**Victorian tomb-raiders**
British archaeologists in 19th-century Turkey

**Eros in Athens**
The god of love at the Museum of Cycladic Art

**Faking it**
The V&A highlights famous forgeries

**Autumn sales review**
Key artworks sold in London, New York and Basel

**Exhibiting the dead**
Early medieval burial brought to life

**Irish chamber tombs**
Winter solstice at Newgrange
08 Forging into the past
The V&As exhibition of fake art and forgeries

10 The coming of the light
Experiencing the winter solstice at Newgrange

14 Into the afterlife
The restored artwork of the tomb-chapel of Nebamun

18 Tracing the art of Akrotiri
Were stencils used to create wall paintings?

22 Scientists or romantic adventurers?
Victorian traveller-archaeologists in Turkey

26 Lost and found
Painted marbles looted from a tomb of the 4th century BC

28 Treasure island
A look at the artefacts discovered in England and Wales during 2007

32 The earth-shaker
How seismic activity shaped ancient myth and history

34 The Gallic ghost
An obscure emperor restored to history

38 Eros and eroticism in antiquity
It’s adults only at the Museum of Cycladic Art

42 Death becomes us
The legacy of the medieval dead

46 Within reach of the crescent moon
Connections between Britain and the medieval Muslim world

48 Antiquities sales report
The action from the auction houses
In theoretical archaeology, as in other social sciences, environmental determinism (the concept that the physical environment, rather than social conditions determines culture) is now broadly viewed as a crude theory that underestimated the role of human culture in shaping its own destiny as a result of biological, economic, sociological, or technological factors. The reality is that the proponents of each school of thought are all correct to some extent, and this is reflected in the eclectic range of articles in the current issue of Minerva. These demonstrate an interesting pattern: while humanists have justifiably abolished environmental determinism in its uncompromising form, it is curious to observe the interplay between culture and environment in each instance.

Perhaps the first aspect of this relationship should be viewed as cosmological: how Newgrange was configured to precisely interact with the winter solstice. Of course one cannot ignore nature and its often terrible manifestations – such as the disaster of the Haiti earthquake – and the devastating role of such phenomena on humanity through the course of history. This implicitly leads on to the metaphysical world of the afterlife – the response of humanity to its perceived mortality graphically portrayed in the Nebamun tomb paintings; morbidly expressed in medieval burials; and reinterpreted in the museology of the present. Art and treasure are also byproducts of this. Exquisite cultural treasure is sometimes ceded to the protective, rather than destructive, force of nature – as it was at Akrotiri – to be discovered generations later and enjoyed in situ, in museum showcases and in exhibitions staged for the international public. Such artworks are also occasionally mimicked by the forger’s hand in extraordinary stories of deception that provide an interesting perspective on the interplay between humanity and the environment. It is ironic that Pliny the Elder, victim of the Pompeii eruption, wrote: ‘Such is the audacity of man, that he hath learned to counterfeit Nature… and is so bold as to challenge her in her work.’

Dr Mark Merrony

Environment, archaeology and human interaction

At Minerva we strive to publish a broad range of articles that are of topical interest. With global environmental issues in the headlines on an almost daily basis, it is fascinating to examine both archaeological and historic records and observe how nature has affected society.
Many readers have contacted us with positive comments on the new look Minerva (January/February 2010). Here is a selection of your letters and emails.

I like the new layout and general design of the magazine very much. The new font is indeed easier to read, and the whole thing has become modern and smart. It had, I think, although this is no reflection on the quality of the articles, become fuddy-duddy looking and dense. **Diane Turner, Andros, Greece**

I do very much enjoy each issue of Minerva – there are some excellent articles with first class photographs... The new font chosen for the magazine does, indeed, give it a clearer view and more comfortable to read. You have retained the excellent article choice, with very good reproduction of colour. All in all, very well done! I look forward to enjoying the content of many future issues of Minerva to come in the months and years ahead. **Elizabeth Galley, Edinburgh**

I must admit I am still trying to get used to the new format, but I would certainly like to contribute again to Minerva. In the meantime, good luck and keep up the good work. **Chris Lightfoot, New York**

We welcome feedback from readers on the content and design of Minerva – your input will help us to continue to improve the magazine in the future. Please take a few minutes to complete the reader survey on page 55. The first 10 respondents will receive a complimentary copy of *Masterpieces of Classical Art in the British Museum*, by Dyfri Williams (2010, 360pp, 280 colour illustrations, worth £20).

If you would like to share your views on any of the articles in Minerva with the editorial team or other readers, please email editorial@minervamagazine.com. We reserve the right to edit and publish correspondence.

We welcome editorial submissions to Minerva, but cannot guarantee publication. The editor reserves the right to modify any submission and preference will be given to previously unpublished material. Manuscripts should be submitted as an email attachment in Microsoft Word format. Please do not send photographs as email attachments unless requested by the editor.

---

**FORUM**

**inthe news**

recent stories from the world of ancient art and archaeology

### New website for deciphering ancient texts

A new online archive of ancient inscriptions from the ancient Near East and Mediterranean aims to offer a scholarly resource through an online database of images. These written records, which are housed in an array of international museums and libraries, would otherwise be difficult for most people to access.

The site brings these artefacts together on a global network so that they can be viewed by scholars as well as the interested public. Texts displayed include the Dead Sea Scrolls, as well as cuneiform tablets from Mesopotamia and Canaan, papyri from Egypt, inscriptions carved on stones from Jordan, and many more.

The site offers access to high-resolution images of inscriptions, together with a magnification facility. It also provides a multitude of photographic forms, including the use of infrared lighting to capture and highlight otherwise unseen information. The catalogue also contains old and new images of the same artefact, allowing scholars to compare previous studies in order to delve deeper into the understanding of each text.

Participating academic institutes include the West Semitic Research Project at the University of Southern California and the Oriental Institute at Southern California University are joining forces in analysing one of the Middle East’s oldest continuously spoken and written languages. This study opens up access to new knowledge about Imperial Aramaic, the dialect used in international communications and record-keeping in many parts of the Assyria, Babylonian, and Persian empires. The online database allows communication with specialist epigraphers and philologists worldwide, combining multiple studies simultaneously.

**New website for deciphering ancient texts**

Obverse side of an Elamite text, written in nonalphabetic cuneiform script, at Persepolis, about 500 BC. The tablet is a part of the Persepolis Fortification Archive. On loan from the Iranian government to the Oriental Institute, University of Chicago.

The tablet is a part of the Persepolis Fortification Archive. On loan from the Iranian government to the Oriental Institute, University of Chicago.

The tablet is a part of the Persepolis Fortification Archive. On loan from the Iranian government to the Oriental Institute, University of Chicago.

To sign up, visit www.inscriptifact.com

To access the database there is a helpful set of instructions online. Simply download the form from the website to obtain a username and password.
INVADING ALIENS

It is becoming increasingly clear from recent studies carried out in the cold waters of the Baltic that marine invaders are slowly extending their range into the sea, causing huge financial damage as they go, and threatening the rich underwater archaeology and maritime heritage of the region.

The aliens colonising the shallow waters of the Baltic are a species of shipworm known as Teredo navalis, which burrow into wooden structures and eventually lead to their destruction. While in other seas and oceans of the world shipworm have always been a problem, until the early 1990s the Baltic had managed to remain free of the molluscs, save for occasional, short-lived invasions. The absence of the shipworm was probably due to the low salinity of the Baltic, which has a narrow entrance connecting it to the Atlantic and a large inflow of fresh water from the many rivers that drain into it. The cold temperature of the sea also helps inhibit the spread of shipworm, and it consequently contains some of the best preserved shipwrecks found anywhere in the world. The sea therefore offers underwater archaeologists an incredibly rich source of information about the maritime history of northern Europe, and it has been estimated that about 100,000 well preserved wrecks still lie on the sea-bed of the Baltic.

Marine biologists are still uncertain as to why shipworms are now being able to expand into the Baltic. While the Teredo may have gained entry into the sea when storms forced saltier water from the North Sea into the Baltic, it nevertheless seems likely that global warming has led to a slight increase in the sea temperature of the Baltic, providing the seaworms with the chance to move north and enjoy a longer breeding season. Studies have confirmed that shipworm has spread into the southern parts of the sea and is now found along the Baltic coasts of Denmark, Germany, and southern Sweden. If the marine molluscs can penetrate further north, then the damage to the underwater and coastal archaeology of the region will be catastrophic.

While Teredo navalis can grow to 50cm in length in tropical waters, in the southern Baltic they are limited to 30cm. Nevertheless, they burrow into all types of wood, creating tunnels sufficiently long to hold their entire body. Wooden ships or submerged coastal structures can be eaten away in a very short space of time: softwoods such as pine can be consumed within four months, while hardwoods such as oak are usually devoured within eight months.

In addition to threatening the archaeology of the region, the northward spread of shipworm would also prove economically disastrous for countries that face onto the sea. In San Francisco Bay alone, Teredo navalis causes approximately $200 million of damage every year, and in the 17 years since the shipworm was first detected in the southern Baltic, its destructive burrowing has caused about €50 million in damage. But the consequences of Teredo infestation can be even greater. In the early 18th century the destructive actions of shipworm on the wooden piling and sea-gates of the Dutch dyke system so weakened the sea defences that, during the great storm of 1731, the dykes gave way, resulting in extensive flooding and great loss of life.

Unfortunately there is no definitive way to protect wood from the actions of seaworms. Biocides can be applied to submerged timbers, but they merely slow the rate at which the molluscs devour the wood, and also pose a hazard to the environment. Permeable fabrics, known as geotextiles, can be wrapped around timbers and provide a reasonably effective barrier preventing shipworms' activity, and burying exposed wood beneath the sea-bed also helps safeguard it. However, this depends on archaeologists already being aware of the location of wreck-sites and other submerged timber structures. The preservation of the wrecks and other wooden artefacts littering the sea-floor of the Baltic therefore depends more on the natural barriers of low salinity and cold temperatures that have denied shipworm access to the sea in the past.

James Beresford

FITZWILLIAM MUSEUM REOPENS THE GREEK AND ROMAN GALLERY

Following a closure of 18 months to allow for major refurbishment and redesign, the Fitzwilliam Museum, Cambridge, finally opened the doors of its Greek and Roman Gallery on 30 January. During the closure, the museum has also initiated a programme of research and conservation of many of the artefacts (see Minerva, May/June 2009, pp. 27-30). Timothy Potts, Director of the museum, commented: ‘The Fitzwilliam’s collection of Greek and Roman antiquities is of international significance, so I am delighted that we now have a superbly redesigned space in which to display it to its full potential. This new presentation, which is based on recent research and conservation work, will offer many fresh insights, not only to new visitors, but also to those who are familiar with the collection.’ Scholars from the Faculty of Classics at Cambridge University have also assisted in the layout of the new gallery, which, although maintaining a chronological order, explores themes such as how the ancients related to their gods and the ways in which the dead were honoured.

Details of opening times and the various exhibits and other galleries can be found online: www.fitzmuseum.cam.ac.uk

Conservator Julie Dawson examines a piece of stone funerary sculpture that functioned as a grave marker, featuring a palmette (a fan-shaped ornamentation resembling palm leaves).
East Asians in the Roman Empire

Investigations of a Roman cemetery near Vagnari, southern Italy, have yielded information that provides new evidence for population movements 2000 years ago, as well as the ethnic diversity of the Empire when Rome was at the apogee of its imperial might.

The cemetery was first discovered in 2002 by Prof. Alistair Small, Edinburgh University, and from 2003 research at the site has been led by Prof. Tracy Prowse, McMaster University, with research funded by the Social Sciences and Humanities Research Council of Canada. The cemetery was part of a large imperial estate owned by the emperor. Many, if not all, of the 75 skeletons that have so far been excavated at the site were probably workers employed in agricultural and industrial activities carried out on the Vagnari estate. Fragments of roofing tiles found at the site stamped Gratia Caesaris – ‘Slave of the Emperor’ – also indicate that many of the workers buried in the cemetery were probably servile labourers.

Research undertaken by the Canadian team has focused on analysing stable oxygen isotopes found in the teeth of the excavated skeletons. As Prof. Prowse has noted: ‘Teeth retain the signal acquired during their formation (ie childhood), so this can provide some indication of place of birth.’ The isotopic evidence clearly indicates that while the majority of those buried at Vagnari were locally born, and appear to have spent their entire lives in the region, about 20 percent of those found in the cemetery were foreigners who had been born and spent their childhood in other regions ruled by Rome, or even originated from beyond the Empire’s borders. Grave goods laid alongside many of the bodies, date the cemetery to 1st-3rd century AD, a time when Rome’s wars of imperial expansion certainly led to the acquisition of large numbers of slaves from defeated enemies.

In addition to the oxygen isotope research, two other McMaster researchers, Dr Jodi Barta and Dr Tanya von Hunnis, also extracted mitochondrial DNA (mtDNA) from the teeth of some of the bodies in an attempt to discover the maternal ancestry of some of the cemetery’s occupants. It was this line of inquiry that yielded the most surprising of results when one of the skeletons, that dated to the 1st-2nd century, returned mtDNA results that placed him firmly into what scientists refer to as haplogroup D – a genetic group that is of East Asian origin. Unfortunately the scientific technique provides no clue to the skeleton’s paternal DNA. It is also unknown if the individual had travelled all the way from the Far East, or whether one of his maternal ancestors had made the journey. ‘How this particular individual ended up down in Vagnari is an intriguing story and that’s what makes this find very exciting’, said Dr Jodi Barta. Despite raising as many questions as answers, the research has provided new and exciting insights into the great genetic diversity of Graeco-Roman populations, something that has previously been undetectable in the archaeological record.

The genetic origins of the man also raise new questions concerning the links that existed between the Roman Empire and the civilizations of East Asia, especially that of the Han Chinese. Literary records suggest Graeco-Roman writers knew virtually nothing of the states and empires that lay on the far side of the Eurasian landmass. However, the scientific evidence from Vagnari indicates that even if direct diplomatic and economic relations between the Mediterranean world and East Asia were absent, there was nevertheless population movement from one region to the other. It may be the case that there was greater awareness of far-distant regions than is generally considered to be the case. It is to be hoped that future investigations of ancient DNA from elsewhere in the Graeco-Roman world will slowly provide a clearer picture of population movements 2000 years ago.

The results from the research carried out on the Vagnari skeletons is due to be published in the Journal of Roman Archaeology, and will also be presented at the Roman Archaeology Conference, to be held in Oxford between 25-28 March.

James Beresford

Archaeological excavations at the early imperial cemetery site of Vagnari, southern Italy. Courtesy Prof. Tracy Prowse, McMaster University, Hamilton, Ontario, Canada.

Anglo-Saxon Queen found in Germany

A research project carried out in the German Cathedral of Magdeburg during 2008 may have uncovered the final resting place of 10th century Queen Eadgyth, granddaughter of the Anglo-Saxon king, Alfred the Great. Queen Eadgyth was also sister to King Athelstan, his victories over the Vikings – most notably Olaf Guthfrithson, King of Dublin, at the Battle of Brunanburh in AD 937 – also gained him overlordship of Wales and Scotland.

In AD 929, at the age of 19, Eadgyth married Otto I, Duke of Saxony, and for 17 years she resided in Saxony until her death in 946 at the age of 36. Otto assumed the crown of what would later be known as the Holy Roman Empire 16 years after Eadgyth’s relatively early death, and her descendants would rule Germany until 1254, while others married into many of the royal families of medieval Europe.

