Simmonds.

I was more taken aback than I can say to discover that on this cuneiform tablet was the Babylonian Flood story. The trouble was that, as I read down the inscribed surface of the unbaked tablet, things got harder; turning it over to confront the reverse for the first time was a cause for despair. I explained that it would take many hours to wrestle meaning from the broken signs, but Douglas would not leave his Flood tablet with me. He blithely repacked it and more or less bade me good day.

Nothing happened about ‘my’ tablet until much later, when I spotted Douglas staring at Nebuchadnezzar’s East India House inscription in the British Museum’s Babylon: Myth and Reality exhibition in 2009. I picked my way carefully through the crowds of visitors and asked him about it. The bewitching cuneiform tablets strewn around the exhibition must have had a good effect because he promised to bring his tablet in again for me to examine. And he did.

Decipherment proceeded in fits and starts, with groans and expletives, and in mounting— but fully dressed— excitement. Weeks later, it seemed, I looked up, blinking in the sudden light… I discovered that the Simmonds cuneiform tablet (henceforth known as the Ark Tablet) was virtually an instruction manual for building an ark.

The story of a flood that destroyed the world, in which human and animal life was saved from extinction by a hero with a boat, is almost universal in the world’s treasury of traditional literature.

Many scholars have tried to collect all the specimens in a butterfly net, to pin them out and docket them for family, genus and species. Flood stories in the broadest sense have been documented in Mesopotamia, Egypt, Greece, Syria, Europe, India, New Guinea, Central America, North America, Australia and South America.

The story of Noah, iconic in the Book of Genesis, and as a consequence a central motif in Judaism, Christianity and Islam, invites the greatest attention. In all three scriptures the Flood comes as punishment for wrongdoing by man, part of a ‘give-up-on-this-lot-and-start-over’ resolution governing divine relations with the human world. There is a direct and undoubted Flood continuum from the Hebrew Old Testament to the Greek New
Testament on the one hand and the Arabic Koran on the other.

Since the Victorian-period discoveries of George Smith it has been understood that the Hebrew account derives, in its turn, from that in Babylonian cuneiform, much older and surely the original that launched the story on its journey.

People have long been concerned with the question of whether there really was a flood, and been on the lookout for evidence to support the story, and I imagine all Mesopotamian archaeologists have kept the Flood at the back of their minds. In the years 1928 and 1929 important discoveries were made on sites in Iraq that were taken to be evidence of the biblical Flood itself.

At Ur, excavation beneath the Royal Cemetery disclosed more than 10 feet of empty mud, below which earlier settlement material came to light. A similar discovery was made at the site of Kish in southern Iraq.

To both teams it seemed inescapable that here was evidence of the biblical Flood itself. In more recent times scholars have turned to geological rather than archaeological investigation, pursuing data about earthquakes, tidal waves or melting glaciers in the hunt for the Flood at a dizzying pace.

The Ark Tablet, like many documents of its period, is designed to fit comfortably in the reader’s hand; it is much the same size and weight as a contemporary mobile phone. The tablet was written during the Old Babylonian period, broadly 1900 BC – 1700 BC. The document was not dated by the scribe but, from the shape and appearance of the tablet itself, the character and composition of the cuneiform and the grammatical forms and usages, we can be sure that this is the period in which it was written. It was composed in Semitic Babylonian (Akkadian) in a literary style. The hand is neat and that of a fully trained cuneiform scribe. The text has been written out very ably without error and for a specific purpose; it is certainly not a school practice tablet from a beginner, or anything of that kind. It measures 11.5 by 6cm and contains exactly 60 lines.

The front (or obverse) is in fine condition and virtually everything can be read. The back (or reverse) is damaged in the middle of most lines, with the result that not everything there can be read now, although much of substantial importance can be deciphered; some parts are simply missing altogether and other parts are very badly worn.

The most remarkable feature provided by the Ark Tablet is that the lifeboat built by Atra-hasis – the Noah-like hero who receives his instructions from the god Enki – was definitely, unambiguously round. ‘Draw out the boat that you will make,’ he is instructed, ‘on a circular plan.’ Confronting this fact comes, initially, as a shock. For everyone knows what Noah’s Ark, the real Ark, looks like: a squat wooden affair with prow and stern and a little house in the middle, not to mention a gangplank and several windows. But as I stared into space with the tablet precariously poised over the desk, the idea of a round ark began to make sense.

A truly round boat would be a coracle, and they certainly had coracles in ancient Mesopotamia; a coracle is exceptionally buoyant and would never sink, and if it happened to be difficult to steer or stop from going round and round, that would not matter, because all it had to do was keep its contents safe and dry until the waters receded.

The reed coracle is effectively a large basket, sealed with bitumen to prevent waterlogging. Its construction is somehow natural to riverine communities; coracles from India and Iraq, Tibet and Wales are close cousins. These traditional craft remained in use, unchanged, on the rivers of Mesopotamia into the first half of the last century.

Before the arrival of the Ark Tablet, hard facts for the boatbuilder were sparse. We have had to wait until now for the statistics of Minerva May/June 2014
shape, size and dimensions, as well as everything to do with the matter of waterproofing. The information that has now become available could be turned into a printed set of specifications sufficient for any would-be ark-builder today.

Enki tells Atra-hasıs in a very practical way how to get his boat started; he is to draw out a plan of the round boat on the ground. The simplest way to do this would have been with a peg and a long string. The stage is thus set for building the world’s largest coracle, with a base area of 38,750 square feet, a diameter of, near enough, 230 feet and walls at about 20 feet.

Atra-hasıs’s coracle was to be made of rope, coiled into a gigantic basket. This rope was made of palm fibre, and vast quantities of it were going to be needed. Coiling the rope and weaving between the rows eventually produces a giant round floppy basket, which is then stiffened with a set of J-shaped wooden ribs. Stanchions, mentioned in lines 15-16, were a crucial element in the Ark’s construction and an innovation in response to Atra-hasıs’s special peculiarity of Atra-hasıs’s reports in diverse arrangements; set flat on the interlocked square ends of the ribs, they would facilitate subdivision of the lower floor space into suitable areas for bulky or fatally sick animals. One striking peculiarity of Atra-hasıs’s reports is that he doesn’t mention either the deck or the roof explicitly, but it is the world’s most beautiful dictionary definition.

The Babylonian animals, like those of Noah, went in by two, a completely unsuspected Babylonian tradition that draws us ever closer to the familiar narrative of the Bible. The Babylonian flood story in cuneiform is 1,000 years older than the Book of Genesis in Hebrew, but reading the two accounts together demonstrates their close literary relationship. No firm explanation of how this might have really come about has previously been offered, but study of the circumstances in which the Judaeans exiled to Babylon by Nebuchadnezzar II found themselves answers many crucial questions. All the stories agree that the Ark, whatever its shape, was successfully built, and that human and animal life was safely preserved so that the world could go on. A story that recommends foresight and planning in order to ensure that outcome has lost none of its resonance.

5. The world’s earliest usable map is inscribed in another cuneiform tablet. The Babylonian Map of the World (700-500 BC) shows the River Euphrates and also the mountain where the Ark landed after the Flood – not Mt Ararat but Mt Cudi Dagh, a peak 200 miles to the south-west.


7. Early 20th-century photograph showing a guffa, or coracle, being constructed by the River Euphrates.
A magnificent 3rd-century Roman mosaic from the city of Lod in Israel will go on show at Waddesdon Manor in Buckinghamshire in June. Since its discovery in 1996 the Lod Mosaic has attracted much attention, so much in fact that it has been on a ‘world tour’. Waddesdon is its only UK venue and, when it leaves there and moves on to Russia in December, its sojourn at the Hermitage in St Petersburg will be its last stop. After this, the mosaic will return to Israel, where it will be permanently housed in the new, state-of-the-art Shelby White and Leon Levy Lod Mosaic Archaeological Center.
Its fine condition is exceptional and the exquisite quality of its design and decoration makes it not
The magnificent Lod Mosaic goes on show at Waddesdon Manor, the Rothschilds’ Buckinghamshire mansion, in June, and this is its only UK venue. As Astrid Johansen, curator of the exhibition, explains, given the family’s strong links with Israel and the support it has given to archaeology over many decades, it is the perfect place to show it.

1. As grand as any French chateau, Waddesdon Manor in Buckinghamshire dates from 1874 and was built by Baron Ferdinand de Rothschild (1839-98).

2. Baron Edmond de Rothschild with his son, James, and James’ wife, Dorothy, visit Israel in 1925.

3. The complete Lod Mosaic measures 784cm x 426cm. It was originally part of a larger mosaic floor. Photograph: Israel Antiquities Authority/Nicky Davidov.

continued down generations, as can be seen at Waddesdon, where fine objects from the collections formed by Baron Ferdinand and his sister Alice (1847-1922) are displayed.

Upon Alice’s death, Waddesdon was inherited by her French great-nephew James (1878-1957), whose father Baron Edmond de Rothschild (1835-1934) was not only a collector in the best family tradition, but also deeply interested in antiquity and archaeology – this was later shared by his son.

While the Rothschilds’ reputation as collectors is renowned, their role in supporting archaeological excavation and research, particularly in the Near East, is perhaps less well known. Baron Edmond helped finance a number of excavations, including those by Eustache de Lorey in Syria, Charles Simon Clermont-Ganneau in Egypt, and Raymond Weyl in Palestine. Amongst the sites particularly associated with him is Er-Tell (widely thought to be the biblical site of Ai) in Israel, excavated by Judith Marquet-Krause between 1933 and 1935 with funding from the baron. Arguably the most significant site excavation to receive Rothschild support is that of Tel Hazor in northern Israel. Hazor, located north of the Sea of Galilee, is the largest biblical-era site in Israel and one of the most important areas for biblical archaeology, which was recognised when it received UNESCO World Heritage Site status in 2005.

Major excavation works were carried out here by the Hebrew University, partly funded by Baron...
Edmond de Rothschild's Palestine Jewish Colonization Association (PICA), which was founded in 1924. Led by Yigael Yadin over four seasons between 1955 and 1958, these excavations (known as the James A de Rothschild Expedition) were followed by one more in 1968.

The number of digs and size of the site make this one of the largest excavations conducted in Israel, and since 1990 work here has been led by the Hebrew University with support from the Selz Foundation. Some of the finds from the earlier Hazor digs will be in the new exhibition at Waddesdon.

The Rothschild interest in archaeology has continued, with work carried out at Caesarea Maritima, on the Mediterranean coast in northern Israel, partly funded by the Rothschild Caesarea Foundation, which has made contributions to the field of marine archaeology in the region.

Additionally, amongst the organisations supported by the current Lord Rothschild is the Butrint Foundation, which he started in 1993 with Lord Sainsbury of Preston Candover. The foundation helped continue archaeological work begun in the 1920s at the World Heritage Site of Butrint, in south-western Albania. It now supports training and conservation programmes and offers grants and funds to further projects in the area.

When considering all these links to archaeological projects and the historical connection between the Rothschilds and the Holy Land, it seems appropriate that the Lod Mosaic should come to Waddesdon Manor, itself one of the Rothschild family’s great contributions to UK heritage and philanthropy.

The collections at Waddesdon date largely from the 18th century onwards, but they also include some objects from antiquity collected by the family, including an interesting collection of ancient coins belonging to James – some of which will be on display – which reflect their appreciation of historical finds.

Entitled Predators and Prey: A Roman Mosaic from Lod, Israel, the exhibition will centre on this extraordinarily fine mosaic, which was accidentally discovered in Lod, about 15 kilometres south-east of Tel Aviv. Uncovered in 1996 during construction of a highway, it
lay only a metre below the ground. Part of a larger set of mosaics, it is in excellent condition and has been preserved for over 1,700 years. The mosaics made up the floor of a large villa, probably a reception hall, the walls of which had collapsed, covering and preserving them. After its discovery, the excavation of the mosaic was led by archaeologist Miriam Avissar for the IAA. It was partially conserved in situ, cleaned and documented, with any loose tesserae re-attached at this stage. It was then re-covered with layers of fabric and mesh, followed by stone and soil, until funds could be raised to extract it and build a new museum on site to house it.

It was not until 2009 that the mosaic was uncovered again and extensively conserved by a team led by Jacques Neguer, Head of Art Conservation at the IAA. It was divided into sections in order to make it easier both to lift and to transport. It has since been displayed in a number of international institutions in the USA and Europe. The city of Lod, known throughout most of antiquity as Lydda, was an important centre for industry and scholarly activity in the region, and its inhabitants were predominantly Jewish from the 5th century BC onwards. It was destroyed in AD 66 by the Romans at the beginning of the First Jewish-Roman War and later rebuilt as a colony, renamed Diospolis (‘City of Zeus’). It is said to be the birthplace and resting place of St George, who was reputedly buried there in AD 303, around the time of the mosaic’s production. By the middle of the 4th century the majority of its inhabitants had become Christian. The city remained under Roman control until the Arab conquest in AD 636. As the city has been continuously occupied, there has been limited archaeological activity, which makes the discovery of the Lod Mosaic and the implications of what else may exist of the Roman city all the more intriguing.

This mosaic is one of the largest, best-preserved examples of Roman mosaic work in the whole Levant region. While a pattern-book was probably used for some of the standard design features, the mosaic’s subject matter is in itself fascinating. What is depicted is an array of wild and domestic animals along with a marine scene, but no deities or people – the only indications of...
human life are two merchant ships and a basket of fish. This is highly unusual and adds to the mystery of the owner’s identity and nationality. All that is certain is that only a wealthy person could have owned such a beautiful floor.

While there is a lack of clear religious symbolism, a number of motifs that are open to interpretation can be attributed to Jewish, Christian and pagan traditions. For example, the lions in the central panel could be seen to represent the tribe of Judah, whose symbol was the Lion of Judah. However, the same iconography was also used by Christians for Jesus, who is described as such in the Book of Revelation 5:5.

As for pagan symbols, the trident, which is the symbol of Poseidon, is depicted between two dolphins in the four corners of the central panel. Meanwhile the inclusion of a ketos (sea monster), between the mountains (possibly representing the mountains of Ethiopia) in the central octagon, makes a reference to Classical mythology. It brings to mind the myth of Perseus and Andromeda, in which the hero saves her from a sea monster.

In general, though, the overlapping and varied possible symbolism is open to interpretation, and many motifs would just have been standard designs, so it is impossible to draw any firm conclusions about the owner’s religion from the design of the mosaic alone.

The diversity of the animals depicted is impressive, with the central octagon containing a rhinoceros, giraffe, tiger, bull, elephant and two lions, as well as the ketos. The elephant, rhinoceros and giraffe were unfamiliar to residents of Lod and would have seemed very exotic — rhinos and giraffes rarely appear in ancient art. Yet despite this apparent lack of knowledge, the detail of the animals is astonishing, from the cross-hatching on the elephant to represent its wrinkled skin, to the distinctive markings of the giraffe and tiger. While the portrayal of the rhinoceros and the bull is not very lifelike, the multi-tonal shading on all the creatures shows that an extremely sophisticated artist was at work here. There has clearly been great attention to detail, evident particularly in the elaborate plumage of a peacock.

Each vignette is framed by a decorative border that separates different scenes. In some of these, solitary animals or non-combative images, including a delightful family of partridges, are depicted. But it is the theme of predators and prey that is the recurring motif: leopards pounce on gazelles, a tiger attacks an onager, a lioness strikes a scimitar oryx. In the marine scene there is an almost chaotic sense of the hunt taking place just below the surface. The sea creatures have been rendered with great accuracy including identifiable fish species such as bream, mullet and snapper, all of which would have been very familiar to people living on the Mediterranean coast. The images of animal combat, combined with the exotic beasts portrayed and the merchant ships, suggest that the villa’s owner would have been familiar with such creatures from watching gladiatorial games. There was a thriving trade in the capture and transportation of these animals for such purposes and it is quite possible that the owner was involved in this business, although this can only be speculation.

The exhibition at Waddesdon not only showcases the Lod Mosaic as an artistic masterpiece, but also puts it into context as the floor of a villa belonging to a wealthy Roman household in this region. For this reason, we are displaying it alongside objects from daily life — common items, like cooking and storage pots, and luxurious goods, such as jewellery and metalware. Many of these exhibits are on loan from the British Museum.

The Rothschilds’ continuing support of many and varied archaeological projects, and their strong connection with the State of Israel, make Waddesdon Manor a fitting place to display the Lod Mosaic. This is its only UK showing, so make sure you don’t miss it.

- **Predators and Prey: A Roman Mosaic from Lod, Israel** will be on show in the Coach House of the Stables at Waddesdon Manor (www.waddesdon.org) from 5 June to 2 November 2014. A programme of activities and events will accompany the exhibition.
- The Lod Mosaic will be displayed in the State Hermitage Museum in St Petersburg from 19 December until 25 April 2015.
We are pleased to announce our new gallery location in the heart of London’s Mayfair opening in Spring 2014
6 Hill Street London W1J 5NF
Exhibiting at Masterpiece London, 25 June – 2 July, Booth A6

Ariadne Galleries
11 East 76th Street New York, NY 10021
Tel. +1 212 772 3388
www.ariadnegalleries.com
Email: info@ariadnegalleries.com

Pair of Horse Head Plaques
Eurasian
First to Third century BC
Bronze
n Cesare Berzotti’s painting Visit to the Tomb of the Reliefs at Cerveteri of 1850, a group of elegantly dressed visitors stands inside a cavernous, dark interior space, lit only by a smoking lantern, the glow of which casts into dramatic relief the colourful decoration on the columns and walls. Fans, roundels, fluted pilasters and other shapes can be made out in the gloaming. One of the frock-coated men peers closely at the decorated walls, while a woman turns to her companion, her hand raised to her mouth in amazement.

