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Archaeology, a relatively new scientific discipline, has acted as a double-edged sword, sometimes refuting and sometimes corroborating mythology.

It is a curious paradox that while folklore and mythology are regarded as the most dubious aspects of history, they are frequently the driving force behind archaeological inquiry. In fact, archaeology has been largely responsible for changing the perception of myth – no longer seen as pure apocrypha, we now acknowledge its associations with historical fact. This was certainly the case with the tales of the Trojan Wars in the *Iliad* of Homer which fuelled the zeal of Henrich Schliemann to discover the physical remains of Troy.

Archaeological sites are one thing, but establishing the existence of ‘legendary’ individuals is an almost impossible task. King Arthur is a case in point. Mentioned in the *History of the Britons* (9th century) and *Welsh Annals* (10th century) as a military leader defending Britain against the invading Saxons of the 5th or early 6th century, associating him with archaeological remains has been problematic. This is due in large measure to the explosion of Arthurian myth initiated by the fanciful quill of Geoffrey of Monmouth in the 12th century. In 1986, the archaeologist J.N.L. Myres famously commented: ‘No figure on the borderline of history and mythology has wasted more of the historian’s time.’

Mythological inflation inevitably leads to highly topical portrayals which can further cloud reality. This is the case with Robin Hood, immortalised most recently by Ridley Scott’s epic film, but there is good reason to believe that the events has a solid historical basis, albeit in the austerity of 13th century England.

Perhaps the most attractive aspect of myth is that it remains forever removed from historical reality. Day-to-day life in Late Bronze Age Troy was no doubt a good deal less colourful than its romaniticised portrayal in Classical literature. Likewise, the reality of military leadership in Arthurian Britain would have taken place against a backdrop of political decentralisation and the decay of civilised urban life as the Roman province slowly disintegrated; Robin Hood’s life as an outlaw in seasonally inclement Sherwood Forest is also best experienced in the comfort of a modern cinema.

**Dr Mark Merrony**
The fate of Babylon

Arguments have been brewing over the last few months regarding the fate of the ruins of the ancient city of Babylon, which lie in the south of Iraq on the River Euphrates.

While archaeological finds suggest that Babylon was possibly founded as early as the 24th century BC by the Akkadian king Sargon the Great, according to the Book of Genesis, the city – referred to in the Bible as Babel – was first built by Nimrod, the great-grandson of Noah. During the reign of Hammurabi in the 18th and 17th century BC, when the king famously codified the laws of the city, Babylon was probably the most populous city in the world. Destroyed by the Assyrians in 689 BC, Babylon recovered its independence at the end of the century, and during the long reign of Nebuchadnezzar II (c. 605-562 BC) the city was rebuilt on a monumental scale, with the Hanging Gardens and the Ishtar Gate becoming architectural marvels of the ancient world. More than two centuries later, Alexander the Great would capture the city from the Persians, before his own short and dramatic life came to an end in the Palace of Nebuchadnezzar in 323 BC.

Unfortunately the ruins of the ancient city have suffered greatly over recent years. Heavy equipment used by the American and Polish armies in a military base located on the site caused damage to some of the archaeology. However, Babylon suffered most during the Ba’athist regime’s control over the country and the site is still dominated by the modern yellow bricks, many stamped with the name of Saddam Hussein, used to rebuild the walls of Nebuchadnezzar’s palace in the 1980s. This reconstruction also caused considerable damage to the mud brick remnants of the original 6th century walls.

A two-year programme intended to ensure the preservation of the site was initiated in 2009 by the World Monuments Fund (WMF) with a grant of $700,000 from the US State Department. The WMF is also hoping to expand the project to restore the Temple of Nabu, the Babylonian god of wisdom, as well as the famous blue-glazed Ishtar Gate, a reconstruction of which, incorporating original bricks and tiles, now stands in the Pergamon Museum, Berlin. Both these monuments are in desperate need of conservation. The Ishtar Gate suffered during Saddam Hussein’s rule when the weight from concrete poured around the monument forced the groundwater into the surviving walls, leading to the disintegration of the mud bricks and the flaking of the carvings. Plaster that had been applied to the ancient brickwork of the Temple of Nebo has also begun to crumble, taking parts of the original walls with it. Wooden strengthening beams that had been installed at the temple in the 1980s have also been eaten away by termites, bringing down a section of the ceiling.

While no one denies that the remains of Babylon must be conserved, there is disagreement as to whether priority should be given to preservation of the archaeology, or to increasing the commercial opportunities offered by the site. Mansour Al-Manae, head of the archaeology and tourism committee of the provincial council, has questioned the slow progress of the conservation efforts and the archaeology that has accompanied them. ‘We are not satisfied with the pace of the work in the site, which is being totally neglected by the antiquities board. We are trying our best to attract investments in order to build restaurants and other attractions.’ He therefore envisages the site as ‘a big source of money to the province and to the country.’ Such an approach, which is focused more on the short-term potential of the site and the financial benefits it may generate, could well have a catastrophic impact on the surviving archaeology. The WMF and the Iraqi Antiquities Department have warned of the dangers of pushing for any quick-fix solutions, urging instead that the scientific work continues slowly to ensure the archaeology is preserved as carefully as possible.

What happens at Babylon may define the direction of cultural development in Iraq for the foreseeable future. Will the Iraqi government and people seek to usher in a new era of scientific conservation which has the protection of the country’s heritage as its ultimate goal; or will they instead be driven by a blinkered short-term agenda, primarily focused on financial opportunism?

James Beresford
York’s Roman gladiators

Forensic archaeological investigations at York have recently concluded that 80 skeletons found in gardens of a terraced street in the city are those of gladiators who died between the 1st and 4th centuries. The skeletons, which have been exhumed over the course of the last decade, all appear to be those of unusually tall, powerfully built men. Many had suffered wounds over the course of their lives, and a number had died through decapitation or a heavy blow to the head. These findings are consistent with the idea that the men had been gladiators. The theory is reinforced by results from mineral tests on the tooth enamel of the skeletons, which indicate that they had grown up in a variety of places, spread about the provinces of the Roman Empire, suggesting the trade and recruitment of gladiators.

The muscles of the right arm of many of the bodies also appear to have been more developed than those of the left, characteristic of men who had spent a lifetime engaged in training to strengthen the sword and spear arm. According to Kurt Hunter-Man, a field officer with York Archaeological Trust: ‘The arm asymmetry would also be consistent with weapons training that had already started in teenage years, and we know from Roman accounts that some gladiators entered their professions at a very young age.’ The bodies also appear to have been buried with respect, which might be expected for heroes of the arena, and more than a dozen of them were accompanied by grave goods.

All the skeletal evidence could just as easily suggest the men were soldiers drawn into the Roman army at a young age from various far-flung parts of the Empire, who had died in various battles or training accidents. However, bite marks were present on some bones, and are thought to have been inflicted by a large carnivore such as a bear, lion, or even a tiger. While Roman soldiers would have been unlikely to encounter such creatures, they were frequently unleashed in the arena and set on condemned criminals or gladiators.

Research on the bones and other artefacts recovered from the site is ongoing. However, if the skeletons are confirmed to be those of gladiators, this would be an extremely significant discovery. The importance of the find has been stressed by Dr Michael Wysocki, an expert in forensic anthropology at the University of Central Lancashire, who has been studying some of the finds from York: ‘We don’t have any other potential gladiator cemeteries with this level of preservation anywhere else in the world… Anthropologically speaking, the material is particularly significant because it includes such a broad spectrum of healed and unhealed injuries associated with violence.’ It is, however, still unknown if Roman York ever contained a purpose-built amphitheatre in which gladiatorial displays were staged.

James Beresford

Ochre processing plant discovered in South Africa

As Minerva goes to press, the focus of a large proportion of the global media will shift to the Republic of South Africa for the FIFA World Cup. A key symbolic role will inevitably be played by the national flag, with its distinctive range of colours symbolising the unity of its people. A fascinating new discovery reveals that the indigenous inhabitants of the region were producing an impressive palette range 58,000 years ago on an industrial scale in a large rock shelter site dating to the southern African Middle Stone Age (MSA) in Sibudu, north of Durban, in Kwa-Zulu Natal.

Professor Lyn Wadley, based at the Institute for Human Evolution at the University of the Witwatersrand, analysed the site and defined it as an installation with four cemented hearths containing ochre powder. These could also have contained grindstones for its processing. This theory is supported by the discovery of around 8000 pieces of ochre, from which a range of colours were created, including orange, red, yellow, brown, and variant shades. Prof Wadley has also described how ochre was used to paint clothing and decorate the body, and could be mixed with plant gum or animal fat to produce an adhesive to fix stone spear or arrowheads to hafts, or blades to handles.

In southern Africa, the MSA spans 300,000-50,000 BP (Before Present), and the technology relating to this discovery (including stone tools) indicates that the site of Sibuda was inhabited by anatomically modern humans (Homo sapiens). Ochre – the core component at this site – is a base ingredient for the spectacular paintings with which many rock shelters across the broader region were decorated in the Late Stone Age (LSA), which began c. 50,000 BP. This indicates that the processing of ochre continued unabated, because many of the extant rock shelter paintings were produced within the last 8000 years by San Bushman hunter-gatherers.

Ethnographical accounts from /Xam Bushmen in the 1870s proved instrumental to unlocking the spiritual content of San rock art. Subsequently, the pioneering work of Prof Lewis-Williams applied a shamanic interpretation to much of the prehistoric rock art in southern Africa and Europe, a theory widely endorsed as a plausible explanation for the enigmatic depictions at Altamira in Spain or Lascaux in France (see Minerva, May-June, 2006, pp. 28-30).

Dr Mark Merrony

A Greek tragedy

At the end of April, the Greek government announced cuts in spending amounting to €30 ($26, $40) billion in an effort to cut its deficit, which currently stands at 13.6 percent of the country’s gross domestic product (GDP). The austerity measures imposed on the Greek government by the European Union and the International Monetary Fund following their €110 (£95, $137) billion bailout package for the Greek economy are likely to have a dramatic effect on Greek museums and archaeological sites, many of which were already struggling to obtain adequate funding even before the economic crisis (see Minerva, November/December, 2009, pp. 6-7).

When questioned about the scale of the problem facing the Greek heritage industry, Dr Korka, the country’s delegate at the recent Cairo Conference (see pp. 8-11), dismissed concerns: ‘I’m sure that Greece will always maintain its monuments. It has done so for many years.’ However, it appears inevitable that there will be reductions in the number of staff working in the Greek heritage sector as a result of financial cuts...
While stands the Colosseum, Rome shall stand;  
When falls the Colosseum, Rome shall fall;  
And when Rome falls – the World.

Lord Byron (1788-1824)

Childe Harold’s Pilgrimage,
(published between 1812-1818).

On the morning of 9 May, a section of the roof, measuring about a metre square, above one of the stone entrance ways leading into the Colosseum, collapsed. Three large pieces of ancient mortar were sent crashing through a wire mesh protective net and smashed into the ground below. Fortunately the collapse of the ceiling happened soon after dawn, before the Flavian Amphitheatre was open to the public; had it occurred just a few hours later, the heavy chunks of mortar may well have endangered the tourists who visit the famous structure every day. Giorgia Leoni, President of the Confederation of Italian Archaeologists, emphasised the seriousness of the incident: ‘Once again we’ve come close to tragedy. If the collapse had happened during opening hours, it could have hit one of the thousands of visitors.’ As with the collapse of the ceiling of one of the rooms in the Domus Aurea at the end of March (see Minerva, May/June, 2010, p. 4), the mortar above the arch at the Colosseum was probably weakened by water infiltration, a result of heavy spring rains and relatively high humidity. Although the area around the archway was quickly cordoned off, the Colosseum remained open to tourists.

Though a colossal structure in its own right, measuring 48m in height and 188m in length, and capable of holding about 50,000 spectators, the Colosseum probably gained its name through proximity to the Colossus Neronis, a huge statue of bronze possibly reaching over 35m, in height raised during the reign of Nero (AD 37-68) and fashioned in his likeness. Originally erected on the Palatine Hill as part of his palatial complex, the Domus Aurea, the enormous bronze was rededicated Colossos Solis, in honour of the sun god Helios, by Vespasian (r. AD 69-79), before it was relocated close to the Flavian Amphitheatre during the reign of Hadrian (AD 117-138). Here it stood until at least the middle of the 4th century AD, when it was destroyed, probably so that the vast quantity of bronze could be melted down. However, the three centuries of the statue’s existence were to turn it into a symbol of the endurance of Rome that would be referred to by Bede (c. 672-735). Over subsequent centuries references to the amphitheatre as the Colosseum, rather than the lost statue, would lead Byron to mistranslate Bede, writing in the narrative poem Childe Harold’s Pilgrimage of the doom that would befall Rome and the world were the Colosseum to one day crumble.

The inaugural games of AD 80 lasted 100 days, during which 9000 beasts were slain and gladiators ‘fought in single combat and several groups contended together both in infantry and naval battles, for the emperor Titus suddenly filled this same theatre with water’ (Dio Cassius, Roman History, 66.25). The Colosseum was used to stage a variety of public spectacles until AD 217, when a lightning strike caused fires to sweep through the structure. Restored over the following 20 years, the amphitheatre continued to hold gladiatorial contests until they were brought to an end during the reign of Honorius (r. AD 393-423).

The building was heavily damaged by earthquakes during the Late Roman period, and on into the Middle Ages. A massive quake in 1349 caused damage to the eastern façade of the building, while in 1826 another earthquake further weakened this part of the Colosseum, and the engineers had to erect buttresses to prevent the walls from collapsing. The fabric of the structure also suffered great destruction throughout the medieval and early modern periods. Converted into a fortress by the Frangipani family in c. 1200, in later centuries large quantities of the amphitheatre’s travertine and marble was quarried for use in various building projects taking place in Rome, including the construction of St Peter’s Basilica. Limestone from the Colosseum was also burned to make quicklime. Roman bronze clamps used to hold the travertine blocks together were also pried from the stonework for reuse elsewhere in Rome, further weakening the structure of the Colosseum and scarring much of the remaining stonework with pockmarks. As Byron would note in Childe Harold’s Pilgrimage: ‘A ruin – yet what a ruin! from its mass; Walls, palaces, half-cities have been rear’d’. Only with the Papacy of Benedict XIV (1740–1758) was scavenging of the stonework of the Colosseum brought to an end when the site was consecrated holy ground where early Christian had been martyred.

It is a decade since the amphitheatre reopened following a restoration programme in which $25 million was spent replacing fallen masonry, clearing weeds from the stonework and arena, and draining water lying in the hypogoeum, the network of rooms, cages, and tunnels added underneath the Colosseum by Domitian (r. AD 81-96). However, the recent fall of mortar indicates that the Colosseum requires further work to preserve the imposing structure and ensure that Byron’s poetic words do not become prophetic.

James Beresford

Minerva July/August 2010
Relations between the J. Paul Getty Museum in Malibu, California, and the Italian government have been strained over recent months. In February, Lorena Mussoni, an appeals court judge in Pesaro north-east Italy, ruled that the ‘Fano Athlete’, a bronze statue that probably dates to the 4th century BC, should be returned to Italy, from where it was illegally exported 40 years ago.

The statue, also known as ‘Victorious Youth’, was hauled from the seabed in the nets of fishermen some 50-60km from the town of Fano on the north-west of the Adriatic in 1964. It appears that the statue was then smuggled out of Italy to Brazil at some point in the late 1960s, before being acquired by the Getty in 1977 for $3.9 million.

The Getty had appealed against the ruling, claiming the statue was found well outside Italian territorial waters, which, in 1964, only stretched 11km from the shore. As such, according to Italian antiquities law, the bronze had never become Italian state property. Lawyers acting on behalf of the Getty stressed that even if the statue had been smuggled illegally out of the country, its purchase was not necessarily illegal in the United States. Indeed, an Italian dossier from 2006 appears to have accepted that the country had ‘no viable legal claim’ to the bronze, while the following year, another law court in Pesaro ruled that no charges would be made against individuals in either Italy or the US, and that the Getty had brought the bronze in good faith.

Nonetheless, in April, Judge Raffaele Cormio turned down the appeal by the Getty and prosecutors in Pesaro are now preparing an international confiscation order so that the bronze can be returned to Italy. However, the Italian government may prefer to first attempt negotiation with the Getty, a policy that, over recent years, has seen the museum and the Italian government co-operating on a number of conservation projects, exhibitions, and loans of important artefacts. Furthermore, it is unclear how the Italian court could legally oblige the Getty to return the statue and any officials attempting to remove the bronze from the museum would require a US court granting them authority to do so.

Quite apart from the legal wrangling, there are also moral questions regarding the rights of the Italians to the bronze statue.

Following the legal ruling in April, former Italian culture minister, Francesco Rutelli, was quoted as saying: ‘This is an historically important decision, that brings to an end the time when our archaeological heritage was ransacked. With today’s decision, the Getty Museum will have to return this statue of incomparable beauty back to Italy.’ However, the statue was a Greek masterpiece, and has been linked by art historians to Lysippos (c. 390-305 BC), personal sculptor of Alexander the Great. The bronze was therefore probably looted by the Romans during their conquests of the eastern Mediterranean during the Middle and Late Republican periods (see pp. 26-29). There is indeed no evidence that the statue is ever actually stood on the soil of Italy at any point in antiquity, and it may have been lost when the ship transporting it from Greece sank in a storm whipped up by the powerful bora winds for which the northern reaches of the Adriatic are infamous.

Rather better news for the Getty is that Marion True, the former Chief Curator of Antiquities at the museum, who was arrested and put on trial in 2005, is having her case brought to a close. No verdict has been reached because the trial has run out of time. Ms True, together with the antiquities dealer Robert Hecht, was indicted in Italy on charges of conspiring to acquire archaeological artefacts that had been illegally excavated and smuggled out of the country. Although the case will be closed because the statute of limitations has been invoked, according to Italian law, both Ms True and Mr Hecht will remain neither innocent nor guilty.

James Beresford

The ‘Fano Athlete’, the lifesize bronze statue recovered from the seabed in the northern Adriatic in 1964 and now on display in the J. Paul Getty Museum, Malibu. H. 151.50cm.

A special relationship

New research has shown that most humans today are part Neanderthal, suggesting that interbreeding occurred between the two groups at some point in their history. About 1 to 4 percent of DNA in modern people from Europe and Asia was inherited from Neanderthals, researchers report.

At the annual meeting of the American Association of Physical Anthropologists in Albuquerque, New Mexico, genetic anthropologist Keith Hunty and colleagues presented the results of a new study that found evidence for interbreeding between modern humans and some other extinct ancient human species – either Neanderthals (Homo neanderthalensis) or another group such as Homo heidelbergensis. Neanderthals lived in Europe, the Middle East and western Asia until they disappeared about 30,000 years ago – but the new data indicates that they were assimilated into the human gene pool.