On her death the queen was originally buried in the Monastery of Mauritius in Magdeburg. However, in the late Middle Ages statues of Eadgyth and Otto were placed in the city’s cathedral, and at the start of the 16th century a tomb was also added. Although it has always been considered a cenotaph, when the German research team removed the lid in 2008, they discovered a lead cist and, wrapped in white silk, the bones of an almost complete female skeleton with a predicted age of between 30 and 40. The cist bore the inscription: ‘The rescued remains of Queen Eadgyth are in this sarcophagus, which were placed here following the second repair of the monument in 1510.’

While the inscription and the age at death indicate that the remains are those of Queen Eadgyth, according to Professor Herald Meller of the Landesmuseum fur Vorgeschichte in Saxony-Anhalt, who led the German team which found the tomb: ‘We still are not completely certain that this is Eadgyth, although all the scientific evidence points to this. In the Middle Ages bones were moved around and this makes definitive identification difficult.’ Nonetheless, a research team from Bristol University is analysing the skeleton found at Magdeburg and will attempt to match isotopes that had been locked in the bones during infancy against those common to remains from Wessex and Mercia, where the queen probably spent her childhood.

Elena Taraskina
Aston University
VANDALISING AMERICA’S PREHISTORIC HERITAGE

According to the Arizona Bureau of Land Management (BLM), near the end of last year, a number of prehistoric features at Sears Point Archaeological Site, Yuma County, were found to have been badly vandalised.

Sears Point has a plethora of archaeological sites including rock alignments, cleared areas, and aboriginal foot trails. Most famous are the thousands of petroglyphs cut into the basalt cliffs and rock faces of the region. These are some of the most important Native American petroglyphs surviving from the prehistoric south-west, carved by peoples from the Desert Archaic, Patayan, and Hohokam cultures that inhabited the region from 10,000 BC through to the arrival of Europeans in the mid 16th century.

The importance of the Sears Point site, and the fragility of the archaeology that it contains, had led to the area being designated an Area of Critical Environmental Concern by the Arizona BLM. Despite this protected status, last year’s damage included rolled boulders and fractured petroglyphs. While the BLM does not normally offer rewards, this incident has led authorities to offer $1500 for information leading to the identification and prosecution of those responsible. According to Lori Cook, spokesperson for the Yuma office of the BLM: ‘This site is a very important part of our history and because of this vandalism, a part of history has vanished and we need to do all we can to protect it.”

PAKISTAN’S PAST IN PERIL

It is nine years since the Taliban in Afghanistan used artillery, dynamite, and anti-tank mines to blow apart the 6th century AD Bamiyan Buddha statues on the grounds that the statues were idolatrous and anti-Islamic. Despite being removed from power in Afghanistan at the end of 2001, the cultural destruction wrought by the Taliban operating in Pakistan continues unabated. Fighting between the Taliban and Pakistani army over the course of 2009 has placed the Buddhist archaeological heritage of the north-western provinces of the country at great risk.

Lying to the east of the Khyber pass, and on the trunk road linking northern Pakistan with Afghanistan, the city of Peshawar used to be a popular destination with foreign tourists eager to see the museum’s collection of Gandharan relics. However, a series of suicide bomb attacks in the city has crippled the tourist industry, and although the museum remains open, the heavily armed guards and anti-car bomb road blocks on the approach to the building give the impression of a fortress under threat of attack rather than home to archaeological artefacts.

Such has been the danger from increased Taliban activity in the Swat district of the North-West Frontier province of Pakistan over recent years, that archaeological research there has come to a halt. More than a dozen foreign research teams have pulled out of the region, and in 2008 the Swat Museum, in the town of Mingora, had its most important exhibits removed for safekeeping before being closed.

The remoteness and very dry environment of Yuma County has allowed the survival of thousands of prehistoric petroglyphs. Photos courtesy of Bureau of Land Management, Yuma

The government of Japan had spent 46 million yen on the museum during the 1990s to preserve the relics of the region’s Buddhist history, but a bomb attack at the end of the year damaged many of the remaining artefacts and left the museum in need of massive repair work.

This is not the first time that Taliban militants have focused their attacks on the monuments of Swat’s Buddhist past. In October 2007 it was reported in the Khyber News that a group of 40-50 militants had attacked the carving of the Buddha located near the village of Jehanabad. Measuring seven metres in height, and believed to have been created c. 200 BC, the relief was one of the most important ancient depictions of the Buddha in Pakistan. A resident of the village recounted: “They brought a power generator with them, drilled holes in its head, filled them with explosives and then set them off, badly damaging the upper portion of the carving.” The problem is especially acute in the Swat Valley where, in addition to Taliban attacks, local communities are also reported as regularly pillaging archaeological sites, either
While some of the petroglyphs were deliberately smashed or chiseled from the rocks, boulders carved with rock art were tipped over.

James Beresford, future of archaeology?

come, if sites are not preserved and protected, we lack funds. For weeks we don’t have the extra security precautions but they aren’t possible attack on this museum. We have taken up the warning about a possible attack on this museum.

The local administration has warned us about a serious crime which is punishable by up to a $100,000 fine and/or imprisonment for up to five years for each offense.

Irina Grechko, Emerson College, Boston

in the hope of finding treasure, or for stones and bricks that can be reused in their houses.

The city of Taxila, located just over 30km to the north-west of Islamabad, capital of Pakistan, is one of the country’s most important archaeological sites. Ruins of the ancient city date back to at least the 6th century BC, and 18 of the city’s sites appear on the UNESCO World Heritage List. Known as a centre of learning in antiquity, Taxila was captured by Alexander the Great in 326 BC, while Chandragupta, founder of the Maurya Empire, was said to have been a youthful resident in the city at the time of the Macedonian conquest. Despite Taxila’s important heritage and close proximity to Islamabad, staff at the museum are concerned by the upsurge in violence in north-west Pakistan in the last two years. Abdul Nasir Khan, Curator of Taxila Museum, was quoted in AFP last November as saying: ‘Even in Taxila we don’t feel safe. The local administration has warned us about a possible attack on this museum. We have taken some extra security precautions but they aren’t sufficient and we lack funds. For weeks we don’t get even a single foreign visitor. If visitors don’t come, if sites are not preserved and protected, if research stops, what do you think will be the future of archaeology?’

James Beresford

A tightening on Egypt’s antiquities laws

On 1 February, the Egyptian Parliament voted to make amendments to the laws concerning the illegal trade in antiquities, as well as patent rights governing reproductions of the country’s artistic treasures. There has been a stiffening of the penalties for those convicted of stealing artefacts, who will now face ten years in prison, while anyone found guilty of smuggling antiquities out of the country are looking at 15 years behind bars, in addition to a fine of 1 million Egyptian pounds (£116,700, $182,800). While Egyptians are allowed to retain antiquities that are family heirlooms, they must now be registered with the Supreme Council of Antiquities (SCA). Although the heirlooms can still be handed down as part of an inheritance, they cannot be sold, willfully destroyed or subjected to neglect. The new legislation also grants SCA the lucrative patent rights for artworks reproducing the country’s cultural icons.

Find of the earliest Ptolemaic temple dedicated to Bastet

On 1 February, the Egyptian Parliament voted to make amendments to the laws concerning the illegal trade in antiquities, as well as patent rights governing reproductions of the country’s artistic treasures. There has been a stiffening of the penalties for those convicted of stealing artefacts, who will now face ten years in prison, while anyone found guilty of smuggling antiquities out of the country are looking at 15 years behind bars, in addition to a fine of 1 million Egyptian pounds (£116,700, $182,800). While Egyptians are allowed to retain antiquities that are family heirlooms, they must now be registered with the Supreme Council of Antiquities (SCA). Although the heirlooms can still be handed down as part of an inheritance, they cannot be sold, willfully destroyed or subjected to neglect. The new legislation also grants SCA the lucrative patent rights for artworks reproducing the country’s cultural icons.

In mid-January the Supreme Council of Antiquities (SCA) announced that the remains of a temple dedicated to the goddess Bastet had been unearthed in Alexandria. The building dates to the reign of Ptolemy III Euergetes (246-222 BC) and is the earliest known Ptolemaic temple to be erected in honour of the cat goddess. Although stone was quarried from the temple in later antiquity, according to the SCA the buried remains of the building are still substantial and are thought to measure about 60m in height and 15m in width. Images of Bastet have also been uncovered in three separate areas of the site, while there have also been finds of a variety of other gods honoured with statues made from faience, bronze and terracotta. Dr Abdel Maqsoud, who discovered the temple, has also put forward the possibility that the building might stand in the long-sought royal quarter of Alexandria.

A piece of Alexandria’s history resurfaces

Near the end of last year, archaeologists from the Polish Centre of Mediterranean Archaeology of Warsaw University, working at Deir Al-Malah Monastery in Fayoum, discovered a clay vessel containing a hoard from the Abbasid period, consisting of 18 gold coins together with the fragments of a further 62 coins. Buried under the remains of a fallen wall that exhibited signs of charring, it is likely the hoard was lost when a fire swept through the building at some point in the 8th or early 9th century. An oil lamp and a chandelier, both made of bronze, were found close by and were probably lost at the same time.

Irina Grechko

Emerson College, Boston

in mid-January the Supreme Council of Antiquities (SCA) announced that the remains of a temple dedicated to the goddess bastet had been unearthed in Alexandria. The building dates to the reign of Ptolemy III Euergetes (246-222 BC) and is the earliest known Ptolemaic temple to be erected in honour of the cat goddess. Although stone was quarried from the temple in later antiquity, according to the SCA the buried remains of the building are still substantial and are thought to measure about 60m in height and 15m in width. Images of bastet have also been uncovered in three separate areas of the site, while there have also been finds of a variety of other gods honoured with statues made from faience, bronze and terracotta. Dr Abdel Maqsoud, who discovered the temple, has also put forward the possibility that the building might stand in the long-sought royal quarter of Alexandria.

A piece of Alexandria’s history resurfaces

In December last year a large pylon, standing 2.25m in height and weighing about nine tonnes, was lifted out of the waters of Alexandria’s eastern harbour. Constructed from a single piece of stone cut from the red granite quarries of Aswan in southern Egypt, the pylon had been discovered on the sea-floor of the sunken city in 1998. It probably once formed part of the Temple of Isis, which occupied a prominent location in the Ptolemaic city. It is the first time since 2002 that the Supreme Council of Antiquities has allowed any archaeological objects to be removed from the sea-bed. Once it has undergone cleaning and restoration, the pylon will be placed on display in the underwater museum that is planned for the city.
Forging
into the past

Richard Falkiner reviews the V&A's short-running exhibition of fake art and antiquities

London's Metropolitan Police recently curated a two-week exhibition, 'Fakes & Forgeries', which ran from 23 January at the Victoria and Albert (V&A) Museum in London. Rather than chasing long-dead criminals, the involvement of the police ensured the emphasis of the exhibition was on relatively recent cases – primarily spanning the last two decades – which had initially been investigated with the aim of obtaining criminal convictions. For the same reason, the exhibition was related only to crimes carried out in Britain, and did not seek to delve into forgeries perpetrated abroad. Indeed, it appears that the main motive underlying the exhibition was for the police to showcase their recent efforts to counter criminal activity in the art world and so discourage future fraudulent activities. It is fitting that this exhibition should be housed in the V&A, if only because its Director, Mark Jones, organised the highly informative 1990 exhibition 'Fakes' during his time at the British Museum. Two decades later, the 2010 exhibition took the concept of security against forgery a useful step further.

To someone removed from the world of art and antiquities, forgery of artefacts and pictures might seem an almost victimless crime. The exhibition was, however, at pains to demonstrate that such an attitude is extremely short-sighted. Art forgery distorts the history of past societies and their culture, and this is particularly true as one travels further back in time and written records become increasingly scarce or non-existent. Understanding of such civilisations is derived almost entirely from what remains of their material culture.

Fig 1. Pottery goose, allegedly by the celebrated Modernist sculptor Barbara Hepworth (1903-1975). In reality the piece was a fake created by Shaun Greenhalgh.


A rather more pragmatic reason to come down hard on this form of deception is that it harms the collective reputation (when undetected) of many individuals, whether museum officials or those engaged in the legitimate sale of art and antiques. Forgers undermine public faith in this nebulous section of society, which directly and indirectly provides employment to thousands of people in Britain alone. For these reasons this small exhibition is worthy of applause.

At this stage it should be clarified that whilst forgery is a crime that will lead to the police becoming involved, there is no crime, moral or legal, in making reproductions of works of art and artefacts. The crime is passing, or attempting to pass, these objects off as genuine. Of course artefacts incompletely manufactured can get offered as genuine, not only by the downright unscrupulous, but also by the less well informed who may not recognise a fake which, in some circumstances, may have been manufactured decades – or even centuries – earlier.

The exhibition at the V&A included forgeries masquerading as genuine objects from prehistory through to works of modern art. At times an individual forger will create fakes that span a number of different cultures and artistic traditions. Much has been written about the nefarious activities of the Greenhalgh family of Bolton, Lancashire. For almost 20 years this threesome foisted on to the market a wide variety of fake works of art from diverse historic periods. It seems that they achieved their crooked ends primarily because of their versatility. After all, an expert in the 19th century Hudson River School landscape paintings of Thomas Moran (Fig 3) generally has little, if any, contact with an expert in Modernist sculpture (Fig 1), let alone an area such as Pharaonic sculpture. Even for those dealing with artefacts derived from more closely related periods and cultures, such as an Egyptologist and Assyriologist, will often have scant contact with one another. Creating fakes and passing them off as genuine pieces from such diverse cultures does, of course, require considerable skill and artistic talent. It is therefore of little surprise that, following the conviction of Shaun Greenhalgh in November 2007, Detective Sergeant Vernon Rapley, from the Metropolitan Police’s Art and Antiques Unit told the BBC: 'There are far better artists in this world than Shaun Greenhalgh and far better forgers but I’ve never come across a forger able to do that many disciplines, that’s what made him so exceptional and accomplished.'

The V&A exhibition was additionally useful in that it emphasised the need to be wary of supporting documentation. It was shown that on occasion such records had been surreptitiously inserted into museum archives so that they could later be found and used as authentication evidence. The Greenhalghs relied heavily on this aspect of fraudulent...
Exhibition of fakery

One of the earlier Greenhalgh forgeries was the ‘Roman’ Risley Park silver lanx (serving dish), modelled on an 18th century engraving (Fig 4). Of course the now infamous ‘Armana Princess’, also manufactured by Shaun Greenhalgh, was on display (Fig 2). In 2003 Bolton Council had purchased the statue for £400,000 from George Greenhalgh, who claimed his grandfather had bought the piece during the sale of the contents of Silvertone Park in Devon, home of the 4th Earl of Egremont, more than a century earlier. In support of this story the Greenhalghs furnished a genuine (but actually unconnected) 1892 sale catalogue of the auction, which listed two Egyptian sculptures among the contents of the house. Also on view were the three purported Assyrian reliefs that were recognised as forgeries by Chantelle Waddingham (now Rountree), head of Bonhams antiquities department, together with the writer (Fig 5). It was these fake Assyrian pieces that blew apart the Greenhalgh deception when the story was printed in the Antiques Trade Gazette in December 2007. Despite their recent fraudulent origins, it is regrettable that one of these Assyrian forgeries has been so viciously defaced in the cause of forensics. Even a forgery can be considered an object of art and this defacing is shameful. Investigation of the relief’s fraudulent creation could have been investigated with greater sensitivity.

With hindsight, it is easy to observe that few people, and certainly not specialists, should have been deceived by the pieces in the exhibition. However, when viewed in prestigious circumstances, such as a museum or art gallery, the objects quickly garnered a level of legitimacy. As such, if this exhibition teaches us anything, it is to cynically observe the connected supporting evidence.