This scene showing smart 19th-century day-trippers savouring the thrill of visiting an archaeological site is currently displayed in an exhibition entitled The Etruscans and the Mediterranean: the City of Cerveteri at the Palazzo delle Esposizioni in Rome. And it says a lot about how Etruscan culture was viewed following its discovery in the 1820s. The ‘mysterious’ Etruscans, with their ‘lost’ language and unwritten history, became a received truth, perpetuated as late as the 1920s, when DH Lawrence travelled to Cerveteri and Tarquinia.

It was because most of their material remains were buried – unlike Greek and Roman ruins, which were largely above ground – that the unearthing of a forgotten culture, with all its mystery, romance and drama, took powerful hold of the public imagination. While much has been discovered and written in recent decades to shine a light on to this magical imagined people, scholarship in the Etruscan field still has catching up to do. The current exhibition pulls into sharper focus our view of Etruscan civilisation by concentrating on one of its chief cities, Cerveteri, and its main port, Pyrgi, through which it traded, spreading its influence across the Mediterranean from about 750 BC.

The area of the Italian peninsula known as Etruria stretched from Tuscany in the north to Rome in the south; the west was bordered by the Tyrrhenian Sea, and the east by the Tiber, but Etruscan colonies have been identified as far north as Bologna and the Po Valley. Etruria was an area of extraordinary

Those enigmatic Etruscans

They were portrayed in the 19th century as the darkly mysterious denizens of a lost civilisation. But the Etruscans emerge as far more accessible to us, even reassuring, as Polly Chiapetta finds at an exhibition currently on show in Rome.

1. Terracotta head of Achelous, 530-520 BC. H. 26cm. W. 14cm. © Soprintendenza per i Beni Archeologici dell’Etruria meridionale.

2 Large faience alabastron (perfume jar), late 7th – early 6th century BC. H. 10.2cm. © Musées Royaux d’Art et d’Histoire, Brussels.


4 Bronze funerary demon with dog’s head, circa 500 BC. H 4.5cm. © Staatliche Museen zu Berlin, Antikensammlung/ Johannes Laurentius.
agricultural fertility, producing olives, grapes and grain crops, and rich in minerals, such as iron and copper ore, silver and lead, resources that provided the basis of the region’s wealth. The 12 major cities within these natural boundaries, which included Cerveteri, Arezzo, Veii, Vulci and Chiusi, were united in a loose confederacy by ties of a common language and religion, and receptivity to outside influence, although emphatically not to territorial incursion. Through the arc of the civilisation’s development – from its origins in the 9th century BC to its eventual absorption into the prevailing Roman culture in the 1st century AD – it retained a sense of separateness from other peoples of the Italian peninsula, with its own clearly identifiable artistic styles and cultural practices. Crucially, what allowed the Etruscans to prosper was peace. A remarkably stable political environment, fostered first by the rise of princely families in the 7th century BC, and in the following century by the dominance of public authority and the civic laws, created the conditions for the independent city states and their cultures to flourish largely untroubled by the privations of war.

The 7th century, known as the Orientalising period, saw unprecedented contact with the outside world, with Etruscans looking towards the Near East and Greece for commerce in goods, ideas and social customs. Athenian amphorae, Egyptian perfume-holders and Cypriot bronzes made their way, via Phoenician traders, into Etruria, and native crafts assimilated styles and influences from as far away as Persia. In Pyrgi, gold plaques with texts in Etruscan and Phoenician dating from the end of the 6th century BC, which were made to be fixed to a sanctuary door, attest to the cosmopolitan make-up of that port city’s population.

In a sense, the Etruscans are worth more to us dead than alive. Of their lives, very little remains: no domestic buildings – which were made of timber, bricks and pottery, and eventually returned to the earth – and few writings survived, either by or about them. But their tombs
have been a rich source of evidence of the wealth enjoyed by their noble families.

Cerveteri, or Caere as it was known in Latin, was one of a number of cities with a substantial burial ground nearby (half the acreage devoted to the city itself). These highly organised necropolises, or ‘cities of the dead’, consisted of a series of tombs, some of them circular tumuli up to 60 metres wide carved into the tufa, with interior chambers that often mimicked the domestic arrangements preferred by the occupants in life. Eternity is a long time to suffer inadequate accommodation, and well-heeled Caeretans saw to it that their provision in death was commensurate with their position in life.

For example, in the Necropolis of the Banditaccia adjoining the city, the Tomb of the Five Chairs provided its unnamed incumbent with a banqueting room for his symbolic use in the afterlife; while the Tomb of the Lions, among others, had raised platforms, not unlike beds, for the repose of the dead. Some tombs were virtual palaces in themselves: the sumptuously decorated Tomb of the Reliefs, which dates from the 4th century BC, had funerary niches sufficient for several generations of a single family.

Pottery, metalwork, gold jewellery and wall paintings of a breathtaking range and craftsmanship that were buried with the elite bear witness to the vitality of Etruscan culture. Much of this was as a result of migrant Greek craftsmen who brought their techniques, motifs and styles of decoration with them to Etruria. Cerveteri’s well-heeled princely class adopted and adapted Greek social practices, most notably the symposium, or formal drinking party, and avidly acquired the various accoutrements associated with it: numerous Attic, red- and black-figure cups and oenochoai (wine jugs), as well as lebetes for holding wine and kraters for mixing it with water, were unearthed in Cerveteri, many with Athenian-style decoration typical of Proto-Corinthian pottery. Imported goods inspired local makers, both Greek settlers and native Etruscans, to emulate typical Greek shapes, or to depict Greek myths, but they did so in a distinctively vernacular style.

A spirited krater by Aristonothos dating from circa 650 BC (remarkably the first signed work in Italy, now in the Capitoline Museums in Rome) shows Odysseus and his men blinding the Cyclops Polyphemus (seated right), circa 650 BC. Terracotta, H. 36.3cm. D. 33.5cm. © Soprintendenza per i Beni Culturali, Capitoline Museums, Rome.

No material reveals as much about the distinctive taste and inventiveness of Etruscan craftsmen as terracotta.
an almost naive stylisation with a deceptively refined design – alternating and repeated stripes of colour in the friezes echo patterns in the pleats of the figures’ dress and feathers in their wings. While the style has been described as Ionic, there is much about these that could only be Etruscan, from the fashionably pointy boots to the surprisingly nimble movement of the stocky figures. Found in a tomb in Cerveteri – though probably moved there from a public or private building – they are only one of a handful of examples of ancient interior decoration.

No material reveals as much about the distinctive taste and inventiveness of Etruscan craftsmen as terracotta. From the Villanovan era – 900 to 700 BC – potters in the region transformed clay into vessels ranging from utilitarian impasto cooking pots or amphorae to cinerary urns or the most elaborate of wine jugs, jars and cups for the symposium. The most typically Etruscan form of terracotta, bucchero – a form of pottery specially fired to an oxidised black colour – could be burnished to a smooth shine to imitate bronze or other costly metals, yet judging from the quantity of bucchero in aristocratic tombs, it seems not to have been regarded as a poor substitute.

Where the Greeks had access to marble that they could carve for building and ornamenting temples and other public buildings, 6th-century Etruscans turned yet again to terracotta to adorn their religious structures. Antefixae, or roof-tile terminals, in the form of faces of male and female figures, animals, sphinxes and palmettes have been unearthed in urban centres such as at the sanctuary at Pyrgi. Traces of paint suggest these would have been highly coloured, which would have livened up the timber buildings.

Techniques for producing large-scale terracotta sculpture were well developed in Cerveteri by the middle of the 6th century BC, and it is from this tradition of craftsmanship that the most striking and most celebrated object in the show emerged. In the Sarcophagus of the Spouses, almost lifesize figures of a man and woman lie together on a couch, raised on one elbow, their bodies almost fused. However, the spontaneity and relaxed naturalism of the work are deceptive – other examples of the type reveal the reclining form was a standard type in funerary sculpture, making the Sarcophagus of the Spouses more likely to have been an emblematic representation of marital unity and possession. The actual function of this work is still unclear – it may never have served as a sarcophagus in the usual sense of containing human remains. Their gestures suggest their symbolic presence at a funeral banquet. The man extends his left hand to receive drops of perfume, associated with funerary rites, from a now missing vessel held in his wife’s right hand, while her left hand seems to be grasping a small object – possibly a pomegranate, a fruit associated with the afterlife.

However, to reduce this work to a schematic series of symbols does little credit to its maker – who modelled the detail and realised the lifelike expression with consummate sensitivity and skill. It is difficult not to be moved by the intimacy of this couple as they faced the afterlife side by side more than two and a half millennia ago. As we stand in front of these figures, the Etruscans no longer seem strange or mysterious but familiar and almost reassuring.

The Etruscans and the Mediterranean: the City of Cerveteri is on show at the Palazzo delle Esposizioni, Rome (www.palazzoesposizioni.it/categorie/mostre-in-corso) until 20 July.
‘If you read Oedipus the King it will take you back there and you’ll read about yourself,’ Julian Anderson states categorically. That may be so, but why anyone would choose to set Sophocles’ Theban Plays to music is an intriguing question.

Anderson, of course, is not the first to do so – Stravinsky teamed up with Jean Cocteau and together they wrote Oedipus Rex, an ‘opera-oratorio after Sophocles’, which premiered in Paris in 1927. But back to Julian Anderson.

‘While I was studying Classics for A-levels at Westminster School, I was asked to translate a line from Oedipus the King. The blind seer Tiresias is brought before him to shed light on why the city of Thebes is blighted by plague and pestilence but says that, although he knows the cause, he will not reveal it. At this point Oedipus flies into a rage and explodes: “You would provoke a stone to anger!” That was the line I was asked to translate and it hit me at once – I thought that should be sung!’

And now it will be. That moment of insight three decades ago led Anderson to where, aged 46, he is now – very close to the dress rehearsal of his three-act opera Thebans, whose world premiere is on 3 May.

Based on the so-called Theban Trilogy, three tragedies by Sophocles – Oedipus the King, Antigone and Oedipus at Colonus – the opera follows the tangled tale of a family doomed for three generations. It spins a web of murder, incest, love, loyalty and political ambition. Anderson has changed the order of the plays, taking them out of chronological order by moving Antigone forward into the second place where he thinks it belongs.

‘Antigone is central to the story,’ he explains, ‘and this ups her role and also emphasises Oedipus at Colonus, which is all about searching for the right end. Oedipus believes he is a wronged man but he’s not blameless. He’s a very bad father – he spurns his son Polynices and curses him. He says: “I loathe the sound of his voice.” Nobody is black and white in this.

‘Oedipus knows his life is coming to an end. He departs in order to die, and forbids his daughter to come with him. He goes off in a blaze of light, and the last song is Antigone’s lament for her father.’

So at the end of opera is the tragedy resolved? I hate to use the word ‘closure’ but is this what it is all about?

‘No – Oedipus finds the end that he wants, but he won’t let Antigone go with him. That is why, later, she is so desperate to bury her brother Polynices.’

Anderson speaks about all this with such feeling that I venture to ask if the ancient myth has any personal resonance for him. It does.

‘I was in my 30s, abroad, teaching at Harvard when my father became very ill. I was told he would last for a few days, so I got the next plane I could back home to England. He died while I was on the flight and I never saw him again…’

He clearly feels for Antigone, who also wants to be with her father when he dies.

‘The last thing you hear in the opera at the end of Act III is her voice. The music is full of luminosity at that moment – it’s very passionate yet gentle, rendering his death and her grief.’

The librettist of Thebans is the great Irish playwright Frank McGuinness, whose powerful translation of Oedipus the King, staged at the National Theatre in 2008, starred Ralph Fiennes.

Anderson, who has enjoyed working with McGuinness, says he is ‘generous’ and has given him ‘great latitude’ – especially when he suggested where lines needed cutting. There have, he says, been major rewrites.

‘We used to meet in the foyer of a London hotel to discuss it and he’d say: “Can you
believe what they’re saying here?” – as if the characters were alive today. Frank told me that he once asked John Mortimer [when he was still a working barrister] about the worst crimes committed and he told him that they were all tried in the family courts – which he avoided. “Families are terrifying!” he said.

Did Anderson find it difficult to set particular lines to music?

‘If it’s a question of how do you set lines like “please pass the salt” – you just don’t set it. The music does not have to mirror the action entirely. It can be impassive and let the words carry the story. Sometimes the music depicts, imitates the action, and sometimes it contradicts the emotions being shown.’

It has taken Anderson three years to write Thebans. His biggest musical influences have been the works of Messiaen, Mozart, Beethoven and Stravinsky.

But what about theatrical influences – was he tempted to employ antique devices, such as masks, in his production?

‘No,’ he replies emphatically, ‘although Peter Hall’s Oresteia [a four-and-a-half-hour masked production staged at the National Theatre in 1981] was wonderful.

I have looked into ancient music – I know about it – but Thebes could be here today. I wanted Thebans to reflect the conflict between public and private life – it’s very political. The influence of the family really messes with public life. What I love about this story is that it addresses the problems of society in a cohesive, coherent way: family versus the individual; the state versus personal concerns. When Creon won’t let Polynices be buried, he is like Stalin and the disappeared. Antigone represents the dignity of human rights. It is also about the endless hunt for scapegoats which still goes on today.’

Anderson sees that the problems and conflicts of the ancient world are still with us; he is definitely not looking backwards. He is also determined to plough his own furrow and not to tread where other composers inspired by Classical myths have trod.

‘I avoided the Jungian approach with its archetypes – Tippett has already done that – and I steered away from ritualistic opera, as Harrison Birtwistle has tackled that.’

Julian Anderson is clearly ready for anything that the critics or anyone else can throw at him.

‘I don’t write to please or to displease. I write from me, from my life. Thebans is just about people, people that you meet in everyday life.’

Thebans will be performed by the English National Opera at the Coliseum (www.eno.org.uk) on 3, 8, 10, 17, 23 and 31 May and on 3 June.

The story of Oedipus

Because, before his birth, the Delphic Oracle foretells that Oedipus, the son of Laius, King of Thebes, and his wife Jocasta, will kill his father and marry his mother, the newborn is carried away and left to die on a hillside. A shepherd finds the baby and he and his wife adopt him. As a young man, Oedipus hears about the prediction and, horrified, flees his ‘parents’. He heads for Thebes and, on the way, meets an arrogant man (Laius) at a crossroads; they argue and Oedipus kills him. Oedipus arrives in Thebes where he solves the riddle of the Sphinx and marries Jocasta. Together they have three children. When the terrible truth is revealed, she commits suicide and he blinds himself and leaves Thebes, led by his daughter Antigone. They arrive at Colonus where Oedipus goes off to die alone. His sons, Polynices and Eteocles fight for the throne. They both die but Polynices remains unburied. Antigone buries him against the orders of King Creon and, as a result, is sentenced to death. She commits suicide, which causes her betrothed, Haemon (son of Creon and Eurydice), to follow suit. When his mother hears this, she, too, commits suicide, leaving Creon a destroyed and desolate man.
Footprints from the deep past

Nick Ashton tells how evidence of our oldest ancestors, discovered on a Norfolk beach, has pushed back the dating of the human story in Britain by 300,000 years and become a vital part of a fascinating exhibition on show at London’s Natural History Museum.
In May 2013, the oldest footprints outside Africa were discovered in ancient estuary mud on the coast at Happisburgh in Norfolk. They dated to at least 800,000 years ago. Together with other astonishing finds that have been unearthed at Happisburgh over the last 10 years, these footprints contribute a vital piece of evidence to Britain: One Million Years of the Human Story, a major exhibition currently on show at the Natural History Museum in London.

For more than two centuries this crumbling Norfolk coastline has been famous for the discoveries of fossil bones of mammoth, rhino and hippopotamus, together with fossilised wood and other plant remains, in deposits known as the Cromer Forest Bed. Since then, extensive fieldwork at Happisburgh has revealed at least five new sites of varying ages, the surface with the footprints being the latest of these discoveries.

The first site (Site 1) was discovered by local resident Mike Chambers while he was out walking his dog. Organic muds had been exposed at an exceptionally low tide to the south of Happisburgh, and embedded in them was what appeared to be a humanly worked black flint. This was, in fact, a hand-axe that has now emerged as an iconic object – it was voted in as No 1 in Britain’s Secret Treasures on ITV in 2012. Site 1 dates to about 500,000 years ago, being one of the earliest hand-axe sites in northern Europe. However, the real importance of the hand-axe is that it led to new fieldwork and further astonishing discoveries.

Of all the new sites, it is Site 3 that has transformed our understanding of early humans in northern Europe. It was discovered in 2005 and lies in a complex series of river channels and estuary sediments 1km to the north-west of Site 1. Excavations over several seasons have revealed more than 80 flint artefacts, associated with a wide range of environmental data. These artefacts are in fresh condition and consist of simple flakes, occasionally...
retouched into notches or scrapers, but no evidence of hand-axes. The environmental data provides clear evidence of the habitat in which humans were living. Pollen, wood and other plant remains indicate regional vegetation dominated by coniferous forest.

The more localised environment can be reconstructed from study of the insect remains, which suggest that the site was near the estuary of a large river with a flood plain consisting of a mosaic of grassland, stands of alder, small pools and marsh. The valley was grazed by herds of deer, horse and bison, together with larger herbivores such as mammoth, rhino and hippo.

The insects, the beetles in particular, provided the first surprise. As beetles often have very specific habitats and usually fly, they are quick to react to changes in the environment, and their present-day distribution can be used to reconstruct past climate. The combination of species found at Site 3 suggests that summer temperatures were similar to those of East Anglia today, with an average of 17°C. However, estimated winter temperatures appear to have been 3°C to 6°C cooler than today’s average of 3°C. A modern-day equivalent would be southern Scandinavia or northern Germany, which would make winters a challenge to survive.