One period of interbreeding probably occurred shortly after Homo sapiens migrated out of Africa around 60,000 years ago. The researchers found an excess of genetic diversity in all modern people except Africans, suggesting that the influx of Neanderthal-like DNA came after the exodus from Africa. A second period of interbreeding is suggested by the fact that the researchers measured even more genetic diversity among people of Oceanic descent – people from Australia, New Zealand, New Guinea and other Pacific islands.

The researchers looked at DNA samples from almost 2000 people around the world, and calculated how much genetic variation existed between samples. The results indicate that some extinct group of hominids mixed their genes with ours.

Sophie Mackenzie

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Sophie Mackenzie
Penetrating the canopy

Laser technology has been used to create images of an ancient Maya settlement hidden beneath the dense jungle canopy in Belize. University of Central Florida researchers led a NASA-funded research project in April 2009 that collected the equivalent of 25 years of data in four days.

Flying over the jungle in a Cessna 337, the researchers used LiDAR (Light Detection and Ranging) equipment to bounce laser beams to sensors on the ground, penetrating the tree canopy and producing images of the ancient city. The result is a vivid illustration of the complex urban centres constructed by the Maya.

Arlen and Diane Chase, professors of anthropology at the University of Central Florida, have directed archaeological excavations at the site of the Maya city of Caracol for more than 25 years. In the past, scientists have relied on machetes to clear the jungle and map 23 square kilometres of the site. The LiDAR equipment was able to survey 200 square kilometres, detecting thousands of new structures, 11 new causeways, tens of thousands of agricultural terraces and many hidden caves, over 24 hours’ flight time and some three weeks spent analysing the images. These findings confirm the size of the city (more than 177 square kilometres) and corroborate the Chases’ estimates for the size of the population (at least 115,000 people in AD 650).

Arlen Chase commented: ‘It’s very exciting. The images not only reveal topography and built features, but also demonstrate the integration of residential groups, monumental architecture, roadways and agricultural terraces, vividly illustrating a complete communication, transportation and subsistence system.’

Until now, Maya archaeologists have been limited in exploring large sites and understanding the full nature of ancient Maya landscape modifications because most of those features are hidden within heavily forested and hilly terrain and are difficult to record.

The technology is being employed in other regions where researchers face similar challenges. Archaeologist Patricia Castillo Peña, Academic Director of the Prehispanic site at El Tajin, Veracruz, hopes that altars, plazas and ballgame courts, among other buried structures, may be detected by using LiDAR.

Together with digital mapping, the technology will be used to determine which areas of the site should be excavated. This may help to locate burial areas – at present no entombments have been discovered at El Tajin, a city which at its peak is thought to have been home to some 30,000-50,000 inhabitants.

Sophie Mackenzie

Digital mapping will allow new research projects to be part of El Tajin Archaeological Zone Management Plan.

New Kingdom Nilometer unearthed in Luxor

The ongoing archaeological work in Luxor on the Avenue of the Sphinxes, that connects the Temple of Karnak to that of Luxor almost three kilometers to the north, has uncovered a Nilometer. Discovered in the fourth section of the Avenue of the Sphinxes, the cylindrical structure, which measures seven metres in diameter, and contained a spiral staircase, was used to monitor the rise and fall of the water level of the Nile. A collection of clay vessels excavated from within the structure date to the New Kingdom (1569-1081 BC), although the Egyptian archaeologists have not, as yet, released more specific dates as to the period when the Nilometer was in use.

Readings from this and other Nilometers along the banks of the river allowed officials of the New Kingdom to record the maximum height of each year’s flood. From such information it could be determined how much land was subject to inundation and which farmers would benefit from the deposition of the fertile alluvial silt on their fields. It was from these calculations that officials could estimate the agricultural productivity for the coming year and set levels of taxation well in advance of the harvest.

Tomb discovered at Saqqara

Excavations at Saqqara by a team of archaeologists from Cairo University have discovered the tomb of a high-ranking government official of the 19th dynasty (c. 1292-1190 BC). The tomb was constructed for Ptah Mes, who held a number of important appointments including royal scribe and supervisor of the Temple of Ptah. Measuring 70m in length, the tomb is situated on the southern flank of the ramp leading to the pyramid of the Old Kingdom Pharaoh Unas (reigned c. 2375-2345 BC). Although the announcement of the discovery of the tomb was made at the end of May, excavations are continuing at the site in an effort to uncover the burial chamber and the body of Ptah Mes. However, even if the Egyptian archaeologists locate the main shaft leading to the burial chamber, it is unlikely that any funerary equipment will be discovered, as the tomb was robbed in the Victorian period.

A view of the rediscovered tomb of Ptah Mes at Saqqara.

Pillars had also been removed from the tomb for construction projects during late antiquity or the early medieval period. However, the excavations have revealed clay vessels, shabtis, and amulets, as well as fragments of a statue of Ptah Mes and his wife. A painted head recovered from the sand probably depicts the wife or a daughter of Ptah Mes. Several stelae have also been recovered from the tomb.

James Beresford
Antiquities conference

The power of the past

James Beresford examines how the recent ‘Conference on International Cooperation for the Protection and Repatriation of Cultural Heritage’ has raised a number of important questions for museums and collectors

Staged at the Supreme Council of Culture Conference Room, Cairo, 25 countries were represented at the conference, which ran from 7–8 April (Fig 4). The discussions revolved around two fundamental issues. First, how governments can best tackle the trade in illegal antiquities and so prevent the looting and destruction of archaeological sites that often accompanies such illicit activity. Second, the compilation of an international ‘wish list’ of iconic cultural treasures that currently reside in some of the most famous museum collections of the world, which many national governments are now petitioning to have returned to their original homelands.

It is the first of the General Principles laid down during the conference that has potential to cause greatest impact for Western museums and collectors: ‘Cultural heritage belongs to the country of origin and this ownership does not expire. There is no time limitation on the ownership of this heritage.’ Such pronouncements would certainly open the floodgates to huge numbers of claims for the repatriation of antiquities to the land of their origin from the museums and collectors who, according to international law, currently have legal entitlement to them.

According to the UNESCO Convention for the Protection of the World’s Cultural and Natural Heritage, 1970, antiquities belong to the country of their origin and any archaeological artefacts illegally removed from a country in the years after the convention was adopted in 1972, must be returned. However, because the convention is not retroactive and most of the artefacts on the Cairo ‘wish list’ were removed from their countries of origin long before the law came into effect, there is currently no legally tenable claim that can be brought against museums and individuals holding disputed objects. Nonetheless, many countries question the legality with which some antiquities were originally removed. Egypt, for example, has made numerous claims for the return of Nefertiti’s head from Berlin (Fig 1), and the Greek government has raised doubts over the legality of the arrangement made by the Ottoman rulers of Greece, who allowed Lord Elgin to remove part of the frieze of the Parthenon and ship it to Britain in 1802 (Figs 2, 3). However, as Dr Elena Korka from the Greek Culture Ministry stressed during the Cairo conference, the return of the Parthenon marbles ‘is not a question of legality but of goodwill, and that cannot fall under a paragraph of law’.

For countries seeking the return of cultural property, the principal argument is that artefacts should belong to the country in which they were found; antiquities are regarded as fundamental to the identity of the place and its people, and are central to the national heritage. Few would deny that such an argument is extremely
powerful when made by a nation such as Greece, demanding the return of the Parthenon Marbles. The reliefs and carvings removed from the Classical monument not only depict scenes from the history and myths of ancient Greece, but also symbolise the birth of the artistic, political, philosophical and literary traditions that continue to reverberate on the heart-strings of the country’s population.

However, the claim that all modern nations have a special link to ancient artefacts found within the boundaries of their modern state, is open to dispute. For example, Libya is pushing for the repatriation of the Apollo of Cyrene (Fig 5), and the bronze head of a Libyan (Fig 7), both of which are held in the British Museum. Syria is also demanding the return of the Palmyrian kouros from the Hermitage Museum, St Petersburg. Yet both these countries are now Arab republics with populations that are predominantly Muslim, whereas the artefacts in question were created by Graeco-Roman pagan cultures. Similarly, Mexico, which hopes to repatriate the feathered headdress of Moctezuma from the Museum of Ethnology in Vienna, and Peru, which is demanding the return of the Machu Picchu collection from the Peabody Museum at Yale University, are countries with a language, religion, and cultural tradition that grew from Spanish roots put down less than 500 years ago.

The tenuous relationship of many past cultures to the nations of the present has been most forcefully stated by James Cuno, Director of the Art Institute of Chicago: ‘Antiquities are often from cultures no longer extant or of a kind very different from the modern, national culture claiming them. What is the relationship between, say, modern Egypt and the antiquities that were part of the land’s Pharaonic past? The people of modern-day Cairo do not speak the language of the ancient Egyptians, do not practice their religion, do not make their art, wear their dress, eat their food, or play their music, and they do not adhere to the same kinds of laws or form of government the ancient Egyptians did’ (Who Owns Antiquity? 2008, pp. 9-10).

The Cairo resolution also poses complex diplomatic questions. If, for example, the Chinese were to pursue future claims for the return of Tibetan cultural treasures, it seems inconceivable that such requests would be regarded favourably regardless of the nation’s present territorial boundaries. The solidarity of the conference participants may also be tested by future archaeological discoveries. Egyptian excavators currently digging at Taposiris Magna, west of Alexandria, are searching for the tomb of Cleopatra and Mark Antony. Were the bodies of the ill-fated lovers to be discovered, and Italy to press a claim for the repatriation of the body of the famous Roman politician and general, then it appears that Egypt would be unwilling to comply to such a request. As Dr Hawass informed Minerva: ‘If, as we believe, Mark Antony was buried in Egypt, then his body belongs here. It would not be “repatriation” to send it to Italy! Objects should stay in the country where they were left in ancient times, and discovered in modern times.’

Similarly, it is doubtful Greece would be content with such a situation were the body of Alexander the Great ever to reemerge from its long lost burial site in the sands of Egypt. Worryingly, the call for the return of iconic treasures can also offer politicians the opportunity to court popular sentiment at home by asserting independence over former colonial powers. By so closely linking heritage with politics, there is a very real danger that unpopular and unstable regimes will use antiquities as a means
to incite nationalist self-righteousness against the West. Furthermore, even if all the objects on the conference wish list were returned to their original homelands, it is likely that further claims would swiftly follow, especially by a government or minister intent on making a grand political gesture.

Attempts were made at the conference to downplay any fears of mass demands on Western museum collections. Dr Korka, for example, noted that delegations had submitted wish lists that 'selected a few very small items that are very special to us for various reasons… so I think that this will not create a floodgate that scares people'. However, the fears of Western museums that there will, at the very least, be a steady trickle of artefacts from their collections, was partly confirmed when Dr Hawass used the Conference to announce a further addition to the list of artefacts that the Egyptians have long wanted returned to Cairo: the statue of Ramses II, currently in the Egyptian Museum, Turin (Fig 6).

Many of the countries whose delegations attended the Cairo Conference undoubtedly have strong moral arguments over the ownership rights of archaeological objects removed from their territory. However, what is often in doubt is the ability of some states to adequately conserve and protect the artefacts should they be returned. The British Museum, for example, has reportedly cited security concerns when refusing to send the Rosetta Stone to Cairo (Fig 8).

Egypt has certainly suffered a number of terrorist attacks directed against tourists, reaching a peak in 1997 when Islamic extremists killed 62 visitors to Hatsheput’s mortuary temple complex at Deir el-Bahri, near Luxor. While European and North American governments also face terrorist violence, it has not, thus far, been directed at tourist sites or museums, which are the prime targets in countries like Egypt. It can also be argued that, by keeping important artefacts from past civilisations scattered around the world, at least some would survive a major terrorist attack or natural disaster.

The fragile nature of the global economy has also cast a shadow over the financial stability of many of the countries demanding the return of cultural treasures. Just weeks after the Cairo conference, the Greek government was forced to announce massive cuts in public expenditure which will almost certainly have a dramatic impact on the ability of the government to employ conservators, archaeologists, security staff and the like to work in the nation’s museums or archaeological...
sites. (For more details, see pp. 4-5.) While the global economic downturn has hit Greece particularly badly, many other nations are also suffering considerable financial problems. Even Britain’s museums and galleries have not escaped the financial squeeze. In mid-May, staff at London’s National Gallery staged a strike over pay. Although it only lasted two hours, it nevertheless highlighted that even large museums in Western European and North American cities are not immune to the effects of the economic crisis.

This close, if often uncomfortable, relationship between culture and the economy is felt most acutely in Egypt, where the present government receives an annual grant of about $2.2 billion from the United States. Given the global financial crisis, such a vast sum may well be reduced in future. Funding for many aspects of Egypt’s heritage sector is also heavily reliant on foreign donations and international goodwill. The Grand Egyptian Museum, currently under construction at Giza and scheduled to open in 2013, has a projected cost of $550 million, of which $300 million has been obtained on favourable terms from the Japan Bank for International Co-operation at an exceptionally low rate of interest. Other international donations are expected to contribute more than $100 million to the building project. Much of the funding for archaeological research and scientific study of Egypt’s artefacts also arrives from overseas. Even the recent analysis of the DNA drawn from royal mummies of the New Kingdom’s 18th dynasty could only be undertaken by Egyptian researchers after the Discovery Channel provided $5 million to allow the equipping of a new DNA laboratory at the Egyptian Museum in Cairo (see Minerva, May/June, 2010, pp. 8-10).

An argument often presented in favour of keeping artefacts from the world’s past civilisations in the museums and galleries of the West is that they allow considerably more visitors to see and experience them than would otherwise be the case. European and North American countries certainly have far greater numbers of tourists entering their borders each year. However, it can be argued that tourists from the generally wealthier West have greater financial means to travel overseas to view ancient artefacts. Furthermore, if the return of iconic objects acts to boost tourist revenue, then it would seem only right that the treasures of a country’s past be used to increase its present and future prosperity.

Even among those who are critical of the methods by which many museums acquired their collections, there is an acknowledgement that they provide an unparalleled resource where the material culture from different civilisations separated by time and place can be studied at a single location. However, there are often many experts of ancient cultures unable to travel to see the collections of museums in Europe or North America because of financial or visa constraints. For example, the universities of Egypt turn out more graduates of Egyptology than all the other universities of the world combined, yet many of these young scholars will be deprived the opportunity of seeing the Rosetta Stone, the bust of Nefertiti, or the other icons of ancient Egyptian history currently held by museums in the West.

The last of the General Principles set out at the conclusion of the Cairo conference stated: ‘The general public must take pride in cultural heritage and become partners in its protection.’ Such a goal reflects that proclaimed 40 years earlier in Article 10b of the UNESCO Convention, and highlights the continuing need to protect against the looting of archaeological sites, and also combat the apathy felt towards the preservation of antiquities prevalent in many developing countries, which often face more immediate social and economic problems. Changes across time and culture have also left many people divorced from the societies of the past. It is a problem most obvious in Egypt itself, and one that allowed many cultural treasures to leave the country in the first place.

One of the strongest arguments for allowing institutions such as the British Museum or the Metropolitan Museum in New York to retain the objects in their collections is that entry is free, opening up the artefacts to everyone, and especially encouraging children to take an interest in world archaeology and history. Currently, the Egyptian Museum in Cairo has admission set at 60 Egyptian pounds ($10.50, £7.30), with additional costs to see the Royal mummies; the Acropolis Museum in Athens, where the Parthenon Marbles would be displayed were they retuned to Greece, charges an entrance fee of €5 ($6.20, £4.20). However, when questioned about this during the Cairo conference, Dr Korka responded: ‘If the condition for the return of the Parthenon Marbles were that the Museum would be free, then I assure you that the Greek government would consider having a free entrance.’ Although no concrete action-plan was set out during the Cairo conference, another meeting has been provisionally planned for March or April 2011. In the meantime it is unclear how countries seeking the return of artefacts placed on the Cairo wish list will go about achieving their goal of repatriation. While Dr Hawass indicated that punitive measures might be employed in future, in his closing remarks to the conference he offered a more conciliatory approach: ‘I am saying we are not going to have severe actions against countries or museums at all. We are going to talk. We are going to show the world that these are unique artefacts that should be in the Motherland… in some cases we are willing to give some objects in exchange.’

It is the exchange of artefacts on a temporary basis – to allow, for example, the Rosetta Stone to be displayed in Cairo, while treasures from Tutankhamun’s tomb were loaned to the British Museum in return – that would appear to offer the speediest and most mutually acceptable resolution to the demands made by many of the delegates at the Cairo conference, and the concerns expressed by the world’s great museums. There does, however, appear little doubt that calls for the repatriation of cultural treasures to the lands of their origin will become increasingly strident in coming years.
When surveying Scandinavian archaeology – at least at a popular level – most attention is devoted to the Vikings. However, there is a wealth of material from other periods as well, some of the most enigmatic being in the form of prehistoric rock art. For many years this branch of archaeology was regarded with suspicion, and often considered to be ‘without context’. Rock art is certainly difficult to date and often has no clear connection with other forms of evidence: settlements or graves may or may not be associated with nearby rock art, and, even if they are located in close proximity to each other, it is often impossible to know if they were created at the same time. To further complicate the picture, some rock art compositions appear to span a considerable amount of time: early and late carvings can coexist on the same panel, and earlier carvings can be recarved. The result is that rock art has been something of a refuge of theorists who at times show little regard for traditional archaeological methods.

Viewing rock art today is also a very different experience from that originally intended by its creators. When the art was first carved it would have stood out from the surrounding rock, as it was usually lighter in colour. However, over the course of time it generally becomes increasingly difficult to make out. This is a perennial problem for researchers today. Modern archaeologists often use water to accentuate rock carvings, a practice that may have a precedent in antiquity, as it is probable that some rock art was originally intended to be associated with rain. As can be seen in photographs illustrating this article, some petroglyphs in tourist areas have also been painted in an effort to make them more readily identifiable to modern visitors. However, paint was probably not used to decorate rock art during prehistory, and many rock-cut images would only have been visible in the raking light of the early morning or late afternoon; during most of the day it would have been difficult or impossible to appreciate the carvings. It is also likely that some rock-cut images were intended to be viewed at night by firelight, which may have imbued them with a mystical character.

Even a cursory appreciation of rock art suggests that the designs were made by craftspeople and were not simply the scratchings or doodles of the uninitiated. But the main question that emerges is what rock art meant to the people who made it. This has been addressed by Trond Lødøen and Gro Mandt who, in their beautifully illustrated book *The Rock Art of Norway* present a rigorous synthesis of the field. The authors adhere to the practice of broadly defining rock art according to tradition. For some of the localities attention is paid to traditions of the Sami (sometimes referred to as Lapps), one of the indigenous peoples of the Nordic countries. Some Sami groups still preserve a traditional way of life, herding reindeer, trapping and fishing.
activities very similar to those practiced by the prehistoric societies of the region. This lifestyle may be reflected in the rock art preserved in the northern part of the Nordic countries.