It is a pity that it was necessary to stage this useful exhibition for such a short time and that there were not the resources to produce an accompanying catalogue.

The main motive underlying the exhibition was for the police to showcase their recent efforts to counter criminal activity in the art world.
In the run-up to Christmas, thousands congregate in churches to take part in festivities focussed on midwinter. In recent years, crowds have also flocked to a far more ancient site – the Irish Neolithic monument of Newgrange – to do the same, and 2009 was no exception. Archaeologists, politicians, druids, TV crews, and locals all gathered at Newgrange to witness an extraordinary astronomical feature of its construction: its alignment to the rising sun at the winter solstice.

Newgrange, along with two other large and prominent monuments – Knowth and Dowth – is located next to the River Boyne in Co. Meath, Ireland. The three monuments are situated within a complex prehistoric landscape, which received World Heritage status in 1993. Known as passage-graves (or passage-mounds), each monument contains long passages and chambers constructed from stone, covered by a large circular earth and stone cairn (Fig 1). At Newgrange, the entrance and passage are aligned on a hill on the south-east horizon, known locally as 'Red Mountain'. Directly above the entrance is a 'roof box' or aperture for allowing light into the passage (Fig 2). There is also a forecourt with a large kerbstone lying in front of the passage entrance (Fig 3), and a series of standing stones in a circle round the monument (Fig 4). Many of the megaliths in the passages, chambers and around the kerb at Newgrange, Knowth and Dowth are also highly decorated with rock art (Fig 5).

Long-abandoned and covered with slip material from their substantial cairns, the sites had fallen into obscurity by the Middle Ages. However, memories of their ancient power were preserved in Irish myth and legend. The Boyne monuments are the ‘Bru na Bóinne’ – the houses of the Irish ancestor gods, the Tuatha Dé Danann – as recorded in the medieval Mythological Cycle. In 1699, Newgrange was re-discovered by the owner of the site, Charles Campbell, and soon became the object of antiquarian speculation. Local stories suggested there was an astronomical property to the layout of the monument. However, it was not until the 1960s that these theories were scientifically tested.

At dawn on 21 December, 1969, Professor Michael O’Kelly of University College Cork observed the alignment of the passage and chamber from inside the monument. He confirmed that, just before 9am, as the sun rises above the local horizon, a thin pencil
of light enters the roof box, making its way along the passage and reaching the inner chamber. The band of light widens and sweeps across the chamber, lighting up the space (Fig 6). After only 17 minutes the light leaves the internal chamber, which descends back into darkness. The beam of light takes a further hour to leave the passage completely as direct sunlight continues to shine on the entrance until after 10am. This also causes shadows to be cast towards the monument’s entrance by the standing stones (Fig 7), and lights up the three-spiral motif on the entrance kerbstone (Fig 8), and the white quartz that partially covers the cairn.

Professor O’Kelly’s observation was one of a series of advances that began the transformation of our understanding of the astronomical and engineering capacities of prehistoric peoples. O’Kelly’s excavation of Newgrange, together with the archaeological investigation of the monument at Knowth in the 1960s directed by Professor George Eogan, University College Dublin, established that both sites were built around 3200 BC. This firmly dated their construction to the onset of the late Neolithic in the British Isles. Built later than their most obvious predecessor, the Gavrinis passage-grave in Brittany, the Boyne sites nonetheless predate the Egyptian pyramids, and the circle of sarsen stones at Stonehenge, by several hundred years. For monuments with such an early date, their astronomical precision and artistic expressiveness are remarkably sophisticated.

It has become increasingly clear that Neolithic peoples were interested in astronomical phenomena and were capable of raising large monuments incorporating celestial spectacle into their construction, and scientific research has slowly begun to reveal the precision and complexity of many such alignments. At Newgrange it has been proved that, because of precession (changes to the earth’s rotational axis and orbital path around the sun), the beam of light would have been brighter and travelled further, lighting up the three-spiral carving in the back recess of the inner chamber when the monument was originally constructed more than 5000 years ago. The monument is also sufficiently precise to calculate the exact day of the solstice.

The entrance, passage, and chamber are remarkable feats of astronomically informed engineering. Moreover, the care taken to achieve such a precise alignment on winter solstice sunrise is not the only evidence for sophisticated stone-working techniques in the Boyne region of Ireland. Many of the stones at Newgrange, Knowth, and Dowth are covered with rock art.
Together, the three monuments represent the largest collection of megalithic rock art in Europe, and the highly accomplished carvings depict a series of seemingly abstract and recurring images, used singly and in combination: spirals, circles, crescents, zigzags, and wavy lines (Figs 5, 8).

It took the considerable talents of artist and writer Martin Brennan and his colleagues to begin to shed light on potential meanings associated with the Irish passage-grave rock art tradition, which reached its fullest and most elaborate form at the large Boyne sites. Brennan’s research, first published in the early 1980s, convincingly argued that the astronomy and rock art at Newgrange, Knowth, and Dowth (and at other sites) were integrally related. Two examples illustrate the connection.

The first is stone SW22, one of the kerbstones at Knowth (Fig 10). Also known as the Calendar Stone, it represents a remarkably clear depiction of the moon’s monthly cycle, or the synodic month. The 29 circles and crescents carved around the long wavy line in the middle of the stone (Fig 9) appear to represent the monthly cycle of the moon. Counting clockwise, the new moon is the first crescent to emerge from the spiral. Crescents become circles through the moon’s waxing phase until it reaches full moon – the circle at the top of the stone. Circles become crescents again through the moon’s waning phase, and dark moon (the three nights of the month when the moon is not visible) is represented by the three crescents in the spiral. The new moon emerges from the spiral and the monthly cycle is repeated.

In fact, the lunar counting system on SW22 is even more complex. It can be used to calculate the harmonisation of the lunar and solar cycles over five solar years. Because 12 lunar months are 355 days, but a solar year is 365 days, there will be 62 lunar months (12 for each year plus two ‘extra’). The wavy line in the middle of the stone counts out 31. Each turn represents the lunar month depicted in crescents and circles around it. The line reverses, to count to 62 – the number of lunar months in five solar years. The reversal of the line at 31 harmonises the lunar count with the equinoxes as there is one extra lunar month every two and a half years.

Researchers argue that The Calendar Stone can be used to map even more complex astronomical cycles, including the Metonic cycle, named after Meton, the Athenian astronomer who lived in Athens in the 5th century BC. In the Metonic cycle, the sun and moon harmonise over 19 solar years, which equals 235 synodic months. On the bottom-right hand corner of SW22 there is a wavy line that counts out seven. Seven multiplied by 31 – the count of the wavy line in the middle of the stone – equals 217. Halfway along the wavy line there are two small crescents, where the wavy line count stops at 18. Add 18 to 217 and you have 235: the number of lunar months in a 19-year solar cycle.

The second example of the relationship between rock art and astronomy is the prominent and recurring image of the triple spiral at Newgrange. It appears on the entrance kerbstone (Figs 3, 8), and about halfway up the passage on stone L19 (Fig 5). The device then appears again on the right hand wall of the back recess in the inner chamber (Fig 11). Each image has been directly placed to receive the light of the rising sun as it enters the monument at winter solstice.

The movement of the sun in the
sky over the course of a year can be depicted by a spiral, and the curvature of its shadows over a year form a double spiral. In summer the spiral is clockwise; in winter, anti-clockwise. The double spiral is prominent at the three Boyne sites, but the triple spiral adds a further twist. The triple spiral, or triskele, became a prominent symbol in Celtic Christian art, and it has maintained a consistent association as a representation of the Trinity, whether of pagan Celtic gods or the Christian belief in the 'Father, Son, and the Holy Spirit.' Perhaps the triple spiral at Newgrange combines solar imagery with a representation of divinity; possibly the builders of Newgrange believed the sun was a god. Other scholars have argued the symbol represents nine months (each spiral representing the three months it takes for the sun to move from equinox to solstice). It may therefore be an image of the human gestation period. The art at Newgrange might reflect aspects of all of these, and more. As such, it reflects the complex associations – ritual as well as astronomical – invoked at the monument.

While the triple spiral is clearly the leitmotif of Newgrange, the spiral is a widespread image in the Neolithic art of Ireland and Britain. Its invocation of the path of the celestial orbs in the sky, and more emotive associations such as journeying and return, are perhaps why the image was widely reproduced. Rock art at later Neolithic sites, such as the Pierowall passage-grave in Orkney, also depict the double spiral, and spirals were also transferred on to portable material culture such as pottery and stone balls, carved to fit in the palm of a hand. Such objects could travel a long way, carried along well known routes through the landscape and traded and exchanged at other monumental complexes, such as the Thornborough henges in Yorkshire or the Avebury stone circle in Wiltshire. People also gathered at these places to tell stories, feast, and observe and celebrate dates of astronomical, seasonal, and ritual significance. Images such as the spiral served to develop a sense of a shared culture and make connections between people even as they were separated by time and space.

At Newgrange, perhaps even more important than the need for a structure to mark the shortest day of the year, was a wish for a place at which people could participate in ritual and ceremony that gave expression to the social and emotional qualities associated with midwinter. At a human level, winter is a time when our need for social relationships – to ensure shelter, warmth, and food – is at its highest, even more so for our ancestors who lived in relatively small-scale groups in a far wilder landscape. Newgrange demonstrates that the need to mark midwinter as a time for social and ritual activity was deep-rooted more than 5000 years ago. Despite changes in religious belief systems, we continue to undertake similar practices today, which is perhaps why we hear the voices of our ancestors so clearly and powerfully at such a site.

There is no doubt that the features of Newgrange exquisitely facilitate ritual experience. Those lucky enough to be in the inner chamber when the sun rises at midwinter are treated to an experience of epic proportions. The chamber, which is completely dry, is also pitch-black. Neither noise nor natural light penetrates. The initiate waits, blinded by mystery, for enlightenment. And it comes as a magical red beam, filling the chamber with glorious light, heralding the world outside, the potency of midwinter’s day and of a new year and lengthening days.

The womb-like qualities of the place are inescapable. Certainly, the penetration of the inner chamber by the sun and of the entrance by the shadow of the standing stone invoke sexual associations on a cosmic scale – the marriage of the gods. It is not just the living who wait in darkness for the return of the light: human remains found inside the monument indicate the dead did too. Leaving the chamber is akin to being reborn, creeping down the ‘birth canal’ to a world made new. Is Newgrange a temple dedicated to death and rebirth, of beings, of the seasons and perhaps even of the cosmos itself? The evidence, and its associations, would suggest so.

Since archaeologists have discovered, preserved, and made available to the contemporary world the wonders of prehistoric sacred sites like Newgrange, we have additional ‘cathedrals’ in which to share the vision of our ancestors of the light-filled nature of being and of time.
Thanks to the enterprise of European tomb-robbers – there was no scientific archaeology in the early 19th century – Egyptian antiquities have spread across the world, and many of these objects were recovered from burial chambers. These served the dual purpose of providing a place of repose for the deceased and a monument to ensure their name would not be forgotten. Sadly, many tombs were broken up and the contexts were lost; in an era before organised excavation and study, Egyptian art was not well understood. However, soon after their discovery, it was widely realised that there was something special about a group of tomb paintings that are ascribed to the tomb of Nebamun and which now reside in Room 61 of the British Museum as part of a permanent exhibition. The most famous scene, hunting in the marshes (Fig 1), has been reproduced so many times that it can be considered an icon of Egyptian art (Fig 2). Indeed, the display in the British Museum helped stimulate the European craze for Egyptian art in the 19th century (Fig 3). Following a lengthy period of conservation, the tomb paintings were reinstalled early last year to be enjoyed by future generations. From the start, however, their future was uncertain.

The paintings were discovered by the local agent of Henry Salt (1780-1827) who was the British Consul-General in Egypt. A man lacking substantial means, he assembled a collection of Egyptian antiquities in the hope they would provide for him after his retirement. He employed several agents to hunt items for his collection. Giovanni d’Athanasi (1798-1854), a Greek with a familiarity of Egypt, had a keen understanding of what European collectors would be willing to pay for. Although Giovanni was given firmanas (legal permissions) from the Egyptian government to recover antiquities from specific areas, there was often conflict with other diggers when something...
particularly valuable was found. The paintings were recovered from Thebes in 1820, but no one is sure exactly where they were found, probably because the excavators did not want anyone to be able to identify the general area for fear of attracting competition from rival collectors. It is thought that the paintings came from the northern part of the necropolis of Dra Abu el-Naga, and the exact location of the tomb may now be obscured by modern habitation (Fig 4). The limestone in this area is of poor quality, so carving of the stone was impossible and only painted decoration could be used. Saw marks in the paintings indicate that the tomb was probably largely destroyed when the paintings were removed. Only a fraction of the surviving paintings were removed, and these usually contained scenes — such as hunting and banqueting — that appealed to European tastes. In contrast, the portraits of Nebamun himself, executed in a formal style, largely perished, although several other museums have relatively small fragments from the same composition.

The paintings now in the British Museum formed a late addition to the first collection that Salt acquired and offered to the trustees. After wrangling about the price, a sum of £2000 was agreed in 1818 and the paintings were shipped from Alexandria and arrived in England on Christmas day 1821. Salt wrote in a letter before their shipment: ‘Some care must be taken in carrying them, as jolting them would probably destroy them.’ Because the images had been painted onto a layer of mud plaster mixed with plant materials and applied over the rough surface of a rock-cut chamber, the paintings were extremely fragile, and Salt’s concern for their survivability was justified. Soon after the paintings went on display they began to crumble. Museum staff at the time solidified the images with plaster of Paris, which over time caused great damage — as the plaster dried and set it shrank, causing the surface of the paintings to crack. The use of plaster also led to the formation of salt crystals under the paint causing flaking. To address these problems, a major programme of conservation was finally initiated in 1998. In most cases old plaster mountings were removed using dental equipment. Painted surfaces were consolidated using an acrylic emulsion. While not restored to their full glory, they have nevertheless been stabilised, and a great deal of information about the paintings has been learned in the process of conservation. The treated sections have recently been unveiled by the British Museum and placed back on view in a new display.

During the course of conservation the paintings were examined using various scientific techniques. The range of pigments used by the Egyptian painters was conservative, remaining unchanged from the Dynastic period until the Roman conquest, when pigments familiar to the wider Mediterranean world were introduced. Egyptians used a small range of colours that included black (lampblack), creamy white (calcium carbonate) and white (huntite), as well as red and yellow ochres. Blue and green frits — fused ceramic material quenched to form glass — were also used. While the former pigments were affixed using plant gum, the frits could be applied using animal glue. It is surprising to many that paintings of such virtuosity could be produced with such a limited palette. However, many artistic effects, such as depicting fish scales or bird feathers, were created by texturing rather than by mixing colours. Furthermore, the painters generally preferred to use bright, unmixed colours that would be easier to view in a dark chapel.

Colours could be mixed, and a range of reds, yellows, oranges and browns was obtained from combining red and yellow ochres with black and white. Different tones were also produced by mixing with huntite, a magnesium calcium carbonate. Some pigments were probably made from mixing green and blue frit. Beeswax could also be used.
Tomb paintings are important for the archaeologist because they depict scenes of daily life that have escaped comment in contemporary literature

Egypt returned to the previous divine order and the Amun hieroglyph in Nebamun's tomb was restored, albeit in a clumsy manner. With the tomb owner's name seemingly linked to Amun, the religious ferment of the period, and the removal and subsequent restoration of the deity, has resulted in uncertainty about the name of the individual assumed to have been called Nebamun.