A bigger surprise was the age of the site. The mammalian fossils provide the main clue. The mammoth remains can be attributed to an early form called *Mammuthus meridionalis*, which seems to have become extinct about 800,000 years ago. The horse, *Equus Suessenbornensis*, also became extinct about this time. By contrast the giant elk, *Cervalces latifrons*, and red deer, *Cervus elaphus*, first evolved about a million years ago. The combination of these fossils means that the age of the site can be bracketed between 1 million and 800,000 years ago.

This age is supported by the reversed palaeomagnetism recorded in the estuarine sediments, where minute iron minerals are orientated to the south, rather than north. Until recently it was thought that humans first reached northern Europe only 300,000 years ago. Now the dates of the discoveries at Happisburgh push this back by at least 300,000 years. The combination of the cold winter climate and the early dates prompt questions about the use of clothing, shelter and fire. Did humans possess these technologies much earlier than previously thought, or were they better adapted physically to cope with the cold, through extra body fat, or perhaps functional body hair? These questions are still being researched.

Site 3 and its associated deposits were set to reveal yet more surprises. The last two years have seen extensive erosion, particularly around Site 3, which has revealed large exposures of the estuary sediments. These consist of flat laminated horizons of silts and sands, similar to muds laid down in estuaries today. Occasionally ripple marks can be identified from gentle tidal action, but they are normally planar and flat in aspect. While we were undertaking geophysics on the foreshore in May 2013, Dr Martin Bates from Trinity St David University, Wales, identified a rather different, much more irregular surface with a jumble of hollows, many of which were elongated in form. He identified the Happisburgh surface as similar.

A healthy scepticism questioned Martin’s conclusions, but a recent origin for the footprints was soon ruled out, as the sediments are extremely compacted and will not take a modern print. The other option was some form of erosion, but, again, no known process could account for the elongated pattern that in the clearest examples consistently produced the right ratio of width to length for human
imprints. It was a few days before a recording team could be mobilised and systematic recording begin. Dr Sarah Duffy came down from the University of York to use multi-image photogrammetry, which combines digital photos from multiple positions to create a 3D model.

As the surface was only exposed at low tide, there were only three to four hours to remove recently accumulated beach sand and water, and then to record. The combination of persistent rain, wind-blown sand, fading light and incoming tide made the process extremely difficult, particularly with the need to continually sponge out rainwater from the bottom of the hollows. Remarkably, given the conditions, the results were stunning. It was only after seeing the overhead views of the entire surface that the front, back and arch of feet could be identified, and in one case the imprint of toes.

So how are they preserved over such lengths of time? The process is the same as with the much later prints found in areas such as Borth, the Severn Estuary or the Sefton Sands in Lancashire. The muds have to be plastic enough to take a print; if the mud is too dry there will be no print, or if too wet, the edges quickly collapse. Gentle incoming tides hold sediment in suspension, but as water slows it is the heavier sands in the mud that drop out first and fills the hollows, followed by silts and clays.

Burial by further tidal sediments preserves the sand-filled prints for several thousand, or in the case of Happisburgh, many hundreds of thousands of years. The uniqueness of Happisburgh is the further burial of those estuarine muds by over 10m of glacial sands and clays, which left them untouched until 30 May. Within two weeks further erosion had erased them.

So what do the prints tell us about these early humans? Dr Isabelle de Groote of Liverpool John Moores University analysed the clearest of the footprints. From the heels, arch and front of the foot there is little doubt that these are fully upright, bipedal humans. The length of the prints can tell us more. They vary from 26cm to less than 10cm, suggesting both adults and children, and at least five individuals. There is an average ratio of 1.5 percent for foot-size to stature, which seems to hold for both modern and past populations. The tallest individual stood at about 1.73 metres or 5ft 8in tall, which probably indicates an adult male and that we are dealing with a small family group. The jumble of prints and lack of distinct trails suggests that the group had paused, and there is some overprinting. However, the orientation does indicate movement in a roughly south-easterly direction, perhaps along the edge of the estuary.

There are no human fossil bones from Britain of this age, so the question remains open as to who these individuals were. The most likely candidate is a species called *Homo antecessor* or ‘Pioneer Man’, whose remains have been excavated from the site of a similar age at Atapuerca in northern Spain. Here we know that the average male height was 1.73 metres, while for females it was 1.68 metres, which falls within the range of the individuals from Happisburgh. They would have looked similar to us, with a slightly different cranial structure and a slightly smaller brain.

So what was *Homo antecessor* doing in northern Europe? The name ‘Pioneer Man’ is perhaps appropriate. The only evidence from Happisburgh suggests that these populations were beyond their normal range, coping with difficult winter climates. It is unlikely that they migrated south seasonally, wintering in the Mediterranean, partly because of the vast distances involved, but also because of the social structures that would be needed; how would they have coped with infants, the old or the infirm?

Long-distance seasonal migration is unknown in modern primates and seems to be a strategy only adopted by fully modern humans. The cold winters certainly suggest either physical adaptation or the use of technology such as clothing, shelter and fire. But perhaps the biggest challenge was the short growing season of northern latitudes, implying a greater dependence on meat and more effective scavenging or possibly hunting.

Was the secret of Happisburgh that it was situated on an estuary that provided important resources such as shellfish and seaweed over those difficult winter months? It is probable that this small population either died out or retreated south as climate cooled still further. It is also likely that they were the pioneers of the day, reaching the northernmost limit for humans at that time any-where around the globe. They were pushing the boundaries and facing new challenges that were ultimately the catalyst for new technologies. Perhaps it is this trait, as well as the footprints in the mud, that mark the Happisburgh population as being distinctly human.

---

**Britain: One Million Years of the Human Story**

- You can come face to face with some of our earliest ancestors in the form of lifesize models of a Neanderthal (left) and *Homo sapiens* in Britain: One Million Years of the Human Story, at the Natural History Museum (www.nhm.ac.uk) until 28 September. What we now call Britain was once a lost world where mammoth, elephant, hippo and rhino roamed freely. Among 200 exhibits are the largest hand-axe in Europe, which is around 300,000 years old, the skull of the earliest known Neanderthal in Britain, and the oldest wooden spear in the world. You can also find out what six well-known figures discovered about their own ancestry when they had their DNA analysed. Who would have guessed that Alice Roberts had more Neanderthal in her genetic make-up than Bill Bailey?

- A one-day conference Britain: One Million Years of the Human Story with lectures by Christ Stringer, Nick Ashton and Simon Parfitt, will be held on 31 May. Tickets, cost £35 (to book online go to www.nhmshop.co.uk/tickets/conference-britain-one-million-years/events-listing.html).
It is somewhat ironic that an exhibition devoted to libraries and culture is on show in the Colosseum, a building that is the epitome of crass vulgarity and was once home to the most brutish entertainment. However worthy the achievements of ancient Rome – and they were indeed many – they will be forever blighted by a whole society hooked on gory spectacles: the gruesome, elaborate pornography of violence and death. Nevertheless, in recent years, the Colosseum has hosted a series of important exhibitions revealing the hitherto lesser-known, often underestimated and more positive aspects of Roman civilisation. The latest exhibition is a good example. Entitled The Infinite Library: The Places of Knowledge in Antiquity, it sets out to answer the question ‘Who read what, where, in the Classical world?’

Roman society was literate, on the whole, and reading and writing were not the sole privilege of the wealthy or religious upper classes. The foundation of Roman education was the home and family, where the pater familias and his wife taught their children a respect for tradition, good manners, dedication to duty and the basic skills needed to make of them useful Roman citizens. For a boy, this meant devotion to the state; for a girl, devotion to her husband and her family. Richer families hired private tutors, often cultured Greek slaves or freedmen, such as Marcus Verrius Flaccus (circa 55 BC-AD 20), the tutor of Emperor Augustus’ grandsons. Poorer children were, at the very least, taught to read and write by the litteratus or litterator (male or female teacher).
in the *ludus litterarius* (primary school), which could be housed in a variety of buildings, ranging from a private residence to a gymnasium, or even under a colonnade out in the street.

Pupils’ performance was measured through exercises that were either corrected or applauded after very competitive recitations. Between the ages of nine and 12, boys from affluent families would be taught by a grammar teacher, who improved their writing and speaking skills and taught them Greek if they did not yet know it. Lower-class boys would start training for a skill as apprentices, while girls, both rich and poor, would be coached to become chaste brides and capable mothers.

When boys reached the age of 14 or 15, the wealthiest and most promising students were sent to a *rhetor*, who taught public speaking, the art of delivery being essential for their future literary, judicial and political careers. They also learned geography, music, philosophy, literature, mythology and geometry.

During the years of the Late Republic, after Rome had conquered Greece, Asia Minor and Egypt, books and prized works of art were brought home as loot. Famous libraries, such as that of King Perseus of Macedon (*circa* 212-166 BC), were part of the booty taken to Rome by Lucius Aemilius Paullus in 168 BC. These libraries, filled with parchment codices and papyrus scrolls, now became literally the intellectual property of the elite. Their owners only allowed their friends or *clientes* – men such as Cicero (106-43 BC) and Varro (116-43 BC) – to have access to them. Men who benefited from the generosity of these patrons were in turn able to assemble their own libraries. They then invited fellow writers to visit them, and books were discussed, exchanged and copied. Such was the rage for libraries that ‘...by now, like bathrooms and hot water, a library is got up as standard equipment for a fine house...', wrote the dramatist Seneca (4 BC-AD 65) in *De Tranquillitate Animi*, IX. He ridiculed those who fitted out their libraries for show,
displaying scrolls in bookcases (armaria) of citrus wood inlaid with ivory that ran up to the ceiling, but who would not have the time or wit to read the titles of those works, let alone the contents.

The 18th-century discovery of the Villa of the Papyri (Villa dei Papi, also known as the Villa dei Pisoni) at Herculaneum provides us with a blueprint of the rich man’s library in antiquity. This magnificently appointed villa filled with works of art probably belonged to Julius Caesar’s father-in-law, Lucius Calpurnius Piso Caesoninus (circa 100-43 BC). Its Greek library, the only one found so far, was assembled by an Epicurean philosopher, Philodemus of Gadara (110-40 BC), a key figure in the transmission of Greek philosophy to Rome.

The eruption of Mount Vesuvius in AD 79 buried the villa under layers of volcanic ash, and as a result almost 2,000 papyrus scrolls written between 180 BC and AD 70 were carbonised. Because of their fragile state it is only recently that these charred scrolls have become legible, thanks to a multispectral imaging technique developed by NASA scientists. Archaeologists hope that Piso’s Latin library, kept separate from the Greek one (as was the custom), will be discovered as work continues on the site.

One of the best of the Latin prose writers and historians, Julius Caesar (100-44 BC), planned to build a grand library in Rome to put it on a par with the cultural standards of the Hellenistic centres of learning abroad, such as Alexandria. Sadly, his premature death put paid to his plans, and Romans had to wait until the reign of Emperor Augustus (31 BC-AD 14) for public libraries to be commissioned in Rome. As part of his programme to transform the city into a grand capital that would reflect his own enlightened patronage and political authority, Augustus built three major libraries, with a capacity of more than 30,000 books each, in the 15 years leading up to his death.

The greatest of all the imperial libraries, however, was built by Emperor Vespasian (r. AD 69-79) in the Templum Pacis, between AD 71 and 75. This was a magnificent complex with a library and auditoria for the recitation of literary texts modelled on the structure of a Greek Musaeum, where masterpieces of Greek art were displayed in the porticoes surrounding the courtyard and in the gardens framed by colonnades. The templum, which was reconstructed by Emperor Septimius Severus in AD 203-211 after it was damaged by fire in AD 192, contained the Forma Urbis, a large marble map of Rome that lined a whole wall. So encyclopaedic was the collection of books in the templum that Pliny the Elder (AD 23-79) referred to some of its 500 reference books that he used to compile his Natural History. Most of the large Roman baths, too, included libraries containing Greek and Latin texts.

Rome’s public libraries were open from early morning till noon. Readers walked into large, lavishly decorated marble halls lined with statues and rectangular book shelves (armaria) filled with scrolls (volumina) arranged either by subject or alphabetically.

Papyrus scrolls, usually about 25cm high and 5 to 10 metres long and rolled around a cylinder, were extremely fragile, and soon parchment codices, although more expensive, became increasingly popular. Portraits of authors served as signposts and made it easy to find their books. Each scroll had a label (titulus) with the name of the writer and title of the work.

The procuratores bibliotecarum, or library directors, were chosen from cultured freed slaves, usually
The monumental ambulatories of the Colosseum are now lined with well-planned showcases in seven separate sections that illustrate the importance of education and the literary life of the Greek and Roman worlds.

Included among the 120 artefacts on show are writing instruments, containers for books, portraits of patrons and writers, wall paintings, maps and plans of the public and private spaces devoted to the preservation of knowledge in Rome and in its empire.

This exhibition sprang from a desire from archaeologists to show the public finds excavated in the Templum Pacis and the auditorium during work for a new underground line. These include two small ivory sculptures: a statue of Emperor Septimius Severus (11) and a head that is, perhaps, of Emperor Julian the Apostle (12). ‘Hadrian’s auditorium is the biggest find in Rome since the Forum was uncovered in the 1920s...’ announced Rossella Rea, the archaeologist in charge of excavations between 2007 and 2011.

These excavations brought to light a large portion of the once very imposing public building used for literary recitations – reading aloud was the norm in antiquity. Reading was a slow process hampered by the scriptio continua, a script with no spaces between the written words. It was rarely a private, silent occupation.

As Greek culture became increasingly accessible, Roman writers explored new genres, adapting Greek prose and poetry formats to Latin. Greek and Latin art and literature had completely different canons: the Greek ethos was based on ideals of restraint and harmony, the Roman on deference to the laws of the state, down-to-earth pragmatism and sentimental excess. This can be seen in Roman portraits, which represent recognisable individuals, warts and all, very different from idealised Greek sculpture.

Yet the best of Roman literature is often lyrical and private, especially when it describes nature or the pangs of love, particularly in letter-writing. Roman literati were great letter-writers and their missives provide an insight into everyday life in Roman society that is both informative and poignant.

Until quite recently a Classical education was de rigueur for all cultured Europeans, who were expected to be familiar with the works of Greek and Latin writers and to quote them with ease. Sadly, this is no longer so.

I hope that this unusual and welcome exhibition devoted to libraries and their function in the Graeco-Roman world will entice visitors to revive their knowledge and love of the Classics. Then they can find pleasure in reciting lines of poetry and prose in languages that are far from dead and are still capable of eliciting enchantment.

This reminds me of an anecdote from the Second World War when, in the Cretan mountains at dawn in 1944, the British writer Paddy Leigh Fermor (1915-2011) heard his German prisoner, General Kreipe, recite in Latin the opening lines of Horace’s Ode to Thalarchum. Paddy continued the recitation, inducing Kreipe to remark: ‘Ach so, Herr Major’, to which Paddy’s response was ‘Ach so, mein General’. For a brief moment war was kept at bay and the words of Classical civilisation drew these adversaries together.
After the break-up of the Roman Empire, the mathematical sciences of the Classical world were almost entirely lost to the West. When the Nestorian school at Edessa (modern Sanliurfa) closed in AD 489, its scholars went mainly to what is now Iran, and when the neo-Platonic academy at Athens ceased to function, around AD 529, there was another exodus east, largely to Syria.

The triumphs of Pythagoras, Plato, Eudoxus and Hipparchus were eventually inherited by Islam, under which they were not only treasured but also greatly expanded. One such Hellenistic triumph was placing a map of the heavens on to a globe, which gave us the celestial sphere indispensable to astronomy. The Greeks then improved on the invention by projecting a skeletonised version of the sphere, with its circles, or colures, from a perspective underneath its south pole, on to a flat plane. This stereographic projection through a pole formed the basis of the astrolabe (from the Greek astron = star + lab = take), a beautiful, portable sighting device for computing celestial motion.

No examples survive from Classical antiquity, but the astrolabe was to become the jewel of Islamic science and was greatly improved on in the centuries that followed. One of the most notable improvements was achieved in the 11th century by an Arab astronomer in Andalusia named Azarquiel (Abu Ishaq Ibrahim al-Zarqali), when he changed the point of projection from one pole (the south for northern latitudes) to the vernal colure (the arc of the spring equinox on a plane crossing both poles. This meant that the instrument could be used at any latitude, removing the need for separate latitude plates. The latitude and longitude grid of the Earth on which these colures relied had been established in the 3rd and 2nd centuries BC, usually credited to Eratosthenes and Hipparchus.

The projection of the terrestrial globe on to a flat surface was, of course, essential for map-making. The best-known projection is probably that of the Flemish cartographer Gerard Mercator, devised in 1569. But the familiar projection looking down on the North Pole that is used as the emblem of the United Nations, and indeed in the national atlas of the United States Geological Survey, was in fact created half a millennium earlier, by the 11th-century Iranian scientist Al-Biruni.

There are an infinite number of possible terrestrial projections with varying distortions inherent in flattening a sphere. These projections vary according to the information required. It is now known that a seemingly impossible requirement was both set and met in 17th-century Safavid Iran. That was to construct an instrument with a world map whose sight rule (or alidade) would show both the direction of and distance to Mecca from any location on it. All known projections distorted one or both values. It was 17th-century Iranian brass qibla discovered in 1995. Opened up (opposite), it shows a world map with Mecca at its centre and the names of cities engraved in the squares of the grid. Beneath the map, at the south, is a magnetic compass with a blued steel arrow in the shape of a bird. The three cartouches are in the Safavid style.

2. Half-folded (below), the qibla is also a partially inclining universal sundial that can be used to tell the time of day.