During most of the Palaeolithic (dating from the arrival of *Homo sapiens* in Europe c. 40,000 years ago to c. 9000 BC) most of Scandinavia was uninhabitable by humans, covered by vast sheets of ice. The earliest known human presence in Scandinavia dates from c. 11,000 years ago, after the ice had melted. Some sites suggest there were some animals living in Scandinavia on the ice, so it is possible that evidence of humans dating to earlier periods may be recovered in the future. However, no rock art dates to before the end of the last Ice Age.

The oldest rock art in Norway is that called *veidekunst* or ‘hunters art’, a tradition associated with the northern part of the country and hunter-gatherer communities of 9000-2000 BC. In keeping with the primary concerns of their lifestyle, the motifs usually depict the animals they would have hunted, such as elk, reindeer, red deer and large sea mammals such as whales, porpoises and seals. By contrast, human figures and abstract motifs are relatively rare. The other main tradition of Scandinavian rock art is that of the ‘agricultural petroglyphs’ or *jordbruksristninger*, associated with Bronze and early Iron Age peoples (c. 1800 BC – AD 400). Rock art from this tradition often depicts humans, boats and other objects of complex material culture, as well as abstract forms such as rings and spirals. There is debate as to whether there was any ethnic difference between the two cultures that created the rock art, or if the two traditions should be appreciated in the light of changes to subsistence practices and technologies. Our understanding of the relationship between them is further complicated by the fact that, in some instances, rock art from both traditions occurs at the same site.

The largest group of sites in Norway associated with the earlier hunter-gatherer artistic tradition is located at the head of Altafjord in Finnmark. The rock art of the region was brought to the attention of specialists in 1950, and major new discoveries were made well into the 1970s. In 1985 the petroglyphs of the area were placed on the UNESCO world heritage list. Interestingly, much of the rock art was discovered by amateurs, who brought the petroglyphs to the attention of specialists. A good example is the site of Jiebmaluokta/Hjemmeluft (the former is the name of the bay in Sami). In the late 1920s the archaeologist Anders Nummedal excavated an ancient dwelling site in the area, but did not record the presence of the nearby rock art, even though many outcroppings in this area are very densely decorated with petroglyphs depicting humans as well as boats (Fig 1). The rock art in this area has been tentatively dated by linking the position of the carvings to the level of the prehistoric shoreline, which has changed dramatically since the last Ice Age as a result of sea-level rises together with the uplift of the Scandinavian landmass following the removal of the weight of the ice sheets. The oldest rock art from this area dates to about 4200 BC and there are four delineated groupings displaying different styles and ranging from 8 to 26m above the current sea level. Phases of rock art in the area also seem to roughly correspond to prehistoric settlements, while it also appears that the art was carved on to rocks near the shoreline, which was clear of lichens and other vegetation.

Rock art also preserves traces of ritual activities that are now difficult, if not impossible, to decipher. One such example is seen in carvings at...
Skavberget, Troms county, northern Norway, created during the veidekunst tradition, where two human figures, each drawn with a different pattern on the torso of their bodies, are engaged in some form of ceremony (Fig 2). One figure holds a Y-shaped shaft supporting a circular disk that has been variously interpreted as a drum, sun idol, bird, or fish head. There are also scenes of individuals arranged in pairs, linked at the hip: these are usually regarded as ‘marriage scenes’ (Fig 3). From the later jordbruksristninger tradition, many examples of figures with large phalluses are engaged in hunting, fighting or dancing. Interestingly, very few images that can be positively identified as women exist, although some figures seem to have long hair in braids, and may represent females. Most have been interpreted as men through their physical attributes and because they are engaged in traditionally masculine activities such as hunting or warfare.

A procession scene belonging to the later rock art tradition, cut into rocks at Leirfall, in the Stjørdalen district of central Norway, shows a leader, depicted larger than the other figures. Circles or ovals decorating the scene have been interpreted as the soles of feet (Fig 4). Such scenes are best interpreted in the context of the surrounding landscape, which can also suggest if a ceremony was likely to have been restricted to a small number of people, or if it was a communal gathering. Unfortunately, much of the elaborate nature of the prehistoric ceremonies and mythologies associated with rock art sites will remain forever unknown. However, in the case of animal figures, reasonable conjectures can be made. In ethnographic studies of hunter-gatherer societies it is clear that sympathetic magic played a prominent role. Many depictions of animals were probably intended to provide hunters with the power to successfully catch and kill them, and in some cases rock art may be linked with specific locations in the landscape used by prehistoric hunters as kill sites. These often made use of natural barriers, such as lakes or broad rivers, or narrow valleys through which animals could be funnelled and trapped. Some rock-cut depictions leave little doubt at the degree with which hunter-gatherer communities appreciated animals and, very occasionally, some are represented with internal organs discernible (Figs 5, 6). Several petroglyphs contain what would appear to be a ‘life line’. This is a prominent line with a definite beginning and end that seems to suggest that animals were seen to have their destiny written in their entrails.

Boats feature prominently in later phases of Norwegian rock art, although no vessels have ever been recovered from the Stone or Bronze Ages in Scandinavia. However, it is clear that boats existed because people had settled many of the Norwegian islands soon after the end of the last Ice Age. The types of boats used for transport by these early communities is open to debate: were they hollowed-out logs, or made from hide stretched over a frame? Some vessels portrayed on rock art feature vertical lines that have been interpreted as the internal ribs of a boat, while others include vertical lines and...
In addition to their practical uses, boats may have fulfilled a number of ritual functions. As in the mythology of numerous later cultures, the prehistoric communities of Norway may have linked boats with the transfer of the spirit to the underworld. Depictions of boats may also have conveyed broader concepts, such as journeys. A complex group of carved figures together with several boats, from Mariskarvet, near Bergen in southern Norway, has seemingly been arranged around a cleft in the rock, perhaps representing a transition from one phase of life to another. Other images of boats can be associated with the seepage of water through and over the rocks into which the art was cut (Fig 10). In some petroglyphs, the boats may have been intentionally positioned to face towards rivers or the sea (Figs 8, 9).

There are few scenes depicted in Scandinavian rock art that can be linked with certainty to prehistoric mythology. Some framework patterns have been interpreted by archaeologists as portraying a spiritual world of abstractions, although such figures might also represent physical structures in the material world, particularly those involving weaving (Fig 11). However, a striking exception is a panel from the Solberg farm, Østfold County (Fig 12). The central tree may represent the mystical ash tree known as the Yggdrasil in Norse mythology, which is referred to in the Poetic Edda and the Prose Edda, both compiled in the 13th century. This huge tree was said to span nine worlds, and every day the gods would visit to hold their courts. While it is impossible to know if the rock cut scene from Solberg farm represents a Bronze Age version of this myth, it nevertheless indicates that trees already held a special significance for the community that inhabited the area during this period.

One of the greatest strengths of The Rock Art of Norway is that it presents questions and proposes answers in the form of competing theories. Specific information, such as dating evidence derived from post-glacial uplift of terrain, or through archaeological associations, is given pride of place. Special attention is paid to the landscape surrounding the rock art. There are cases where it is clear why decorations were placed in a specific location. In answering these simple questions with beautifully taken photographs, the authors leave plenty of scope for future researchers to utilise their work. Given that weathering, exfoliation and vandalism will no doubt obscure carvings in many of the locations over the coming years, it is essential that the rock art of Norway is documented in such a systematic way.

It is also important that new generations of scholars are made aware of traditions in other lands that may not be familiar to them. This book should therefore be consulted by those interested in rock art from such diverse regions as North America and Australia. What may emerge from such international comparisons is that rock art, particularly that made by the increasingly complex societies of the Bronze Age onwards, may not follow a ‘universal language’, comprehensible across cultures. However, there may be common themes, portrayed in similar ways. Trond Lødøen and Gro Mandt’s book demonstrates that rock art can offer a wealth of information about the people who created the designs. To unlock some of this information, researchers simply have to start asking the right questions.

In 1998, the wife of François Pinault, a wealthy businessman and art collector, acquired for five million French francs (then equivalent to €770,000), a statue of the great Middle Kingdom pharaoh Senusret III sitting on a cube-shaped, low-backed throne (Figs 1a, 1b). Measuring 57cm in height and carved from a block of distinctive black and yellow flecked granodiorite quarried from Aswan, it was clear that the image represented the powerful 12th dynasty king from a cartouche carved on to the belt of the statue, bearing the birth name of the pharaoh.

The statue had first appeared on the art market in 1981. Its pedestal featured two columns of inscriptions in addition to the hieroglyphs in the cartouche, but these were so poorly executed that they were rapidly effaced. Traces of the hieroglyphs were, however, preserved in photographs. Both before and after it had been retouched, the statue was presented to a number of museums in Berlin, Geneva, London, Cleveland, and New York. Under careful scrutiny, it was pronounced at best doubtful and at worst a fake. In 1993, experts at the Basel Antique Dealers Fair reached the same conclusion and refused to exhibit the statue.

The refusal of the various museums and scholars to authenticate the statue caused the seller, who remains unknown to this day, to accept that he was fighting a losing battle. Through his representative, a German lawyer, he offered it for sale at a public auction staged at the Hôtel Drouot, Paris, in November 1998.

Prior to organising the sale, the auctioneer, Chakib Slitine, consulted Dietrich Wildung, Curator of the Egyptian Museum in Berlin and Professor of Egyptology at the Freie Universität Berlin. A well known specialist in Middle Kingdom art, Prof Wildung travelled to Paris to see the statue and immediately recognised it as a piece he had examined a few years previously. In fact, his opinion on the statue had appeared in a fascicule, Falsche Faraonen, published during an exhibition of fakes in Munich in 1983. It was thus immediately apparent that the statue was already well known to Egyptologists interested in the problem of forgeries.

Prof Wildung immediately alerted Slitine and the Hôtel Drouot that, in his considered opinion, the statue was a forgery. Nevertheless, the auctioneer persisted in going ahead with the sale, sufficing only to mention in the catalogue that the pedestal inscription had been effaced; a procedure described as ‘a modern addition to an antique sculpture’. The statue subsequently attracted the bid of five million francs from Madame Pinault. Understandably annoyed that his opinion had been rejected and the sale allowed to go ahead, Prof Wildung provided the French newspaper Libération with all the necessary details for an article revealing that the authenticity of the statue, bought for such a colossal sum, was highly dubious. When the story appeared in print, the buyer, in high indignation, returned the contentious object to the auctioneer and refused to make payment. ‘The Senusret III Affair’ had begun.

The ensuing legal wrangling went on for more than five years. The Paris tribunal requested an initial report from the famous Egyptologist Christiane Desroches-Noblecourt and Elisabeth Delange, General Curator of the Egyptian Department, Musée du Louvre, and this was filed in 2000. The report concluded that the statue was genuine. To explain the stylistic peculiarities of this work of art, the two experts theorised that it was ‘a posthumous statue’, executed not during the king’s lifetime, but between the end of the 12th and the beginning of the 13th

Jean-Jacques Fiechter examines the Senusret III forgery affair and tracks down the creator of the statue that initiated lawsuits by a billionaire collector and quarrels between leading experts in the field.

Pharaonic fakery

Fig. 1a, 1b. Granodiorite statue purporting to be of Senusret III (reigned c. 1878-1841 BC). H. 57cm.
dynasties (turn of the 19th–18th century BC), some 30–50 years after the death of Senusret III. On this basis, the Paris Tribunal ruled that the buyer was liable not only for the statue’s cost, but also for payment of the experts’ fees and the legal costs.

Anyone other than François Pinault would have called a halt at this stage of the proceedings and, true to his original intentions, donated the statue to the Louvre on the strength of the experts’ opinion. Pinault, however, clung on stubbornly, and in 2001 requested that the sale of the statue be cancelled for non-conformity with its description. Two years later, this claim was also rejected on appeal.

Meanwhile, the affair sparked a debate of pharaonic proportions, which emphasised the difficulty of scientifically dating certain works of art carved from stone. François Pinault ordered an in-depth study of the statue and trace element tests by microanalysis were carried out. These revealed the use of modern tools, but the Paris Tribunal ruled that the statue might date back to the 19th century BC, but had been re-polished in modern times. However, Pinault’s obstinacy finally won the day, when the Appeals Court threw out the case.

My own file on the Senusret III affair runs to several hundred pages. It concludes that the statue is indeed a modern forgery; an opinion with which a large majority of Egyptologists and specialists agree. This statue is far from unique; it is just one of a series of similar effigies, executed in the same speckled granodiorite from Aswan, such as that entitled Pharaoh Amenemhat IV, formerly in the Halkedis collection in Atlanta, also considered by some experts to be of doubtful origin.

In the vast majority of forgery cases, it is impossible to identify with any certainty the craftsman who actually created the fake artefact. However, following investigations carried out in Egypt to verify some of the accounts collected during the enquiry into the authenticity of the Senusret III statue, I feel able to identify the author of the forgery.

He is a self-taught craftsman, aged about 50, from Mit-Rahineh, ancient Memphis, just south of Cairo, and has been sculpting statues in different materials since the age of 15. He works from illustrations in books or from photographs supplied by sponsors. This explains the principal mistakes in proportion and stylistic details that appear so obvious when compared against the pharaonic originals. Naturally gifted, and with many years of experience, he executes his commissions swiftly, working with the assistance of family members; initially with an elder brother who recently died, and later with another, younger brother whose job is to rough-hew the original stone block. That, in my opinion, provides the principal clue to the forgery of this series of statues: the rectangular block from which they were all sculpted is easily identified. When shown photographs, the sculptor admitted, with some pride, that he was the creator of the two statues of Senusret III and Amenemhat IV. When asked why he engraved two different cartouches on two very similar statues, he replied that he was only following instructions given by his sponsors.

Our sculptor has never had problems with the police, because the activity of a copyist is not illegal in Egypt. It was obvious that I was not attempting to follow the thread leading to the export of these objects from Egypt. I had taken care to introduce myself as an art historian interested in beautiful modern copies made locally, not an antiquities dealer. The interview was relaxed and cordial, conducted over a bottle of cold soda. He even posed voluntarily for photographs, standing alongside me and the rest of my team. Because he worked uniquely to order, the sculptor said, he had no copies in stock to show us. His last order had just been delivered to a museum in one of the Gulf states. I asked, as a joke, whether he signed his products. He replied, very seriously, that of course he did not – his models were of pharaonic originals.

In general, there are many intermediaries between the craftsman who makes identical copies of a genuine piece and the final product, which arrives, more or less doctored, on the art market. The artificial ageing, the cracks and fissures, the clumsily made repairs, all certified by pseudo-pedigrees specifically created to transform honest copies into deceitful forgeries, are rarely the work of one person. That is the explanation for the enormous difference between the initial amount paid to the original artist and the final price asked by the seller. A high asking price also helps to garner a level of legitimacy for the forged artwork. The final asking price for the series of fake statues, supposedly dating from the 12th to 13th dynasties, would represent a markup of at least 100 percent of the original cost, based on the number of working hours put in by the artist.

The most worrying aspect of my recent investigations into forgeries of pharaonic sculpture on the antiquities market is the confirmation of the existence in Egypt today of craftsmen working in many types of stone, some of which is very hard, with greater or lesser talent. Excellent casts in reconstituted stone have also allowed sculptures to be presented on the market as genuine. They can fool the most alert buyers, especially if they have a provenance that is shrouded in mystery, or are passed off as finds from clandestine archaeological digs.

This whole region has just been delivered from Turkish misrule, and for the first time in history the birth-lands of religion and civilization lie open to unobstructed study and research. In the entire history of knowledge this is the greatest opportunity that has ever come for the study of man and his career.

Th is confident approach by James Henry Breasted (Fig 5) to John D. Rockefeller Jr was written in February 1919 to request funding for his expedition and for the establishment of the Oriental Institute in Chicago – a ‘laboratory’ where ‘the methods and equipment of natural science should be applied to the study of man’.

The request bore fruit in the form of a pledge for $50,000, to be paid over five years (Fig 3), and within six months Breasted’s first expedition was under way.

Breasted’s self-assurance was based on a distinguished career, and the knowledge that Mrs Rockefeller was already an admirer of his work. He had served as Professor of Egyptology at the University of Chicago for 25 years and was the first American to receive a PhD in Egyptology. He had written several formative works on the subject, including Ancient Times, a textbook published in 1916 (Fig 4) and Ancient Records of Egypt (1906), in which he coined the phrase ‘the Fertile Crescent’ to describe the regions of Mesopotamia and the Levant delimited by the dry climate of the Syrian desert to the south and the Anatolian highlands to the north. Over the years he had built up the collection of the Haskell Oriental Museum, but he dreamed of establishing a research institute at the University of Chicago that would trace Western civilisation to its roots in the ancient Middle East.

The Oriental Institute’s current exhibition traces Breasted’s daring travels through Egypt and Mesopotamia in the unstable aftermath of World War I.
Visitors follow the events of his expedition, but at the same time explore larger issues about the relationship of the past to the present, of archaeology to politics, and of America to the Middle East.

Dr Geoff Emberling, Chief Curator of the Oriental Institute Museum, told Minerva more about some of the exhibition’s highlights, and its contrasting perspectives.

‘Th is is the story of an archaeological adventure, taking place at a chaotic, crazy time. Th e story is told in two voices: firstly, that of Breasted himself, who embarked on the expedition not knowing, or not wanting to know, just how dangerous it would be. He was an extraordinary man, but he was a man of his time, and much of what he had to say now appears to have a colonialist, even racist ring. Balancing this is a modern, critical archaeological voice, which shows the viewer how attitudes and practices have changed, and asks questions like: where do antiquities belong? To whom does the past belong?’

Breasted’s story is told through three categories of material: archival pieces, such as the passport used on his journey (Fig 2); the artefacts he purchased, and his lively, highly engaging letters, many written to his wife Frances. He was a prolific correspondent and spared no details in recounting his adventures. His 14 weeks in Egypt were spent purchasing antiquities for the university and the Art Institute of Chicago, and his letters are full of anecdotes about the dealers and their ‘canny’ ways. Whilst managing to maintain a poker face in their presence, he freely expressed his delight in some of his purchases afterwards, describing a special papyrus shown him by the Greek dealer Nicolas Tano (Fig 6).

‘…a beautiful brown roll of papyrus, as fresh and uninjured as if it had been a roll of wallpaper just arrived from the shop! … Tano laid it down on the table, put his finger on the unrolled inch or two and giving the roll a fillip, he sent it gliding across the table, exposing a perfectly intact bare surface before the beginning of the writing…. And then came the writing! An exquisitely written hieroglyphic copy of the Book of the Dead with wonderfully wrought vignettes, the finest copy of the Book of the Dead which has left Egypt for many years!’