Tomb paintings are important for the archaeologist because they depict scenes of daily life that have escaped comment in contemporary literature. Paintings are also crucial in that they depict – albeit in an idealised way – how the Egyptians viewed their world. No one can be sure if Nebamun specifically approved of the art adorning his tomb-chapel, but it is clear that the society valued the family. The hunting scene (Fig 1), with Nebamun's wife to the right and his little daughter grasping his legs, does not record an actual event, but rather depicts social mores. Although the marsh is teeming with fish, Nebamun is hunting rather than fishing; possibly a reflection that meat was considered more appropriate for consumption by officials and priests than fish.

There has been considerable debate about the artist(s) who painted Nebamun's chapel. Evidence from unfinished tombs suggests that a team worked on a composition, and that the final touches were applied by the master, although at times different artists worked together. The latter may have been the case in Nebamun's tomb – small variations between the two halves of the hunting scene in the marsh suggest that two different hands worked on the painting. Work in teams might suggest why much Egyptian painting seems stylized and stiff, as a group of inexperienced workers would not be allowed a wide creative range. On the other hand, the painting workshops of the European Renaissance also comprised a system of students and masters that allowed a great variety of artistic techniques and styles.
to flourish. Evidence from surviving tomb-chapels in Thebes suggests that designs were flexible. Although some broad conventions were followed, it is nevertheless likely that the occupant or family commissioning the artwork could select scenes to suit their personal taste. It is clear that the paintings in Nebamun’s tomb were executed to a very accomplished standard and it is possible that the artists also carried out work for royalty.

The maintenance of funerary rights and the preservation of the name of the deceased was a primary focus of Egyptian burial. While the tomb would be sealed up and concealed, the chapel would remain open. The decoration would be aligned along an east-west axis with scenes on the eastern – usually outer – part of the chapel depicting the real world, while funerary ceremonies would occupy the western or inner part of the chapel. When a visitor entered the chapel, scenes of offerings or banquets would be displayed on the opposite wall. In Nebamun’s tomb it is the offering scene that is the most formal, stiffly painted section of the composition (Fig 5). Even though the banquet scene is associated with the offering scene, it is rendered in a much more naturalistic style. Here musicians and dancers entertain guests of the family in celebration of the deceased (Fig 6). The musicians are drawn according to specific artistic conventions; in front of their heads they wear a lotus flower, and on top they bear distinctive cones believed to represent the wearing of perfume. They also wear informal wigs, unlike those of higher-status women elsewhere in the composition.

It was the entrance and facing wall of the chapel that received the best light and, as such, usually held the most detailed and important art. At the entrance of the rock cut chapel there were probably large images of Nebamun facing the viewer. The ceiling was probably painted with a geometric pattern imitating fabric. Unfortunately, these parts of Nebamun’s tomb did not survive. What paintings are preserved suggest that his tomb did not receive the usual finishing touches, such as some inscriptions (Fig 7), and that soon after, Nebamun’s name was hacked out by officials of a new king. The tomb remained largely intact until the 1820s, when it was transported to England and the name of the occupant restored. Whatever his true name, the fame of the occupant is now secured for future generations. The quality of the paintings has, in a strange way, fulfilled the original intent of the monument by securing the immortality of Nebamun.

All images courtesy of the British Museum.


Tracing the art of Akrotiri

At Akrotiri, near the south-western tip of the Greek island of Santorini (ancient Thera), excavations have brought to light the ruins of a Bronze Age city that flourished in the 17th century BC. However, the settlement was hastily abandoned as earthquakes and ominous rumblings from deep within the earth preceded one of the most powerful volcanic eruptions in human history, which tore apart the island and sent vast quantities of ash and pumice into the atmosphere. The explosion triggered tsunamis that raced across the Aegean and the Eastern Mediterranean and may have reduced the temperature of the earth by one or two degrees Celsius. (See Minerva, January/February 2010, pp. 20-22.) The effects of the Thera eruption have been linked to the Plagues of Thera during the Late Bronze Age, the volcanic activity nevertheless proved to be a boon for archaeologists. Like the Roman city of Pompeii, the thick layer of ash and pumice that blanketed Santorini during the eruption ensured the survival of many of the Late Bronze Age buildings of Akrotiri and the artefacts contained within (Fig 1). Although there had been indications of an ancient settlement at the site for many years, it was only in 1967 that excavations, directed by the late Professor Spyridon Marinatos, began at Akrotiri. Archaeological investigation continues at the site under Professor Doumas, University of Athens. Of all the finds unearthed at Akrotiri, the wall paintings constitute the most significant contribution to our knowledge of Aegean art, civilisation, and society. The exceptionally well preserved fres...

Constantin Papaodysseus examines the probable use of stencils in the paintings preserved on the walls of Santorini’s Bronze Age town.

Fig 1. Houses of Akrotiri, buried during the volcanic explosion which ripped Santorini apart in the Late Bronze Age. Photo courtesy of Peter Clayton.

Fig 2a. Tracing the art of Akrotiri

Fig 2b. Egypt recorded in the Exodus of the Old Testament, and even the destruction of the fabled island civilisation of Atlantis. (See Minerva, September/October 2008, pp. 23-26.) Although there is no doubting the great destruction and human suffering that resulted from the eruption of Thera during the Late Bronze Age, the volcanic activity nevertheless proved to be a boon for archaeologists. Like the Roman city of Pompeii, the thick layer of ash and pumice that blanketed Santorini during the eruption ensured the survival of many of the Late Bronze Age buildings of Akrotiri and the artefacts contained within (Fig 1). Although there had been indications of an ancient settlement at the site for many years, it was only in 1967 that excavations, directed by the late Professor Spyridon Marinatos, began at Akrotiri. Archaeological investigation continues at the site under Professor Doumas, University of Athens. Of all the finds unearthed at Akrotiri, the wall paintings constitute the most significant contribution to our knowledge of Aegean art, civilisation, and society. The exceptionally well preserved fres...
coes decorated the walls of many of the houses of the settlement. They constitute a major source of information concerning the Aegean civilisation of this era and open up a new chapter in the study of Late Bronze Age pictorial art. In private homes, these wall paintings probably acted as prestige items, enhancing their owners’ social status, while in public buildings the frescoes are likely to have served ideological purposes. For scholars, the frescoes adorning the walls of Akrotiri rank alongside the greatest archaeological discoveries ever unearthed in the ancient Mediterranean.

Were geometric guides used?

Careful inspection of the main themes of the wall paintings analysed by researchers reveals that the well-preserved contour of these frescoes manifests a noticeable stability of line. This suggests the possibility that stencils or templates might have been used to paint many of the murals at Akrotiri. Th e researchers therefore set out to test the following hypothesis: Th e artists employed guides or instruments to support the drawing object, and they took special care and paid attention to ensure continuity of the drawn contour line and, wherever possible, of its tangent, at the points where the guide was repositioned.

In other words, it is thought plausible that the artist(s) might have had at their disposal a set of geometric instruments in the form of stencils to aid in the painting process. In order to draw part of a contour of a thematic unit, such as the outline of a human or animal figure, the artist would place the required part of the stencil on the wall before following its contours with the paintbrush until the end of the chosen part of the guide was reached. In this manner, the artist or artists were able to generate the required portion of the contour line of the drawn theme with a single stroke of the brush. Subsequently, the artist replaced the stencil with another containing a different shape, without removing the brush from the wall, so as to ensure continuance of the previously drawn contour line and its tangent. In this way, a unified brush stroke was generated, whose contour line was impressively stable since it had been generated by stencils.

According to this assumption, the contour line of a thematic unit painted in this way is the result of a sequence of continuous contours derived from a set of templates that, when used together, allowed artists to produce frescoes that were still formed with a single stroke of the brush. Such a method of painting is compatible with the fact that the fresco technique – in which paint had to be applied to wet plaster before it had time to harden – required fast and precise execution. At the same time, achieving stability of the contour line of the figures depicted on the paintings was a primary goal.

In order to test the validity of this hypothesis that some form of stencils or templates were used to create the contour lines on the wall paintings of Akrotiri, four different frescoes were examined in detail: ‘Gathering of Crocus’, ‘Naked Boys’, ‘Th e Wild Duck’, and ‘Th e Little Lilies’.

Possible prototypes

If some form of geometric guides were employed by the artists of Akrotiri, the stencils or instruments used must have been compatible with the technological level of the Late Bronze Age, and in particular with the level of geometric knowledge possessed by the inhabitants of Akrotiri. Researchers examined prototype curves among the geometric schemes that were extensively studied in later periods of Greek antiquity, and concluded a set of geometric figures that could have been conceived and constructed by artists of the Akrotiri civilisation consisted of the following:

- Exponential spiral
- Th e spiral generated by unrolling a thread around a peg, usually called the involute of a circle
- Th e linear or Archimedes’ spiral
- Th e ellipse
- Th e parabola
- Th e hyperbola

Spiral shapes appear in prehistoric artwork centuries before they were painted by the artists of Th era. Th ere are many types of spirals. Among them, the involute of a circle can be easily generated through the use of everyday materials, while the exponential spiral is encountered in various cockleshells and elsewhere in nature (Fig 3b). Th us, it is not surprising that rough approximations of these two types of spirals are encountered quite early in the art of various prehistoric civilizations.

On the other hand, the linear spiral does not exist in nature (Fig 3a). Its conception is first attributed to Konon of Samos (3rd century BC), while, at about the same time, Archimedes outlined many of its fundamental properties and related theorems of geometric construction, which led to the spiral being associated with him.

Th e mathematician credited with first realising that conics were the result of the intersection of a cone with a plane is Menaechmos (c. 380-320 BC), while they are first described by Euclid around 300 BC. According to Pappus of Alexandria (c. AD 290-350), Th e four books of Euclid’s Conics, were completed by Apollonius [c.
260-190 BC], who added four more books of Conics. Th e names of the three conic types – ellipse, hyperbola, parabola – as well as many complex theorems (Fig 3c), are attributed to Apollonius.

If the conjecture regarding the employment of guides in the creation of the wall paintings is valid, then the entire contour of all four frescoes studied would have been produced by using a limited number of prototype curves. It is not possible to see with the naked eye the point on a brushstroke where the artist repositioned or switched the template, so the researchers developed mathematical algorithms to identify parts of the pattern which may have been drawn with a single stroke. Th e resulting prototype curves were checked for accuracy against the original art and those that had high degrees of error were reassessed. By analysing the single strokes used across the whole painting in this way, the researchers were able to calculate the minimum number of guides that were used.

Application of this method to the frescoes under examination indicated that the main thematic units of the wall paintings matched seven distinct geometric guides: four different hyperbolae (Fig 3c), two different ellipses (Fig 3c – in yellow and purple), and one linear (Archimedes) spiral (Fig 3a). Th us, it is logical to assume that seven stencils, or a similar apparatus, were probably used by the artists painting these frescoes. Th ese geometric prototypes were colour-coded by the researchers, and the colour of each curve uniquely corresponds to its parts determined on the wall paintings (Figs 2, 4, 5).

Th ere is a superb match between the outlines of the main figures of the wall paintings under consideration. Th is excellent fit was also revealed by the statistical results, which show that the average matching error between the curves of the different figures is less than 0.33mm, while the average length of the single-stroke drawn elements is around 9cm. Th ese results make it almost certain that the artists working on the outlines of the different figures on the Akrotiri frescoes used stencils to aid the painting process, and further reasoning supports the idea. Th e Archimedes spiral does not occur in nature. Th is suggests that an artificial shape or apparatus was used by the artists.

Previous research has already demonstrated that several different artists were usually involved in creating the wall paintings of Akrotiri and, in some cases, more than one artist worked on a single wall painting. Different parts of paintings have been created with the same geometric curve. Th e attitudes of some parts of the figures are unnatural. For example, the female figure’s forearms in ‘Gathering of the Crocus’, like those of the youth in ‘Naked Boys’, or the unnatural torso-waist proportions of ‘Naked Boys’, and the stance of the ‘Wild Duck’, can best be explained if these figures were drawn under the constraint of a limited number of available shapes. Indeed, parts of the paintings suggest that the artist chose his subject matter based on the available templates.

Comparison can be made with other, non-figurative decoration, such as the architectural frieze on the island of Ikaria, where no matching curves could be found and the picture was probably painted freehand.

Mathematics and aesthetics
Th e researchers concluded that certain artificial geometric forms, such as the linear spiral, the hyperbola and the ellipse, probably appeared in the art of Akrotiri centuries before they were first analysed in Classical and Hellenistic Greece. It is not suggested that Euclidian geometry was invented on Bronze Age Th era – rather that the use of advanced geometric shapes, although requiring a particularly creative sense of regularity, proportionality, and symmetry, was not necessarily subject to rigorous mathematical formulation. Th e frescoes highlight that intricate geometric concepts served aesthetic purposes and emerged because of the needs of artists working in the 17th century BC. Nonetheless, it is remarkable that these geometric conceptions appear more than 1300 years before their treatment by great mathematicians such as Archimedes, Euclid, Menaechmos, and Apollonius.

Th e Akrotiri wall paintings therefore indicate an evolution from an emotional understanding of geometry through to its formal rigorous examination in the Classical and Hellenistic periods.

Collaborators with Constantin Panayiotou:
Panayiotis Roussopoulos, Michalis Panagopoulos, Michalis Exarchos, Student Dimitris Arabadjis, Student Georgios Galanopoulos, Dimitrios Fragoulis, Thanasis Panagopoulos, Constantin Triantafyllou: School of Electrical and Computer Engineering, National Technical University of Athens.
Turkey was the centre of vast archaeological expeditions headed up by British traveller-archaeologists in the mid-19th century. Then at the heart of the Ottoman Empire, the classical sites on Turkey’s western coast were investigated, and lost wonders of the ancient world discovered. These explorations were led by charismatic men who positioned themselves as archaeologist heroes – an image that, as the Indiana Jones franchise illustrates, has resonated through the popular perception of archaeology down to the present.

Charles Fellows (1799-1860) was the first of a new kind of antiquarian in Britain. He described himself as a man of science, rather than a gentleman dilettante, and fought against the British Museum establishment as the archaeologist who reported ‘a collection of facts’ from the ground. He travelled across inland Turkey and visited ruins previously unexplored by European archaeologists. At Xanthus in Lycia, on the corner of south-west Turkey, Fellows was amazed by the Lycian tombs he found amidst Roman ruins (Fig 3). After returning to the site accompanied by an artist, George Scharf, and publicising the attractions of Xanthus in two travel books, Fellows led an expedition to remove

Debbie Challis examines the traveller-archaeologists working in Turkey during the 19th century


Fig 2. *The Nereid Monument*. An early 4th century BC tomb constructed for Erbinna, ruler of Xanthos, in Lycia, south-west Turkey. The structure gains its name from the statues of Nereids – sea-nymphs – placed between the columns. It was built for Erbinna (Greek Arbinas), ruler of Lycian Xanthos. Picture by George Scharf.

Fig 3. Reconstruction of the *Harpy Tomb* at Xanthos in Turkey with Roman ruins behind.
Victorian archaeology

antiquities from his ‘favourite Lycian city’ for the British Museum. Fellows publicised his activities in numerous pamphlets and travel journals, which were gathered together in one popular volume *Travels and Researches in Asia Minor* in 1852.