When turning to prayer, devout Muslims need to know the qibla, or direction of Mecca. Now, it seems that the history of science needs re-orientating after the discovery of two 17th-century Iranian qibla indicators containing a device not thought to have been invented until 1909. Sebastian Whitestone get his bearings on the story.
until 1909 that a British cartographer, James Craig, devised a highly sophisticated system to address the problem, called a retro-azimuthal projection. So you can imagine the consternation when, in 1989, an incomplete and unsigned 17th-century qibla indicator emerged with a world map that clearly performed the task.

This was followed six years later by the emergence of another very similar instrument, this time complete with its sundial and signed by the maker.

The world map of the second instrument, discovered in 1995 – referred to in this article as ‘the 1995 instrument’ – is shown with its hinged sundial folded out of the way (1). By itself, this plate (225mm in diameter) looks superficially like an astrolabe. In fact, apart from the 1989 instrument, it is the only Islamic world map with a properly drawn coordinate grid known from antiquity.

However, it is no ordinary grid. The lines of latitude are not parallel to each other but curved, like the arcs of an ellipse, and symmetrical with respect to the meridian through Mecca. The lines of longitude are straight but not equidistant. In effect, the grid is a retro-azimuthal projection of the type that until recently was thought to have been created only just over a century ago.

Within the grid are engraved the names of various towns and cities, from Andalusia in the west to China in the east. Around the outside edge is a scale giving the direction to Mecca when read against the tip of the diagonal rule. This rule swivels round the centre, which represents the Holy City, and when aligned with any place on the map allows the distance to be read off a scale engraved on one arm. At the ‘southern’ end of the plate is a magnetic compass.

The three cartouches are typically Safavid (1501-1722) in style and contain inscriptions in Thuluth, an ancient Islamic script that first appeared in Iran in the 11th century. The one to the right of the compass reads: ‘When you put the diametric rule at the latitude and longitude of any city you will be shown the qibla and the distance from Mecca’.

The one on the other side says: ‘In this stone is significance on land and on sea: it moves towards the southpole like a blue feathered bird’.

The blued steel compass needle is, indeed, in the form of a bird.

The top inscription reads: ‘When you align the local latitude with the plate for the hours, the shadow of the gnomon will be a guide to identify the hour of the day’.

This last inscription refers to the sundial, which is shown unfolded and ready for use (2). This type of portable dial is known as a universal inclining sundial, so called because the hour ring is raised on a hinged arm at the side to varying elevations according to a variety of latitudes.

On the instrument discovered in 1989 and now in the Kuwait Museum of Islamic Art, the sundial is lacking. The world map is signed, in a small oblong reserve under the left-hand side, ‘the work of Muhammad Husayn’. There were several possible candidates for the maker with the same name. However, because of the emergence of a signed astrolabe, it is reasonably certain that this Muhammad Husayn was an Iranian Sunni, the son of a mathematician who wrote a treatise on the astrolabe entitled Mizan al-sanaziy in 1661-1662.

One of the world’s foremost experts on Islamic science, David A King, Emeritus Professor of the History of Science at Goethe University in Frankfurt, set to work on studying the two instruments and probing the hiatus in history that made their discovery such a surprise.

The result of his researches is a monumental 638-page tome entitled World Maps for Finding the Direction and Distance to Mecca. In it, King likens the problem that the age and the sophistication of the two instruments pose to that of finding a microchip in a tomb in a pyramid. He shows that the geographical data on the maps derives from a 15th-century source in Central Asia and suggests that the mathematics involved in the projection derive from a 17th-century source in Baghdad.

However, Elly Dekker, of the Faculty of Geographical Science at Utrecht University, challenges King’s conclusion of a 9th-century derivation. She believes that, as yet, it is completely unknown when and where the idea for these cartographic grids was first conceived.

Whoever is right, Professor King clearly relishes a mystery, for at the beginning of what is one of the most comprehensive analyses of the background of any scientific device, he quotes the Austrian writer Erwin G. Kolbenheyer: ‘Die ungelösten Probleme halten den Geist lebendig, und nicht die gelösten’ (‘It is the unsolved problems that keep the mind alert, not the ones that have been solved already’). •

World Maps for Finding the Direction and Distance to Mecca by David A King was published in paperback by Brill in 2013, at £41.
AN EGYPTIAN WOOD PAINTED MUMMY PORTRAIT OF A WOMAN
Roman Period, circa 2nd century AD
15 3/4 inches (40 cm.) high
$300,000–400,000
The Streets of London

When David Miles goes on a time-walk through the metropolis he sees how much the worship of both God and Mammon have helped to shape the city.

Sunday morning and to St John, Spitalfields, as Samuel Pepys might have written. Not to attend a religious service, but to indulge in London’s finest bacon sandwich. For St John: Bread and Wine, to give this café its full title, is well-known for its devotion to the pig. After leaving St John, we walk out on to Commercial Street where the pleasures of the flesh are almost erased by the sight of one of London’s most powerfully dramatic churches, Christ Church Spitalfields. This is a building that dominates this neighbourhood of fine Georgian houses and markets, and reminds us that our time on earth is transient. The renowned art historian Nikolaus Pevsner thought it ‘ugly’ – and maybe he was not alone in his opinion as, for most of my adult life, this architectural marvel teetered on the brink of abandonment and ruin. Now, fortunately, at long last, thanks to a devoted few, its magnificent restoration is complete.

Built between 1714 and 1729, Christ Church was the work of Nicholas Hawksmoor, who earned his architectural spurs working for Christopher Wren on St Paul’s and who, in middle age, emerged as one of Britain’s greatest and most individualistic architects (the term ‘architect’ was first used in English in 1563).

Hawksmoor was on the scene at the right time. The Great Fire of London in 1666 more or less destroyed 87 of the City’s 107 churches. Two decades later, in 1689, the Act of Toleration licensed Nonconformists to step out of the shadows. Their meeting-houses proliferated, as did London’s population. The Tory government attempted to come to the rescue of the established Anglican Church and passed the Fifty New Churches Act of 1711. The proposed churches were to cost no more than £10,000 each, funded from the Coal Tax.

Progress was initially slow, but the eventual results were spectacular – although rarely within budget. James Gibbs’ masterpiece, St Mary-le-Strand, came in at £22,000 and Christ Church Spitalfields at over £40,000.

Yet it was these new churches with their varied spires and towers, along with Wren’s new St Paul’s Cathedral (built 1675-1720) that gave London its distinctive skyline for almost three centuries. The great poet William Wordsworth was passing across Westminster Bridge ‘on the roof of a coach on my way to France, 3rd September 1802’ when he wrote the oft-quoted lines:

Earth has not anything to show more fair…
Ships, towers, domes, theatres and temples lie
Open unto the fields, and to the sky
The view from Westminster Bridge has changed dramatically since 1802. Looking east, the spires which once soared heavenwards, sailing like statel craft about the domestic roofs and commercial buildings of London, are now bludgeoned into meek submission by the thrusting towers of international capitalism’s stacked trading floors, which clash like a line-out of pumped-up rugby players. The bankers, bondsmen and oligarchs are no longer obliged to buy indulgences to assure a place in heaven; now, they simply step into their silent super-fast lifts and soar upwards through their oddly shaped glass mega-buildings towards the empyrean.

For some reason (perhaps to make them a less dehumanising sight) these towers of commerce, rarely entered by the public, have acquired cosy nicknames: the Gherkin, the Walkie-Talkie, the Cheesegrater, the Shard. Many are designed by Sixties idealists, some now established, ennobled and beknighted.

For millennia, new buildings were constructed on the remains of their ancestors – Wren is an exception. Cities grew vertically and organically out of the strata of demolished buildings, preserving the past in an urban layer-cake. No longer. Now the tower-builders first create huge voids, erasing the work.
of their predecessors, digging out the mosaic floors, bathhouses, temples and wharfs of the Roman city of Londinium. Even the bodies of Londoners must make way; the capital is not a place to rest in peace.

But, during the past few decades, archaeologists have at least managed to persuade London’s authorities that they should record the City’s disappearing history. Much of this work has been done by the staff at MOLA (Museum of London Archaeology), who have an admirable record of making their results known to the public.

Their latest offering is Religion in Medieval London: Archaeology and Belief, a handsomely produced, well-illustrated book that delivers exactly what its title says. The idea for the book came from the excavations carried out in advance of the new East London Line railway in 2006-9, when part of the lost monastic house of Holywell Priory, Shoreditch, was revealed.

But as well as having a wealth of churches, London always has been an excellent place for making money. In AD 604, the Venerable Bede described it as ‘a city which stands on the banks of the Thames, and is a trading centre for many nations who visit it by land and sea’. One of those newcomers was Bishop Mellitus from Rome, appointed by his fellow missionary Augustine of Canterbury to preach to the East Saxons. London was their capital.

Mellitus was not the first Christian bishop in London. Following the emperor Constantine’s Edict of Toleration in AD 313, Christianity grew in popularity among the soldiers, bureaucrats, traders and craftspeople of Rome’s most remote province. A certain Restitus is recorded, as Bishop of London in AD 314, attending the Council of Arles with his colleagues from Lincoln and York. A thousand years later, their religion had grown from an exotic oriental cult into an institution that dominated London and Londoners both physically and spiritually. Only the Jews discreetly managed to co-exist under the Christian monopoly.

But the Christian trajectory was not always upwards. With the abandonment of the walled Roman city in the 5th century, Christianity probably disappeared in London. By AD 597 Pope Gregory clearly saw the need for a missionary and diplomatic expedition to the quondam Roman province of Britannia. The story of him referring to some fair-haired Anglian slaves he saw in the market at Rome as ‘not Angles but angels’ is probably an English invention. From his archives in Rome it is clear that London had been the provincial capital of Britannia. By the later 6th century, however, London was no longer a secure place for Christian expeditions. The Roman city was dilapidated and bounded by hostile kingdoms. The new Anglo-Saxon trading centre of Lundenwic had developed along the Strand and around today’s Covent Garden.

The old Roman city of Canterbury in Kent was a more secure base for Gregory’s emissary, Augustine, and the Kentish king already had a Frankish wife who was Christian. After a few years Mellitus drew the short straw and was sent to try his luck in pagan London. At first he was
the medieval building, Wren cleared the site before constructing the new cathedral, so little or no trace of the Anglo-Saxon structure survives.

In the 10th and 11th centuries churches had sprung up all over London. Many were established by private individuals rather than on any planned or centralised basis. St Lawrence Jewry was built of timber in the 11th century on the site of the Roman amphitheatre. St Paul’s Cheapside was one of the first stone churches. The origins of Westminster Abbey (St Peter’s) are shrouded in forgery. The 12th-century monks doctored the charters in an attempt to rival the antiquity of St Paul’s, and claimed that they had established the abbey on the site of a Roman temple.

As the city and its population grew it was imperative to provide places to bury the dead and this need for cemeteries promoted the building of churches. By 1200 there were more than 100 parish churches in London; rather a lot by European standards, only medieval Norwich with 57 churches within its city walls came close to this number.

One of these early parish churches, St Benet Sherehog, was excavated in the mid-1990s in advance of the construction of James Sterling’s post-modernist confection, No 1 Poultry. This is not the only church with an unusual dedication: St Vedest (a bishop of Arras) and St Ethelburga (an Anglo-Saxon abbess of Barking) are two of many. But the most popular dedication was to St Mary the Virgin. In the medieval world Our Lady was more popular perhaps because she seemed more approachable than her son or his father and, with so much disease and death around, her divine help was needed.

Buildings inspired by Christianity totally dominated medieval London. A number of impressive monasteries sprang up – the international power-houses of Augustinians, Benedectines, Cistercians and Clinknacs – providing not only spiritual solace but medical treatment for the sick, lodging for the homeless and rudimentary education for the untutored. Soon these monasteries were joined by friaries and nunneries, and monuments belonging to the Knights Templar and Knights Hospitaller. Relatively little of them now remains.

The Cistercians were once to be found at St Mary Stratford Longthorne (then in Essex, now part of East London). But whereas their houses in remote areas of Yorkshire, such as Fountains Abbey, survive as picturesque ruins, St Mary’s Stratford was totally robbed of its stone following Henry VIII’s Dissolution of the Monasteries. Archaeologists working on the Jubilee Line extension in the 1990s documented the traces of this once great complex.

There were 13 hospitals in medieval London. The first, St James’s (the site of the present-day St James’s Palace), was built in the early years of the 12th century to treat lepers. Others were used more as almshouses or old people’s homes.

In 1999 I visited the largest-ever excavation of a medieval hospital in Britain, at St Mary Spital, part of the Spitalfields Market redevelopment. About 10,000 of the patients lay outside in tightly packed graves, victims of leprosy, tuberculosis and syphilis. For those who succumbed to the Black Death even more mass graves were required. A remarkable survival, and fortunately still preserved today, this 14th-century charnel house is heaped with bones. Presumably, optimistic Londoners hoped that, at the Last Trump, their mixed-up bones would somehow sort themselves out.

This compact little book provides a vivid account of a way of life and death that has disappeared. Its visible physical remains are remarkably scarce in London thanks to the Reformation – the so-called ‘stripping of the altars’ and the Dissolution of the Monasteries between 1534 and 1540. During that period Londoners took part in a wave of destruction and cultural vandalism worthy of the Taliban. It also reminds us what we have lost, how great cities and their buildings rise and fall.
Consulting the oracle

Academic, writer and broadcaster, Dr Michael Scott gives Diana Bentley a 360-degree view of the history of Delphi

It was a school trip to Greece that marked the beginning of Dr Michael Scott’s passion for ancient history. ‘I spent my 17th birthday in the Gorilla nightclub near Olympia,’ he recalls fondly. Fast forward and Scott, now in his early 30s and working as Assistant Professor in Classics and Ancient History at the University of Warwick, is well-known through his television and radio programmes and his books.

His television documentaries – Who were the Greeks?, Delphi: The Bellybutton of the Ancient World, and Ancient Greece: The Greatest Show on Earth – have won much praise for providing a clear and robust view of the world of the ancient Greeks.

It was while he was studying at Cambridge from 2000 to 2003, however, that Scott found that his desire to develop a fully rounded view of history was somewhat at odds with the traditional approach.

‘Classics students are under great pressure to specialise in various fields like history, literature, the arts or philosophy,’ he explains. ‘Studying ancient history introduces you to, and makes you think about, art, architecture and philosophy – but you need to be able to engage with all these aspects of the ancient world to appreciate how people lived then and perceived the world around them.’

Now, he says, there is much more emphasis on the connectivity of things and a greater drive to study relationships within the wider ancient world:

‘We’ve viewed the Classical world as Greece and Rome, excluding Egypt and Persia, but there’s a rebellion about this now in Classics. These countries were all intimately connected and traded with each other. This aspect of the ancient world is a growing area of scholarship and people are taking a more global view.’

Scott has brought this inclusive view of things to bear on his latest book, Delphi: A History of the Center of the Ancient World.

‘There was no book that brought together archaeological, historical and literary material on Delphi and addressed all the things that happened there. But as well as the oracle being based in Delphi, it also hosted athletic and musical competitions,’ he tells me. It was while researching Delphi and Olympia for his doctorate at Cambridge between 2004 and 2007 that he also discovered the dearth of material on those subjects published in English.

‘The ancient world was excavated by different European countries; the Germans were at Olympia, the French at Delphi and Delos, the English at Sparta. If you want to study more than one ancient Greek site, you must go to different national archaeology departments to do your research – and you must speak several languages. You need German, French, Italian and some modern Greek, at least.’

It was the vast amount of work written about Delphi in French that, in part, prompted him to write his own book.

‘Only the work on the oracle is in English, so I wanted to provide, in English, a 360-degree view of what the place was like and for people who were not necessarily academics.’

Scott examined the history of Delphi from its beginnings through to the present day:

‘In the 6th and 7th centuries AD, Delphi suffered a decline. It was covered by rock falls. A small village grew up on the mountainside and people weren’t aware of what was beneath it. So it wasn’t until the 17th century that people who were reading the literature referring to Delphi became curious.’

Some people thought that it was not worth looking for, but then, during the 19th century, the interest in archaeological excavation grew and grew.

‘Excavations began at Olympia in 1875; Schliemann was excavating Troy and Mycenae, and soon pressure was building to find Delphi.’

There was stiff competition to get permission to excavate there and, in the end, the French team was selected.

‘The French negotiated with the Greeks for 10 years – they called it their “Trojan War”. Eventually they bought the villagers’ houses and built a new village further away
from the site. It was a huge financial investment. Today, it would be hard to imagine a major European power allocating many millions to excavate an archaeological site in another country, but there was a sense then that it was our collective past.

The excavations were ground-breaking in terms of technical achievement says Scott. ‘A railway engineer brought in devised an ingenious system whereby wagons filled with debris could be pushed downhill by one man to be emptied and pulled up again by a single mule.’

When the work ended in 1902 the archaeologists believed that the excavation had been definitive, but they quickly realised their mistake and teams returned in the 1920s and 1930s. The last major excavation was in 1992. Not only was there more to find but the focus of the work changed: ‘The early excavators wanted to find nice sculpture and art. Later archaeologists were more interested in how the site developed. Why was it there? We now know there is evidence of Neolithic settlements in Delphi dating from 7000 BC.’

While Scott was conducting his research on Delphi, the French Archaeological School in Athens gave him permission to study at their dig-house, which was a particularly happy experience for him. ‘The house is close to the site, hidden behind the new museum. It can be quite eerie but wonderful at night; you look out on to the sanctuary of Apollo in the moonlight.’

Scott studied the excavation reports of Delphi and insists it was vital to be there to fully appreciate its history. ‘The monuments all crowd in on one another on the steep slope of the mountain. People studied the oracle as an isolated phenomenon. But they didn’t think about how these were original texts or people talking about earlier texts. But it does seem to have been active during the 8th and 9th centuries,’ he says.