Other purchases included an XVIIIth dynasty officer’s battle axe, which he carried in the fifteenth century BC, with bronze head, fine wooden handle and leather lashings all in perfect condition’ (Fig 1), and a lapis lazuli hand and foot from a small-scale composite statue (Fig 10). Overall, he spent over $53,000, and many of the objects he bought are key pieces in the Chicago collections.

Breasted was one of the first archaeologists to experiment with aerial photography, persuading the RAF to fly him over the pyramids at Abu Sir (Fig 9). Taking photographs with a bellows camera from an open cockpit plane proved problematic in more ways than one, as he described afterwards: ‘Th e air was very lumpy and at frequent intervals we dropped with a sickening fall through a hole in the air, as you come down in an elevator…. I stuck to my pictures and to studying the terrain from one great pyramid cemetery to the next, grinding my teeth and swearing I was not going to give up to it. But it was all of no avail. I leaned over the cockpit rail and surrendered to the Sahara a very good thirty piastre lunch.’ Th e resulting photographs, too, were disappointing (Fig 8).

‘Th e majority of Breasted’s journey relied on more traditional modes of transport (Fig 7). Since the land route from Egypt to Mesopotamia was considered too dangerous, Breasted and his colleagues travelled by sea toward Basra, a roundabout journey of nearly two weeks that took them through the Suez Canal (Fig 14) and across the Arabian Sea to Bombay, where they found berths on a ship to Basra. From Baghdad to the ancient Assyrian capital of Ashur, the party travelled on the newly inaugurated Mesopotamian Railways (Fig 12), then by armed caravan through dangerous territory towards Mosul.

In the spirit of pioneers
exploring the American West, the party travelled by covered wagon for eight days, following the Euphrates River and then turning west for Aleppo (Fig 13). Political relations between officials, local tribes, the French and the British were extremely tense at the time, and to make sure there was no mistake about the travellers’ nationality, an American flag was flown from their wagon (Figs 11, 13). The wagons themselves were extremely uncomfortable, and the party’s accommodation at night, in caravanserais or khans, was no better, as Breasted described.

‘The rooms in these khans are raised a storey above the barnyard enclosure where the horses, wagons and drivers spend the night. … [The wind] picks up all the dried horse droppings outside and they become droppings in a very personal sense… We are simply alive with fleas…. Tonight in this execrable den of filth we are 25 miles from civilization and a comfortable hotel in Aleppo.’

The expedition continued to pursue antiquities along the way, but many of Breasted’s acquisitions were in the form of political contacts. In Beirut he met with General Gouraud, High Commissioner of France in Syria, and in Damascus with King Faisal (Fig 15), once at his private home and once for dinner at the palace.

‘The dinner was simple... ending with the famous Damascus pastry and really luscious Damascus fruit. Politics had been rather delicate ground... Th e King said bluntly his present unhappy position between French and English aggression, the one in Syria, the other in Palestine, was our (America’s) fault!’ Within two months of the expedition’s departure, General Gouraud would order his soldiers to Damascus to remove Faisal from power. On leaving the Middle East, Breasted returned to the United States via England, where he met with the British Foreign Secretary, Lord Curzon, to pass on intelligence gained from his time in Mesopotamia, Syria and Palestine. He arrived home in July 1920, 11 months after he had started.

To make sure there was no mistake about the travellers’ nationality, an American flag was flown from their wagon

Fig 11. The American flag the expedition flew from their wagon when travelling through Mesopotamia and Syria.

Fig 12. Timetable for the Mesopotamian Railways, 1920.

Fig 13. The wagon (arabanah) of the University of Chicago at Tibni, Iraq, looking towards the Euphrates River.

Fig 14. The expedition party on board the ship City of Benares in the Suez Canal bound for Bombay. Left to right: James Breasted, Daniel Luckenbill, William Shelton, William Edgerton and Ludlow Bull. February 1920.

Fig 15. A stock photo of King Faisal, which Breasted asked him to sign.

Th e involvement Breasted came to have in gathering political intelligence is one of the most striking aspects of his story, says Dr Emberling. ‘One of the things that jumped out at me was the access he had to top-level political figures. As a modern archaeologist, this has certainly not been my experience! He cultivated these relationships, but it’s important to consider why the off icials were so willing to cooperate. My conclusion is that they regarded understanding the history and archaeology of a region as key to achieving intellectual control over it.’

Today, Breasted’s belief that Western civilisation began in the Middle East is not disputed. It is clear, however, that he also believed civilisation to have passed from the Middle East to the West, and that the inhabitants of the region at the time were not worthy heirs to that legacy. Th is was his justification for the removal of objects from Egypt to museums in the West. Breasted’s journey has left the Oriental Institute with a wealth of material – ancient and modern – and complex questions surrounding ownership of the past, the antiquities trade, links between ancient civilisations and modern nations, and the political importance of archaeology. Th ese issues continue to provoke debate and discussion to this day.

Dr Geoff Emberling is Museum Director at the Oriental Institute and Curator of the exhibition ‘Pioneers to the Past’. He is co-editor of Catastrophe: Th e Looting and Destruction of Iraq’s Past. Th e exhibition runs at the Oriental Institute Museum until 29 August. For more information, please visit www.oi.uchicago.edu
The sanctuary of Apollo at Delphi has drawn visitors for millennia. Modern tourists come to see one of the world’s most spectacular sacred landscapes (Figs 1, 2, 10). Ancient pilgrims came to consult the famous Delphic Oracle, where a woman in a trance channelled the words of gods – originally Gê or Mother Earth; later the prophet-god Apollo, son of Zeus. Of all the mysteries that surround the site, one of the strangest is the religious tradition that granted to the Pythia, a holy woman from this small mountain village, the power to speak prophesies.

John Hale analyses the geological processes that may explain the mystery of the Delphic Oracle.

Of GODS and GASES

Fig 1. The Temple of Apollo at Delphi with the valley of Pleistos behind. Photo: Prof John Hale.

Fig 2. The ramp leading to the eastern entrance of the Temple of Apollo. Photo: Prof John Hale.

Fig 3. Marble Naxian Sphinx, which originally perched on a 10m Ionic column below the terrace of the Temple of Apollo, from where it guarded the sanctuary. H. 222cm, L. 135cm. Delphic Archaeological Museum. Photo: Cris Haley.

Since the time of Homer, the oracles of Apollo formed an important thread in the tapestry of Greek legend and history. No momentous decision could be made without visiting Delphi. Private citizens posed questions concerning health, family, business, travel, and averting bad luck. More powerful visitors sought the wisdom of the oracle on matters of war and peace, drought and famine, and the choice of leaders in their home communities.

Mythical figures who consulted the Delphic Oracle included Deucalion and Pyrrha, who alone survived the Great Flood (Ovid, *Metamorphoses*, 1.381-3); the ill-fated Oedipus, who eventually killed his father and married his mother (Sophocles, *Oedipus Rex*, 791-3); and king Agamemnon of Mycenae, before embarking on the Trojan War (Homer, *Odyssey*, 8.78-81). There were notable consultants in historical times also: the Greek adventurers who founded new colonies overseas, the fabulously wealthy king Croesus of Lydia (‘If the king crosses the River Halys, he will destroy a great empire’, as recorded in Herodotus, *Histories*, 1.473), the Athenian envoys who received the riddling ‘Wooden Wall’ oracle before the battle of Salamis (Herodotus, 7.140), a disciple of Socrates who enquired about wisdom (Plato, *Apology*, 21a-c), and even Alexander the Great (Plutarch, *Life of Alexander*, 14.4). The oracles could be cryptic, and the motto ‘Know Thyself’ was displayed on the temple’s façade as a warning to those who sought guidance not to interpret Apollo’s words without due consideration (Pausanias, *Guide to Greece*, 10.24.1).

According to a number of Greek and Roman writers, the oracle’s power derived from natural features under the temple of Apollo: a cleft or fissure in the bedrock; a spring; and a sweet-smelling, gaseous emission. Seated on a tripod above the fissure, the Pythia inhaled the mystic *pneuma* or vapour and then slipped into a trance (Strabo, *Geography*, 9.3.5. *Fig 4*). On most occasions she spoke her prophecies clearly, sometimes in verse, but on at least two the gases triggered a violent delirium that ended in death (Plutarch, *On the Obsolescence of the Oracles*, 438B). When French archaeologists began to excavate the temple of Apollo in 1893, they expected to find a large cave or chasm and an easily detectable gas. When these failed to materialise, most scholars considered that the ancient tradition must have been a fiction or even a deliberate fraud on the part of the Delphic priests.

In 1996, after a century of scepticism about the ‘chasm and vapour’ at Delphi, an interdisciplinary team of researchers returned to the question. The explicit eye-witness testimony of Plutarch, who was also a high priest at Delphi in about AD 100, proudly noted that he had encountered visitors from as far away as Britain and Arabia on the same day (Plutarch, *On the Obsolescence of the Oracles*, 410A).

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John Hale (author of this article), chemist Jeffrey Chanton, and toxicologist Henry Spiller. The Greek archaeologists at Delphi, Rozina Kolonia and Elena Partida, were instrumental in securing permits to sample and analyse water from the sacred springs, as well as travertine rock that had been laid down by the springs in antiquity.

An intensive survey of the mountainside revealed that the temple of Apollo had been built over the intersection of two faults, thus creating fissures in the underlying limestone through which groundwater and gases could rise to the surface (Figs 7, 8). An asymmetry in the architecture of the temple reflected this geological situation: the oracular crypt or adyton (literally ‘place of no entry’) was constructed not on the temple’s central axis, but in a declivity in the foundations on the southern side, above an active spring. Massive stone drains led the overflow through the foundations to a fountain-house on the terrace outside.

Plutarch had said that the pneuma could rise either as a free gas or mixed with the water (On the Obsolescence of the Oracles, 432D), and the travel-guide author Pausanias in his Guide to Greece, written in the 2nd century AD, spoke of the spring that rose in the crypt ‘where its waters made the women prophetic’ (Pausanias, 10.24.7). What sort of natural emissions could have existed that would induce an altered state in the Pythia, but stop short of toxic effects or complete anesthesia? Noting that the underlying limestone was bituminous, De Boer decided to see if the petrochemicals in the bedrock itself could have yielded intoxicating gases. Similar geological deposits in the Gulf of Mexico (where petroleum from faulted limestone has recently caused an environmental crisis) produce bubbles of lighter-than-air hydrocarbons, including methane, ethane, and ethylene. All are intoxicants.

Analysis of water and stone in the sanctuary at Delphi revealed traces of all three gases in larger than normal atmospheric ratios. Yet the presence of such hydrocarbons was specific to the faulted area around the temple of Apollo: no such emissions could be detected in the waters of the sacred Castalia spring, a mere 150m to the east. Apparently the bituminous contents of the limestone were heated by friction along the lines of the faults under the temple, and when the heated petrochemicals finally vapourised, the intoxicating gases rose through the fractured rock of the fault zone until they emerged in the enclosed adyton.

The presence of ethylene in the spring water was particularly intriguing. Plutarch had described the smell of the gas as ‘sweet, like expensive...’
peroxide (On the Obsolescence of the Oracles, 437C), and while methane and ethane are odourless, even slight traces of ethylene do indeed have a sickly sweet smell. Moreover, experiments on human subjects have shown that ethylene could be used as an anesthetic, were it not for its highly combustible nature. In laboratory tests, volunteers exposed to light doses of ethylene typically experienced light, out-of-body trances, during which they could sit upright on stools and respond to questions. (The medical experimenters of the early 20th century devised very helpful procedures, though completely unaware of the Pythia’s state during oracular consultations!) The altered state was induced by the introduction of the ethylene into the bloodstream through the nose, where the gas then inhibited the release of oxygen from red blood cells into the brain. Ethylene even induced, in a few modern cases, a delirium during which the subject thrashed and screamed – a precise analogue to the rare instances of a violent reaction to the prophetic pneuma on the part of at least two unlucky women at Delphi.

Following up these results, the team visited other oracular shrines where ancient sources referred to a divinatory procedure that involved gases, springs or both. In Greece, Turkey and Albania, such sanctuaries were consistently found to have been built on the lines of active faults.

Around the Temple of Apollo at Hierapolis (modern Pamukkale in Turkey), the lines of the faults could still be traced on the surface, and both gases and spring waters were still flowing. At the healing sanctuary of Acharaca near the ancient Hellenic city of Nysa (also in Turkey) gaseous emissions could be detected emerging directly from the rocks of a nearby ravine. On encountering such vapours, the Greeks seem to have attributed to them supernatural effects, including the power of prophecy.

How then can we reconstruct the history of the Delphic Oracle? When the first settlement was built at Delphi in the Middle Bronze Age (roughly 1600 BC), the sacred spring lay just west of the town’s rampart or terrace wall. Further west was the cemetery, and those who first experienced an altered state from inhaling the vapours at the spring may have been seen as channeling the voices of dead ancestors. A similar situation can be observed today among the gaseous emissions of Mount Osore in Japan, where pilgrims can communicate with dead family members through women who serve as mediums.

Later, at Delphi, a special sisterhood of women collected around the site, deriving their prophetic gifts from Mother Earth, or her daughter Themis (‘Justice’), or from local nymphs. Eventually a male priesthood took over the sanctuary and introduced the cult of Apollo, but they apparently required the services of the women to provide the Pythia who sat on the tripod, inhaled the pneuma, and spoke the oracles.

Their secrets were passed down through the generations, and considered too holy to be committed to writing (Fig 9). Even Plutarch, a high priest, did not know how the women acquired their mysterious abilities, or determined which woman would act as Pythia on a given day. He could only say that Apollo was a divine musician, the woman was his lyre, and the pneuma was the spectrum with which the god touched the Pythia to make her speak (On the Obsolescence of the Oracles, 436F and 437D).

Even under Roman rule, Delphi maintained its importance. When the short-lived emperor Julian the Apostate (AD 331-363) sent envoys to Delphi in about AD 362, he was hoping to revive the pagan tradition of prophecy at a time when Christianity was sweeping the Roman Empire. In reply, the Pythia pronounced the last recorded Delphic oracle. ‘Tell the king that the well-built hall has fallen to the ground. Apollo now has no shrine here, no prophetic laurel tree, no talking spring. The waters are silent’ (Philostorgios, 7). In these final verses, the oracle indicated that the divine presence at the temple was inextricably linked to forces of the natural world.

Dr John R. Hale is Director of Liberal Studies at the University of Louisville. He has carried out archaeological fieldwork in several countries. In addition to the geological origins of the Delphic Oracle, he is an expert in ancient seafaring and has recently published Lords of the Sea: The Triumph and Tragedy of Ancient Athens, Gibson Square Books, 2010.
Two years after an important exhibition held in Mantua, 'La Forza del Bello' ("The Power of Beauty"), which outlined the influence of Greek art on that of Rome and other parts of Italy, the Capitoline Museums in Rome are now presenting 'The Age of Conquest', curated by Eugenio La Rocca with Claudio Parisi Presicce and Annalisa Lo Monaco. The exhibition focuses on the Roman conquests in the Eastern Mediterranean, and the subsequent introduction of Greek and Hellenistic artefacts into Italy.

The exhibition presents a new format in which many of the objects are displayed among the statuary normally on view in the Palazzo dei Conservatori. The result is something of a treasure hunt through the various sections of the exhibition, which, although benefiting from the magnificent frescoed rooms of the Capitoline Museums and the stunning masterpieces it houses, makes it difficult for visitors to follow the thematic sequence of the exhibition itself. The lack of signs or other markings clearly indicating the various stages of the exhibition can also cause confusion. The display is discreet and there are no glass cases, except for the few necessary to protect the smaller, more fragile terracottas. The other statues are set on plinths. 'The Age of Conquest' may thus encourage a new trend for shows held in major museums, in which international loans are mixed together with the permanent collections.

It remains to be seen whether this approach will prove successful or desirable. While it has the potential to cause confusion, the layout will probably reduce the costs required to stage such an exhibition, and may also encourage visitors to rediscover the familiar, while responding to the appeal of...
a well publicised exhibition. Only in the last of the four display sections, 'Everyday Life in the Greek Mode' is the exhibition staged in a more traditional, specially designed setting, in the rooms of the top floor of the adjacent Palazzo Caffarelli-Clementino, which afford spectacular views of the rooftops and cupolas of the city below.

The exhibition is the first of a series to be featured at the Capitoline Museums over the next four years. These will be 'Portraits of Power', focusing on Italy in the 4th century BC to the 4th century AD, set for 2011; 'Empire Building', examining the same period; 'The Age of Equilibrium', concentrating on the years from AD 98 -161 (2013); and finally 'The Age of Anguish', which will focus on AD 161-305 (2014).

The current exhibition spans a complex period for the history of Western art, when the cultural identity of Rome took shape, moving from the archaic and conservative Latin traditions into a period when the influence of Hellenism became dominant during the 3rd and 2nd century BC. It was an age when Greek art was brought to Rome in great quantities, and was absorbed and remodelled in an innovative surge that slowly shifted from the direct copying of respected models to the development of a composite Graeco-Roman style, which was to become predominant. The exhibition thus charts a course through the dynamic period when Hellenistic art was physically uprooted from the cities of the Eastern Mediterranean and, on being brought to central Italy, was transformed into the universal art of the Roman world. Writing in the 1st century BC, the poet Horace noted, 'Captive Greece took captive her savage conqueror and brought the arts to bucolic Latium,' (Epistles, 2).

The Punic Wars, fought between Rome and Carthage from 264-146 BC, initiated and sustained Roman imperialistic ambition, offering the opportunity to the senatorial class of the Middle Republic to extend Roman influence, not just in the central and western basins of the Mediterranean, but also to the Hellenic lands of the east. The year 146 BC, which saw the culmination of the Third Punic War with the conquest and destruction of both Carthage and Corinth, is rightly regarded as one of history's red-letter dates, when Rome claimed undisputed mastery of the Mediterranean. However, the 3rd century BC saw victorious campaigns undertaken by the Romans in Magna Graecia, Sicily, Greece, Asia Minor and North Africa. Contemporary anecdotes referring to uncouth Roman soldiers gambling and using painted Greek masterpieces as dicing tables, suggests that Romans were initially considered nouveaux riches and devoid of any aesthetic awareness of the cultural treasures they had acquired by force. The booty gained from such wars saw thousands of looted statues and other precious artefacts flooding back to Rome.

Rome of the Middle Republic was still a relatively small town, and could not compare to the imposing grandeur of eastern cities like Athens, Alexandria, Antioch or Pergamum. Only with the end of the Republican system of government and the rise of the Principate would Rome match, and later eclipse, the urban splendour of the East. Under the emperors, the city would be transformed into a capital worthy of an empire. As Augustus famously claimed, he 'found Rome a city of bricks and left it a city of marble.'