Whilst admiring Pergamum (Fig 4), Fellows was shocked to learn that only a day earlier a French ship had collected a sculpture from the site for the Louvre. By 1840 France and Britain had an inglorious rivalry for antiquity-hunting in the Mediterranean, which had been particularly acute during the Napoleonic period. The French later supported antiquarians such as Charles Texier, who excavated in western Turkey between 1838 and 1842. The British, on the other hand, had a reputation for acquiring vast collections for the British Museum in spite of poor government and museum support. However, as the historian Holger Hoock has astutely argued, the excavations led by traveller-archaeologists in the mid-19th century were made through a peculiarly British ‘public-private initiative’. This meant that between 1840 and 1875, large-scale excavations carried out in western Turkey were led by British archaeologists.

Fellows was an adventurous traveller and a member of the Alpine Club, but had no previous archaeological experience. Edward Edwards, a historian of the British Museum, described these expeditions in 1870 as containing ‘not a little romantic adventure: of remote and perilous explorations and excavations’.

Fellows led two arduous expeditions to Xanthus in Lycia in 1841-2 and 1843, removing a number of important monuments for the British Museum, including the ‘Harpy Tomb’ (now known as The Kypernis Tomb), the Payava Tomb, and the Nereid Monument (Fig 2). These expeditions were not without their perils: two men from the first naval ship on the expedition, HMS *Beacon*, drowned in the River Xanthus, and the crew that later transferred the antiquities from the shore to their ship caught malaria, leading to many fatalities.

The expedition had its lighter moments, such as the sailors playing cricket and the game causing much amazement amongst the local people, which was recorded by Fellows in his travel journals. The nature of the ‘public-private initiative’ meant that the traveller-archaeologists needed to generate publicity to get public awareness and the support of influential people. Fellows’ publishing record on Lycia, and the use of his own drawings together with those by George Scharf, was typical of this sort of archaeological marketing (Fig 1).

Fellows’ experiences influenced later traveller-archaeologists, though the next large excavation in western Turkey did not take place until after the Crimean War (1853-1856).

Diplomatic relations between the war-time allies, the Ottoman Empire and Britain, were good at the time. Charles Thomas Newton (1816-94) was vice-consul at Mytilene on Lesbos, but before that had been an assistant curator in the Department of Antiquities at the British Museum. Newton’s diplomatic appointment was not an official connection between the Museum and the Foreign Office, though it illustrated the links between archaeology and diplomacy. (See Lucia Gunning’s recent book, *The British Consular Service and the Collection of Antiquities for the British Museum*, reviewed in *Minerva*, September/October 2009, pp. 55-6.)

In 1856 Newton visited the Castle of St Peter in Bodrum, where he identified ancient Greek lions and sculptures built into the fortifications (Fig 5). He applied for a firman, a permit, to remove these and to excavate nearby for the long lost Mausoleum.
of Halicarnassus, which was subsequently found. Permission was granted and HMS Gorgon, a royal naval ship full of supplies, was sent. On board to assist with the expedition were the artists George Frederick Watts, Valentine Cameron Prinsep, and John Roddam Spencer Stanhope; two photographers (Corporals Benjamin Spackman and J. McCartney); 150 naval sappers, and a Lieutenant of the Royal Engineers, Robert Murdoch Smith, as well as Captain Towsey.

Early in January 1857, Newton informed Anthony Panizzi (1797-1879), the Head Librarian (or Director) of the British Museum, that he had found the site of the Mausoleum. One of the Seven Wonders of the Ancient World, the Mausoleum dated to the mid 4th century BC and was thought to incorporate work by the Greek sculptors Skopas, Bryaxis and Praxiteles. The sculptures that emerged from the ground were described by Newton as second only in artistic excellence to the Parthenon sculptures (Fig 6). The Mausoleum’s discovery was hugely significant and Newton subsequently became known as Charles ‘Mausoleum’ Newton. It was only posthumously alleged, and subsequently proved, that it was the engineer Robert Murdoch Smith who first identified the location of the Mausoleum, but this should not denigrate what Newton achieved. The excavation of the Mausoleum had been one of the most systematic up to that time, with photography used to record the results (Fig 7). Newton would use these photographs to illustrate his publications and to generate publicity in illustrated magazines.

In 1861 Newton went from archaeological discoverer to become Keeper of the newly formed Department of Greek and Roman Antiquities at the British Museum. In his new role he supported further archaeological exploration in Turkey and the nearby Greek islands. Richard Popplewell Pullan (1825-88), who had worked with Newton in Bodrum and Knidos, surveyed sites along the coast of central western Turkey for the Society of Dilettanti in the 1860s. In 1868 and 1869 Pullan excavated at the Hellenistic city of Priene, where he was joined in April 1869 by Newton, who brought resources to continue the work. Newton had acquired £400 from his old friend John Ruskin to excavate for Greek art in Priene. This enabled him to pack 100 cases of antiquities and take them to London. Ruskin’s donation illustrates the use of private resources when the government would not provide funds.

The main expedition to Turkey during the 1860s was officially supported by the British Museum, albeit in a rather limited way. John Turtle Wood (1821-90) was a classically educated architect who worked on the Izmir-Denizli railway. In 1863 Wood began excavating at Ephesus in search of the Temple of Artemis, another Wonder of the Ancient World, and Newton secured some funding from the British Museum in order to assist him. However, Wood could not afford to give up his work for the railway and was at first forced to commute the three hours by train from Izmir to Selçuk and back, until he was able to live nearer the site (Fig 8).

Wood dug at Ephesus for six years before he found the temple. During that time he uncovered the Odeon...
and the Great Theatre, enduring many hardships and mishaps. He was stabbed by a ‘lunatic Turk’ in Izmir, shot at by brigands, and had to arrest his entire workforce and then get them released following a murder committed in the Great Theatre. Wood’s difficulty with finding the site was due to the fact that Lysimachus, one of Alexander the Great’s generals, had founded a new city in the 4th century BC, five kilometres away, while the temple remained in its original location. In late 1869, just as the British Museum was threatening to withdraw future funding, Wood changed location and found a sculpted column drum – proof that this was the Temple of Artemis as described by Pliny (Fig 9). Work on excavating the temple continued until early 1874. Antiquities were loaded onto carts, driven to the Selçuk railway station and then taken by train to Izmir, where Charles Newton met them and oversaw their safe transport to a Royal Naval vessel. By the time excavations came to a close they had lasted 11 years and cost the British government £16,000 (Fig 10).

Heinrich Schliemann visited Wood at Ephesus and congratulated him on his discovery shortly before he began the excavations at the tell of Hisarlik in north-western Turkey, where he discovered the site of legendary Troy. Schliemann’s removal of the ‘Trojan Treasure’ from his excavations, combined with changing political conditions in the Ottoman Empire, made the authorities more wary of excavations by foreign nationals. In 1874 the passing of the first antiquities protection act signalled a change in Ottoman attitude. There were also increasing calls in Britain for archaeology to become a professional discipline. The days of the British traveller-archaeologist in Turkey had come to a close.

Dr Debbie Challis is Audience Development Officer in the Petrie Museum of Egyptian Archaeology, University College, London, and the author of From the Harpy Tomb to the Wonders of Ephesus: British Archaeologists in the Ottoman Empire 1840-1880, 2009.
A small but interesting exhibition is currently on view in Rome at the National Museum in Palazzo Massimo until 18 April. ‘Painted marbles from Ascoli Satriano’ showcases a group of 11 exceptional marble artefacts excavated illegally some 30 years ago from Ascoli Satriano in Apulia in the province of Foggia, which have been recovered and restored. The occasion was provided by the recovery and restoration of objects, which must originally have been assembled in a magnificent tomb of the 4th century BC, and which are once again on display together. They are preserved in a dramatic and evocative display: a black room with only the white marble objects individually lit.

The confession of a thief before his death in 1992 triggered a dogged pursuit by the Italian police, the law courts and the Ministry for Cultural Heritage. The two most beautiful of the objects now on show in Rome – a magnificently sculpted trapezophoros (Fig 1), and an elaborately painted podanipter (Figs 2, 3, 4) – were returned to the Italian government in 2007 by the J. Paul Getty Museum in Los Angeles. The artefacts had found their way to the United States in the 1970s soon after being unearthed in a clandestine excavation in Apulia, and their return coincided with the repatriation of other objects from American museums, also illegally acquired.

The looting of the Satriano site must have taken place around 1976/77, and was discovered in 1978. A series of fragments making up eight large marble vases with traces of gilded decoration were retrieved by the Commando Carabinieri Tutela Patrimonio Culturale (the police unit set up to recover artworks that form part of Italy’s artistic heritage) from the local tomb-raiders. These were placed in storage in the Museo Civico in Foggia, where they were subsequently forgotten for many years. When the pieces from the Getty were returned to Italy, and were restored and studied by archaeologists, the puzzle began to take shape: the objects originally belonged to the same funerary ensemble as the vases stored in Foggia. The meticulous investigation carried out by the Carabinieri has therefore led to an important discovery – one which has shone some much-needed light on the rather obscure ritual and funeral practices of this part of ancient Magna Graecia. The high quality of the Satriano funeral furnishings is especially outstanding because the monumental vases deposited in the grave were deliberately created not as containers but for a purely symbolic and aesthetic function. The tombs of the aristocracy of the ancient cities of Apulia have often revealed important architectural complexes and mobile goods, but never before have there been finds rivalling the sophistication of this extraordinary funerary group.

The original excavation took place in the territory of Ascoli Satriano (ancient Ausculum), a centre of the former Daunia region, best known as the site of the battle in which Pyrrhus, King of Epirus, won a costly victory over the Romans in 279 BC. The clandestine dig at the Satriano site, which yielded the outstanding group of marbles, is believed to have taken place at the foot of the so-called Hill of the Snake (Collina detta del Serpente), the summit of which was a place of ritual thought to have been set aside for high ranking personages of the 4th century BC. However, because the grave was located and looted by robbers, nothing can be stated with certainty about the original site of the rich tomb. The most likely theory is that it constituted the furnishings of a chamber tomb of a high-ranking personage and dates to the second half of the 4th century BC. The finely crafted marble grave goods also bear witness to the tomb owner’s wealth and status in life.

Although it has long been known that polychromy was the norm in the
ancient world, it is still something of a surprise for modern viewers to see vivid colours adorning Graeco-Roman marbles. The marble chosen for the podanipter (Figs 2, 3, 4), the trapezophoros, (Fig 1) and the vases (Figs 5, 6, 7), probably derived from Paros in the Cyclades or the quarries of Aphrodisia in Asia Minor, and the smooth surface of the stone was enhanced by well preserved painted decoration. One is reminded of the beautifully painted grave stele from the site of Demetrias, which probably dates to the 3rd century BC, and the extraordinary vivacity of the colours on the magnificent alabaster sarcophagus of the Amazons, probably also painted in Apulia in the 4th century BC.

The inside surfaces of the podanipter, a large basin resting on animal legs, used for the ritual washing of feet, are decorated with a group of three Nereids bearing Achilles’ weapons. Homer recounts how these were fashioned for the hero by the god Hephaestos at the request of Achilles’ mother Thetis, herself a Nereid (Iliad, 18). The sea nymphs depicted on the podanipter ride red, purple and blue sea horses, while attendants of Poseidon and his wife Amphitrite (also a Nereid) are surrounded by three dolphins and three fish (Fig 2). The subject was popular among pottery painters in Apulia from the beginning of the 4th century BC, following a trend that had originally developed in Attic. The basin was first covered with a very thin film of glue and then the pigments were applied directly to the surface following a geometric distribution of the figures, whose outline was delicately defined by darker lines. When the podanipter was filled it must have appeared as if the Nereids rode through the water.

The trapezophoros is a large and dramatic marble group in which the polychromy of green, blue, ochre and red survives (Fig 1). Chemical and mineralogical analysis of the pigments has revealed that eight different colours were used, though with a prevalence of cinnabar and Egyptian blue. Such a range of colours is evidence of the wide and complex networks of trade that spanned the Mediterranean, allowing craftsmen to obtain the precious materials needed to create such artwork. Of further interest is the fact that the podamipter, loutrophoros, oinochoe and epichysis looted from the Satriano tomb were all shaped with a lathe and carved in marble, yet they reproduce contemporary ceramic and bronze models such as those common in Athenian burial of the same period.

Until construction of their final home, the Ausculum site museum, is complete, the objects in the exhibition will be on display in the Museo Civico di Ascoli Satriano (Foggia). Meanwhile, the archaeological excavations that began in 2003 will continue at Ascoli Satriano and at Herdonia, 10km to the north-east along the fertile Carapelle Valley. The excavations at the site of ancient Ausculum are being carried out by archaeologists from the University of Foggia, alongside a team of Austrian researchers from the University of Innsbruck. Their work has emphasised the long history of the site, stretching back as far as the 9th/8th century BC. The excavations have been focused within the area encompassed by the recently established Parco Archeologico dei Dauni, which surrounds the Collina del Serpente.

The story of the discovery and recovery of the Satriano painted marbles has only partially been revealed. Much has still to be learnt about the clandestine network that arranged for the sale and export of the objects to the United States. Above all, the original tomb from which the objects were looted must be relocated, excavated and restored. By publicising the illegal finds from Satriano, the Italian government hopes to put a stop to the clumsy digging, looting and illegal export of objects which are of the utmost importance to our understanding of the history of arts and culture of southern Italy. Most worrying of all is that this criminal dispersion of the heritage of Magna Graecia was encouraged by the staff of museums that claim international respectability.

Minerva March/April 2010

Peter A. Clayton reviews the recently released report outlining the artefacts discovered in England and Wales during 2007.

A rchaeological finds continue apace, invariably recorded as being found ‘while metal-detecting’ in the recently published Portable Antiquities and Treasure Annual Report 2007. The two Reports have, for the first time, been combined into a single volume of 434 pages, 142 of which are colour, illustrating objects ranging from the Stone Age through to post-medieval. The publication of the two reports together has raised a problem inasmuch as The Treasure Report requires presentation to Parliament whilst the Portable Antiquities Scheme Report does not.

Margaret Hodge, Minister for Culture and Tourism, launched the Report at a gathering at the British Museum, which also saw the display of some of the highlights of the incredible Staffordshire Hoard of Anglo-Saxon gold objects – the largest ever found. This hoard will be a major feature in the forthcoming report for 2009, and its display in London certainly got the present 2007 combined Reports off with a bang (see Minerva, January-February, 2010, pp. 42-45).

A major new element in the Treasure Act 1996 had been that anything found in context with material deemed to be Treasure was itself also identified as Treasure. This has had a major bearing on a number of finds, especially some covered in the current Report.

The Treasure Act 1996 came into force on 26 September 1997, and since then over 400,000 archaeological finds have been reported either as Treasure, or under the Portable Antiquities Scheme (PAS). In 2007, 747 finds of Treasure were reported, and 66,311 non-treasure cases recorded with the PAS on a voluntary basis. In a number of instances these items were acquired by, or donated to, local museums by the finder. In some instances, items deemed to be Treasure have been returned to the finder either because a local museum that had expressed an initial interest in acquiring them had not been able to find the requisite funds, or because no museum had expressed interest in the item’s acquisition. In such cases, the finder and landowner (the National Council for Metal Detecting recommends a written 50/50 division agreement between the two) can either dispose of the item or keep it, as they may jointly agree.

Bronze Age Treasure
A subsequent amendment to the Treasure Act 1996 has extended coverage to include prehistoric bronze implements and so a large number of Bronze Age hoards have also found protection. In 2007, 27 Bronze Age Treasure cases were reported, 16 of which comprised base-metal hoards or groups, and 12 single gold finds (Fig 1). An exceptional group of four Late Bronze Age or Early Iron Age hoards (c. 800-600 BC), found at Langton Maltravers, Dorset, consisted of 276 complete socketed axes, 107 halves, and 117 fragments. Without the later amendment to the 1996 Act these could well have been lost to the archaeological record. This hoard group is one of the largest ever found in Britain, and the largest-ever hoard of socketed axes.