‘This time used to be known as the Dark Ages, but it’s becoming increasingly clear that the Dark Ages weren’t so dark!’

Although the oracle remained a powerful presence until the 4th century AD, other aspects of Delphic life were also dynamic. ‘The athletic games held there – the Pythian Games – were one of the four great Panhellenic games, although it was Hadrian who built the stadium that we see in Delphi today in the 2nd century AD,’ he says.

‘Every four years there was a flow of people into the place, so buildings and monuments were built there continually with the knowledge that many people would see them – people made statements there. Over time, that gathers its own momentum. When the Romans took over the Greek world, they understood that.’

Olympia had a similar thing going on, yet there was a crucial difference, Scott insists. ‘Delphi was ruled by an international council of Greek cities like an ancient version of the EU or the UN. It had good, impartial management. Olympia was governed by the nearby city of Elis, a small city that was glorifying itself.’

Scott has been busy investigating Delphi’s powerful and continuing allure for some time; but he is also drawn to the period of Greek history from 400 to 300 BC. ‘This time is often forgotten. We’re more taken with the 5th century BC,’ he says, ‘and after that, with the time of Alexander the Great. But during 400 to 300 BC, Athens was transformed from a democracy to a kingship – a complete overturning of life that needs explanation. The days of the city-states were over.’

Persia was more influential then, he points out, than previously thought. ‘The Persian king settled a dispute during this time between the Greek city-states.’

Then there was the rise of Philip of Macedon, who reconfigured the map of Greece, and the astonishing achievements of Alexander the Great, a man whom Scott admits he finds intriguing. ‘The three main sources on him, Plutarch, Arrian and Curtis Rufus, provide very different accounts and there are almost no contemporary reports. I believe he was an extremely opportunistic, driven man who did extraordinary things but sadly died young, before he was able to put in place a system to cement what he had achieved. The empire had no obvious heir or one who could immediately hold power. The great question remains of how the ancient world would have changed if he had lived longer.’

We must remember, though, he stresses, that it is difficult to be objective when looking at history. He also dispels any romantic notions of life in ancient Greece. ‘We need to understand how different groups interpreted the past and factor that in. Every age sets its own agenda and is influenced by its own concerns, and we’re as subjective as everyone else. Our interpretation of the legacy of the ancient Greeks keeps changing, but that actually keeps our interest in them alive. We now know we have to question how we approach things.’

‘It would have been quite a brutal world. Life expectancy was very short. There were constant wars. In the country you worked very hard. Towns would have been noisy and smelly. If you lived in Athens, its democratic system demanded very active participation – we’d find it strangle.’

His fascinating book on Delphi has just been published and he has many other projects in the pipeline. The Classical world is always full of surprises, so it cannot be long before he shares more of his refreshing insights into another aspect of its history.
Nestled in the Kahoon Valley of the Salt Range hills in the Punjab province of Pakistan, lies the enchanting site of Katas. The focus of the site is the sacred pool, the blue-green waters of which contrast sharply with the surrounding arid landscape. The low hill that rises above the pool has been crowned with a complex of temples. The entire Katas site is of extreme importance to Hindus and features prominently in some of the religion’s most famous tales.

The name of Katas is derived from the Sanskrit word *kataksha* meaning ‘raining eyes’. According to Hindu belief, the pool of Katas was created by tears shed by the powerful deity Shiva who was utterly devastated following the death of his beloved wife, Sati. Weeping profusely, he grieved inconsolably for his loss and the streams of his tears formed two sacred bodies of water: one is the pool at Katas and the other is Pushkar Lake, near Ajmer, in northwest India.

The pool is a testament to Shiva’s love for Sati and, as such, has always been considered a sacred site by Hindus who, for countless generations, have travelled from far and wide to bathe in its holy waters. The pool of Katas also features in the Hindu epic tale of the *Bhagavad Gita* (*The Song of the Bhagavan*), part of the Sanskrit epic poem *Mahabharata*, thought to have been composed in the 3rd century BC. This part of the story tells of the five Pandavas brothers the eldest of whom, Yudhishthira, was the rightful heir to the throne of the kingdom of Bharata in north central India. Yudhishthira’s succession was,

The Seven Temples of Katas

Zahra Aslam and Zulekha Ahmad explore a complex of Hindu, Sikh and Jain temples built around a sacred pool at a little-known site in Pakistan.
however, opposed by his cousin who banished all the brothers from the kingdom.

After a dozen years in exile, four of the Pandavas, looking to slake their thirst, entered a forest in search of water. When they failed to return from their journey, Yudishtira went to look for them and discovered their lifeless bodies next to the pool at Katas. Despite his grief, Yudishtira was also about to drink from the pool when he was halted by a yaksha, a spirit of nature, which had taken the form of a crane. The yaksha warned Yudishtira to refrain from sipping the water until he had successfully answered certain questions put to him; because his brothers had foolishly failed to take heed of this warning and drank from the pool, they had been rewarded with death.

Following the yaksha’s instructions, Yudishtira correctly answered the 18 questions put to him. He then sprinkled water from the Katas pool over his dead brothers and the holy water restored all four of them.

Following the battle of Kurukshetra, the brothers regained their kingdom. This is the most famous section of the Mahabharata.

The powers of healing attributed to the pool in the story of the Pandavas have drawn Hindus to Katas for centuries. Although it is relatively small, measuring only about 45 metres (150 feet) at its widest point, Sir Alexander Cunningham (1814-93), the British army engineer and archaeologist...
who was also the founder of the Archaeological Survey of India, noted that Katas was the most frequented site of pilgrimage in the Punjab. While Cunningham believed the depth of the water to measure about seven metres (23 feet), for many Hindus the pool is believed to be bottomless.

According to the Bhagavad Gita, it was the Pandavas who were responsible for the construction of the sat-ghara or ‘Seven Temples’ which are located around the pool. Indeed, the site is commonly referred to as Satghara Katas (‘Seven Temples of Katas’); six temples are all connected to a seventh that lies at the centre of the complex. The temples are primarily constructed on square platforms with cantoned corner pilasters and are approached by a flight of steps, while the temples are connected to one other by winding paths and stairs. The main temple is flanked by two dilapidated shrines, with two more located close by.

There has been human occupation at Katas since at least the Vedic period (circa 1500-500 BC), although the earliest surviving temples at the site possess architectural features that appear to date no earlier than the 6th century AD.

Even in the 19th century, the poor state of preservation of many of the Katas temples made it impossible for Cunningham to make out many of their architectural details. Nevertheless, he was able to date the earliest of these temples to the late 7th century AD by relating some of the surviving architectural features – dentils, trefoil arches, fluted pilasters, pointed roofs – to those prominent in Kashmiri buildings.

With the Kingdom of Kashmir exerting political power over the Punjab during a significant portion of the Indian Early Medieval period, the close relationship in architectural styles is unsurprising. Most of the temples that crowd around the sacred pool were probably constructed, or extensively rebuilt, during the 11th century by the Brahma dynasty (often known as the Hindu Shahis) in the years following their expulsion from Afghanistan by the Turkic Muslim Ghaznavids under Mahmud of Ghazni (r 998-1030). In addition to the sat-ghara, numerous other temples and shrines have been added over the years. In the late 19th century Alexander Cunningham recorded about a dozen temples at the site in various states of repair.

While the main temples are located at different levels on the rising ground that surrounds the pool itself, other temples and shrines are spread over an area of 20 hectares (50 acres). Although some of the temples have survived in reasonably good condition, many are now ruinous and closed to the public.

One of the most notable temples at Katas is the Hanuman Temple, named in honour of the Hindu deity who, in the epic Ramayana, helped the eponymous god Rama recover his wife Sita from the clutches of the 10-headed king of Lanka, Ravana.

The interior walls of this temple are decorated with murals depicting Hindu mythological characters, including Krishna, Radha and Varaha (the latter being Vishnu’s incarnation as a boar). Until the early 1990s the temple also contained an idol of Hanuman, but this was removed from the site due to fears it might be destroyed in the wake of religious tensions following the destruction of the Babri Mosque in Uttar Pradesh, India, in 1992.

The Rama Chandra Temple, the ‘Temple of Snakes’, was built during the Sikh period of the 18th and 19th centuries. The temple door contained a statuette carved from red sandstone depicting a figure sitting cross-legged, with four arms and three heads – that of a man in the centre, a pig on the right, and a lion to the left. It is believed that all three heads depict the god Vishnu whether in human or animal form.

Featuring a central façade of red sandstone that projects slightly outwards, flanked by two wings with a stucco veneer, this building dominates Katas. Built on two levels, this temple also features two severely damaged jharokas, the overhanging roofed balconies that are such a common architectural feature of the sub-continent. In addition, it contains various ornamental elements distinctive to the Sikh era, with curved chajjas (bungalow eaves), as well as cut brickwork and circular domes topped with finials.

Dating from about the same period...
as the Rama Chandra Temple, is the haveli (residence) of the great Sikh general, Sardar Hari Singh Nalwa (1791-1837). This huge complex covers a significant portion of the site with expansive courtyards and passages. Chatri-like pavilions built on plinths are also found at the site. However, because there is little documentation pertaining to these structures, it is difficult to determine their history with any certainty.

Despite its close association with the Hindu religion, Katas also provides an architectural reflection of the diverse cultures and religions that have held sway over this region. There is a Buddhist stupa, dating to the 5th or 6th century AD. There is also a ruined building that has been identified as a Jain temple, the decoration of which has similarities to Buddhist buildings found at the ancient site of Taxila, located about 130km to the northwest of Katas.

Furthermore, according to local tradition, the Katas Valley was also home to a Sanskrit University in the past. The most prominent scientist associated with the university is Al-Beruni (AD 973-1048) who is said to have attempted to measure the circumference of the earth while studying there.

Despite the cultural and religious significance of Katas, little has been done to protect the site and it is currently in a poor state of repair. In addition to the erosion brought by nature and the passage of time, government indifference and encroaching urbanisation have combined to place the site under great stress.

Of the numerous problems that Katas currently faces, the shrinking water level of the pool has been of most obvious and pressing concern. Three large cement factories were established close to the site at the start of the new millennium, and their great demand for water caused a drop in the level of the sacred pool. However, action by the local inhabitants did force a government response in 2012 and over the last year water levels have begun rising.

Katas has also been extensively looted and vandalised over the years. The frequently poor relations that exist between Pakistan and India, and the political apathy towards what is a primarily Hindu religious centre, have resulted in the government of Pakistan failing to provide adequate security at Katas. As a result, the complex has been stripped of virtually all its relics by looters: only a single carving, depicting the deities Shiva and Sati together with two female slaves, remains intact – and even this is badly damaged. Also, as some local school buildings are located within the temple complex, the children use the site as a playground.

The visit of LK Advani, President of the Hindu nationalist Bharatya Janata Party (BJP), to Katas in 2006 brought the site to political and wider public attention and, following the visit, the government of Pakistan decided that 640 million rupees (approximately £3.4 million, $6 million) would be spent developing Katas and the surrounding area. Recently restored murals can be seen in and around various temples and there are more ambitious plans for constructing a museum at Katas that would house ancient relics discovered at the site. However, many of these restoration efforts have been problematic: the use of lime plaster has damaged the original brickwork of the site, while the addition of a modern railing and staircase around the pool has drastically altered the appearance of the complex.

Nevertheless, there are moves to nominate Katas for inclusion on the UNESCO World Heritage list and, although little progress has been made on this front, delegations have been sent to India with the purpose of acquiring sculptures and idols to replace originals that have been damaged or looted.

Recent improvements in relations between Pakistan and her large neighbour to the east have also made it easier for Hindus from India to come to Katas to celebrate Maha Shivatri, an annual festival honouring Shiva. Religious pilgrimage, together with increased accessibility to the site via the national motorway system, has led to Katas becoming an increasingly popular tourist destination. However, unless the government takes steps to increase security around the site, the increase in tourist traffic to the sacred complex might prove to be of more harm than good.

The cultural and religious importance of the site, as well as its beautiful natural setting, make it imperative that efforts are stepped up to ensure that Katas is preserved for future generations.
What exactly happened to the towns and cities of Roman Britain after the province ceased to be part of the Roman Empire is still largely a mystery. The gradual breakdown of organised society – with the disappearance of coinage, mass-produced goods, and structures built of masonry – makes it very difficult for the archaeologist to confirm solid facts about this period. Some settlements were eventually deserted and gradually disappeared from the landscape, while others are known, or are suspected, to have continued through the early medieval period (or the ‘Dark Ages’, as this period used to be known), eventually re-emerging into the light of historical record centuries later, when they were the setting for some notable events.

One such is Chester, located at the head of the estuary of the River Dee and facing out towards the Irish Sea. In this case, the event, recorded principally by the Venerable Bede, was extremely dramatic, as it was one of the pivotal battles in the history of the expansion of the early Anglo-Saxon kingdoms and the beginning of a process that eventually led to the emergence of the single nation known as England.

Chester was founded around AD 74 as a legionary fortress, but by the end of the 4th century it was more akin to a town with a substantial military garrison. Probably the seat of a bishopric by about AD 350, it is likely that it continued to function as a centre of Christianity during the ensuing centuries, and was the location for the second synod, or meeting, between the bishops of the Celtic Church and St Augustine, around AD 601, attended by, among

A history of Heronbridge

Investigating the earliest known battlefield in Britain, David JP Mason relates an early 7th-century tale of treachery, intrigue and revenge.

1. The site of the inlet on the River Dee at the north end of Heronbridge that was made into a quayside in the Roman period.

2. Map of Britain showing the location of Chester.

3. Image of Chester, the site of the battle.
others, Abbott Dinoot, the head of the monastery at Bangor in north-west Wales and that at Bangor-on-Dee, about 15 miles south of Chester.

The outcome of this synod was the reason that Bede took such an interest in the Battle of Chester, fought some 15 years later. The bishops of the Celtic Church refused to recognise the superior authority claimed by Augustine as representative of the Pope, and Bede viewed the subsequent defeat of the British kingdoms of western Britain as divine punishment for their ‘disobedience’. While some students of this period believe that the battle was an invention of Bede’s simply to make a point, a fieldwork project that I conducted has provided conclusive and highly dramatic evidence that this event really did take place.

The early 7th century was a period in which the Anglo-Saxon kingdoms of the east and south competed for superiority, both among themselves and with the British kingdoms in the west. The kingdom of Northumbria underwent a period of aggressive expansion, most notably under Aethelfrith (r. 593-616).

In 588 his father, Aethelric of Bernicia, had taken over the kingdom of Deira and joined it with his own realm to form Northumbria. Edwin, the infant heir to the Deiran throne, was spirited away by Deiran loyalists. Eventually, they were given sanctuary by Cadfan of Gwynedd (in north-west Wales), who saw the possibility of placing a puppet king on the Northumbrian throne in the future.

By the time he had reached his mid-20s, Edwin had begun to make a series of strategic alliances with both British and Anglo-Saxon kingdoms, with the ultimate ambition of regaining his kingdom.

It was while Edwin was away at the court of Raedwald of East Anglia (thought to be the king interred in the Sutton Hoo ship burial in Suffolk), trying to add him to his list of allies, that Aethelfrith launched what might be termed a pre-emptive strike. He set out with a large army, intent on destroying the military power of the North Welsh kingdoms. Aethelfrith swept down into Cheshire with such speed that the British were taken by surprise and could only muster a hastily assembled force to oppose him.

In his Ecclesiastical History of the English Speaking People (ii.2), Bede relates how the two armies met near Chester, ‘... the city of the legions (Civitas Legionis), which is called Legacaestir by the English, and more correctly Caerlegion by the Britons...’. Bede relates how Aethelfrith won the battle, ‘...making a great slaughter of that nation of heretics...’ He also tells us that Aethelfrith ordered the killing of more than 200 monks who had come to give the British forces moral support by offering up prayers for their victory, reasoning that, although they were unarmed, they were still part of the opposing force. The Northumbrians’ victory was gained at the cost of heavy losses, however, and soon afterwards Aethelfrith decided to retreat to his kingdom. On the way back, his army was ambushed and defeated by Raedwald’s forces at Bawtry, on the South Yorkshire border, and Aethelfrith himself was killed. So, after living 28 of his 31 years in exile, Edwin returned in triumph to Northumbria as its king.

This, then, is the historical background but, given that locating battle sites is notoriously difficult, is it possible to obtain archaeological proof that the event even actually took place?

This brings us to the site known as Heronbridge, situated two miles south of Chester city centre on the line of the main Roman road to the south (known in modern times as Watling Street) beside the River Dee. It was here in
the early 1930s that the remains of a sizable Roman settlement were discovered when an amateur archaeologist searching for the precise line of the Roman road cut sections through a bank beside the modern road, believing it to mark the position of the ancient route.

Further work revealed that the bank in fact defined an oval enclosure some six hectares (14 acres) in extent, occupying the area between the road and the river and overlying the remains of the eastern half of the Roman settlement. The bank had been built of the material (largely clay) produced by the excavation of a massive ditch immediately in front of it, six metres wide and three metres deep. There was no clue as to the date of these works other than the fact they were clearly later than the Roman buildings through which they cut or overlaid.

This pre-war work also located a mass grave containing what were interpreted, on the evidence of violent death by weapon blows to the head, as battle casualties. The apparent absence of artefacts accompanying the burials meant that this battle cemetery also could not be dated.

On several occasions in the 1980s a search was made of the archaeological collections at Manchester Museum, where the human remains had been taken for study in the 1930s, to see if they could be located and samples extracted for radiocarbon dating to settle the matter once and for all. The search, however, proved unsuccessful. So the only way to answer this question was to return to the site, re-locate the mass grave and extract additional material for dating purposes.