One of the merits of this exhibition is that it makes visitors look anew at the terracotta sculptures which preceded the widespread use of marble in Rome, a material that became popular and desirable among wealthy Roman citizens following the importation of statuary from the Hellenistic states and empires of the East. The pediment from a temple in the northern Italian town of Luni, founded in 177 BC, highlights the mastery with which craftsmen of the 2nd century BC used clay to harmonize the figures of five deities grouped together in a monumental ensemble worthy of the Etruscan tradition that preceded it (Fig 2). A fragment from another temple pediment of the same period, which may have represented a gigantomachy, is the head of a man wearing a helmet crowned with plumes, found under the pavement of a church in central Italy (Fig 1). The head, heavily influenced by Hellenistic models, was vividly painted to emphasise the dramatic expression of the warrior, and may reflect the celebrated Pergamum monuments. Yet another example of the monumentality achieved using terracotta as a medium to fashion statuary of a very high quality is the 3rd/2nd century BC seated goddess (one of three in the exhibition), which may represent Demeter/Ceres.

Fig 1. Terracotta head from the Temple of Zeus at Pagliaroli di Cortino (Teramo), excavated in 1975. Second half of the 2nd century BC. H. 25cm. Museo Civico Archeologico, Teramo.

Fig 2. Terracotta pediment representing Apollo, Luna and the Muses, from a temple in Luni, northern Italy, excavated in 1842. 2nd century BC. H. 122cm. Museo Archeologico Nazionale, Florence.

Fig 3. Terracotta goddess sitting on a throne found in 2003 at Luco dei Marsi (Aquileia). Late 3rd/early 2nd century BC. H. 87 cm. Museo Archeologico Nazionale, Chieti.

Fig 4. Marble head, possibly of Aemilius Paulus. 1st century AD copy from a 2nd century BC original. H. 27cm. Muzeu Arkeologjik, Tirana.
discovered in the central Italian city of Chieti in 2003 (Fig 3).

The Greek language was part of the basic knowledge of the Roman upper classes throughout the Republican periods, and was relatively well spoken and commonly used for official documents. This gave Romans a political advantage, since the Hellenistic rulers they came in contact with had no similar knowledge of Latin. Although cultivated Romans would speak Greek and might own some important objects made in the East, they were not as yet really fully Hellenised. After the Second Punic War (218-201 BC), the works of art plundered and displayed during the Triumphs of victorious generals introduced hitherto unseen and unknown Greek masterpieces to the Roman population. The introduction of looted Hellenic treasures to Italy also led to changes in the lifestyles of wealthy Romans. Treasures from the Greek East gave rise to the common practice of dining with silver vessels, an ostentatious extravagance seldom seen before in Roman households.

It is therefore fitting that part of the exhibition is displayed underneath the frescoed vaults of the Stanza del Trionfo di Lucio Emilio Paolo, the room named after the Triumph of Lucius Aemilius Paullus (c. 229-160 BC), the Roman commander who was victorious over Perseus, the last king of Macedonia, at the Battle of Pydna in 168 BC. What may be a portrait of the Roman general is also part of the exhibition (Fig 4). In the years that followed, the Roman general’s name would become a byword for extravagance and Hellenistic opulence.

In the wake of increasingly lavish public displays, the homes of Rome’s rich and powerful citizens began to be filled with marble, bronze, silver and gold objects brought from the East. It also became common for wealthy Romans to embark on an ancient version of the ‘Grand Tour’, visiting the monuments of Greece and Asia Minor. There was, however, opposition to the steady influx of Greek art and philosophy by some leading Romans, most notably Cato the Elder (234-149 BC), who was commonly referred to as Cato the Censorius for his attempts to censor the decadence and luxury of Hellenic culture. However, members of the powerful Scipio family, who had been in the forefront of the wars against Hannibal and Carthage, became the upholders of Greek liberties and inevitably of Greek art. Greek artists, architects, teachers, and doctors came to Rome where they would transform both the physical appearance of the city, as well as the moral attitudes of its inhabitants. Pliny mentions a
group of Greek sculptors in Rome during the 2nd century BC, whose work in marble and bronze was displayed inside temples such as that of Apollo, where Philiskos of Rhodes created statues of the god, together with Latona, Diana, and the Nine Muses. In the temple of Juno, the artists Polykles and Dionysos, both sons of the Athenian artist, Timarchides, sculpted two statues of the goddess. These statues were fashioned in the severe archaic style preferred for cult objects. Masterpieces derived from Greek originals were also made available through numerous copies, even in the most remote provinces of the Italian peninsula (Figs 6, 7).

Roman portraiture also evolved and statues were commissioned to honour deserving citizens and victorious generals. These were usually over-life size, with muscular bodies shown in ‘heroic nudity’, fashioned as if in the full vigour of youth, even when the person represented was a mature or old man. Only the head was to be true to life in order to be recognisable to the citizens of the cities where they were displayed (Fig 10).

The 3rd and 2nd centuries BC was also a period when a technological revolution took place in architecture, a consequence of the introduction of cement, which was widely used in the construction of both public and private buildings. The new material allowed for the construction of tall arches and vaults to support large temples like that of the Fortuna Primigenia in Palestrina (ancient Praeneste) in central Italy, built on terraced gradients in a curvilinear shape. In the last phases of this artistic and architectural evolution, even cult objects were copied and used as decoration in opulently appointed mansions such as the Villa dei Papyri in Herculaneum, where the wealthy Roma elite used marble and bronze to confirm that to be fashionable and cultured was to be Hellenised (Figs 5, 8, 9).


Almost 18 years after its discovery, Catherine Johns reassesses the importance of the artefacts and the enduring mysteries that surround this Late Roman treasure.

One of the most spectacular Roman treasures ever found in Britain came to light at Hoxne, Suffolk, in 1992, giving rise to a great deal of public interest and excitement (see Minerva, November/December, 1993, pp. 22-25). The publication of the second and final volume of the academic catalogue of the treasure this year is a far less sensational event, but it serves as an occasion to remind readers of this important find, and to update them on the research that has taken place around it.

The Hoxne treasure consists of nearly 200 gold and silver objects and 15,234 coins, almost all of which were minted in the 4th century AD (Fig 1) and concealed in the ground some time after AD 407–8. This is known from the date of the two latest coins in the hoard, silver siliquae struck at Lyons by the usurper Constantine III (AD 407-11) during his campaign against the Western Roman Emperor, Honorius (AD 395–423). The 29 pieces of gold jewellery comprise a body-chain, six necklaces, three finger-rings and 19 bracelets, one of which bears the name of its owner (Figs 3, 9). The silver items range from luxury tableware and toilet utensils such as toothpicks, to padlocks, mounts and hinges from small wooden caskets.

The outstanding items amongst the table vessels are a zoomorphic handle in the form of a prancing tigress (Fig 6), and four small pepper-casters designed as statuettes (Fig 11). The silver spoons, 98 in all, form the largest known associated group of Roman spoons, and include a number of matching sets (Fig 5). Many are decorated or inscribed, and, as we might expect at this late-Roman date, some of the inscriptions attest to the Christian beliefs of their owners.

The circumstances of the excavation and the later processing and research allowed traces of organic remains to survive. Though the wooden chest that contained the treasure had rotted away, its size (about 60 x 45 x 30cm) could be worked out by careful excavation (Fig 4). The amount of detail that can be inferred about the Hoxne hoard is unusual, and was made possible because professional archaeologists, conservators, and scientists were involved almost from the start.

The treasure was found on 16 November 1992 by Eric Lawes, who was metal-detecting on a field farmed by his friend, Peter Whatling. Instead of excitedly digging everything out as fast as possible, Mr Lawes considered the situation, and, in consultation with Mr Whatling, made a wise judgement: he stopped digging and informed the authorities. This enlightened decision enabled a professional rescue excavation to be mounted on the following day under the supervision of Judith Plouviez and John Newman, archaeologists employed by Suffolk County Council. The finds, raised in context blocks, were transferred to the British Museum on 18 November, and the excavation was then completed in the laboratory. Careful micro-excavation of the context blocks in the calm and secure environment of a conservation laboratory enabled the researchers to recover tiny fragments that could have been overlooked in the field, and to understand more about the way in which the objects had been packed for burial. Detailed recording and listing took place, along with gentle initial cleaning and conservation, and a start was made on the metallurgical analyses and other scientific examination of many of the objects, and on the full photographic record. The completion of the laboratory excavation and basic cleaning took less than a month, but the recording phase, leading to the first complete list of all the objects in the hoard, was a long process.
the treasure, took much longer.

The find was declared Treasure Trove in September 1993, valued by the Treasure Valuation Committee at £1.75 million, and purchased by the British Museum in April 1994, with the help of generous financial grants and gifts. Work then commenced on cleaning and conservation to exhibition standard, and on in-depth research. Short interim publications appeared in 1994, but full scholarly publications require time and the input of experts in different fields of study. There are 11 names on the title page of the final Hoxne catalogue in addition to my own, but many more colleagues played a part in studying and interpreting the material.

Famous discoveries fascinate and attract the public, so museums make every effort to place them on exhibition as quickly as possible to satisfy that natural curiosity. Most of the Hoxne objects were first put on show in the week following the Treasure Trove inquest in 1993; the hoard was displayed at Ipswich Museum from October 1994 to April 1995, and in 2003–6, the major pieces were included in a travelling exhibition on archaeological treasure (‘Buried Treasure: Finding Our Past’) which was shown in Cardiff, Manchester, Newcastle-upon-Tyne and Norwich as well as London. In the meantime, from July 1997, the treasure had become a part of the British Museum’s enlarged permanent Roman Britain display.

Public exhibition is essential, but it is often not realised that it delays and even impedes serious research. An object cannot be properly examined when locked in a showcase in a museum gallery. Exhibition also requires terse, confident descriptions on the display labels, and these may require modification in the light of deeper investigation. When scholars apparently change their opinions, it is generally because the delicate balance of probability between several equally plausible hypotheses has shifted in the light of longer and fuller consideration.

Many of the new insights gained into the nature of the Hoxne Hoard since 1992 have merely confirmed, extended, and refined our first impressions, but we have also needed to emend some of the ideas that were expressed in the first publications and exhibitions.

The body chain

It took only a few minutes to realise that the elaborate chain, with a gem-set plaque and a clasp featuring a gold coin, was not a necklace – nor even a gold belt – but a body-chain, an exceptionally rare type of jewel (Figs 7, 8). Though it contains almost 250 grams of high-purity gold, which would have made it immensely valuable, it is a small example of its type. Experiments with string and metal

Tigers, like panthers or leopards, are associated with the god Bacchus
rings demonstrated that it would fit only a very slender young woman. In Roman art, Venus and Cupid sometimes wear body-chains, and I saw this as a hint that we might be dealing with the jewellery (and part of the dowry) of a bride. Minute examination revealed that the mount holding the coin has been re-used and adapted from a 3rd-century Gallo-Roman coin-necklace, but that the coin it now contains, a gold solidus minted in Trier under emperor Gratian between AD 367 and 375, is fresh and unworn (Fig 7). I conjecture that the body-chain, incorporating a small component of a family heirloom, was probably commissioned for its owner’s marriage within that eight-year period, 35 years or more before the treasure was buried.

The Juliane bracelet
One of the memorable moments in the laboratory excavation was when the conservator working alongside me separated out the six ‘nested’ bracelets and remarked: ‘This one has an inscription on it, Catherine.’ The inscription, worked in lacy pierced goldwork as part of the decorative design reads utere felix domina Juliane – ‘Use (this) happily, Lady Juliane’ (Fig 9). Such good-luck mottoes are common on late-Roman jewellery. Because there are many idiosyncrasies in the lettering and layout of the phrase, I initially assumed that the owner's name was Juliana, and the earlier publications reflect this. However, epigraphic work carried out by Roger Tomlin, now incorporated into the full catalogue, suggest that the name really was Juliane, with an final ‘e’. And that is not the only ‘new’ aspect of the bracelet: a colleague, Ralph Jackson, pointed out that the juxtaposition of the final ‘X’ of felix and the unusually-formed initial D of domina together resemble the standard symbol of Christianity, the Greek letters chi and rho (Fig 10). Early Christian symbols were often deliberately subtle and ambiguous, so I doubt if this is fortuitous.

The tigress handle
The tigress is another unique object from Hoxne (Fig 6). It is a handle from a silver table-vessel, probably a large and richly ornamented one, but there is no trace of the rest of the vessel in the hoard. Because there are known parallels for 4th-century silver amphorae with pairs of zoomorphic handles, the assumption was that the tigress belonged to just such a wine-vase, one with an ovoid body and tall, slender neck. This is not certain, however, and the shape of the original ‘tigress’ vessel remains in doubt. Tigers, like panthers or leopards, are associated with the god Bacchus, and are therefore fairly common in Roman art, but careful thought about the Hoxne tigress, with her short, slightly S-shaped stripes, led to the realisation that some other feline animals, identified as panthers in the past, such as that engraved on one of the spoons from the Thetford treasure, may also depict tigers.
**The ‘Empress’ pepper-pot**

The silver pepper- or spice-container in the form of a female half-figure was originally called ‘the Empress’ because of its resemblance to a series of bronze steelyard weights which have traditionally been regarded as portraits of late Roman empresses (Fig 11). Over the last few years, research on both the weights and the Hoxne pepper-pot has moved away from that interpretation: the Hoxne lady does not appear to be an empress, nor is she a pagan goddess or Christian saint. She seems to be simply a wealthy Roman matron of the same class as the family that owned the treasure. Somebody like the Lady Juliane, perhaps.

Her clothing, jewellery and elaborate coiffure are depicted in great detail (Fig 12). A skilled hairdresser, and very long, thick tresses, would have been needed to create the hairstyle, and we can see from the statuette just how it would have been achieved.

**Iron and organic materials**

Rusted fragments of iron, thin slivers of bone inlay, and microscopic shreds of wood are not ‘treasure’ in the usual sense, yet they are precious finds that help to increase our understanding and interpretation of the hoard. Minuscule fragments of wood on the surviving iron fittings of the treasure chest have been identified, enabling us to establish that it was made of oak, and within the deposit there were traces of eight other types of timber, all native to Britain, indicating the presence of several additional, smaller boxes within the chest. The tiny silver locks and hinges came from little caskets made of yew and wild cherry wood. Hundreds of tiny, shaped pieces of decorative bone inlay are probably from another box or casket (Fig 13), and there are small pieces from a very valuable elephant-ivory pyxis, a cylindrical lidded box with sides decorated in carved relief. Minute traces of flax demonstrate that linen cloth was used to wrap one group of silver objects – a set of plain silver bowls – and wheat straw was also employed as a packing material between the same bowls.

In spite of several inscriptions giving personal names (a set of ten silver spoons are engraved ‘Aurelius’), we still cannot say who owned the treasure, precisely why it was concealed some time in the early 5th century AD, nor even where any of the objects were manufactured. Stylistic comparisons provide many subtle hints at connections outside the province of Britannia, specifically in the Rhine-Mosel area of Germany, and perhaps in the great Roman cities of Trier and Cologne. Future research, and future finds, may tell us more, because work on material such as this can never be complete.

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First impressions

An exhibition at the British Museum examines the 1300-year history of printed images in China. Curator Dr Clarissa von Spee told Minerva more about some highlights of this remarkable collection.

China has the longest history of printing in the world. The British Museum’s collection of Chinese prints is one of the finest and most comprehensive in Europe, and Chinese prints are among the earliest collected artefacts at the museum. ‘The Printed Image in China’ illuminates the history of printing from its inception during the Tang dynasty (AD 618-907) to the present, and explores the role of the Chinese pictorial print in various cultural contexts. The show includes a wide variety of examples of the blockmaker and printer’s art, including Buddhist prints from the Silk Road, colourful images used in folk rituals and festivals, imperial engravings, dramatic anti-war images of the Modern Woodcut Movement, and contemporary prints by artists who have gained recognition in the international art scene.

According to present knowledge, printing on paper was invented c. AD 700 in China, from where it spread to both east and west. The earliest dated extant woodblock image in world history is the frontispiece to the Diamond Sutra (AD 868), which was discovered in a cave near the oasis of Dunhuang, north-west of the Gobi Desert (Fig 2). The cache, found by the Hungarian-born Marc Aurel Stein on his second Silk Road expedition in 1907, contained many Buddhist documents and textiles, as well as the earliest known Buddhist silk paintings. The exhibition includes nine devotional prints from Dunhuang, and these document the extent to which the development of printing was driven by the spread of Buddhism.

Fig 1. Preaching Buddha. Early Tang dynasty (probably second half of the 7th century AD), from Dunhuang. Woodblock impressions with added ink and colours. H. 32.2cm.

Fig 2. Frontispiece of the Diamond Sutra. Woodblock print in scroll form, found in Dunhuang. The image shows the Buddha with his disciple Subhuti, surrounded by attendants and divine beings. The scroll, dated to AD 868, bears a statement by Wang Jie, who commissioned it to ensure blessings to his parents.

Fig 3. Three Buddha’s Hand Fruits, from Ten Bamboo Studio Collection of Calligraphy and Painting. The Buddha’s hand, an inedible member of the citrus family, was a New Year offering to the household gods. Multicoloured woodblock print on paper, c. AD 1633. 25 x 27cm.
individual to escape the relentless cycle of life, death and rebirth. But sacred texts were thought to lose their efficacy if they contained errors in the characters, or the iconography was incorrect. Printing was therefore considered a safer means of duplication than copying by hand – as well as allowing the faithful to produce sacred texts more economically and in greater numbers (Fig 1).

As the fine quality of the Diamond Sutra indicates, printing technology was already well established by AD 868. Paper had been successfully manufactured since the 3rd century AD, and the traditions of seal-making and bronze-casting date back to the Shang dynasty (c. 1600-1050 BC). These were prerequisites for overcoming the challenges of transferring a reverse image in relief on a flat surface into a positive image. The Chinese term for printing is *yin shua* – *yin* translating as 'stamp', 'seal' or 'symbol', and *shua* as 'brush', 'brushing' or 'rub/polish'. These characters give a clear picture of the process of traditional woodblock printing, which is still in use today.

The original or copied drawing, in ink on paper, would be dampened and placed face down on a specially prepared block of wood, usually jujube, pear or catalpa, which were chosen for their fine grain. The block cutter would be able to see the design through the transparent paper, and carve away the blank areas, leaving the linear design in relief. The process would be repeated on a separate block for each colour used in the image (Fig 6). To produce a print, the block was brushed with ink (originally made from soot, glue, and wine), then a sheet of paper was spread over it and brushed lightly with a soft pad before being removed and left to dry.

Printing in two colours and using fine lines dates back at least to the Southern Song dynasty (AD 1127-1279), and impressions in up to five colours were used in illustrated books produced during the Ming dynasty (AD 1368-1654). The second part of the exhibition, 'The Popularisation of Elite Culture', examines how the growth of population, wealth, literacy and mobility in Ming-dynasty China led to the growth of commercial printing workshops. These establishments produced large-sheet prints and sumptuous sets of auspicious images, all embellished with colours, for a clientele eager to emulate the culture of the educated class and the court.