Another unusual Early Bronze Age (c. 2020-1770 BC) Treasure case (no. 19) was the cremated remains of a young male in a grave found at Stanbury, West Yorkshire, which included two bronze basket-shaped earrings (these are better known in gold), a bone pin, a bone belt hook, a battle-axe, and a large, collared pottery urn.

The young man was, by the funerary provision made, obviously a significant person, and his burial exception-
Iron Age Treasure
An unusual Iron Age find was a group of two bronze bowls, a wine strainer (Fig 2), and a wooden tankard, found at Langstone, Newport. The tankard (not Treasure) has been acquired separately by the National Museum of Wales, Cardiff, and the Treasure Valuation Committee is currently (December, 2009) assessing the valuation of the bronze items. There has been a notable increase of Iron Age finds in 2007, particularly of horse harness (eg terrets, rein guides, Fig 3), and lynchpins from chariots. Pins are very evident, as are hoards of gold and base-metal coins. There were nine Treasure cases involving a total of 36 coins, and 443 single finds recorded on the PAS database. The latter records are particularly important as they add to the research into coin circulation, and particularly of imported Gaulish coins in Britain.

Roman Treasure
Finds from Roman Britain continue to increase, particularly in the eastern counties of Norfolk, Suffolk, and Lincolnshire. There was a substantial increase in religious objects (Fig 5) and 1st-3rd century military equipment, but fewer toiletry or medical items. Brooches, as usual, formed a high percentage of the finds, including some unusual individual examples: a silver hound and hare from Hale Cheshire has parallels in Hungary. Several other brooches also appear to have come from the Roman Eastern Europe. In 2007 there were not so many Roman coin hoards, although a block of earth found whilst excavating in Bath for the new Bath Spa possibly contains as many as 130,000 base silver coins, buried around AD 260. There were two exceptional gold coins of the usurper emperor Carausius (AD 287-293) found near Ashbourne in Derbyshire. One, of the London mint, with helmeted bust and PAX reverse was acquired by The British Museum (Fig 7a); the other, Rouen mint with CONCORDIA reverse, was acquired by the Derby Museum (Fig 7b). These two finds bring the number of known gold aurei of Carausius to 25.

Medieval and post-medieval Treasure
The bulk of these joint Reports is taken up with medieval and post-medieval cases. Of particular note is a group of six early medieval graves, c. AD 450-525 from Ringlemere, Kent. A number of precious metal objects were found in the graves, including a silver-gilt belt buckle, and brooches, studs, and fittings fashioned from silver. The association of these items meant that the contents of all six graves were designated as Treasure. This was extremely important, as one of the finds was a remarkable Anglo-Saxon brown glass claw-beaker (Fig 4). Some 39 examples are known, although these have been restored from fragments whereas this beaker is intact. After going through the Treasure Valuation Committee procedure, the beaker and grave contents were acquired by the British Museum.

The major early medieval find in 2007 was the Vale of York hoard, buried c. AD 928. It consisted of a Carolingian silver gilt cup which, amazingly, had a gold arm-ring, five silver arm-rings, 62 pieces of hack silver and 617 silver coins all packed within it (Fig 10). There was evidence that the hoard had been stored in a lead container. The hoard was acquired jointly by the British Museum and the Yorkshire Museum Trust for £1,082,000.

Medieval finds were mainly of small items such as silver dress fittings and gold and silver rings, a number of which were disclaimer as Treasure and returned to the finders. A small gold religious plaque depicting the Holy Trinity from Great Gaddesden, Hertfordshire, was returned to the finder after the local museum was forced to withdraw its interest (Fig 9). Subsequently, the plaque was entered in the saleroom at an exorbitant estimate, and failed to find a buyer.

Coin finds of the period saw a significant increase, mainly individual coins being reported. There were, however, several large hoards of silver...
The number of finds from various periods is hardly abating, and, for the moment, there seems to be no end to the buried history of Britain.

Figs 7a, 7b. Two gold aurei of the British usurper emperor Carausius (AD 287-293), found Ashbourne area, Derbyshire. Diam. 2cm. [Case 490]

Fig 8. An Insular (Irish/Viking) cast copper-alloy animal mount. Found in North Yorkshire, early medieval. L. (including lugs) 6.7cm.

Fig 9. Gold rectangular mount with the Holy Trinity, found at Great Gaddesden, Hertfordshire, c.1450-1550, H. 29cm. [Case 316]

Fig 10. The Vale of York, North Yorkshire, hoard: a silver-gilt cup with a gold arm-ring, five silver arm-rings, 62 other pieces of hack silver, and 617 coins including Anglo-Saxon, Islamic, and Carolingian types. Anglo-Saxon/Viking, deposited c. 928. Cup diam.12cm. [Case 217]

2008 to 30 April 2009, considered 22 individual export licence applications, three of which concerned antiquities. A major item was a Celtic Iron Age engraved bronze mirror, together with two fibulae (Fig 6). It had been found by a metal detectorist in a shallow cremation grave at Chilham Castle, Kent, in 1993. It is the only Iron Age mirror discovered in Kent, with only 17 complete decorated Iron Age mirrors ever found in Britain. Dating to c. 75-25 BC, it is one of the earliest of its type, and particularly significant as it came from a known context that was subsequently the focus of archaeological excavation. The case was heard in February 2009 and three-month deferral of the export licence granted. This was subsequently extended by a further three months as Canterbury City Council had shown serious intentions to raise the money required for the objects to enter the Canterbury Museum. The mirror was acquired for £35,000. The Art Fund supporting the purchase with £8000, and £17,500 coming from the MLA/V&A Purchase Grant Fund, The Headley Trust and other local sources.

An application for an export licence to the USA for an Insular (Irish/Viking) cast copper-alloy animal mount found in North Yorkshire was heard in March 2009 (Fig 8). The agreed matching price (converted from US dollars) was £52,281.37 at the date of the hearing. An initial deferral for two months was granted, but no offer was made to purchase the mount by the end of the period, and an export licence to the USA was therefore issued.

An application for export to the USA of a copper-alloy Roman-British statuette of a horse and rider was heard in March 2009. It had been discovered by a metal detectorist in Cambridgeshire at what was probably a temple site, and represented the god Mars or a local native equivalent. Made as two separate solid castings, the two pieces had originally been joined by an iron spike that had corroded away. The licence application valued the piece at $32,500, the matching conversion price being £22,066.81. A two-month deferral of the licence application was granted, but after a further three-month deferral the piece was acquired by the British Museum.

Peter Clayton is a member of the Treasure Valuation Committee, the British Museum.

pennies recorded such as from Corley, Warwickshire (170 coins, c. 1260-65), Baschurch area, Shropshire (190 coins of c. 1265-70), Low Apley, Lincolnshire (146 pennies, 1317-20).

Post-medieval finds were dominated by dress fittings. As the 1996 Act requires that anything with more than 10 percent precious metal content must be reported, and this therefore includes many Tudor dress hooks, which are increasingly common finds. Finger rings and stamp seals also form a large portion of the reported finds of the period. An intriguing reported find was a small copper-alloy pet coffin (8.2 x 3.55cm) made during the 19th century, which was subsequently extended by a further 6 months after it had been found in a known context that was subsequently the focus of archaeological excavation. The case was heard in February 2009 and three-month deferral of the licence application was granted, and after a further three-month deferral the piece was acquired by the British Museum.

The Report of the Reviewing Committee on the Export of Works of Art and Objects of Cultural Interest, 1 May 2008 to 30 April 2009, considered 22 individual export licence applications, three of which concerned antiquities. A major item was a Celtic Iron Age engraved bronze mirror, together with two fibulae (Fig 6). It had been found by a metal detectorist in a shallow cremation grave at Chilham Castle, Kent, in 1993. It is the only Iron Age mirror discovered in Kent, with only 17 complete decorated Iron Age mirrors ever found in Britain. Dating to c. 75-25 BC, it is one of the earliest of its type, and particularly significant as it came from a known context that was subsequently the focus of archaeological excavation. The case was heard in February 2009 and three-month deferral of the export licence granted. This was subsequently extended by a further
Ancient earthquakes

The earth-shaker

In the wake of the Haiti earthquake, Mark Merrony takes a look at how seismic activity has shaped ancient myth and history.

At 4.53pm local time on 12 January, Haiti was struck by an earthquake of 7.0 magnitude. With its epicentre in a densely populated area near the capital of Port-au-Prince, the cataclysm killed an estimated 230,000 people, demolished up to 250,000 buildings, and destroyed the infrastructure of the island state (Figs 1, 2). Afflicting the poorest country in the Western hemisphere, the disaster shook the world, with a proportionate response in humanitarian aid. As the dust settles amid the crumbled ruins of the afflicted area, this is a poignant time to place the harsh reality of this recent event into an historical context.

Perhaps the first link to be made to the past was the ridiculous claim by Reverend Pat Robertson that the Haiti earthquake was the result of divine retribution, based on an apocryphal episode in which Voodoo priests formed a pact with the devil to expel the French in the late 18th century. The reality is of course that the catastrophe had nothing to do with Ashtoreth, demon of the Americas, but was a direct result of seismic activity associated with the Enriquillo-Plantain Garden fault system between the North American and Caribbean tectonic plates.

The link between divine retribution and earthquakes was perceived as the norm in the mythology of ancient Greece. While best known as god of the sea, Poseidon was also regarded as responsible for earthquakes, and when displeased, could bring his trident crashing down to shake civilisation (Fig 3). It is interesting that two of the most famous cataclysms of Greek myth – the disappearance of Atlantis and the fall of Troy – may be associated with Poseidon and earthquakes.

Plato provides the first references to Atlantis in his Timaeus and Critias, written in the 4th century BC. According to the philosopher, Egyptian records stated that, in the far-distant past, the island had been located west of the Pillars of Hercules (the Straits of Gibraltar). In Critias (6.16) Plato narrates how Atlantis was granted to Poseidon by the Hellenic gods and ruled by his eldest son Atlas. The island is described as 3000 stadia (555km) by 2000 stadia (370km) and holding sway over large parts of North Africa and Europe. However, the power of the Atlanteans was brought to an end in a mighty cataclysm: ‘There occurred portentous earthquakes and floods, and one grievous day and night befell them, when the whole body of your warriors was swallowed up by the earth, and the island of Atlantis in like manner was swallowed up by the sea and vanished...’

This passage, perhaps above all others, has given rise to searches for one of the most celebrated ‘Holy Grails’ of archaeology. However, like so many other events from ancient mythology, finding facts that prove the authenticity of the story is nigh on impossible. Nevertheless, it is widely accepted that Plato may have based his account on oral traditions of violent upheavals that had shaken the ancient world. Most famous of these was the eruption of Thera in the late Bronze Age (see Minerva, January/February 2010, pp. 20-22), although during Plato’s own lifetime the coastal city of Helike on the Corinthian Gulf was levelled by an earthquake and accompanying tsunami. Visiting the city 500 years later, the writer Pausanias recorded that: ‘An earthquake struck the country and...’
destroyed every single building, until the very foundations of the city were lost for all time... A sudden tremor was sent by the god [Poseidon], and with the earthquake the sea ran back, dragging down Helike into the receding waters with every living person.' (Description of Greece, 7.24.5). While the existence of Atlantis eludes archaeological discovery, the reality of the Helike seismic catastrophe proves that more than a grain of truth can underpin mythological events.

Troy, located in north-west Turkey, is no exception (Fig 4). Immortalised in Homer’s epic, the Iliad, excavations in the late 19th century by Heinrich Schliemann proved the historical reality of the city. Subsequent work by Wilhelm Dörpfeld (1893-4) and Carl Blegen (1932-8) indicated that Troy had at least nine main phases of occupation. The rub of interest here is the reconciliation between myth and reality.

Various excavations at the site have uncovered a great deal of what appeared to be earthquake damage c. 1300 BC, with fallen masonry from the levels known as Troy VI indicating the city experienced violent seismic activity. In spite of constructing the foundations of the city walls on a cushion of earth above the bedrock – a technique that has been interpreted by some archaeologists as an anti-earthquake precautionary measure – the fortifications of Troy VI were reduced to rubble. But they were soon rebuilt, and the successor city is known as Troy VII. It is this city, which shows evidence of fire damage consistent with its sack by a conquering army, that most scholars generally associate with the Homeric myth. However, some regard the earthquake that destroyed Troy VI as providing a link with the myth of the Trojan Horse. If an earthquake tumbled Troy’s walls and allowed Agamemnon’s forces to gain access, then it would be understandable that the Greeks should give thanks to Poseidon, honouring the deity with a statue in the shape of the animal with which he was most closely associated.

Seismic destruction in ancient Greece was far more widespread in time and space than these celebrated examples drawn from history and myth. The same is true of the Roman period that followed. The impressive territorial extent of an empire that spanned from Britain to Iraq, and Germany to Africa, ensured that it encompassed an extremely high concentration of geographical faults and associated plate motion (Fig 5).

Herculaneum and Pompeii are, of course, best known for the extraordinary preservation of their archaeological remains – a direct result of their burial under volcanic material resulting from the eruption of Vesuvius in AD 79. However, this cataclysm overshadowed an earthquake that struck the city 16 years earlier recorded by Seneca the Younger: ‘We have heard... that Pompeii, a busy town in Campania, has subsided under an earthquake... All the surrounding areas have also been affected... and it inflicted great devastation on Campania... For part of the town of Herculaneum too fell down and even the structures that remain are unstable...’ (Natural Questions, 6.1.10). Seneca’s account also makes it clear that the region was afflicted by a series of powerful after-shocks: ‘Yet why did the earthquake last several days? For Campania shook continuously and did not stop though it became less violent.’ (6.31).

In the Res Gestae, Roman historian Ammianus Marcellinus provides an especially interesting account of the AD 358 earthquake that struck Nicomedia (Izmit) in modern Turkey in the reign of Constantius: ‘On the twenty-fourth of August, at the first break of day... a mighty tempest of raging gales burst forth; and at its onslaught were heard the groans of the smitten mountains and the crash of the wave-lashed shore; these were followed by whirlwinds and waterspouts, which, together with a terrific earthquake, completely overturned the city and its suburbs.’ (17.2).

Marcellinus’ account is interesting for two additional reasons. First, the Roman god Neptune – analogous but not identical to Poseidon – had lost the association with earth tremors: ‘Nothing is said about the god that causes earthquakes, and this with due caution, for fear that by naming one deity instead of another, since it is not clear which of them thus shakes the earth, impieties may be perpetrated.’ (17.10). Second, Marcellinus defines four types of earthquakes. Among these are ‘climatiae’ which rush along to one side and obliquely, levelling cities, buildings, and mountains’ (17.13). This description perhaps best fits the Haiti earthquake.

Many other historical references to earth tremors punctuate the Late Roman period. One of the best known of these comes from the vitriolic pen of Procopius. In contrast to his earlier Buildings and Wars, designed to flatten the Byzantine emperor Justinian, The Secret History revealed his true thoughts. Among these was the perception that earthquakes were a form of divine retribution for his demonic rule. Thus in AD 526: ‘Earthquakes destroyed Antioch, the leading city of the East; Seleucia, which is situated nearby; and Anazarbus, most renowned city in Cilicia. Who could number those that perished in these metropoles?’ (18.41). Estimates of the number of dead in fact run as high as 250,000 – higher even than the Haiti earthquake.