An opportunity for this finally occurred in the opening years of the new millennium when I undertook a collaborative project with the Chester Archaeological Society at Heronbridge. Managing to date the battle cemetery and the earthwork was the major objective and I was not really concerned as to what that date might turn out to be, though the hope of finding such a rare phenomenon as a 7th-century battle-field was lurking at the back of my mind. The excavation took place over four summer seasons from 2002 to 2005, followed by a programme of research on the data and artefacts recovered, which is now nearing completion.

The results of greatest interest were obtained in 2004. The 1930s trench where the burials had been found was re-located and a small extension alongside it then excavated. Further burials were found packed in so densely that the total number of bodies in the mass grave must have been at least 120. Two skeletons were extracted for examination and analysis by the paleopathologist Dr Malin Holst, followed by radiocarbon dating. During the course of the excavation it was quite plain from even a superficial inspection that most of these individuals had sustained head injuries like those seen on the examples excavated during the 1930s.

The paleopathologist’s report confirmed that the two exhumed individuals were male, one aged in his early 20s, the other in his 40s. It also made for rather grisly reading, as both men had sustained numerous injuries.

The three-month wait for the results of the radiocarbon dating was a nail-biting time. But it was worth it, because they were nothing short of startling: they confirmed with a degree of accuracy beyond expectation that the burials did indeed date to the early 7th century. Given the considerable number of bodies in this mass grave and the coincidence in date with the encounter described by Bede, it seems reasonable to conclude that they are indeed casualties from the Battle of Chester. This would make Heronbridge the earliest known battle site in the whole of England.

But were these men from the British force or members of Aethelfrith’s army? The fact that the bodies were still articulated when buried and had been interred with care suggests burial had taken place soon after death and close to the spot where they had fallen. Given that it was Aethelfrith and
not the Britons who controlled the area immediately following the battle, it seems very likely that these men represent the heavy losses that, Bede says, his army sustained.

This is supported by the results of an isotopic analysis of teeth from the two excavated skeletons carried out by Dr Andrew Millard of Durham University. The technique is based on the fact that people who are born and grow up in a particular geographical region accumulate stable isotopes in the enamel of their teeth in proportions specific to that region, the oxygen and strontium isotopes being especially important in this regard. The results indicate that both men grew up in north-east England or central Scotland; that is, in the hinterland of Aethelfrith's capital at Bamburgh. Therefore it seems more likely that the mass grave contained fallen warriors from Aethelfrith's army.

As the project progressed, it became clear that the bank and ditch of the earthwork enclosure had never continued along the river frontage and also that the front of the bank had been reinforced with a substantial masonry revetment constructed of stone robbed from the ruined Roman buildings and river cobbles, as well as tombstones taken from the nearby Roman cemeteries lining Watling Street to the north.

The scale and character of the bank and ditch demonstrate quite clearly that the enclosure was defensive in nature. Furthermore, it exhibited no signs of major repairs or re-castings, and this, combined with the complete absence of buildings from the areas of the interior examined on this and earlier occasions, suggest it was occupied for a brief period. Yet its construction was obviously a major undertaking involving a substantial workforce.

A section through the defences close to the centre of the west side of the enclosure recovered plentiful organic material from the ditch fill suitable for radiocarbon dating. The results showed the ditch had gone out of use by around AD 730 at the very latest. In the absence of any other known or likely circumstances to explain the construction of such a substantial earthwork, it is suggested it was a fort built by Aethelfrith’s army.

If so, it would make Heronbridge a site of unique importance for the early medieval period: not only the earliest known battlefield in England but also the sole example of a proven 7th-century Anglo-Saxon fortification in the country, the only other example known being – and this is surely no coincidence – the ancestral stronghold of the Bernician royal house at Bamburgh, described in one version of the Anglo-Saxon Chronicle as ‘defended first with a stockade and later a wall’ (sub anno 547).

There is a final twist to the story of the Heronbridge project. In 2011, I was contacted by Bryan Sitch, Deputy Head of Collections and Curator of Archaeology at the Manchester Museum. As part of a major review of the museum’s archaeological collections he had been tracking down the provenance of various groups of material, including human remains.

One assemblage had proved particularly difficult to source because of the absence of any site identification or year of excavation coding. Eventually, he detected very faint traces on many of the skulls of a code sequence using letters of the Greek alphabet, the very same system used in the report on those from Heronbridge that was made during the 1930s. As these, too, were all male and many bore weapon cuts, it seems that the Heronbridge skeletons had finally been rediscovered after a period of more than 70 years.

It is hoped that funding can be found to subject this stupendously important material to the range of scientific techniques undreamt of when they were excavated in the 1930s, techniques including those already mentioned, along with DNA sampling that could reveal so much about the lives of these men, their geographic origins, their health and diet, and, of course, the manner of their death and the nature of warfare in early 7th-century Britain.
Aethelstan in England:

In the second poem he is fighting for King
backwards, and weeps over the dishonoured.

In the first he recalls battles in Sweden:

Viking Poetry of Love and War

Judith Jesch
The British Museum, 2013
111pp, 47 colour illustrations
Paperback, £9.99

Now that the rehabilitation of the Vikings is firmly under way – it seems that they are no longer seen as raging, raping, pillaging brutes but as traders, adventurers and skilled craftsmen – it is time to re-examine their poetry, which is just what Judith Jesch does in Viking Poetry of Love and War. As Professor of Viking Studies at the University of Nottingham, she is well placed to do so and well disposed towards the verses of these warrior bards.

While admitting that the main function of their poetry was propaganda for their kings, both dead and alive, she also points out that it is not just gory and glory. Love, for instance, features and last as well – but surely the word ‘trouser-snake’ was not a Viking invention? That said, a lot of blood does gush forth and battlefields, swords and corpses are often in evidence – as in two 10th-century poems by Egil Skallagrimsson. In the first he recalls battles in Sweden:

I went with bloody sword
(wound-grouse following me)
and a resounding spear
to a hard viking attack.

We had a raging fight,
fire raced over houses;
I made bloody bodies
fall within city walls.

(A wound-grouse = raven)

In the second poem he is fighting for King Aethelstan in England:

I piled the field with corpses
round banners in the west,
in fearsome fight I attacked
Earl Adils with steel-blue Snake.

Young King Olaf had three steel-clashes with the English;
Earl Hring held a weapon-moot,

the ravens did not starve.
(Snake = the name of Egil’s sword; steel-clashes = battle; weapon-moot = battle.)

As well as retelling the inherited stories of the gods and heroes, the recording and celebration of victories was transmitted down the generations. Recited from memory the purveyors of the oral tradition relied on fixed structures and verbal devices, such as kennings. These were figures of speech, which although not necessarily metaphorical, denoted some person, or thing, in terms of something else with which it was not usually associated. So, a ship becomes a ‘sea’s steed’ or a ‘bay-horse’ (it conveys you across the bay), a battle is a ‘song of spears’ or a ‘storm of helmets’, blood is ‘corpse-dew’, the sky is the ‘cloud-hall’ and the wind is the ‘storm-driver’.

Warriors of both sexes, such as beserkers and valkyries, cut dashing figures in a turbulent world where gods and men mix in mythological and military encounters. But when a woman is called ‘the goddess of ale-mugs’ by her husband it may not mean all is well in her marriage. In a poem by Hallbjorn Oddsson, also writing in the 10th century, he refers to his wife Hallgerd as this, before berating her for refusing to go home with him and then cutting off her head.

Written by an anonymous scribe on the Griksholm rune-stone in the 11th century, is a memorial to Ingvar and his men who died far away from Sweden:

They journeyed boldly,
went far for gold,
feed the eagle
out in the east,
and died in the south
in Saracenland.

But some notable Vikings found success abroad. The 11th-century king of Norway, Magnus ‘Barelegs’ Olafsson, for example, fell in love with Dublin in more ways than one:

What’s this talk of going home?
My heart is in Dublin,
and the women of Trondheim
won’t see me this autumn.
The girl has not denied me
pleasure-visits, I’m glad;
I love the Irish lady
as well as my young self.

Although most of the poems are from the Viking age, around AD 800-1100, some fall within the larger Norse period, 5th century AD-1500. But these anonymous lines from the Poetic Edda, a collection of Old Norse poems, seem to sum up the Vikings’ general attitude to life:

you need a ship for gliding,

a shield for protection,
a sword for striking,
a maiden for kissing.

I am not totally convinced that the new softer image of the Vikings is accurate but, as far as their poetry goes – all’s fair in love and war.

Lindsay Fulcher

A Viking Way of Life

Steven P Ashby
Amberley, 2014
192pp, 50 mono illustrations
Paperback, £16.99

If you want to take a ‘cutting-edge archaeological approach’ to a subject you should write an ‘object biography’ – and that is exactly what Steve P Ashby has done.

In his A Viking Way of Life, the object he chose to circle around was the comb, which is not such a strange choice as the Vikings treasured these very personal objects that were essential to their personal grooming. Made of antler (deer antler was the preferred material), horn, bone, walrus ivory, wood and, more rarely, metal, their combs were often patterned and some even came with decorated cases; there is a fine example in the British Museum.

But, says the author, these early medieval combs are not only attractive artefacts but, because their styles changed over time, they can also be used as extremely useful archaeological dating tools. And they are not only practical tools used for hygienic purposes. If they were made of rarer material, such as walrus ivory, they may have been special purpose combs with symbolic significance. They have been found in building foundations, interred unburnt with cremated human remains and clasped in the hands of the deceased. Combs made of exotic

Viking Poetry of Love and War

Judith Jesch
The British Museum, 2013
111pp, 47 colour illustrations
Paperback, £9.99

Now that the rehabilitation of the Vikings is firmly under way – it seems that they are no longer seen as raging, raping, pillaging brutes but as traders, adventurers and skilled craftsmen – it is time to re-examine their poetry, which is just what Judith Jesch does in Viking Poetry of Love and War. As Professor of Viking Studies at the University of Nottingham, she is well placed to do so and well disposed towards the verses of these warrior bards.

While admitting that the main function of their poetry was propaganda for their kings, both dead and alive, she also points out that it is not just gory and glory. Love, for instance, features and last as well – but surely the word ‘trouser-snake’ was not a Viking invention? That said, a lot of blood does gush forth and battlefields, swords and corpses are often in evidence – as in two 10th-century poems by Egil Skallagrimsson. In the first he recalls battles in Sweden:

I went with bloody sword
(wound-grouse following me)
and a resounding spear
to a hard viking attack.

We had a raging fight,
fire raced over houses;
I made bloody bodies
fall within city walls.

(A wound-grouse = raven)

In the second poem he is fighting for King Aethelstan in England:

I piled the field with corpses
round banners in the west,
in fearsome fight I attacked
Earl Adils with steel-blue Snake.

Young King Olaf had three steel-clashes with the English;
Earl Hring held a weapon-moot,

the ravens did not starve.
(Snake = the name of Egil’s sword; steel-clashes = battle; weapon-moot = battle.)

As well as retelling the inherited stories of the gods and heroes, the recording and celebration of victories was transmitted down the generations. Recited from memory the purveyors of the oral tradition relied on fixed structures and verbal devices, such as kennings. These were figures of speech, which although not necessarily metaphorical, denoted some person, or thing, in terms of something else with which it was not usually associated. So, a ship becomes a ‘sea’s steed’ or a ‘bay-horse’ (it conveys you across the bay), a battle is a ‘song of spears’ or a ‘storm of helmets’, blood is ‘corpse-dew’, the sky is the ‘cloud-hall’ and the wind is the ‘storm-driver’.

Warriors of both sexes, such as beserkers and valkyries, cut dashing figures in a turbulent world where gods and men mix in mythological and military encounters. But when a woman is called ‘the goddess of ale-mugs’ by her husband it may not mean all is well in her marriage. In a poem by Hallbjorn Oddsson, also writing in the 10th century, he refers to his wife Hallgerd as this, before berating her for refusing to go home with him and then cutting off her head.

Written by an anonymous scribe on the Griksholm rune-stone in the 11th century, is a memorial to Ingvar and his men who died far away from Sweden:

They journeyed boldly,
went far for gold,
feed the eagle
out in the east,
and died in the south
in Saracenland.

But some notable Vikings found success abroad. The 11th-century king of Norway, Magnus ‘Barelegs’ Olafsson, for example, fell in love with Dublin in more ways than one:

What’s this talk of going home?
My heart is in Dublin,
and the women of Trondheim
won’t see me this autumn.
The girl has not denied me
pleasure-visits, I’m glad;
I love the Irish lady
as well as my young self.

Although most of the poems are from the Viking age, around AD 800-1100, some fall within the larger Norse period, 5th century AD-1500. But these anonymous lines from the Poetic Edda, a collection of Old Norse poems, seem to sum up the Vikings’ general attitude to life:

you need a ship for gliding,

a shield for protection,
a sword for striking,
a maiden for kissing.

I am not totally convinced that the new softer image of the Vikings is accurate but, as far as their poetry goes – all’s fair in love and war.

Lindsay Fulcher

A Viking Way of Life

Steven P Ashby
Amberley, 2014
192pp, 50 mono illustrations
Paperback, £16.99

If you want to take a ‘cutting-edge archaeological approach’ to a subject you should write an ‘object biography’ – and that is exactly what Steve P Ashby has done.

In his A Viking Way of Life, the object he chose to circle around was the comb, which is not such a strange choice as the Vikings treasured these very personal objects that were essential to their personal grooming. Made of antler (deer antler was the preferred material), horn, bone, walrus ivory, wood and, more rarely, metal, their combs were often patterned and some even came with decorated cases; there is a fine example in the British Museum.

But, says the author, these early medieval combs are not only attractive artefacts but, because their styles changed over time, they can also be used as extremely useful archaeological dating tools. And they are not only practical tools used for hygienic purposes. If they were made of rarer material, such as walrus ivory, they may have been special purpose combs with symbolic significance. They have been found in building foundations, interred unburnt with cremated human remains and clasped in the hands of the deceased. Combs made of exotic
materials were used in gift exchange. Alongside other personal possessions, such as jewellery, gaming pieces, and weapons, the humble comb has found its way into many burials. These include a young man's grave in Balmakeik in Sutherland, a female burial at Westness, and two others in Skiall Bay and Pierowall Bay in Orkney, and also in burials in Cumbria and in Northamptonshire. So this familiar object had a life (and even a death) of its own that begins with its manufacture and design. Its ownership may change over time either by chance (if it is lost), through trade or even in ritual (if it is buried with its dead owner) and it becomes worn, patinated, marked, damaged, cleaned or repaired.

Steve Ashby's biography of the comb is comprehensive as he moves from the diverse beginnings of comb-making, in which he examines the varied means by which comb-makers sourced their raw materials (the antlers of red deer, elk and reindeer), describes the manufacturing process, looks into why people needed combs, outlines the different uses and lists where and in what context various examples have been discovered.

Through the study of the comb Ashby provides a popular introduction to Viking Age culture and society. Who would have thought that such a simple personal artefact could have yielded such a story?

Lindsay Faltcher

Red Cloud: The Greatest Warrior Chief of the American West
Bob Drury and Tom Clavin
The Robson Press, 2013
397pp, illustrations
Hardback, £20

Like most baby-boomers, at least the male ones, I was brought up on a diet of Westerns and films by John Ford, comic-books about the adventures of Wagon Train and Rawhide. The heroes were upright and white – but for some reason I was always more interested in the Indians.

In 1967 it was the fantasy of frontier America that attracted me, aged 19, to cross the Atlantic and spend several weeks crossing the continent on Greyhound buses, ending up working on an archaeological excavation in Canada, north of Toronto on Georgian Bay.

The site was said to be Cahiagué, a large Huron village where the French explorer Samuel de Champlain spent the winter of 1615-16, no doubt trying to persuade the belligerent locals to abandon their 'filthy habits, loose morals, and uncivilised ways'. He would probably have described us archaeologists in similar terms.

At Cahiagué I gave guided tours to many Canadian and American tourists. I was surprised how often they expressed surprise that a Brit should be interested in the history of Native Americans. It seemed to be a common assumption that Romans, Greeks, even ancient Britons, ranked higher in the league tables of historical significance.

But it was probably to be expected that Anglo-Americans had a low opinion of native culture. Quite apart from centuries of propaganda, even distinguished historians, notably Francis Parkman, had portrayed Indians as essentially childlike, badly disciplined, deceitful and violent, as 'tenants of the wilderness', unchanging and backward. In a post-Darwinian, survival-of-the-fittest America they were human fossils, destined for extinction.

More recently, Indian activists and writers such as Bruce Trigger, David Meltzer, Brian Fagan and Jared Diamond, have done much to explain the complexities of native cultures. As early as 1589 the Jesuit priest José de Acosta proposed that Indians had crossed the Bering Strait in pursuit of massive herds of caribou and colonised the continent. Yet even in the early 20th century American anthropologists saw Indian cultures as essentially static.

American archaeology is fascinating and important because this continent was the final terrestrial frontier for human beings. In the past 13,000 years humans spread from the Arctic Circle to Tierra del Fuego, encountering new environments, strange animals, and creating a cultural laboratory of amazing variety. If we want to understand how modern humans cope with change then the Americas are a great place to start.

We also see what happens when powerful, populous, technically-advanced newcomers arrive from across the ocean, bringing new diseases, dogmatic religions, powerful weapons, and strange beasts of burden. The results are not pretty.

In the United States the end process of this interaction was played out on the Great Plains in the later 19th century and, after millennia of prehistoric anonymity, we can hear the voices, or at least the whispers, of a very few representatives of these traditional cultures.

The US Army's greatest enemy on the Plains, Red Cloud (Makhipaya-luta), leader of the Oglalla Sioux, left an autobiographical record of his violent life. As an elderly man, proudly illiterate and cautiously diplomatic, his words, transcribed by two neighbouring white men, are not entirely ‘the truth and nothing but the truth’. However, they do provide the basis for a fascinating account of his violent life.