Colour printing reached its apogee in the early 17th century. Outstanding examples of work from this period are from the Ten Bamboo Studio.
Collection of Calligraphy and Painting, the earliest picture collection in China to be printed in colour and the first to include isolated illustrations of subject matter from nature, such as plants, fruits, rocks, flowers and birds (Figs 3, 4, 5). The Ten Bamboo Studio was the residence of Hu Zhengyan in Nanjing. Hu was an accomplished scholar in ink-making and seal-carving, as well as calligraphy and painting. He entrusted a team of highly skilled artisans with the carving and printing of eight volumes of images, which show vivid depictions of nature, fresh colours and masterly gradations of ink hues.

Artists eager to perfect their rendering of orchids and bamboo could consult the ‘how to’ pages of the Ten Bamboo Studio Collection and the hugely influential Mustard Seed Garden Painting Manual (Fig 5). This included many pages of text, covering such subjects as ‘Six Principles of Painting’, ‘Three Faults and Twelve Things to Avoid’. Readers were shown how to create the components of landscape paintings, including rocks, mountains, trees, flowering plum, and chrysanthemums. The accurate reproduction of painterly techniques required great skill on the part of the printer. The blocks were carved to represent broad brushstrokes, to which the printer could apply a gradation of ink from one end to another. In inking the block to give this effect, the printer became a key contributor to the artistic success of the print.

This technique required precise alignment, or registration, of the blocks used to apply the various colours, achieved by means of an ingenious printing table (Fig 7). A stack of paper was fixed to the right, and the firmly positioned woodblock to the left was then inked and the sheets of paper pulled, one by one, over the block. A new block would then be affixed for the second colour, and the process would be repeated until each sheet had been inked with each colour.

Such artistic innovation and meticulous reproduction were not required by the producers of popular prints, which make up the third section of the exhibition – yet these have a vibrancy and charm of their own. They were produced in large quantities throughout the year, but were in particularly high demand during the New Year festival, when households replaced their old prints with new ones. These inexpensive single sheets in bright colours, sometimes completed with a brush, depict subjects ranging from deities and tutelary spirits required for religious rites and containing protective or auspicious meanings, to illustrations of
Door guards were believed to lose their efficacy when they became faded or torn, so the prints were replaced annually.

Stories and operas for entertainment and interior decoration.

Guards in military attire were pasted in pairs on the panels of the street door to protect the interior from evil spirits (Figs 8, 9), and their civil counterparts were affixed to the inside doors of the house to attract prosperity (Fig 11). Door guards were believed to lose their efficacy when they became faded or torn, so the prints were replaced annually. The stove god (Fig 10) had his place in the kitchen and was burned in a ritual at the end of every year to be ‘sent’ to the Jade Emperor (the Daoist ruler of heaven and all realms of existence below), to whom he would report on the household’s conduct and family affairs. Before the god’s image was burned, his lips would often be smeared with honey or sugar to encourage him to deliver a favourable report. Although the use of popular prints can be traced to the Song dynasty (AD 960-1279), prints in this section of the exhibition date from the early 18th to the 20th century.

The remaining sections of the exhibition, ‘Printing at Court’, ‘The Modern Woodcut Movement’, and ‘Modern and Contemporary Prints’, feature works from the beginning of the Qing dynasty (1644-1911), the Republican period (1912-49), Mao era (1949-76), and the reform period of the 1980s and 1990s. They show the introduction of Western artistic techniques to Imperial China through European missionaries employed at court; the revival of the monochrome woodcut in the early 20th century; and the exploration of new techniques and themes as China’s arts academies developed their own styles and the country reopened to the global economy at the end of the century.

“The Printed Image in China from the 8th to the 21st Centuries” runs at the British Museum until 5 September 2010. Entry is free. For further information: +44 (0)20 7323 8299; www.britishmuseum.org

In the wake of the latest Hollywood reimagining of the story of Robin Hood, Mark Merrony takes a look at the historical figures that have inspired the legend.

On 12 May, surrounded by paparazzi flashes and thousands of jubilant fans, Russell Crowe strode majestically across the red carpet into the Palais des Festivals in Cannes for the premiere of Ridley Scott’s latest epic, Robin Hood (Fig 1). This is the latest in a series of productions on stage, screen and television that have spanned more than a century. The famous outlaw first appeared on screen in the silent film Robin Hood and his Merry Men (1908), but the hooded man’s adventures truly began with Douglas Fairbanks playing the swashbuckling hero in Robin Hood (1922), followed by Errol Flynn in The Adventures of Robin Hood (1938), Richard Greene in Sword of Sherwood Forest (1960), and Kevin Costner in Robin Hood Prince of Thieves (1991). Such is the appeal of Robin Hood – a personality so enshrined in English culture that he was alluded to by Geoffrey Chaucer in Troilus and Criseyde (1380), mentioned by William Shakespeare in his 16th-century play The Two Gentlemen of Verona, and had a minor role in Walter Scott’s Ivanhoe (1819), as well as being immortalised in a bronze statue erected in Nottingham (Fig 2). There are numerous other references to him in medieval and post-medieval literature. The reality is that these sources are a tapestry of myth interwoven with threads of fact – and the imagination of Hollywood screenwriters, directors, and producers has accelerated his mythology in the modern era. It is commonly believed that there is no tangible archaeological evidence relating to Robin Hood, but he can be identified by careful scrutiny of medieval texts and his deeds given some colour by archaeology in the modern era. It is given some colour by archaeology in the modern era. It is logical association.

Perhaps the best example of this is the reference to Robin as Earl of Huntington in manuscripts belonging to Thomas Gale, Dean of York (1697–1702). This takes the form of a short obituary:

‘Here underneath this little stone Lies Robert earl of Huntington No archer was as he so good And people called him Robin Hood Such outlaws as he and his men Will England never see again.’

A similar inscription is known on a grave in the grounds of Kirklees Priory (West Yorkshire), but a respectable body of medievalists think these references are most likely to be contemporary attempts at popularising the Robin myth, rather than primary texts written centuries earlier.

Before the welter of textual evidence is considered, it is worth trawling for any trace of archaeological evidence for Robin Hood and his Merry Men. Various claims relating to monuments in the north of England (as above) lack conclusive proof. Three other examples include ‘Little John’s Grave’ at St Michael’s Church, Hathersage (Derbyshire), ‘Will Scarlett’s Grave’ in the churchyard of St Mary of the Purification, Biddulph (Northamptonshire), ‘Robin’s Coffin’ in St Nicholas’s churchyard, Loxley (Warwickshire), Robin Hood’s Well at Skellow (South Yorkshire), and of course the Major Oak in Sherwood Forest, which the outlaw is said to have used as a hideout (Fig 5).

We are on firmer ground with the tangible remains of Nottingham Castle (Fig 3) – if it can be proved that it played a role in the ‘true’ story of Robin Hood. The same may be said of the medieval bow, by association, and
some interesting factors will emerge in this context.

On this journey back to the medieval period, there are two passengers whom we can bid farewell: Maid Marian (Fig 4) and Friar Tuck. Marian and Robin was a French play, composed towards the end of the 13th century, which became conflated with the Robin tradition in the second half of the 15th century. Robert Chaplain, a priest in the Parish of Linfield, Sussex, became known as ‘Friar Tuck’ when he became the leader of an outlaw band in the same region in 1417. He became the leader of an outlaw band, while the upper stonework is a Victorian addition. Photo: courtesy of Dave Rav.

Fig 3. Gatehouse of Nottingham Castle. A motte-and-bailey castle was erected on the site the year after the Norman Conquest in 1066, and was remodelled in stone the following century. The bridge and lower sections of the gatehouse are medieval, while the upper stonework is a Victorian addition. Photo: courtesy of Dave Rav.

Fig 5. Tradition has it that the Major Oak in Sherwood Forest was used as a hideout by Robin Hood. Photo: courtesy of soyletgreen.

whom the foolish populace are so inordinately fond of celebrating both in tragedies and comedies... This is of particular relevance and it will be fruitful to look at the broader implications of this passage at a later stage. Also of interest is the Orygynale Chronicle by Andrew of Wyntoun (c. 1420), which mentions that Robin Hood, Little John and their men resided in Inglewood and Barnsleydale (South Yorkshire).

To return to the ballads, it is thought that the earliest, Little Geste of Robyn Hode and his Meiny, may date from the end of the 14th or early 15th century. This comprises five other poems: Robin Hood and the Knight, Robin Hood and the Sheriff, Robin Hood and the King, and Robin Hood and his Death. The four shorter ballads recount Robin Hood and the Potter, Robin and Guy of Gisborne, and Robin Hood and the Monk. All would have been more widely circulated after the printing press appeared in England in the late 15th century.

Each ballad title gives an obvious hint at the story it tells, and contains detail enough to fill a long essay, but there are some broad similarities that may be regarded as a recurring theme: outlawry, archery contests, and life in the forest (Barnsdale, Yorkshire and Sherwood, Nottinghamshire to a lesser extent). They include tales of conflict with — and robbery of — the Sheriff of Nottingham; imprisonment in Nottingham Castle; disloyal/loyal service to King Edward; robbery of — and brutality towards — ecclesiastics; and some mildly charitable acts, such as a loan to the knight Sir Richard at the Lee in the Geste. Richard repaid the loan and gave Robin and his men refuge in his castle in Sherwood.

Robin’s reputation for benevolence and of ‘stealing from the rich to give to the poor’ was also emphasised in the same ballad: ‘Of my good he shall have some, If he is a poor man.’ Moreover: ‘Like we do no husband harm, That tills with his plough, No more shall we do to a good yeoman... No knight or squire, That will be a good man.’ Finally: ‘He was a good outlaw, And did poor men much good.’ Interestingly, the implication here is that Robin favoured yeomen over squires and knights (with the exception of the impoverished Sir Richard), which perhaps alludes to early perceptions of his social standing: not a peasant, knight, or aristocrat, but a minor landowner with some rights, and a champion of the agrarian majority. The 2010 film adopts this interpretation, with Robin portrayed as a working-class archer who served in King Richard’s army.

Many of the details in the Robin Hood ballads were based on real people and events in the 13th century. It is true that they are not documents created to provide a factual historical narrative, but then this is true of many records. Unlike the often propagandist documents that afflicted much of medieval history, the ballads were an amalgam of eye-witness accounts — no doubt with exaggerations — told and retold in the oral tradition, then written down over the course of several decades or more. So who was the real Robin — if he existed?

In 1852 the antiquarian Joseph Hunter identified the hooded hero as one Robyn Hode, who had been under the employ of Edward II in 1323, but this theory comes with no evidence that this Robyn was ever an outlaw. A more plausible and tempting theory is that proposed by L.V.D. Owen (1936) and J.C. Holt (1981) that the
outlawed Robert of Wetherby, named in Yorkshire judicial documents (1226-1234) as an ‘evil doer’ may be associated with the fugitive Robertus Hode, but unfortunately there is no conclusive evidence that these were one and the same person.

A small crumb of information in the ballads may point us in the right direction: reference to an Edward sitting on the throne of England (in contrast to most screen and literary portrayals, which set his exploits during the reign of Richard I a century earlier). This would suggest that the oldest Robin ballad was not written before the reign of Edward I (1272-1307) while there is also a factual basis for seeking a temporal fit for Robin in the reign of Edward I. Roger Godberd (c. 1230-90) was proposed as a candidate for Robin by J.R. Maddicott (1985), describing him as ‘that prototype Robin Hood’. After Simon de Montfort (c. 1208-1265) briefly seized power in 1264, during the reign of Edward’s father, Henry III (1216-72) (Fig 6), Godberd became one of de Montfort’s staunchest allies and there are a number of similarities between details in the ballads of Robin Hood and the historically documented events relating to Godberd’s life during the reigns of Henry III and Edward I. This has again been argued again by D. Baldwin (2010), and may be summarised below.

Godberd was a tenant of Robert Ferrers, Earl of Derby, and a landholder who may be identified as a yeoman. He became a member of the garrison of Nottingham Castle in the 1260s, accepted by the reinstated royalist government as an act of reconciliation, but their instability enabled Godberd and his ‘Merry Men’ – notably Walter Devyas (Little John?) – to operate as outlaws. Legal documents record incidents that echo characteristics in the ballads: retaking land by force from the monks of Garendon (Leicestershire); brief trial and imprisonment by the Sheriff of Nottingham (Leicestershire); brief trial and imprisonment for poaching (1264); the pardoning of Godberd and others for offences in Sherwood Forest (1287).

What of the deft archery that is so evocative of Robin Hood, and is vividly portrayed in Russell Crowe’s character? Baldwin has drawn attention to legal evidence brought against Godberd and others for poaching near Nottingham. This states that his gang was responsible for killing numerous hares, 26 stags, 45 does, and 110 roe deer. A combination of archaeological and historical evidence indicates that such poaching was probably carried out using the new military technology of the English longbow. In 1252 the Assize of Arms Act was passed under Henry III, making it compulsory for every male aged 15-60 to equip himself with a bow. It is interesting that in the same year, the longbow was accepted as a formal military field weapon over the short bow, and of course was used to devastating effect at the battles of Crécy (1346), Poitiers (1356), and Agincourt (1415), all of which were fought against the French during the Hundred Years’ War (1337-1453). The power of the longbow was such that contemporary accounts claim that an arrow fired at short range could penetrate 10cm of seasoned oak. The once ‘invincible’ knight could have his armour penetrated at a range of up to 200m, and even plate armour could be pierced at distances under 100m. Modern tests have confirmed this: a 700-800 grain arrow can pierce 9cm of oak when fired at close range and 2.5cm when released at distances of about 200m. The power of the longbow is perhaps most graphically illustrated by the cleric Gerald of Wales: ‘In the war against the men of Wales, one of the English Men-at-Arms was struck by an arrow shot by a Welsh archer. The dart went right through the leg, high up on his thigh, where it was protected inside and outside by a steel cuirass and then through the skirt of his leather tunic. The arrow then penetrated the saddle … and finally it lodged in his horse, driving so deeply into the flesh that it killed the animal; (A Journey Through Wales, 1191).

The historical events documented above of course raise the question of why Roger Godberd was not known as Robin Hood in his day. Medieval civil and judicial documents in fact name many people on both sides of the law called Robert or Robin Hood, common names in the medieval period. Perhaps the key to resolving this is to draw a distinction between people named Robert or Robin Hood, and the name used as a generic appellation denoting illegal activities. Significantly, in judicial records, the surname ‘Robehod’ was given to a man previously named William le Fevere in Berkshire after he had been outlawed in 1262. It is possible that the official would have been influenced by the illegal activities of a Robin Hood, but there is scant evidence that a figure of sufficient notoriety bore this name before this period. Alternatively, this clerical alteration could have been a simple allusion to robbers who wore hoods to disguise themselves – as was the case in this period – which would appear more likely. It is extraordinary that this occurred in precisely the same time frame as Godberd’s outlawry. It seems that Roger Godberd and his gang are the best candidates for Robin Hood and his Merry Men, and it should not surprise us that he would have been branded ‘Robehod’ by the judicial and ruling authorities. This name – synonymous with anarchy – would be ripe for adaptation by yeomen and peasants as a symbol of their struggle against the hand of autocratic rule.
When faith and science collide

James Beresford travels to northern Italy to see one of the world’s most controversial artefacts, the Turin Shroud

And when Joseph had taken the body, he wrapped it in a clean linen cloth, and laid it in his own tomb, which he had hewn out in the rock.’

The above verse, taken from the Gospel of Matthew (27:59-60), is one of the most crucial in the history of Christianity. According to the Gospels, on the third day after the death of Jesus on a cross erected on the hill of Golgotha, Jerusalem, he was resurrected. This set in motion a train of events that would see the religion he founded usurping the position of the old pagan gods of the Roman Empire, and eventually spreading across the world.

Held in the royal chapel of the Cathedral of St John the Baptist (Fig 4), the Turin Shroud is a large, rectangular piece of herringbone woven linen cloth measuring 4.4 x 1.1m, upon which is imprinted the faint image of a naked man, whose body bears the marks of death by crucifixion. The figure appears to be 30-45 years of age and has an estimated height of between 1.7-1.88m (5’7”-6’2”) and a muscular appearance, probably weighing about 75-82kg (165-180lbs). He has shoulder-length hair, a beard and a moustache. Blood from a wound in the side and trauma around the head has stained the shroud. For many Catholics, there is no doubt that this is indeed the image of Christ as he appeared in the hours after being removed from the cross, pierced in the flank by a Roman spear, and forced to wear a crown of thorns. For sceptics, the Turin Shroud is a medieval fake produced in the 13th or 14th century to cater for the insatiable, and highly lucrative, trade in holy relics.

No other historical artefact has generated so much discussion, and polarised opinion, in quite the same manner as the Turin Shroud. Despite more than a century of intense study using the most advanced scientific equipment, it has retained much of its aura of mystery, and the shroud continues to frustrate researchers seeking to understand how the image of a crucified man came to be imprinted on the cloth.

The Catholic Church has consistently refused to take a position on the authenticity of the shroud, a fact emphasised by Pope John Paul II: ‘Since we’re not dealing with a matter of faith, the Church cannot pronounce itself on such questions. It entrusts to scientists the tasks of continuing to investigate, to reach adequate answers to the questions connected to this shroud.’ From 10 April to 23 May, the shroud was placed on public display for the first time in a decade, and as many as two million people were expected to travel to Turin to see it. Devout Christians flocked to northern Italy to see what many regard as the face of Christ in the moments before resurrection. Thousands more came to marvel at an artefact that, even if regarded as a hoax from the Middle Ages, is a fake so cunningly executed that it baffles modern science and demands respect for the creativity and scientific skills possessed by medieval artists and craftsmen. The Catholic Church deserves credit for its willingness to welcome all who wished to visit the shroud, regardless of their religious affiliations.

The Gospel of Matthew marks the first mention of the shroud – the ‘clean linen cloth’ – that Joseph of Arimathea would wrap around the body of Christ (Figs 2, 3). The shroud is also referred to in the three other Gospels, Mark (15:46), Luke (23:53), and John (19:38-42). The cloth is of importance because, according to Christian belief, it was while wrapped in its folds that Jesus was resurrected. It was the shroud that also provided the first indication that Christ had indeed returned to life: ‘Then arose Peter, and ran unto the sepulchre; and stooping down, he beheld the linen clothes laid by themselves, and departed, wondering in himself at that which was come to pass’ (Luke 24:12).