After the substantial territorial losses of the Eastern Roman Empire in AD 649, Romano-Byzantine Beth Shean was supplanted by Beisan, regional capital of the Ummayad ‘new world order’. Exactly 100 years later, according to the evidence from coins, the ancient city was razed by a massive earthquake (Fig 6) and never reoccupied, sobering proof that culture may change across time and space but nature does not. This is borne out by the New York Daily News headline about the Haiti disaster: ‘Mother Nature does not discriminate.’

Minerva March/April 2010
The Gallic Ghost

The discovery of a rare coin has allowed the emperor Domitian II to be restored to history. By Richard Abdy

Following the 2003 discovery of a coin hoard at Chalgrove, Oxfordshire, a historically unattested Roman usurper emperor has now had his place confirmed for future history books. One coin in the Chalgrove hoard features a 3rd century emperor, Domitianus (Fig 1), unknown apart for a find made just over a century ago from a vineyard in western France, but previously doubted owing to its uniqueness. Since the dies used to strike the two coins match, previous doubts over the authenticity of the coin type have been dispelled. One sceptic in the 1990s talked of laying to rest 'the shade of "Domitianus", the Gallic emperor'; now we can definitively resurrect this ghost. Coincidentally, new research on the French specimen indicates that Domitian II held fleeting dominion over (at least part of) the Gallic Empire – perhaps for a matter of only weeks or

even days – around the year AD 271. The Domitian II coin and the Chalgrove hoard are now on permanent exhibition at the newly reopened Ashmolean Museum in Oxford (Fig 2).

Rome’s shadow state

The year AD 260 was an infamous one for the Romans: it saw the capture and enslavement of the emperor Valerian whilst campaigning against the Sasanian Persians (Fig 3). The defeat caused shockwaves across the Roman world. The eastern situation was only stabilised by the rise of Palmyra (which itself soon showed separatist tendencies). In the west, Valerian’s adult son Gallienus (Fig 4) had to contend with a more direct challenge to his tarnished dynasty. Gallienus’s young son had been left in charge of the Rhine legions, but the boy was soon assassinated by one of his own officers, Postumus. This left Rome facing a shadow state almost as large and powerful as itself, which, although generally referred to as the Gallic Empire on account of its core province, initially comprised virtually all the Roman lands to the north and west of the Alps.

Postumus adopted all the trappings of the ‘Central’ Empire, including coinage (Fig 5). His coins also show that he took all the titles befitting a legitimate emperor, while archaeology presents a picture of a parallel court based at Trier (Fig 7), with a Praetorian Guard headed by his eventual successor Victorinus. Postumus even faced his own rebellions on the frontier; he was finally brought down in AD 269 by the hostility of his own troops when he refused to allow them to loot the city of Mainz, which had been a rebellious stronghold. Within the year Victorinus was in charge (Fig 9), although his realm was smaller than that of Postumus because Spain had refused to recognise the succession and had returned to central authority. Victorinus was also to lose control of the Rhône and Raetia, but the crumbling Gallic Empire limped on for five more years. Victorinus’ demise came more swiftly, reportedly because of his outrageous conduct towards his courtiers’ wives. Power passed to the last usurper, Gaius Pius Esuvius Tetricus, in AD 271, who had been the governor of Aquitania (Fig 6). It took the exceptional generalship of Aurelian (AD 270-5) to re-unite the empire. Surprisingly, Tetricus’ defeat at Châlons-sur-Marne in AD 274 resulted, not in execution, but in the award of a governorship in the south of Italy. In contrast, Aurelian was assassinated only one year after he had
managed to reunify the Empire.

The main denomination of coins produced for the Gallic Empire in the 3rd century bear a bust of the emperor ‘crowned’ by solar rays, and are termed ‘radiates’ in lieu of their ancient name. They are perhaps the most cheaply made coin types of the whole Roman series. Even at its inception in AD 215 the denomination was a base alloy consisting of less than 50% silver. By the time of the Gallic Empire, the amount of silver in the alloy had declined to around 5% and had to be disguised with a thin surface wash of silver (often lost during archaeological burial). Alongside the progressive silver debasement of the 3rd century radiate went a massive increase in production.

Thus the hoard found by metal detector Brian Malin near Chalgrove in April 2003, which comprised nearly 5000 coins, was typical for finds of radiates from Britain of the AD 250s-70s. Indeed it was the second discovery from the area; the same finder, together with his brother, had unearthed two pots of similar radiates only four years earlier from a deposit barely 30m away (Chalgrove I). Both the 1989 and 2003 finds might have originally been buried by the same owner who had taken the precaution of dividing up the savings in the hope that, even if one hoard were discovered, the other might escape detection.

After conservation at the British Museum, the identification that followed initially showed a composition typical of such hoards. Reigns spanned that of Trebonianus Gallus (AD 251-3) through to Probus (AD 276-82). Between these two lay a welter of equally obscure and short-lived emperors and usurpers, notable only for the disproportionately massive output of their mints.

However, most coins were from the time of maximum debasement – AD 260-70 (AD 268-74 for the usurper emperors of the breakaway Gallic regime) – consisting of Gallienus and his brief successors Claudius II (AD 268-70) and Quintillus (AD 270), happily mixed together with their Gallic foes.

However, one coin stood out (Fig 1). Its reverse had a standing figure of Concordia Militum, a stock personification on Roman coins that represented the desperate wish for harmony between emperor and army. The obverse carried a heavily bearded bust labelled: IMP C DOMITIANVS P F AVG (Imperator Caesar Domitianus

Pius (dutiful) Felix (fortunate) Augustus). The name Domitian is familiar as Suetonius’s twelfth Caesar, reigning AD 81-96, but this was a long-passed era and the new face did not fit the features of that 1st century Roman (Fig 8). A later 3rd century usurper at Alexandria, Domitius Dominianus (AD 297), could also be ruled out. A certain ‘Domitian of Gaul’ is listed in The Prosopography of the later Roman Empire as: ‘Usurper under Aurelian, quickly suppressed Zosimus’. Possibly in Gaul, where a coin of doubtful authenticity was found with the legend ‘Imp. C. Domitianus p. f. Aug’. This coin ‘of doubtful authenticity’ was uncovered in 1900 during agricultural work at Cleons in western France, and was a single coin in a hoard of 1456 radiates. The earliest coin found in the hoard was of Gordian III (AD 238-44), while the latest were issues of Aurelian up to AD 273, and Tetricus (AD 271-4).

The Domitianus coin was recognised as resembling those minted by the Gallic emperors Victorinus and Tetricus, which led on to a tentative link to a historically recorded Domitianus, who had come to notice fighting for Gallienus in the Balkans in AD 262. He was apparently a senior officer under Aureolus, Gallienus’s generalissimo, who later rebelled against his master at Milan in AD 268. A further complication by the mention in Zosimus’ New History, written in Constantinople at the turn of the 5th and 6th centuries, of a certain Domitianus who was ‘punished’ – presumably executed – in Rome around AD 271, during the reign of Aurelian.

Three possibilities were proposed for the presence of the coin found at Cleons and its mysterious emperor. Firstly, that the coin could have been issued in AD 262 in the Balkans. Secondly, that the style of the coin indicated that it had been minted later on in Gaul around the time of Tetricus, with the same historical Domitianus somehow becoming an unrecorded competitor for the Gallic emperorship. Thirdly, that the Domitian mentioned by Zosimus – who was perhaps both the victor of AD 262 and the rebel of AD 268 – produced the coin in Rome about AD 271, in a manner similar to that of the rebel emperor Silbannacus who minted coinage at Rome around the year AD 253 (Fig 10).
Domitian II

Domitianus is not amongst those recorded as usurper emperors or ‘Tyrants’ as they were referred to by the writers of the time... His ‘reign’ was most likely an abortive coup attempt.

Unfortunately, the first blaze of publicity surrounding the find at Cléons was brief and the coin lapsed into obscurity as a result of subsequent wrangles. The landowner offered the coin to the Cabinet des Médailles in Paris at the preposterous price of 8000 gold francs. On refusal it was bequeathed to the local museum in Nantes in 1929. As recently as 1992 a scholar was able to remark that ‘A disquieting but unavoidable suspicion is that with the exception of the finders and owner... no one since 1901 has examined the coin itself’.

With only a plaster cast published as testament to the coin’s existence throughout the 20th century, the veracity of the piece was challenged. Great harm was done by the most influential Italian numismatist of his day, Lodovico Laffranchi. From observations made of the cast alone in 1942, Laffranchi proposed that the coin was a type depicting Tetricus on the obverse, while the Hilaritas Augg (‘Joy of our Emperors’) on the reverse had been re-engraved to create a new type. The Domitianus bust certainly looks similar to those of the early Tetricus issues. The name TETRICVS, Laffranchi proposed, had been abraded down and re-engraved DOMITIANVS. In Laffranchi’s opinion, the Hilaritas reverse had been treated in a similar manner, adapting the legend and changing Hilaritas’ palm-branch into a libation bowl to leave a Concordia Militum type otherwise unparalleled in the Gallic emperors’ repertoire. Furthermore, other scholars sceptical that a previously unknown Domitian could have ruled the Gallic empire pointed out that most Gallic emperors ‘introduce’ themselves with their full name on at least their first issue, yet the coin found at Cléons lacked a praenomen and nomen on what should have been an inaugural issue.

The possibility that there had been a Domitian II ruling the Gallic empire was never completely dismissed, and one German scholar working in the 1940s certainly accepted the authenticity of the coin. It was however only in 1996, when the Cléons coin was once again located, that a reappraisal of the specimen and its mysterious emperor began in earnest.

Cleaning at Paris’s Cabinet des Médailles revealed that the legend had been embedded in ancient corrosion, scouting any suggestion that the coin had been subject to modern re-engraving. Excitingly, it was also apparent that Domitianus had slightly different features from either Victorinus or Tetricus. Domitianus does however follow the hirsute fashion of the time and the cuirassed bust was similar to those used on issues of the second of the two mints attributed to Victorinus and Tetricus. The die-identical matching of the 2003 British discovery has now put the authenticity of the Cléons coin beyond any doubt. A new Roman ruler could finally be added to the list of Gallic Emperors:
• Postumus (AD 260–9)
• Laelian (AD 269)
• Marius (AD 269)
• Victorinus (AD 269–71)
• Domitian II (AD 271)
• Tetricus I and II (AD 271–4)

Domitianus is not amongst the individuals recorded as usurper emperors or ‘Tyrants’ as they were referred to by the writers of the time. So even if he was the same person as the senior officer(s) mentioned in that period, and had somehow crossed the Alps to defect to the Gallic cause, this was never revealed. As such he is more obscure than either Laelian (Fig 11), who spent most of his few months of office besieged at Mainz, or Marius whose reign seems just as short. Domitian II’s coinage is infinitely rarer than these or indeed any other Gallic emperor. His ‘reign’ was most likely an abortive coup attempt made around AD 271. It is clear that his challenge did not last any longer than it took to have one set of coin dies made. The die carrying the bust is increasingly accepted as being in the style of the branch mint at Cologne. Domitianus was presumably on hand at the frontier for the engravers to create a new portrait type. His influence, however, did not appear to extend to the principal mint, probably sited at the Gallic capital, Trier. The Domitianus coup therefore appears similar to that attempted by Laelian, in which a rebel military commander attempted to seize power with the support of forces stationed on the frontier, though in both cases it would seem that the uprising was swiftly crushed by the more established figure that held the capital and commanded the bulk of the army.
Its scholarly title, ‘Eros from Hesiod’s Theogeny to Late Antiquity’, might give the impression that the current exhibition at the Museum of Cycladic Art in Athens is a discourse on ancient writings relating to the winged child god of love and solely devoted to him. However, it is far from it – the majority of the exhibits do not involve Eros, but are devoted to love and eroticism as practiced by both deities and mortals in ancient Greece and Rome. Some 270 antiquities dating from the 6th century BC to the 4th century AD have been assembled from some 50 museums in Greece, Cyprus, Italy, and France (the Louvre), including over 100 objects never before displayed in public. They range from true masterworks in marble and pottery to humble terracottas, lamps, and even clay sealings.

Eros is presented not only in his most common depiction as a divine androgynous figure, but in his many other incarnations as well. To mention a few: his close association with nature, especially to vegetation (Fig 5); his links to Aphrodite...
Classical mythology

(Figs 1, 6), to Dionysos and the Dionysiac circle, and to loyalty between young men; and his connection between the life and death of individuals and of nature itself – the rebirth of the animate world.

Eros – the Roman Cupid – is first mentioned by Hesiod in his poem *Theogony* (the birth of the gods) written about 700 BC. There are many ancient myths concerning his origins. Hesiod wrote that he arose at the beginning of cosmic life. He was considered to have emerged from a cosmic egg laid by Chronos (god of time) in Chaos (personification of the void) and to be the origin of every creation. Aristophanes (c. 450-385 BC) stated that the egg was the result of a union between Nyx (Night) and Aither (Wind). For Antagoras of Rhodes (early 3rd century BC) he was the son of the winds. Another myth attributes him as the son of Eileithyia (protectress of childbirth) or Iris (goddess of the rainbow) and Zephyrus (god of the West Wind). According to Sappho (c. 625-570 BC) he was the product of Uranus (god of the sky) and Aphrodite (goddess of love) or Gaia (goddess of the earth). For Simonides (c. 556-469 BC) he was the son of Aphrodite and Ares (god of war). Zeus and Hermes were also considered to have fathered him with Aphrodite. Plato (c. 429-347 BC) regarded him as the offspring of Porus (personification of plenty or desire) and Penia (personification of poverty). Take your choice!

By the 7th century BC Eros was commonly associated with Aphrodite, and from at least the 6th century BC he was regarded as the god of passion. He was depicted both as a child and as a graceful adolescent or youth with a soft, tender body and a radiant beauty. He often appears without wings and commonly sports the hairstyle of Aphrodite. He first appears on Attic black-figure vases and sculptures of the late 6th century BC, winged and usually carrying either a bow (Fig 4), a lyre or *kithara* (Fig 3), a wreath, a band,
or a flower. On 5th century vases he appears on everyday scenes with women, or in sexually charged situations. By the 4th century BC he is depicted in wedding scenes on pottery – both mythological and mortal, or in coexistence – hovering above the scene (Fig 12) and often multiplying into depictions of several Erotes (Fig 1). As early as the 5th century BC he is shown as a funerary figure, the herald of death (Thanatos), holding a torch downward, also representing the souls of the dead (Fig 10). Showing another side of his dual nature, he is sometimes represented as Pandemos, the love of sexual delights and pleasures. In other depictions he is Ouranios, the embodiment of pure, spiritual love.

The exhibition is composed of nine thematic units. Only the first two are devoted to Eros: ‘Eros and Aphrodite’, and ‘Qualities and Activities of Eros’. The next two then treat ‘Love Affairs and Weddings of Gods and Heroes’ (Figs 7, 8, 12), and ‘Love Affairs and Weddings of Mortals’. Following from this is a very brief ‘Love Affairs That Changed the Course of History’. While one might expect this to be an important part of the show, it consists of only three coins of Caesar, Cleopatra, and Mark Antony – an obvious shortcoming in what is an otherwise fascinating exhibition. Then, however, we enter into the more sensational second part of the exhibition. The first group, ‘Renumerated Love’, has 37 antiquities depicting prostitutes in a variety of scenes: receiving the client and at their toilet; hetaerai at the symposium; and graphic scenes of sexual congress. In ‘Homosexual Love’ there are scenes of courtship and gift offerings (Fig 9), and then the resultant scenes of sexual encounter. ‘Bucolic Love Affairs’ includes intercourse among members of the Dionysian entourage and scenes of bestiality. Finally ‘Ithyphallic Divinities and Phallic Symbols’ covers ithyphallic deities and daemons, phallic rituals, and 33 phallic models, jewellery, vases, and lamps. Obviously this exhibition has not been censored in any way!