As Drury and Clavin explain, the white actors in the 19th-century Plains drama were prolific writers of diaries, journals and letters. ‘Nearly every sentence of the book could have been sourced’. But they are primarily interested in telling a good yarn – and a good yarn it is. Visceral High Plains history that is sympathetic to all sides without pulling its punches. This book tells not just the life of Red Cloud; in it, we also see the transformation of the Sioux/Lakota and their neighbours following the introduction of the horse by the Spaniards and muskets and steel knives by English traders.

In about 1700 the Sioux began their migration west from the woodlands of northern Minnesota to the buffalo country of the Dakotas and beyond. For a century the Sioux, obsessed by horses, weaponry, warfare and hunting dominated the northern Plains.

After the Civil War American troops did not see the ragbag of Indian tribes as a threat. The Sioux, the US Army assumed, belonged in the Stone Age. So the military intelligence and adaptability of Red Cloud came as a surprise. The US Army’s complacency culminated in the Fetterman Massacre in December 1866, which was the Americans’ most shattering defeat in the Indian Wars prior to the Little Big Horn fiasco.

Red Cloud became the most famous Indian in the US. His war continued until, in June 1870, he travelled to Washington DC to meet President Grant. Leaving the Great Plains for the first time he saw the sheer might and burgeoning white population in the East. As one of his companions stated: ‘Red Cloud saw too much’.

Red Cloud was fitted; thousands lined Fifth Avenue in New York to see the fabulous savage. But his victories were short-lived. Faced with an implacable opponent and the destruction of the buffalo herds the life-style of the Sioux was doomed.

In 1878, after the Custer massacre at the Little Bighorn, Red Cloud was
relocated with his people to the Pine Ridge Reservation. Like another famous Indian leader, Quanah Parker of the Comanche, Red Cloud adapted to life in a house and wearing white man’s clothes.

He died in his bed, in 1909, aged 88. The 300-year war between Indians and whites in North America was over and their cruel and epic story passed into the hands of Hollywood directors. Drury and Clavin throw light both on the great frontier myth, and a complex human being.

David Miles

Ancient Ethnography: New Approaches
Edited by Eran Almagor and Joseph Skinner
Bloomsbury, 2013
279pp
Hardback, £64

First of all, a health warning – this book is a collection of 11 academic papers agglutinated as a result of several conferences attended by jet-setting Classical scholars. But you don’t have to know Ancient Greek or Latin to follow it, as their quotations are ably translated. Some of the English, however, reads as if the authors are writing for each other (which they are) rather than for the readers of a magazine such as Minerva. I am not patronising you; just explaining that if you wish to dig out the gold nuggets, and there are quite a few in here, then it will not be easy – the literary equivalent of a day working in the mines of Laureum perhaps.

However, the subject matter is intrinsically fascinating and addresses questions such as: how did Greeks and Romans see themselves in relation to other people, to outsiders, barbarians, powerful opponents, and exotic tribes at the edge of the world? And have their attitudes affected us?

We could start by questioning the title – was there ever such a thing as ancient ethnography? And, if it existed, what did the people call it. According to the Oxford English Dictionary, the word ‘ethnography’ came into existence in 1834, defined as ‘the scientific description of nations or races of men, their customs, habits and differences’.

The editors of this book are, of course, aware that ‘ethnography’ is a 19th-century neologism, ‘created by grafting two existing words together: the ancient Greek ethn- (people) and graphe (written or visual portrayal). Since then, scholars have mostly accepted the existence of the discipline of ethnography in antiquity, not least because modern ethnographers sought respectability by claiming Herodotus as their disciplinary godfather. Certainly ancient authors showed an interest in people near and far, their neighbours, enemies and prospective subjects. But these writings are usually digressions from their main theme – Tacitus’s Germania is a rare exception – and often they seem repetitive, clichéd, formulac and derivative. Often perhaps written by ‘arm-chair’ ethnographers.

Other digressionary subjects in Ancient Greek writing can justifiably be called ‘scientific’ – Plutarch, for example, on astronomy and physics, geometry and zoology – but ethnography? Greg Woolf rather gives the game away in his paper on Tacitus (Chapter 6, p133) when he says: ‘There was no ethnography of religion in antiquity. The reasons are straightforward: ethnography was not a discipline and there was no ancient concept of religion. What we usually mean by ancient ethnography is, in fact, ethnographic writing … ethnography-as-a-science is a modern invention.”

But if Classical observations, memories and stories about neighbouring people are not necessarily objective, systematic or even reliable, this does not mean they are without interest. The papers in this book are packed with interest. Ancient ethnography has, in recent decades, become a fertile field for academic research.

This is in part due to the work of Edward Said, whose Orientalism (1978) was a major influence on Edith Hall’s Inventing the Barbarian: Greek self-definition through tragedy (1989). A second fertile seam was provided by the anthropologist Claude Levi-Strauss, who carried a burden which came to mean a subject, or virtual slave, who was taxed by the Persian rulers. Hyun Jim Kim argues that barbaros has no language implications. It does not refer to non-Greeks who speak gibberish – ‘bar, bar, bar’. So another cliché bites the dust.

However, the emphasis of the papers is weighted too much towards Greek literary sources as, except for Greg Woolf’s interesting contribution, the Roman attitude to foreigners is neglected. For anyone wishing to fill the gap, David Mattingly’s Imperialism, Power and Identity (Princeton University Press, 2011) can be thoroughly recommended. Not only does Mattingly write beautifully but he puts more emphasis on the importance of material culture. And for the persistent influence of Tacitus there is the excellent A Most Dangerous Book: Tacitus’s Germania from the Roman Empire to the Third Reich by Christopher B Krebs (WW Norton & Co NY, 2011). Ancient Ethnography has a couple of contributions that come from left field, as it were. Thomas Harrison’s paper Exploring Virgin Fields: Henry & George Rawlinson on Ancient and Modern Orient made me want to read more about the lives and ideas of these Victorian over-achievers. While Joseph Skinner’s Imperial Visions, Imagined Passits: Ethnography and Identity on India’s North-West Frontier provides a tantalising glimpse of the influences of ancient ethnography on colonial British attitudes. Fans of Rudyard Kipling’s The Man Who Would be King (1888) and the super film of the book, directed by John Huston and starring Michael Caine and Sean Connery, will get the point.

David Miles

The Gods of Olympus: A History
Barbara Graziosi
Profile
237pp, 8pp colour plates
Hardback, £18.99

This is a fluent, thought-provoking and witty study of mankind’s variable relationship with the Olympian deities. One of the problems about the Olympians is that they are too vast and ancient a subject, and too intertwined together to be usefully separated out into individual cults, ethnic cultures or historical periods. Fortunately Graziosi, a Homeric scholar by training and inclination, stays true to a very specific line of inquiry. What can we know of what individual writers thought of the gods from the texts that survive?

And one of the most useful concepts that a reader can extract from Graziosi’s history is that there never was a coherence or single doctrinal authority. There was no orthodoxy and no trained priesthood to keep the faithful instructed. Nor were there prophets,

Minerva May/June 2014
revealing or divine scripture let alone salvation for the soul. Instead the whole system was supported by popular seasonal festivals, shared consumption of sacrificial meat and wine, some very imposing temples and a swirl of ancient gossip and particular local traditions. Every now and then a poet would try to pull some of this together to make a narrative tale. But these poets, most especially Homer and Hesiod (at work in Greece in the 8th century BC) never claimed any spiritual authority. There was a polite nod to the nine muses, but no communication claimed with even the messenger-god Hermes or the prophetically-inclined Apollo. Instead Homer and Hesiod were revered for their skill with words and the delight with which they were listened to, quoted and remembered. They were succeeded in their turn (but never eclipsed) by Apollonius, Callimachus, Ennius and boy-loving Virgil. But, as Euripides confessed, it was all based on ‘just the wretched words of poets’ whilst Heraclitus compared temple worship to talking to a house. When the gods did speak to the pious, it was bafflingly distant and obscure, through the sound of oak leaves rustling in Dodona, or the wobble of a sacred barque at Sowa.

The second invaluable concept to extract from this book is that a vast range of beliefs always co-existed beneath the glittering surface of state power and the cheerful carapace of popular devotion. On the one hand the gods were clearly archetypes (if not caricatures) of a typically troublesome and greedy royal family: the sexually-predatory Boss, supported by his feuding, grumpy but basically loyal family. On the other hand they were known to be metaphors for the physical forces of nature: the fertilising rain, the terror of earthquake, the joy of spring or a storm at sea, as well as the formalisation of our most basic fears, hidden desires and actual blessings. In the hands of a writer like Euhemerus (a contemporary of the murderous pious Alexander the Great): they were affectionately portrayed as heroic mortals to whom we all owed a debt of gratitude for their useful inventions, be it wine, corn or song. Clear-minded students of power politics, such as Thucydides, gave the gods no mention at all.

Yet throughout there was an ancient tradition of fervent spiritual belief directly linked to ascetic, moral practices, which can be traced through the lost teachings of Orpheus and the Eleusinian Mysteries, through Socrates and the world-colonising works of Plato, which sidestep the amoral Olympians on their way to a perfect single spiritual source. Add the chance conversion of the Emperor Constantine to one of the more disciplined of these cults and we enter a recognisably modern world, complete with a continued belief in festivals, hymns and temples. And the Olympians survive too, locked into our concept of beauty and popular astrological belief systems.

Barnabé Rogerson

The two-page sections on the probable purposes behind our principal textual sources – Homer, Hesiod, Sophocles, Virgil, Euripides – are well articulated for this broad readership. And in the final ‘Legacy’ chapter, the book takes flight, leading us through the modern and ancient meanings of Narcissism and Nymphomania, the survival of the trimmed-down Oedipus complex of Freud and the gradual dwindling of the Jungian Electra complex from our live vocabulary. I found reading this book a thoroughly invigorating experience, it made me see how Classical mythology can be brought to a new audience, who need to know this basic vocabulary, but who are not necessarily interested in ancient history. Barnabé Rogerson
EDINBURGH

Titian and the Golden Age of Venetian Painting
A celebration, with the National Gallery (London), of the acquisition of two outstanding mythological paintings by Titian. The purchase of the first of these, Diana and Actaeon, was concluded in 2009, and that of its pair, Diana and Callisto, in 2012. The two paintings are contextualised among a selection of other 16th-century Venetian paintings, such as Lorenzo Lotto's The Virgin and Child with Saints Jerome, Peter, Francis and an Unidentified Female, circa 1505 (below).
Scottish National Gallery
+44 (0) 131 62 42 00
(www.nationalgalleries.org)
Until 14 September.

UNITED KINGDOM

AYLESBURY, Buckinghamshire

Fame and Friendship: Pope, Roubiliac, and the Portrait Bust in Eighteenth Century Britain
The 18th-century poet, satirist and translator Alexander Pope was the most widely depicted literary figure of his time and, according to this exhibition, this was not down to chance. Pope took great pains over how he was represented, carefully fashioning his public persona through images, published letters and the printed editions of his works. Eight different versions of the same portrait bust (above) by a leading sculptor of the period, Louis Francoise Roubiliac, form the core of the exhibition. Based on a vividly modelled clay original, the variant marble versions were carved with arresting virtuosity, recalling Pope’s own phrase, ‘Marble, soften’d into Life.’ Some of the most celebrated painted portraits of Pope are shown alongside printed texts that he planned with meticulous care.
Waddeson Manor
+44 (0) 1296 65 32 26
(www.waddesdon.org.uk)
From 18 June until 26 October.

KENDAL, Cumbria

British Surrealism Unlocked: Works from the Sherwin Collection
Although unified most strongly as an official movement in Britain in the 1930s and 1940s, this exhibition shows that surrealism continued, and continues, to affect the work of modern and contemporary artists – from Desmond Morris (whose There’s No Time Like the Future, 1957, is pictured above right) to Eduardo Paolozzi and Damien Hurst. While few of the surrealists artists in Britain reached the same level of fame as many of their European counterparts, the images they created were every bit as mysterious and provocative, taking inspiration from the language of dreams and revolutionary politics, while rebelling against the tyranny of the prevailing sexual, religious and social conventions. Presented in a chronological context the exhibition takes visitors from early works in the 1920s and 1930s right through to the Spanish Civil War and the outbreak of the Second World War, ending with examples of the movement’s influence in the late 20th century.
Abbot Hall Art Gallery
+44 (0) 1539 72 24 64
(www.abbothall.org.uk)
Until 21 June.

LONDON

A Fusion of Worlds: Ancient Egypt, African Art and Identity in Modernist Britain
The ways in which modern artists, like Jacob Epstein, Edna Manley and Ronald Moody, have been inspired by Ancient Egypt is a fruitful field of study. Based on archival research, A Fusion of Worlds is an exploration of ideas and images on graphic panels rather than an art exhibition. They make for interesting reading though and, of course, the outstanding displays of Egyptian and Sudanese archaeological finds of the Petrie Museum are always worth viewing.
Picasso and Co: Sherwin Ceramics
To coincide with Abbott Hall’s British Surrealism Unlocked: Works from the Sherwin Collection, this exhibition showcases ceramics from Dr Jeffrey Sherwin’s impressive decorative arts collection including this Orphic plate by Jean Cocteau (below).
Blackwell, The Arts & Crafts House, Bowness-on-Windermere
+44 (0) 1539 44 61 39
(www.blackwell.org.uk)
Until 21 June.

Veronese: Magnificence in Renaissance Venice
The prolific and varied output of Veronese (1528-1588) ranges from complex frescoes in palaces and villas to large-scale altarpieces, from portraits and small devotional paintings to mythological, allegorical and historical pictures. His work was both sought after by collectors and studied by 17th- and 18th-century artists, such as Carracci, Rubens, Tiepolo and Watteau. The first monograph show of the artist to be held in the UK, this exhibition presents 10 paintings by Veronese from the National Gallery’s own collection, with other major works by the artist and his contemporaries loaned from major American and European institutions. The result is
a magnificent survey of art of the Venetian Renaissance. Highlights include Veronese's Venus, Mars and Cupid, circa 1580 (below) from the National Galleries of Scotland.

**National Gallery**
+44 (0) 20 77 47 28 85  
(www.nationalgallery.org.uk)
Until 15 June.

**Ruin Lust**
Rose Macaulay wrote of the ‘pleasure of ruins’: now that innocent pleasure has turned into lust. The craze for visiting picturesque ruins began in the late 17th century, when artists, writers and architects sought to find inspiration among them. All the great British artists depicted ruins; for example, this show includes Turner’s Tintern Abbey and Sketch for Hadleigh Castle by Constable, as well as John Martin’s dramatic The Destruction of Pompeii and Herculaneum. Moving forward into the 20th century, we find John Piper’s The Forum, from 1961 (right) and prints by Classical ruin-loving lan Hamilton Finlay. The show also includes contemporary works by Rachel Whiteread and Tacita Dean, and photographs by Gerard Byrne and siblings Jane and Louise Wilson whose image of a Second World War bunker in Normandy opens the show.

**Tate Britain**
+44 (0) 20 7887 8888  
(www.tate.org.uk)
+44 (0) 20 77 47 28 85  
(www.tate.org.uk)
Until 18 May.

**William Kent: Designing Georgian Britain**
William Kent (1685-1748) was the leading architect and designer of early Georgian Britain, and a man of many parts. A polymath, he turned his hand to painting, sculpture, architecture, interior decoration, furniture, metalwork, book illustration, theatrical design, costume and landscape gardens. His life and career was boosted by the accession of the Hanoverians in 1714 and this exhibition sets out to show how he played a leading role in setting the new Classically inspired, design aesthetic for Britain. A fine example of Kent’s work (left) is this elegant, Neo-classical console table, designed for Chiswick House, circa 1727-32.

**Victoria & Albert Museum**
+44 (0) 20 7942 2000  
(www.vam.ac.uk)
Until 13 July.

**Sense and Sensuality: Art Nouveau 1890-1914, Masterpieces from the Victor and Gretha Arwas Collection**
Witness the drama and spectacle of fin de siècle through this exhibition of (mainly French) Art Nouveau art and design. Following on from the Sainsbury Centre’s acclaimed 2012 exhibition, The First Moderns: Art Nouveau, from Nature to Abstraction, which explored this movement as the forerunner of international Modern design, the focus of this show is on those designers who were interested in the darker, more complex side of life, who embraced the sensual and occasionally risqué nature of Art Nouveau. It features a wide range of exhibits from sculpture, graphics and books to ceramics, glass and furniture. Paul-François Berthoud’s gorgeous gilded Sarah Bernhardt in Joan of Arc (below left) is one of the stars of the show.

**Sainsbury Centre for Visual Arts, University of East Anglia**
+44 (0) 16 03 59 31 99  
(www.scva.ac.uk)
Until 14 December.

**When the Greeks Ruled Egypt**
This exhibition focuses on Egypt’s Ptolemaic Period, acknowledging the 300-year Greek rule that began with Alexander the Great (depicted, with the traditional rams’ horns of Amun, on this silver coin, above) and ended with the suicide of Cleopatra in 30 BC. It was an age of profound curiosity and rich experimentation, as the Greeks, and later the Romans, met an established culture far older than their own and exchanged artistic, social, and religious ideas with the ancient civilisation. This confluence of cultures is explored through more than 75 exhibits such as gilded mummy masks, magical amulets and portraits in stone,
demonstrating the integration of imported foreign styles while also paying tribute to the enduring legacy of ancient Egypt’s distinctive visual tradition.

Art Institute of Chicago
+1 312 24 43 36 00
(www.artic.edu)
Until 27 July.