There is, however, no mention in the Gospels of the fate of the shroud following the resurrection. Nonetheless, many of the early Church Fathers assumed that the cloth had been preserved. Writing in the mid 7th century, Bishop Braulio, of Saragossa in Visigothic Spain, noted: ‘At the time, many things were known to have happened which were not written down; for example, concerning the shroud… in which the Lord’s body was wrapped – we read that it was found but we do not read that it was preserved. Yet I do…'

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not think that the apostles neglected to preserve... such relics for future times' (Letter to Taius).

The shroud that would later take up residence in Turin only receives its first definite historical reference at the beginning of the 16th century, when it is recorded in the ownership of the Dukes of Savoy, who stored it in the chapel of their castle at Chambery in south-eastern France. Partly damaged by a fire in 1532, the shroud was relocated in 1578 to Turin, capital of the Duchy of Savoy. In 1893 ownership of the relic was gifted to the Holy See.

In 1898, the shroud was photographed for the first time by Secondo Pia (Fig 1). The clarity of the features of the figure on Pia’s black-and-white negatives generated renewed interest in the Turin Shroud and led to the first scientific analyses of the cloth. In the subsequent century the shroud has been subject to increasingly sophisticated testing. In 1978 a team of more than 30 international researchers, who comprised the Shroud of Turin Research Project (STURP) were allowed to carry out detailed examination of the linen cloth and its mysterious image, taking ultraviolet photographs of the shroud. In 1988 samples of the shroud were taken for radiocarbon testing at laboratories in Zurich, Oxford and Arizona. All three returned results indicating the material comprising the shroud dated to AD 1260-1390. By the late 1980s it therefore appeared beyond scientific doubt that the Turin Shroud was indeed a medieval fake.

In recent years, however, academic reports have begun to raise questions concerning the accuracy of the radiocarbon results. The most persuasive of these arguments is that the samples tested by all three laboratories came of the linen cloth of the shroud, resulting in the image of the dead man. "The enduring enigma of the shroud is largely a result of its ability to frustrate and confound modern scientific explanations as to how the image of the man came to be imprinted on the shroud", to be clearly seen for the first time (Fig 1), suggesting that the shroud itself is a form of negative print, formed in the Middle Ages by means of a primitive photographic technique. This idea has been championed by Prof Nicholas Allen, an art historian at the Port Elizabeth Technikon, South Africa, who produced images similar to those on the shroud using materials available to medieval artists. The Book of Optics, translated from Arabic into Latin at the end of the 12th or the beginning of the 13th century, also provided the theoretical knowledge to create very crude photographs. If Prof Allen’s theory is correct, then the Turin Shroud is evidence that photographic techniques were partially understood long before Thomas Wedgewood’s pioneering studies in the 1790s.

Prof Allen’s results have, however, been rejected by most scholars, who point out that such techniques cannot replicate the three-dimensional qualities of the Turin Shroud. Attempts to reproduce this 3-D effect have led researchers to use statues and bas-reliefs as models upon which cloth can be painted or heated to create images. Other tests, using various chemicals or pigments, have produced some good superficial likenesses, but when studied at the microscopic level, none resembles the Turin Shroud.

Rather than a deliberate human creation, it has also been proposed that the image on the shroud might result from natural forces associated with the decomposition of the body. Gases produced by the decaying human cadaver may have triggered a chemical reaction with the carbohydrates in the linen cloth of the shroud, resulting in the image of the dead man. However, gases will only escape the body once decomposition has begun, and there are no stains on the cloth of the Turin Shroud to suggest that decay had commenced.

Another theory for the origin of the image on the shroud has been set out by Ray Rogers, Director of Chemical Research for STURP. ‘I am forced to conclude that the image was formed by a burst of radiant energy – light if you like.’ Although unsupported by any empirical evidence, this ‘Resurrection Theory’ has proved popular among researchers attempting to balance science and religion, who envisage the resurrection of Christ as accompanied by a sudden flash of light. It has also been claimed that radiation associated with such an intense discharge of light changed the C14 isotope balance within the shroud, negating the radiocarbon tests of 1988.

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Fig 2. Descent from the Cross, c. 1540. Painted by the Renaissance illustrator, Giulio Clovio (1498-1578), the painting shows how the shroud would have been wrapped about the body, leaving impressions of both the front and back of the figure. Oil on panel.

Fig 3. The Stone of Anointing inside the Church of the Holy Sepulchre, Jerusalem. The church is venerated as the site where Christ was crucified and buried. Tradition holds that Joseph of Arimathea wrapped the shroud about Christ’s body on the stone.
Careful examination of photographs of the Turin Shroud, as well as ultraviolet images taken in the 1970s, have revealed the presence of other objects imprinted into the cloth. In 1985 Prof Alan Whanger of Duke University, North Carolina, claimed to have discovered 28 plant impressions on the shroud, and in 1998 Prof Avinoam Danin, a botanist from the Hebrew University, Jerusalem, identified one of these as a species of chrysanthemum common to the region around Jerusalem.

Although the botanical findings have been questioned, there is little doubt that there are impressions of coins over the eyes of the figure on the Turin Shroud. First spotted in 1931, these have subsequently been identified as a ‘Julia’ lepton, a bronze coin named in honour of the mother of the Roman emperor Tiberius, minted in AD 29, positioned on the left eye. A two lepton bronze coin, minted at about the same time, appears to have been placed on the right eye. If these coin identifications are correct, they strengthen the argument that the shroud dates back to the 1st century AD.

In November 2009, Barbara Frale, a researcher in the Vatican Secret Archives, also claimed that computer analysis of photographs of the shroud had allowed her to decipher the faint writing of an inscription imprinted on the cloth. First spotted by STURP researchers in 1978, the writing appears to come from a death certificate attached to the body. According to Dr Frale it comprises a variety of Hebrew, Greek, and Latin characters, with a text that she has deciphered as, ‘In the year 16 of the emperor Tiberius, Jesus the Nazarene, taken down in the early evening after having been condemned to death by a Roman judge because he was found guilty by Hebrew authority, is hereby sent for burial with the obligation of being consigned to his family only after one full year’. However, Dr Frale’s research has drawn sharp criticism from sceptics such as the historian Antonio Lombatti, who has noted: ‘People work on grainy photos and think they see things. It’s all the result of imagination and computer software.’ Similar doubts have been raised about the identification of the coins placed on the eyes.

In addition to the faint image of the man, the shroud contains blood-like stains. Those around the top of the head correspond to the biblical description of the crown of thorns. Other red marks on the torso are claimed to reflect the beating that Christ received from Roman soldiers carrying the iron-tipped whip, the flagrum.

However, the wounds that are perhaps the most evocative are those appearing to mark out the man on the shroud as the victim of crucifixion. Both feet have large, circular holes through the ankles, consistent with wounds being made by a single round nail being driven into the bone. A large puncture mark through the left wrist (the right wrist is hidden below the left) is also visible on the shroud. Interestingly, rather than being pierced through the palms of the hands, or the flat of the feet, as most medieval artists envisioned Christ when nailed to the cross, scholars today consider it far more likely that nails used in ancient crucifixion would have been driven through the wrists and ankles. This is witnessed archaeologically by the skeleton of a crucified man dating to the 1st century, found in 1968 at Givat Ha-Mitzar, Jerusalem. Nails through the ankles and wrists would certainly have attached the body more securely to the cross behind. However, ancient writers refer to various methods of Roman crucifixion, so the method depicted on the shroud need not be seen as conclusive proof of its authenticity.

The reddish-brown stains on the Turin Shroud have also proved difficult to analyse effectively. Some scholars have identified these marks as iron oxide that may be the result of the application of medieval paint. However, other research carried out by members of STURP identified the red stains as blood, and Prof Alan Adler from Western Connecticut State University, one of the leading researchers of the team, reached the conclusion that it was type AB. If correct, this would indicate that the blood was probably of medieval date, since type AB is believed to have originated during the early Middle Ages. However, such analysis has been strongly contested, and attempts to extract DNA have proved fruitless.

The research of Prof Adler did, however, lead him to conclude: ‘It is evident that the production of the blood marks and the formation of the image were two different events’ (The Orphaned Manuscript, 2002, p. 65). If correct, his would suggest the shroud is a carefully constructed fake that went through at least two stages of preparation, beginning with imprinting of the image of the man on the linen cloth, followed by the later addition of the reddish marks – either paint or more likely blood – being applied to selected areas of the shroud.

Researchers have also discovered minute traces of dirt and pollen adhering to the shroud. The particles of rock were identified as travertine aragonite, a type of limestone common to Jerusalem. Pollen grains taken from the shroud were also tested by Swiss botanist and criminologist Dr Max Frei, who, in 1982, concluded that ‘Plants on the Shroud from Palestine and Anatolia are so numerous compared to the species from Europe, that… the predominance of these pollen must be the result of the Shroud’s stay in such countries.’ It would therefore appear that the Turin Shroud was probably created in Near East before being transported to France and subsequently to northern Italy.

For those who believe the Turin Shroud is the image of Christ as it appeared soon after his death on the cross, explanation of the shroud is straightforward. However, the long tracts of time and space that separate Jerusalem of the 1st century from south-eastern France 15 centuries later, inspire a great deal of scepticism that this could be the same shroud as is mentioned in the Gospels. The radio carbon dates also increase suspicion that the shroud is a fake. Nonetheless, if the cloth is a medieval forgery, the time and effort expended in creating a relic so convincing and elaborate that it still raises questions for modern scientists, is an incredible feat.

Whether a believer or a sceptic in the divine origin of the shroud, perhaps the real power of the figure on the cloth should be to act as an inspiration to all humanity. This was stressed by Pope John Paul II in 1998: ‘The imprint left by the tortured body of the crucified one, which attests to the tremendous human capacity for causing pain and death to one’s fellow man, stands as an icon of the suffering of the innocent in every age.’
For the last half-century, Barry Cunliffe has been one of the most prominent and well respected scholars working in archaeology. In 1966, aged 27, he became an extremely young professor at Southampton University, and in 1972 Professor of European Archaeology at the University of Oxford, a position he held until his retirement in 2007. The leading authority on the Celtic communities of north-west Europe, Prof Cunliffe has led numerous high profile excavations across Britain and Western Europe, and has published many highly acclaimed books. In 2006 he received a knighthood for his services to archaeology.

Prof Cunliffe's interest in archaeology began at an early age, when he visited his uncle's farm in Somerset. 'It was wonderful getting out of post-war, bomb-torn Portsmouth, with great piles of rubble everywhere, and going off to the countryside. I remember getting bored once, and my uncle saying to me, "Why don’t you go and see what you can find in the field with the Roman villa?" And that’s when it started. It was a very well known site – the Pitney Roman Villa – and, kicking over mole-hills, I came across small pieces of pottery, loose tiles, bits of tesserae, things like that, just lying around the field.

I was also fortunate in that I went to a grammar school in Portsmouth where there was a master involved in local archaeology, who ran a very small excavation on a Romano-British site in the chalk downs to the north of Portsmouth. I used to go there on a Saturday afternoon to dig, and things developed from that.

'The sea is very important to me and I really don’t like being away from it for very long. Where I grew up, on the northern side of Portsmouth, I had a two-minute walk into a local park from where I could look across at the great Saxon Shore Fort of Portchester Castle (Fig 3). I remember as a boy taking a local bus to go and see the Roman walls and medieval keep. The fort was also the first site for which I wrote a research design and gained permission to excavate. Ever since, I’ve always had what I’ve regarded as a July excavation by the seaside. When work at Portchester ended, I moved to Hengisbury Head [on the Dorset coast] and excavated that site for a number of years (Fig 4). Then I did some work at Mount Batten in Plymouth before moving to the Channel Islands, and then to Le Yaudet in Brittany, which is one of these wonderful coastal sites with a port that has controlled access between the land and the sea throughout human history. I’m presently carrying out fieldwork on Sark, and looking at how the island, like the others in the Channel, was part of the trade routes that ran along the west coast of Europe.'

The connectivity of the peoples and societies lying along the Atlantic seaways and on either side of the English Channel is referred to in classical sources. Prof Cunliffe therefore notes: ‘In the same way as Henry V of England claimed ascendency over parts of France, during the late Iron Age great kings on one coast of the Channel may have had at least notional ascendency over areas on the opposite side. Julius Caesar therefore writes of kings like Divitiacus of northern Gaul as having dominion over part of Britain.’ However, Prof Cunliffe shies away from the perception of waves of foreign invaders initiating social change. ‘I don’t know how one clearly distinguishes between migration and invasion. There are a thousand other ways in which change and parallel development take place. Britain and the Continent have been interconnected throughout time, which is why the communities on each side of the Channel share various cultural traits.

'I’m interested in the nature of connectivity – what brings people together, what makes them interact: is it trade and exchange, or is it social obligations; is it warfare, or is it the redistribution of rare commodities? What is it that creates connectivity? That’s what I tried to develop in Facing the Ocean (Oxford University Press, 2001) and what also proved very important in my recent book Europe Between the Oceans (Yale University Press, 2008. See review in Minerva July/August 2010.

Fig 1. Prof Barry Cunliffe.

Fig 2. Detail of the dolphin mosaic from Fishbourne Palace, West Sussex. The palace was probably built soon after the Roman conquest of Britain in AD 43.

Fig 3. Walls of the Saxon Shore fort of Portchester Castle. Probably built in the late 3rd century AD, the fort protected the south coast of Britain from Saxon raiders.

Fig 4. Mount Batten, Devon.
Prof Cunliffe’s ideas of connectivity and long-distance trade are most easily seen at coastal sites such as Hengisbury Head, which he identified as the primary port-of-trade for cross-Channel merchants and traders in the years before the Caesarian invasions of Britain in 55 and 54 BC. However, connections between the cultures of the Mediterranean and those of Celtic ‘barbarian’ Europe are also obvious at other famous sites Prof Cunliffe has investigated. At the palace of Fishbourne in West Sussex, excavated by Prof Cunliffe in the early 1960s, the large structure is clearly modelled on Roman buildings and closely imitates the Domus Flavia constructed by Domitian on the Palatine Hill in Rome. Fishbourne Palace, which was possibly built by Togidubnus, king of the Regni, shows how cultural influences were quickly adopted and absorbed into Celtic society (Fig 2). Prof Cunliffe’s excavations at Bath also emphasise the way in which Roman culture was married to that of the native Britons with the great temple of Sulis-Minerva, named in joint honour of the native goddess and the Roman deity with whom she was most closely equated (Fig 5). As Prof Cunliffe has noted: ‘Bath is a very good case of something that grows as a result of two influences coming together at one place. The physically dominant one is the Roman building, but the belief system that lies behind the structure is much older and grows from the place and the way people revered the location throughout many centuries before the Romans ever came.’

Beginning in 1969, and lasting 37 years, Prof Cunliffe’s longest-running archaeological project was focused on the hill-fort of Danebury in Hampshire. ‘We dug about 50 percent of the interior and around the ramparts during the 20-year project on the hill-fort (Fig 6). We then went on to look at Iron Age sites in the neighbourhood, and after that at Roman sites in the surrounding landscape because I was interested in trying to understand the changes that occurred through time.’

Prof Cunliffe’s investigations at Danebury provided a far deeper understanding of how such sites were used. ‘Apart from Maiden Castle, very few hill-forts had been dug on any scale, so we just didn’t know what was in them. There was still a debate about whether hill-forts were only occupied during times of stress and warfare. However, Danebury clearly proved that some hill-forts became places of residence for long durations.’

Despite the vast changes that have swept over the populations of Atlantic Europe in the last two millennia, Prof Cunliffe nevertheless feels there is a strong continuity among the Celtic communities and cultures that still survive on the western extremities of Europe. ‘I see a very strong thread leading back into antiquity and the prehistoric past. My own view has changed from 1997 when I wrote The Celts (Oxford University Press), and I still had a traditional view of the Celtic people originating in Central Europe and then spreading out. But while I was writing Facing the Ocean, I completely changed my views and I think we can now make a very strong case for the Celtic language being an Atlantic language. John Koch, a philologist at Aberystwyth University, has recently carried out a major piece of research suggesting that the Celtic languages evolved on the Atlantic coasts. John looked at all the Tartessian and Lusitanian inscriptions [from modern Spain], and there’s no doubt that the language they spoke was Celtic, even though the script used was Phoenician. So quite an advanced form of Celtic was being spoken on the Atlantic coasts of Iberia from at least the 8th century BC.

‘I think one can say to the Cornish, to the Irish, to the Welsh, the Bretons, the Galicians,'
the Luisitians: the language that you speak now, or which your ancestors spoke, is a mark of your deep-seatedness in the landscape you occupy. You are the living versions of a people who go back into the deep prehistoric past. Recent DNA research also seems to support this conclusion."

Prof Cunliffe also feels that some of the myths and legends preserved in the folktales of Wales, and especially those of Ireland, also contain threads that stretch back to Iron Age society. 'Th'ey are old stories that have been constantly adapted and changed, and by the time they were eventually written down, it's difficult to know how much of the tale started with the Celtic communities. Like any oral tradition, every time it's told it takes a slightly different form. But I do believe that there are ancient stories embedded in them – especially in the Irish tales. What I have suggested quite tentatively – and it's not too popular among my Irish colleagues – is that the earliest part of the traditions in myths such as the Táin Bó Cúailnge, are Iron Age, pan-European stories that don't relate just to the Irish but to folk heroes whose deeds were recounted and celebrated all over Europe (Fig 8). Celtic communities across the Continent had their own version of the story; the only piece which happens to survive is that from Ireland. Th'at would certainly explain why, for example, despite being prominent in the Irish myths, there's no archaeological evidence for chariots in Ireland during the Iron Age, whereas they're found elsewhere across Europe.'

Prof Cunliffe is a prolific writer of archaeological books and articles, both detailed excavations reports and more accessible books aimed at a wider readership. Since retiring as Professor of European Archaeology at Oxford in 2007, he has gained more time to focus on excavations and writing. 'It takes a long time to simply read through all the paperwork that the university generates, and you've got to go to every single meeting. I remember Mortimer Wheeler saying to me once, 'Never ever be absent from a meeting where your own interests might be discussed!' and he was dead right. So I've been able to give up all that. I've also finished undergraduate teaching now, although I still see a few postgraduates from time to time, and examine doctorate theses.'

In addition to excavating, writing, and teaching commitments, Prof Cunliffe has recently held prominent posts as a Trustee of the British Museum, and a Commissioner and interim Chairman with English Heritage. He also chairs the English Heritage Advisory Committee, which has amongst its important cases the Stonehenge project, which aims to drastically improve the setting within which the great monument can be seen and appreciated by visitors (Fig 7). 'Th' e primary problem has been the busy A344 trunk road, which runs very close to the monument, and there are ongoing legal issues concerning the closure of the road. As Prof Cunliffe noted, 'If these orders go through then the A344 won't be a public through road, and it will be down-graded as much as it is possible, in terms of taking away the fencing, possibly even removing the surface, generally restoring the landscape near the stones. Stonehenge itself should be in an oasis of green. Th' e aim is to try and remove the intrusion on the landscape, which also means getting rid of the car park and the visitor centre. Legal issues aside, that still looks set for completion before the London Olympics in 2012.'

Prof Cunliffe has featured in numerous television and radio programmes, but he takes a rather pessimistic view of the portrayal of archaeology in mass media over recent years. 'Television archaeology has become a pantomime, whereas it used to be serious plays. It's not about rushing all over the place and waving your arms about while running across a field. For me, archaeology is about approaching and defining a problem, and gradually chipping away to learn more and trying to find the answer. Back in the 1970s and 80s, when we did programmes on the excavations at Bath, or Danebury, and on Pompeii, we were able to develop a theme.'

Prof Cunliffe is, however, ready to concede that even populist depictions of archaeology have produced some very worthwhile results: 'When I was carrying out surveys in the area around Danebury hill-fort there was an archaeological site that I really wanted to examine, but I was told that I'd never get chance to look at it because the farmer won't let anyone on his land. However, I phoned him up and explained that he had an interesting site on his land and that my team would like to do a magnetometer survey in the field. As I started to explain what that involved he stopped me and said he'd seen one of those being carried out on television, and that he'd no problem with us doing the survey. He was someone who had already been "softened up" by television archaeology and who would probably just have turned me down flat if he had never seen such programmes. Even populist archaeology programmes have therefore helped raise the profile of the discipline and spread awareness among the public. Th' e sadness is that they could do so much better.'


Fig 6. The ramparts guarding the gateway to Danebury hill-fort in Hampshire, southern England. Constructed in the mid 6th century BC, the five-hectare site acted as the political, economic, and religious centre for the region until it was abandoned in about 100 BC.

Fig 7. The sarsen stones of Stonehenge on Salisbury Plain, Wiltshire. The monument was begun in c. 3100 BC and went through several phases of development until c. 1600 BC.

Fig 8. The silver Gundestrup cauldron, probably made in the 1st century BC. Decoration such as neck torcs worn by some of the figures are obviously Celtic, while the iconography has also been linked to myths preserved in the Irish Táin. H. 42cm, Diam. 69cm. National Museum of Denmark, Copenhagen.
At the end 2007 an archaeological team from Zagreb City Museum, at the initiative of the Municipal Heritage Protection Department, began excavations alongside the southern elevation of the church in Remete, 5km from the centre of the Croatian capital of Zagreb (Fig 1). The excavations discovered foundations of two older churches on the site, together with 282 graves, and would raise a number of questions about this well known foundation, which honours the Virgin Mary.

Remete is located in the valley of Kratki dol, in the southern foothills of Medvednica, and was chosen by the Pauline Order (often referred to as the White Friars) as the site for the third monastery they would build in late medieval Slavonia. It is a landscape well suited to the Paulines’ contemplative traits of dedication to prayer, penance, and renunciation. Their work was also marked by the promotion of culture and art, the building of many monasteries and churches, and an educational mission, which resulted in the foundation of the first college in Croatia at Lepoglava in 1503. The name ‘Remete’ itself derives from the hermits (eremitae) who established the monastery at the site.

A Church devoted to the Blessed Virgin Mary has stood on the site from the beginning of the 14th century, when written sources refer to the Croatian-Hungarian Angevin king, Charles I (1301, 1309-1342) providing assistance to the Remete Pauline Order in the construction of the church. Textual evidence concerning the Paulines in Remete also states that, at the time of Provincial Benedict (1270-1290), Abbott Isquirinus established a monastery with a wooden church. According to these sources, financial support from the local nobility allowed the monastery to develop rapidly, and as early as 1390 it had been elevated to the level of vicariate, to which the monasteries in Streza, Šenkova, Lepoglava, and Kamenski were subordinate. During the 14th to 16th centuries, the monastery was damaged several times during Ottoman invasions (in 1484, 1557 and 1591). The monastic complex was also given a Baroque makeover at some point between 1667 and 1687, while, at the same time, the Chapel of the Miraculous Mother of God of Remete was built on the southern side of the monastery. Works on the renovation and expansion of the church westwards were undertaken between 1721 and 1747, during which the interior was adorned with frescos by the celebrated Baroque painter Ivan Ranger. When the order was dissolved in 1786, the bishops of Zagreb also made considerable changes to the monastic complex. The current appearance of the church is the result of repair works carried out following the disastrous earthquake of 1880, from plans drawn by Herman Bollé, one of Croatia’s most important architects of the second half of the 19th century. The complex, which since 1960 has belonged to the
Barefoot (Discalced) Carmelite Order, acquired its final form in the restoration works completed in the 1990s.

Archaeological research carried out along the southern façade of the church from 2007 to 2009 was to force a reconsideration of the dating of the church that currently stands on the site (Fig 2). Furthermore, the remains of what were clearly older architectural features were found during the excavations, and these proved that the site had previously been occupied by two earlier churches.

The remains from the foundations of these earlier churches indicate that both structures had been seriously damaged by strong geotectonic disturbances in the upper layers of the soil. The excavated wall foundations have tensile fractures running through them, as well as large cracks up to 150cm wide. The foundations of both early churches were broken in the south and east (Figs 3, 4), and there was subsidence along the eastern side of the churches. The original location of the foundations had been displaced by an active landslip that had been moving slowly across the site for many centuries, while extensive building repair work carried out at the site has further confused the archaeological picture. It was only after imaging with a 3D scanner that it became possible to define two distinct construction phases of the late medieval monastic church. Digital technology also made it possible to restore the dislocated parts of the foundations to their (hypothesised) original locations and reconstruct a ground plan of the two building phases (Figs 5, 6).

According to the reconstruction arising from the 3D model, the oldest
monastic church on the site featured architectural traits common to the Order of St Paul the Hermit: it was constructed with an emphatically longitudinal aspect measuring 30.4 x 10.8m, while the rectangular nave (13.75 x 80m) was almost as long as the apse with its semi-circular ending (13.8 x 61m). The church was reinforced with solid rectangular buttresses linked to the foundations (Fig 7). In spite of the numerous tensile cracks, the southern foundation of the nave did not undergo any major tectonic shifts, but was partially damaged by later building work, although the rear foundation of the apse did suffer considerable displacement. Along with the damage created by the construction of the second church, it is clear that the destruction of the wall was caused by the shifting of the foundations as a result of the steady movement of the landslip.

The northern wall of the nave and almost the entire western elevation of the church were destroyed in the 17th century during the construction of the Baroque chapel of the Miraculous Mother of God of Remete. Although the construction of the buttresses indicates that the church was vaulted, these were probably built primarily to stabilise the structure on the slope on which it was built.

Croatian churches of the late Middle Ages tended to be built in a short space of time, and it is therefore possible that the foundations and walls of the oldest church began to crack even during the construction phases. The builders of the second church increased the depth and thickness of the foundations and positioned them alongside those of the previous building in an effort to provide additional stability. However, not even these mighty foundations were able to resist the impetus of the shifting ground, and in a relatively short time the new church had cracks running through its foundations.

Thanks to the 3D model, it was possible to produce an ideal reconstruction of the second of the monastic churches found on the site (Fig 6). The model indicated that a similar floorplan to that used for the building was retained, so the church was also long and narrow (34.4 x 14.35m), with a rectangular nave (14.8 x 8.6m) and an equally long, narrower apse finished off with a polygon (13.75 x 7m). This second medieval church was also damaged by geotectonic disturbances, and, although its northern foundations remained almost entirely in their original location, the southern foundations of the nave and the apse shifted eastwards by almost 1.5m and suffered considerable subsidence.

The third (current) church built on the site achieved structural stability only by shifting its position slightly to the north, which moved the foundations away from the main flow of the landslip. It was built on part of the massive northern foundation of the second church, which may have further strengthened its structure.

The key problem during the research was the dating of each of the three building phases, which included that of the existing church. The absolute limit for the construction of the first church on the site was obtained by analysis of the skeletal remains buried in the churchyard, and which correspond to the same stratigraphic layers into which the foundations of the earliest church were dug. The oldest graves date to the turn of the 13th and 14th centuries, so the construction of the earliest church could not have started prior to this period.

The construction date of the third church, which still stands on the site, is much harder to determine. It is clear that the polygonal apse is older than the nave, but because of building modifications carried between 1721 and 1747, and repair works undertaken after an earthquake which damaged the building in 1880, it is difficult to determine which parts of the church are the original Gothic construction. Clues to the date of the building of this third and final church are, however, provided in Catalogus virorum illustrantium et Virgini Matri devorum, qui in ecclesia Remetensis requiescant, written by an anonymous author in 1665.
The writer listed the worthies who had been buried in the church, mentioning the grave of Lovro Stoch of Susedgrad (1400) as the oldest burial. The text suggests that the unknown author was listing the graves that could still be seen in the church. Accordingly, today’s church must have been constructed by, at latest, 1400. All three churches were therefore constructed between c. 1300 and 1400.

Such a relatively short time span for the construction of three large churches is the result of the Pauline Order selecting the unfortunate location on top of an active landslip for the site of its monastic complex. The cracks in the foundations of the first two churches emphasise the speed and strength of the tensile stresses operating on the walls of the buildings.

It has therefore been concluded by the archaeologists that the first church built on the site was never actually used because of the effect of geotectonic disturbances on the structure during the building operations. The second attempt to build the church was certainly more successful and the archaeologists identified repairs to the foundation wall that must have been made while the church was in use. Furthermore, the builders of the second church had also clearly learnt of the geotectonic disturbances that had destroyed the older church, and therefore built very strong foundations in an attempt to provide additional support to the structure (Figs 5, 6). The fact that the first two churches built on the site were discovered at the foundation level, with no record of a demolition layer, also indicates that the building material of the first two churches was reused during construction of the third church.

Archaeological work on the eastern part of the southern plateau alongside the current church also revealed a buried structure that was oval in shape and preserved only at the level of the foundations (Fig 7). Interpretation of this structure is probably explained by the Zagreb historian Janko Barlé, who noted in his work Remete, published in 1914: ‘The whole monastery with church and monastery garden was girt with a wall. It is said that the monastery was connected with Zagreb by an underground passage. This is not true, of course, but it is possible that the Paulines did have some underground secret passage to the mountain, in which they were able in time of need to store their valuables.’ This is suggested by the steep northern entry into the structure and the southern exit, which was probably on the slope. Although there is still debate about when it was constructed, it probably dates to the years immediately following the first Ottoman attack on the monastic complex in 1484. Chroniclers of the Pauline Order refer to the Croatian-Hungarian king Matthew Corvin (r. 1458-1490) financing construction of walls and a tower to help protect the monastery.

During the excavations, 282 skeletal remains were also found. These mostly dated from the late 16th to the end of the 18th century (Fig 9), but eight appear to have been dug at the turn of the 13th and 14th century. The deceased were placed on their backs, often in wooden coffins (which can be concluded from the finds of wood remains and iron nails), with their hands placed on their pelvis or chest. While the oldest graves contained no artefacts beyond skeletal remains, later burials contained crosses, rosaries, buttons and belt buckles. The most numerous items found with later burials were medals, either depicting saints, such as St Benedict with the Virgin, or from pilgrimage sites in Marizell, Passau, Marija Bistrica, Altötting, Dorgon, Wies, Częstochowa, Loreto, Marianka, and Rome (Fig 8).

Among the later medieval finds, a hoard of ten gold coins minted in the 13th century stands out (Fig 10). Four of these were struck during the reign of King Sigismund/Zygmunt, and are dated to the period between 1428 and 1436. A gold coin of King Władysław Jagiełło I was struck in Hermannstadt (modern Sibiu) in 1441. The five remaining specimens were minted in the reign of Matthew Corvin and were found in excellent condition, as if they had hardly been in circulation. They are perhaps connected with the construction of the tower and wall around the monastery from 1485, funds for which were provided by Corvin.

All these finds testify to the remarkable persistence of the Pauline Order in building on the site at Remete, despite the tribulations they faced, up until the dissolution of their order in 1786. Zagreb City Museum, the Heritage Conservation Department, and other national and municipal institutions of Croatia and Zagreb are now faced with the challenging task of presenting the archaeological finds in such a way that the heritage of the site will be made accessible to the general public. Throughout the centuries the church in Remete has occupied an important place in the spiritual and religious life of the population of the wider Zagreb area, a role it continues to fulfil through to the present.
Blue Guide Crete
Paolo Pugsley
Somerset Books, 2010, 432pp
Paperback, £14.95

Crete is acknowledged as an archaeological and historical treasure trove that a substantial task awaits any author who attempts to provide a synthesis of it. The Blue Guides have set an admirable benchmark in this sense and the recently published eighth edition, authored by Paolo Pugsley, enhances a solid reputation established by Pat Cameron in the previous four editions.

For many readers, a key ingredient in any publication that covers such a large period of history across the largest of the Greek islands, a concise yet accurately detailed overview of a subject is desirable, and this is especially true of the latest edition. The opening section (pp. 7-25) provides a useful chronological history of the island, from the aceramic farmers of the Neolithic period (7000-3400 BC), through the fascinating palace civilisations of the Bronze Age (3400-970 BC); the revealing burial practices of the Iron Age (970-630 BC); and the mature civilisation that followed in the Archaic, Classical, and Hellenistic periods (630-67 BC); and later, the Roman and Byzantine periods (67 BC–AD 824). The Venetian period takes the reader past the chronological scope of Minerva (1204-1669) into the Ottoman period (1669-1898) and beyond.

Above all else, Crete is associated with the Minoan civilisation of the Bronze Age, and this guide presents predictably excellent sections on this fascinating period. A concise explanation of the nuanced subdivisions of the Cretan Bronze Age and how this developed is less taxing than is often the case (p. 9), and this is echoed by a clear chronological chart on the inside back cover. Apart from the lucid archaeological and historical information provided – in what is often a thorny period to navigate – as one might expect, the best sections relate to the palaces and these are augmented by a series of marvelous plans, with clearly numbered rooms and areas. The reader is able to gain a relatively rapid spatial insight into several of the most celebrated sites: Gournia (p. 214) and Zakros (pp. 255) in Lasithi Province (p. 214); and Knossos (pp. 68-70), Malia (p. 122), and Phaistos (pp. 150-1) in Herakleion Province.

Without doubt the most enigmatic ‘artefact’ associated with Minoan civilisation – the Phaistos Disc – is analysed in an excellent focus panel (p. 152). This relates to the history of its discovery and the controversy surrounding its authenticity and the interpretation of its 241 signs. These have prompted theories ranging from an astrological or astronomical calendar, portal to space, a hymn, or sacred text – just a few of many proposals put forward that range from the Daniken-esque to more plausible insights. This small section provides corroborating information about up to date this edition is, since it takes into account papers that were presented at the Minerva sponsored International Phaistos Disk Conference at the Society of Antiquities in 2008. This may well have been informed by the diligent note pad of Annabel Barber, Blue Guide author, editor, and proprietor, who attended this conference.

Less familiar periods and places on Crete are treated in an equally impressive manner. For instance, the artefacts from the Graeco-Roman periods in the Archaeological Museum in Chania – not surprisingly overshadowed by its namesake in Herakleion – are summarised by a brief but interesting overview which features a good colour photograph of a Roman mosaic of Dionysus and Ariadne (3rd century AD) and will even provide an excellent complement for the more seasoned academic.

Dr Mark Merrony

The Hoxne Late Roman Treasure. Gold Jewellery and Silver Plate
Catherine Johns
British Museum Press, 2010
440 colour and 13 b/w illus
Hardback, £60

When Eric Lawes found the Hoxne Roman treasure hoard in November 1992 it created a sensation with the media, who (always knowing best) immediately valued it at £10 million. The final figure was £1.75 million. Once the hoard had been declared Treasure Trove in September 1993, then the really detailed work of conservation and study could begin – that was just the tip of the iceberg. The coins, some 15,000, were relatively straightforward and details of them were published by Professor Peter Guest in 2005, but the rest of the hoard, the 29 superb pieces of gold jewellery, a dozen silver vessels, almost 100 silver spoons and some 40 additional objects, called for far more in-depth study and collaboration between scholars expert in various fields. The study and cataloguing of all these items has now been accomplished in an exemplary manner by Dr Catherine Johns, with contributions from nine other specialists; there were many more colleagues and friends also involved whom she acknowledges.

Fortunately the manner of recovery of the hoard (see this issue, pp. 30-33) enabled far more information to be gleaned from it, as Mr Lawes had acted in a responsible way that enabled a professional excavation to take place and the hoard lifted and excavated under laboratory conditions. This revealed an enormous amount of additional information that would have otherwise been lost, and which here adds considerably to our knowledge as revealed in the catalogue of objects published here.

The book consists of 11 major sections on the hoard’s contents, plus the background to the discovery and recovery of the hoard, and a summary of the coins by Professor Peter Guest.
in an overall view from his 2005 publication. Dr Johns's 'Summaries and speculations' makes very interesting reading as she draws a broad yet intriguing picture of the many aspects and questions that the hoard and its contents still raise.

What we have here is an incredibly detailed publication of the contents of the hoard, full of information that has influences and repercussions on many aspects of the Late Roman Empire. In answering questions, it also raises many others, not least amongst which is that of ownership. The inscriptions present on the spoons (which incidentally indicate a right-handed use) give personal names, especially that of Aurelius Ursicinus occurring on a set of ten silver spoons; Peregrinus (six spoons, one of which was incorrectly started as a left-handed spoon by the engraver, and corrected), and Silvicola – none of whom are known from the extensive lists available of personalities and officials of the period.

The technical expertise represented in several of the items, particularly the loop-in-loop construction of the body chain (a splendid piece of jewellery that could only have been worn by a girl or woman of slender proportions), and that of the pierced-work gold Juliane bracelet are unparalleled. Also, most unusual, are the four pepper pots, best exemplified by the 'empress' pot, and it must be remembered that pepper in the early 9th century AD (the date of the hoard's burial) was an extremely expensive commodity.

The whole hoard speaks of the huge wealth and status of the owners, but who they were (apart from the names on the silverware), and where they came from (since there are apparently no major buildings in the area) remains a mystery. It is only through such long and painstaking study leading to this exemplary publication that new light can be thrown on not only the Late Roman world in Britain but also in the Western Empire at a time of internal stress and conflict.

All the pieces are illustrated in many overall and different angles and details, clarified in many instances by the superb drawings of Stephen Crummy and Philip Dean. Dr Johns is a noted international expert on Roman jewellery and has published extensively on the subject and on other hoards, but here, with the Hoxne hoard, there can be no finer evidence of her expertise. The publication is not only a milestone in the archaeology of Roman Britain but will be used and referred to by all other scholars in this field. The only complaint this reviewer would raise is that, despite the extensive illustrations of the hoard that are without fault, space (or cost) was not found to include even a fourpage section with a selection of colour illustrations of some of the more outstanding items.

Peter A. Clayton

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