NEW YORK, New York
Radiant Light: Stained Glass from Canterbury Cathedral
This exhibition presents a unique opportunity to view six stained-glass windows from Canterbury Cathedral that have never left England before. They are currently on display at the Cloisters, a branch of the MET devoted to the art and architecture of the Middle Ages. Founded in AD 597, Canterbury Cathedral is one of the oldest Christian structures in England. After a severe fire in 1174, it was extensively rebuilt and

CLEVELAND, Ohio
Yoga: The Art of Transformation
This fascinating touring exhibition features more than 120 works, dating from the 3rd century to the early 20th century, brought together to illustrate yoga’s central tenets and history. Masterpieces of Indian sculpture and painting tell of yoga’s philosophical foundations and original goal of transformation, including its Hindu, Buddhist, Jain, and Sufi manifestations. This is the first exhibition to present

Minerva May/June 2014

56
Early Horizon (900 BC–AD 200) to the Late Horizon (AD 1470–1532) periods are explored. The collaboration between Blanton and guest-curator Dr Kimberly L Jones continues the museum’s tradition of working with experts across different disciplines to show material outside of its permanent collection.

Blanton Museum, The University of Texas at Austin
+1 51 24 71 73 24
(www.blantonmuseum.org)
Until 17 August.

CHINA
SHANGHAI
Chinese Traditional Art from the Long Collection
With around 100 ancient art works from the permanent collection, this exhibition reflects the development and lineage of Chinese traditional art in a comprehensive and systematic way, showing the extraordinary breadth and depth of Chinese traditional culture. So, sketches of rare birds sit beside calligraphic works and paintings from schools of the Ming and Qing Dynasties.

The Long Museum
+ 86 21 6877 8787
(www.thelongmuseum.org)
Until 29 June.

FRANCE
DUNKERQUE
Collection from the Ancient Egyptian Town of Antinopolis
This long-running exhibition presents research carried out by specialists (in the fields of archaeology, engineering and medicine) attempting to discover the identity of the museum’s golden mummy, one of the most important objects in its permanent collection. Covered in gold leaf, the mummy, a rare example, is from Antinopolis. Funeral mask fragments, figurines, ceramics, glass objects and Coptic fabric, excavated there between 1896 and 1914, are also on display.

Musée des Beaux-Arts
+33 3 28 59 21 65
(www.musees-dunkerque.eu)
Until 31 July 2015.

PARIS
Gustave Doré (1832-83): The Power of Imagination
The renowned 19th-century illustrator, Gustave Doré, occupies a special place in the contemporary collective imagination, his influences are clear in the work of many artists from Van Gogh to Terry Gilliam. As an illustrator, Doré set himself the challenge of providing images to illuminate the greatest works of literature – by Dante, Rabelais, Perrault, Cervantes, Milton, Shakespeare, Hugo, Balzac, Poe – and also the Bible. Renowned for his atmospheric illustrations and merciless caricatures, Doré also tackled numerous other genres in many different mediums, such as drawing, painting, engraving and sculpture. This is a major retrospective (the first in 30 years) and it explores all sides of Doré’s work. Pictured (below left) is one of his landscapes, Souvenir de Loch Lomond (1875), painted while he was salmon-fishing in the Scottish Highlands. Who would have guessed it was by Doré? Not many, I suspect.

Musée d’Orsay
+33 1 40 49 48 14
(www.musee-orsay.fr)
Until 11 May.

GERMANY
DRESDEN
Dionysus. Intoxication and Ecstasy
Since Dionysus (or Bacchus to the Romans) is the god of wine, fertility and ecstasy, he is a popular deity. In this show some 80 objects and paintings represent him in his many guises, creating a vibrant and exuberant Dionysian energy. From antiquity down to modern times, his untamed natural energy and uninhibited joie de vivre have captivated artists. Highlights of the exhibition include drawings and prints by Rubens, van Dyck and Carracci, and Caesar Boetius van Everdigen’s sensual Bacchus und Ariadne of 1660 (shown above).

Staatliche Kunstsammlungen Dresden
+49 (3) 51 914 2000
(www.skd.museum)
Until 10 June.
ISRAEL

JERUSALEM

Dress Codes: Revealing the Jewish Wardrobe

The first comprehensive exhibition of its kind, this show brings together an array of traditional apparel, dating from the 18th century through to today, from the museum’s own world-renowned collection of Jewish dress. Five themes provide a framework for displaying more than 100 costumes from four different continents – all rich in colour, texture, history, and symbolism. The show offers a cross-cultural celebration of the history of Jewish dress and shows the ways in which traditional clothing has stimulated fashion design throughout history and continues to inspire the styles of today. Visitors may be surprised to find items such as a late 19th-century women’s ceremonial outfit typical of Baghdadi Jews from Calcutta, India (below).

The Israel Museum
+972 26 70 88 11
(www.english.imjnet.org.il)
Until 25 October.

ROME

Frida Khalo

Mexican painter Frida Khalo died 60 years ago and this exhibition celebrates her life and work. Khalo remains a symbol of the artistic avant-garde and of the exuberance of Mexican culture in the 20th century. Wife to Diego Rivera and acquaintance of Leon Trotsky, her art is fused with the history and spirit of her contemporary world – the social and cultural transformations that led up to the Mexican revolution and what ensued in its wake. A selection of key works are displayed alongside a selection of photographs of Khalo taken by Nikolas Murray in the 1940s.

Scuderie del Quirinale
+90 06 39 96 75 00
(www.scuderiequirinale.it)
Until 13 July.

JAPAN

TOKYO

Ballet Russes: The Art of Costume

This landmark exhibition has travelled from the National Gallery of Australia. It celebrates Diaghilev’s Ballets Russes and their revolutionary fusion of art, music and costume. Diaghilev brought together some of the finest artists of the early 20th century including visual artists, composers and choreographers to create a new modern art form. There are scores by composers, such as Stravinsky and Debussy, images of dance showing Pavlova and Ninjinsky, and costumes and set designs by artists like Braque and Matisse. With a focus on the Ballet Russes’ celebrated style, visitors can see 144 costumes and accessories from 33 productions, as well as film, set design drawings, photography and original programmes.

National Art Centre Tokyo
(www.nact.jp/english)
+81 03 57 77 86 00
From 18 June until 1 September.

SPAIN

MADRID

Rubens: The Triumph of the Eucharist

This exhibition is the culmination of a major restoration project that began in the museum in 2011. It sets out to analyse one of Rubens’ most important projects: the six panels on The Triumph of the Eucharist commissioned in 1625. Restorers at the museum have removed various layers of paint and a detailed analysis of the restoration process is also on show. Museo Nacional del Prado
+34 91 33 02 800
(www.museodelprado.es)
Until 29 June.

CARNIVAL OF EVENTS

Minerva May/June 2014

ITALY

BOLOGNA

The Girl with a Pearl Earring and the Dutch Golden Age

Following its recent world tour, The Girl with a Pearl Earring is visiting Italy before returning home to Holland. This iconic painting is displayed alongside additional works by Vermeer together with works by other 17th-century Dutch masters, including four by Rembrandt.

Scuderie del Quirinale
+90 06 39 96 75 00
Until 13 July.

RUSSIA

MOSCOW

India: Jewels that Enchanted the World

This show explores the legacy of 500 years of Indian jewellery, from the 17th century to the present day through more than 300 pieces of jewellery and jewelled objects from around the world (many of which have never been exhibited before). This exhibition showcases the beauty of Indian craftsmanship, and the aesthetic refinement of Indian taste through the ages. Visitors can admire the jewellry traditions of South India and the Mughal courts, the gem-set jewels created for the Nizams of Hyderabad and the symbiosis between European jewellery houses and India that occurred in the late 19th and early 20th centuries. Prominent lenders to this exhibition include: the al-Sabah Collection, the British Museum, the Doha Museum of Islamic Art, the Khalili Collection, the Musée Barbier-Mueller, and the Victoria and Albert Museum, as well as the world’s greatest jewellery houses such as Cartier, Chaumet, Maubousin and Van Cleef & Arpels.

The State Museums of Moscow Kremlin
+7 49 56 95 37 76
(www.kreml.ru)
Until 27 July.

SWITZERLAND

MARTIGNY

Beauty of the Body in Ancient Greece, in Collaboration with the British Museum

Masterpieces from the British Museum’s Department of Greek and Roman Antiquities have been selected to celebrate the beauty of the body in ancient Greece. There are 10 themes that lead the visitor through varying depictions of the male and female body in stone, bronze and marble.

Fondation Pierre Gianadda
+41 27 722 3978
(www.gianadda.ch)
Until 9 June.

EVENTS

UNITED KINGDOM

Edinburgh

Conisbrough Castle: Archaeology Festival

The first excavation of the site for almost 40 years opens this 10-day festival where you can talk to the archaeologists, as well as having a guided tour of the castle.
(www.conisbroughcastle.org.uk)
From 2 to 13 June.

London

The Centre for Hellenic Studies
25th Anniversary Series

Two lectures and a conference that will interest all Philhellenes:

Power and Passion in Greek Theatre

Frank McGuinness, renowned Irish playwright and translator.
22 May, 6pm.

Socrates and Athens: Why we still need to care about both

Bettany Hughes, award-winning historian, author and broadcaster.
29 May, 6pm.

Ancient Greek Theatre in the Black Sea

A two-day conference, convened by Professor Edith Hall and Dr Rosie Wyles, challenges the Athonocentric view of ancient performance culture. 4 to 5 July.

Centre for Hellenic Studies
(Kings College London)
(www.kcl.ac.uk/artshums/depts/chs/events.aspx)
Email: chsevents@kcl.ac.uk

Oxford

Ashmolean Museum Oxford

India: A Short History

Author Andrew Robinson will give a lecture in relation to his book of the same title.
(andro-w Robinson.org)
(www.ashmolean.org)
10 May, 2pm.

USA

Staten Island, New York

Archaeological Institute of America

Lecture: The Gold Crowns of Silla (Korea) and the Tomb of a Queen

Lecture by Sarah Muffled Nelson.
Wagner College, Staten Island
(www.archaeological.org/events)
+1 (917) 44 62 057
18 May, 3pm.
ANTiquITIES |_AsIAN | TRIBAL

3 FAIRS

100 MAJOR ART DEALERS

SABLON, BRUSSELS - BELGIUM
JUNE 4 TO 8, 2014 年6月4日至8日

ASIAN ART IN BRUSSELS - www.asianartinbrussels.com

BRUSSELS ANCIENT ART FAIR - www.baaf.be

BRUSSELS NON-EUROPEAN ART FAIR - www.bruneaf.com
UPCOMING AUCTION:

5 - 15 May 2014

Antiquities
Antique Arms & Armour
Fine Antique & Modern Firearms
Orders & Military Collectibles

All catalogues online:
www.hermann-historica.com

A torso of a warrior, marble sculpture of the 19th cent.
based on an ancient model

A Roman silver skyphos with a chariot race scene, 2nd - early 3rd century

A Roman gold ring, 3rd century A.D.

Hermann Historica oHG • Linprunstr. 16 • D-80335 Munich • call +49-89-54726490 • mail to: contact@hermann-historica.com

Artemission.com

Antiquities and Ancient Art
Exclusively on: www.artemission.com
Over 20 years of extensive coverage of ancient art and archaeology from around the world

• Six issues a year packed with articles by experts on ancient art and archaeology
• Pay online through our secure web page, or fill in the form overleaf
• Every issue delivered to your door, before it arrives at newsagents
• Save up to 40% on the cover price of £5.95 and take advantage of the same low rate for up to five years

New subscribers will receive a free gift – a genuine Roman coin of collector quality, dating from around the 4th century AD*

THE IDEAL GIFT FOR FRIENDS AND FAMILY

www.minervamagazine.com

* Eligible to new subscribers in the UK who take out a 5-year, 3-year or 1-year Direct Debit subscription and to new subscribers in the USA paying by credit card with Auto Renew. For full Terms & Conditions please visit our website.
SUBSCRIBE AND SAVE!

Choose your subscription rate and complete the form below.

<table>
<thead>
<tr>
<th></th>
<th>6 issues (1 year)</th>
<th>12 issues (2 years)</th>
<th>18 issues (3 years)</th>
<th>30 issues (5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>£30</td>
<td>£56</td>
<td>£70</td>
<td>£107</td>
</tr>
<tr>
<td></td>
<td>Pay by Direct Debit and receive 6 issues for £28.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>£33</td>
<td>£61</td>
<td>£85</td>
<td>£117</td>
</tr>
<tr>
<td><strong>Rest of world</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>£38 / $60</td>
<td>£70 / $112</td>
<td>£92 / $148</td>
<td>£135 / $216</td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$60 Auto Renew</td>
<td>$112 Auto Renew</td>
<td>$148 Auto Renew</td>
<td>$216 Auto Renew</td>
</tr>
</tbody>
</table>

*Postage takes up to 14 days. You will normally receive your magazine by the first week of the month of publication.

**YOUR DETAILS**

<table>
<thead>
<tr>
<th>Title</th>
<th>Forename</th>
<th>Surname</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Address

<table>
<thead>
<tr>
<th>Zip/Postcode</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phone Number

<table>
<thead>
<tr>
<th>Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Email

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**RECIPIENT DELIVERY ADDRESS (if different from above)**

<table>
<thead>
<tr>
<th>Title</th>
<th>Forename</th>
<th>Surname</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Address

<table>
<thead>
<tr>
<th>Zip/Postcode</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phone Number

<table>
<thead>
<tr>
<th>Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**PAYMENT DETAILS**

- [ ] I enclose a cheque made payable to Minerva to the value of: UK£/US$
- [ ] Please charge my Visa/Access/MasterCard/Switch/Debit card the amount of

<table>
<thead>
<tr>
<th>Card Number</th>
<th>Expiry Date</th>
<th>Security Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Card Name & Address: (if different from delivery address)

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Instruction to your Bank or Building Society to pay by Direct Debit (UK only)**

Service user number 256428

Name (Bank or Building Society)

Address (Bank or Building Society)

<table>
<thead>
<tr>
<th>Zip/Postcode</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Account Holder/s

<table>
<thead>
<tr>
<th>Account Number</th>
<th>Sort Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Instruction to your Bank or Building Society**

Please pay Aurora Publications Ltd Direct Debits from the account detailed in this Instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this Instruction may remain with Aurora Publications Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Signature

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Send to: Freepost RSGX-ZHRA-JKEE (UK only), Minerva, 20 Orange Street, London WC2H 7EF, UK

The Direct Debit Guarantee (This guarantee should be retained by the payer)

- This guarantee is offered by all banks and building societies that accept instructions to pay Direct Debits
- If there are any changes to the amount, date or frequency of your Direct Debit, Aurora Publications Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Aurora Publications Ltd to collect a payment, confirmation of the amount and date will be given to you at the time of the request
- If an error is made in the payment of your Direct Debit by Aurora Publications Ltd or your bank or building society, you are entitled to a full and immediate refund of the amount paid from your bank or building society — if you receive a refund you are not entitled to, you must pay it back when Aurora Publications Ltd asks you to
- You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required.
To order or view a complete list of our available antiquities, please visit our website: www.clioancientart.com

To order yours, please visit www.minervamagazine.com.

To order your Minerva binders, please visit www.minervamagazine.com.

Minerva binders are the perfect way to organise your back copies of the magazine. Dark blue rexine-covered binders with the Minerva logo on the spine are available for £12.95 (inc VAT) in the UK and £15.50 (rest of world), plus P&P.

To order yours, please visit www.minervamagazine.com.

AN ATTIC RED-Figure Bell Krater
in the manner of the Painter of Munich 2335
Circa 440 - 430 B.C.

Provenance:
Irene von Ohlendorff, Munich, pre-1968
Acquired in 1968 by Ernst Langlotz (1895-1978)

2 Georgian House
10 Bury Street, St. James’s
London SW1Y 6AA
Tel: 44 20 7839 0368

www.forgelyynch.com

WANTED TO PURCHASE:
FINE ANTIQUITIES OF ALL PERIODS

We are prepared to travel world-wide to acquire select works of legally acquired ancient art for our rapidly expanding clientele.

We will purchase collections of any size, act as your agent to sell your objects on commission, or exchange them for other select pieces from our extensive inventory (see our advertisement inside the back cover).

Send photographs and full details if possible with your letter.

royal-athena galleries
68 E 57th Street, New York, New York 10022
Tel: 212-686-2014 Fax: 212-686-6479
email: info@royalathena.com
SPECIAL OFFER FROM APOLLO MAGAZINE
Painting • Sculpture • Decorative Arts • Antiquities

Receive a one year subscription (11 issues) direct to your door and gain exclusive access to this diverse international art magazine covering everything from antiquities to contemporary art, exhibition reviews and interviews with major art collectors.

FREE for all subscribers – Apollo on your iPad!

To subscribe go to www.apollo-magazine.com/MINERVA14A or call +44 (0) 1795 592884 quoting MINERVA14A.
Minerva on the move

Download the Minerva App from the iTunes App Store today and keep in touch with the world of ancient art and archaeology wherever you are.

Free to download for Minerva print subscribers, or just £2.99 direct from the store, the Minerva App is now available for your iPad or iPhone.

Requirements: compatible with iPhone, iPod touch and iPad. Requires iOS 4.0 or later.

Available to download direct from your dashboard with Newsstand

Scroll through the current and back issues to select a download

Existing subscribers can login to access the material free of charge

You can preview each issue of the magazine before you buy it
We are pleased to announce our new gallery location in the heart of London’s Mayfair opening in Spring 2014
6 Hill Street London W1J 5NF

Exhibiting at Masterpiece London, 25 June - 2 July, Booth A6

Ariadne Galleries
11 East 76th Street New York, NY 10021
Tel. +1 212 772 3388
www.ariadnegalleries.com
Email: info@ariadnegalleries.com

Bowl
Greek
Fifth Century BC
Gilt Silver