An excellent soft-bound 312-page catalogue has been produced that illustrates all the objects in full colour. An unusually large number (75) of Greek, Italian, French, and Cypriot scholars have described each antiquity in great detail in the catalogue entries, often with extensive comments and bibliographical references, and including notes on even the most minor restorations and repairs. Edited by Prof. Nicholas Chr. Stampolidis, Director of the Museum of Cycladic Art, and the museum's...
Curator Yorgos Tassoulas, it has a preface by Dr Stampolitis and well written introductory texts by six scholars, five Greeks and one Italian: Eros the Greek; Eros the philosopher; An approach to Eros from the realm of death; Love and death in Homeric Greece; Erotic grammatika vases; and Women and men in Magna Graecia and Pompeii. There is a comprehensive 22-page bibliography. Published in November 2009, just 1000 copies were printed in English and 1000 in Greek. The exhibition is the first in a series proposed in 2006 on ‘great universal issues’ by the late Dolly Goulandris, president of the N.P. Goulandris Foundation and founder of the museum in 1985. The Eros exhibition closes on 5 April 2010. Unfortunately for an undertaking of this magnitude, the Museum of Cycladic Art is the only venue.

‘Eros from Hesiod’s Theogeny to Late Antiquity’ runs at the Museum of Cycladic Art, Athens, until 5 April, 2010

www.cycladic.gr

On 5th century vases Eros appears on everyday scenes with women, or in sexually charged situations

Fig 10. Terracotta figurine of Eros, from the Athenian Agora, c. AD 200-250. Sleeping Eros, resting on an inverted torch, may be a funerary allusion as an allegory of eternal sleep, or a Bacchic attribute. The Stoa of Attalos Museum, Athens. © Ephorates of Prehistoric & Classical Antiquities, photo by Yorgos Fafalis.

Fig 11. Roman marble statuette of a chubby Eros seated, asleep, from Smyrna, c. AD 150-200. This charming statuette is from the side acroterion of a large pedimental sarcophagus. H. 25.5cm. National Archaeological Museum, Athens. © National Archaeological Museum, photo by Irene Miari.

Fig 12. Apulian red-figure nuptial lebes with two scenes of wedding preparations, attributed to the Salting Painter, c. 350-340 BC. Helen is adorned in the presence of Paris while Eros brings her a band. H. 39.5cm. Jatta collection, Ruvo di Puglia, Jaffa National Archaeological Museum. © Superintendence for Apulia.

Fig 13. Attic red-figure kylix depicting a mythical symposion (drinking party) with a naked maenad playing krotala (castanets) flanked by two aroused Satyrs, from Orvieto, c. 490-480 BC, attributed to the Colmar Painter. Florence National Archaeological Museum. © Superintendence for Tuscany.
The ethics, politics, and laws surrounding the disinterment, storage, and display of ancient human remains have in recent years led to complex and controversial debates in the UK. With some exceptions, only two decades ago, such debates were mainly a concern for British museums when native American and Australian groups claimed ownership and lobbied for the repatriation of remains they regarded as ancestral. Notable exceptions existed however, as when York Archaeological Trust’s excavation of the medieval Jewish cemetery at Jewbury caused upset to some sections of Britain’s modern Jewish community. The archaeologists were required to rapidly rebury the remains.

British archaeologists now excavating graves in and around the sites of active and former churches and chapels are now encouraged to rebury remains after study. Archaeologists have also been negotiating and debating claims from Pagan groups for the ‘repatriation’ and reburial of human remains found in British contexts as varied as Neolithic tombs, Early Bronze Age cremation cemeteries, Iron Age bog bodies, the contents of Roman sarcophagi, and even early (‘pagan’) Anglo-Saxon cemeteries. This is most clear in the recent consultation undertaken by the National Trust and English Heritage following claims by the Council for British Druid Orders for the reburial of remains on display at the Alexander Keiller Museum in Avebury, Wiltshire. Museum archaeologists are also adapting new ways to show ‘respect’ in displaying the ancient dead, covering up parts of mummies that might cause upset (as at the Manchester Museum).

Some museum curators have removed human remains from display, and many archaeologists believe it is hypocritical to display some and rebury others depending on the supposed religious beliefs of ancient societies. Some archaeologists are also keen to involve communities and interested groups, including religious organisations, in their studies. However, osteologists and mortuary archaeologists have been robust in the defence of these more ancient remains and their study and display. Unlike in Australia and America, there are no surviving ‘indigenous’ groups that possess direct biological and cultural claims over the prehistoric and early historic graves of Britain. Moreover, recent museum surveys indicate that the British public generally supports the excavation and storage of human remains for scientific study.

What do the early medieval dead ever do for us, asks Howard Williams
study, while their display is regarded as a long-established museum practice and one of considerable educational value. In short, as sociologist Tiffany Jenkins has argued, some museum curators and archaeologists have recently become more concerned about minority interests than majority opinion.

Archaeologists are, however, now beginning to explore the bigger picture. Burial archaeologist Duncan Sayer has addressed the legal, political, and social context of modern mortuary archaeology in Britain. He has shown how archaeologists work in a complex but rich environment where there is still public support for their professional investigation of old graves. Likewise, Gabriel Moshenska has recently criticised the claims of neo-Pagans for the repatriation and reburial of human remains and sacred artefacts from British contexts. Archaeologists are therefore beginning to look beyond the ‘reburial debate’ to consider the history of displaying the dead, and the wider cultural and socio-political contexts within which mortuary archaeology operates. In particular, the treatment of bodies in museums has historically formed part of our evolving modern Western relationship with concepts of self-identity, memory, and attitudes towards mortality. For instance, sociologists have emphasised the connection between archaeological displays of the dead and other ways in which our society has transformed and viewed the dead. From the anatomy theatre and the funeral parlour, to the famous Body World exhibition, we allow the dead to be viewed only in select and specific circumstances, when managed by specialists such as surgeons, undertakers, artists, and archaeologists.

To take the debate forward, it is necessary to look at how we display early medieval graves in a selection of British museums, focusing on the 5th-11th centuries AD – the period sandwiched between prehistory and history – which remains crucial to perceptions of modern identity in Britain. Indeed, the burial evidence for this period is integral to our appreciation of the fragmentary and rapidly transforming societies that resulted from successive migrations, ethnogenesis, religious conversion, and kingdom formation following the collapse of the Roman state of Britannia. Instead of focusing on the ethics of their display, this article considers two points. First, how does their display influence our interpretations of the roles of funerals in early medieval society? Second, what do the reconstructions of early medieval graves achieve for the modern visitor?

Displaying the early medieval dead

Many museums and heritage centres portray the finds from early medieval graves in traditional display cases and with discussions of their mortuary context provided by text. However, over the last two decades, an increasing number have opted for arranging body and artefacts in mock-up graves. These three-dimensional reconstructions represent the most expensive, elaborate, and definitive ways of visualising early medieval graves. For example, at the Bede’s World exhibition at Jarrow on Tyneside, a replica of a 6th century weapon burial uncovered...
from the excavations at Norton, Cleveland, is displayed within a cabin (Fig 1). Set vertically to confront the viewer, the moment of archaeological discovery is recreated and the relationship between bones and artefacts create a striking display for the visitor. In other museums, such as the South Wiltshire Museum in Salisbury, a horizontal arrangement of bones and objects is preferred, mimicking more closely the original 7th century weapon burial uncovered at Ford, Wiltshire (Fig 2). At Saffron Walden museum, the grave is placed within the floor and covered with strengthened glass, allowing visitors to walk over it (Fig 3), a practice similar to that adopted by the National Museum of Scotland for a Viking furnished grave from Orkney (Fig 4). Meanwhile, the Sutton Hoo Visitor Centre reconstructs Mound 1’s burial chamber, taking the visitor back to the moment of its creation (Fig 5).

The Corinium Museum, Cirencester, deserves particular attention because it incorporates four discrete ways of representing early Anglo-Saxon graves: finds from a cemetery excavated near Lechlade in the 1980s. First, there are traditional display cases and accompanying text. Second, the dead are brought to life by mannequins with facial features reconstructed from excavated skulls, wearing replica artefacts based on those recovered from the graves (Fig 6). Third, a weapon burial is portrayed as if it were an authentic discovery caught in the moment when revealed by archaeologists; the weapons and other grave-goods are joined by the tools of the archaeologist’s trade (Fig 8). Finally, the burial tableau of the wealthiest 6th century grave excavated at Lechlade is reconstructed as if witnessed at the moment following composition and prior to the grave’s backfilling (Fig 9). The mannequin also sports a facial reconstruction based on the skeletal evidence and is dressed in replica clothing and grave goods while the burial has a painted backdrop modelled on the reconstructed Anglo-Saxon village of West Stow. Two touch-screen computers allow the viewer to explore an interactive database of information about the grave and the society it represents.

Early medieval graves often appear in archaeological plans, sections, photographs, and artist’s reconstructions of graves and funerary scenes. Yet these museum reconstructions provide a tangible link to the early medieval past and give an insight into the attention and desire to recreate the mortuary context in modern museums.
Likewise, the fiery transformation of cremation ceremonies is lost upon the viewer by simply displaying ashes in urns. A critical reading of modern museum displays therefore leads us into new research directions for understanding early medieval funerals and their varied nature between regions and over time.

**Museum displays and modern death**

Viewing remains of the ancient dead is seen by some as voyeuristic, but others promote the public display of ancient bones and mortuary artefacts as educational. Graves and bodies have a unique power to humanise and personalise the past, allowing an individual from the past to be tangible and personalise the past, allowing an individual from the past to be a unique feature of the past, present, and future.

Whether or not they are fully aware of it, archaeologists and museum curators therefore play an important role in modern British society—one that has nothing to do with the scientific investigation of past societies and the education of the public about these cultures. By digging up, studying, and displaying early medieval graves—and arguably those of other periods from Egyptian mummies to Iron Age bog bodies—archaeologists are effectively offering engagement with death and mortality without mourning. This has previously been overlooked by archaeologists and it is certainly something that needs to be factored into any future policy decisions made by government and museums about how the dead are displayed. It questions whether archaeologists are justified in ignoring this popular relationship with the ancient dead and talking only of scientific and educational value. It also questions whether this popular and largely silent practice of British engagement with mortality through museums should be abandoned in favour of repatriation and reburial. Rather than museum curators and archaeologists imposing their sensibilities concerning what they think is ‘respectful’ and ‘tasteful’ about museum displays of the dead, we should instead defer to public opinion and regard early medieval graves as an active and changing part of our early 21st-century British relationship with mortality.

Archaeologists have put the early medieval dead to work in the present. In museums across the country they dig out from display cases or sleep shrouded beneath facial reconstructions and replica clothing. They ceaselessly engage the public with a sense of history and mortality. For generations the British public have visited early medieval graves, together with those of other periods and places, in museums exhibitions with greater frequency and ease than they would view their own dead relatives. From this perspective, academics who regard early medieval graves as primarily scientific, and educational, as well as those elements of society that regard the same remains as worthy of worship, honour, and mourning, are ‘fringe groups’, and are overlooking the bigger picture. The early medieval dead may matter more to the British public because they attract and disturb; they are distant and ancient, while simultaneously familiar and tangible vestiges of human mortality. Therefore, before we address the ethics and politics of displaying the dead any further, we first need to stop and ask the bigger and more difficult question: ‘What do the early medieval dead do for us?”

**Fig 8. Early Anglo-Saxon weapon burial excavated at Lechlade, Gloucestershire.** The display shows the grave under excavation. An archaeologist’s trowel, bucket, and ranging rod are therefore positioned next to the skeleton and the grave goods. Corinium Museum.

**Fig 9. ‘Mrs Getty’, the wealthiest early Anglo-Saxon inhumation grave from the Lechlade cemetery. Reconstructed at the Corinium Museum.**

The dead are brought to life by mannequins with facial features reconstructed from excavated skulls, wearing replica artefacts based on those recovered from the graves.
Geographically speaking, Britain is far removed from the Arab and Islamic world, so it is widely assumed that any connections between Britain and Muslim lands are of fairly recent origin and mostly associated with the British Empire. Whilst there were certainly strong links with Muslim South Asia dating from the establishment of the British East India Company in 1600 and the commercial and imperialist adventures of people such as Robert Clive (1725-1774), Britain’s connections with the Muslim world are far older and considerably more diverse than one would expect.

Recent historical research has shown that during the Tudor period there were not only diplomatic and trading links with the Islamic world, but also a Muslim population residing in London. This community may even have provided inspiration for Shakespeare’s Othello, and the demise of the eponymous Moorish general in the service of Venice. Historically inspired by the Arab conquests onwards we are accustomed to think of two separate worlds: the Muslim Middle East and Christian Europe. The cultural and religious distinctions were substantial, but they were not absolute, and there was considerable exchange of goods, ideas and people between the two regions.

Historical documents from early medieval Britain contain few references to the Muslim world and little to indicate any consciousness of this other civilisation more than 2000km away. However, there is a range of objects in existence that clearly indicate an awareness of this other world. The most telling is the corpus of Arabic coins found in Scandinavia and hoards throughout Britain and Ireland. These are indicative of long-distance trading networks along the river systems of Russia to Central Asia and the Middle East. The sheer quantity of coins suggests not only the scale of the trade, but also the leading position of the Islamic world in terms of finance and capital. Perhaps the most eloquent example of this relationship can be seen in the famous gold coin known as Offa’s Dinar, which is housed in the British Museum (Fig 1). Ostensibly this is an 8th-century Abbasid dinar similar to those produced in Baghdad, but on the centre of the obverse the words Offa Rex (King Offa) are stamped, surrounded by the Muslim profession of faith. Some of the explanations that have been given for this border on the absurd, including the theory that the 8th-century king of Mercia had converted to Islam. The most likely explanation is that the coin was part of a remittance sent by Offa to the Pope as payment for recognition of his regal status. This does not make the coin any less remarkable – in order for Offa to secure the support of the Holy Roman Church, he would have felt obliged to pay with the most powerful currency of the day, and that was stridently Muslim in character.

A number of other objects from the Muslim world found their way to Britain, though in smaller quantities. The Ballycottin Cross is a small piece of 9th-century gold jewellery which features a carved glass bead inscribed with Bismallah (‘In the name of Allah’)
in Kufic script. Of a similar date are a number of pieces of blue-green, alkaline-glazed early Islamic pottery, which were found at Flaxengate in Lincoln, and are associated with an Anglo-Scandinavian settlement.

In 1095, 30 years after the Norman Conquest, the relationship between Europe and the Muslim world was decisively changed with the advent of the First Crusade. This defining event initiated a period of conflict whose legacy is still felt throughout Europe and the Middle East. With the Third Crusade (1187-1192) came a direct clash between the King of England, Richard I ‘the Lionheart’ (1157-1199), and his Kurdish nemesis, Saladin (1138-1193), Sultan of Egypt and Syria (Figs 2, 3). Alongside the infamous hostility and violence, the Crusades also initiated a period of intense cultural interaction. Knights and soldiers from as far as northern Scotland travelled to Palestine and Syria and were confronted with different ways of living and in particular higher standards of hygiene. The famous Syrian chronicler Usama ibn Munqidh recorded how some of the Crusaders adopted Muslim dietary rules, refusing pork and eating only food which was *halal* (permitted).

On their return from the East some of these knights brought new ways of thinking and objects of exceptional value. One of the most famous examples is the glass beaker known as the Luck of Edenhall (Fig 4). Although the exact history of the object is not known, the consensus of opinion is that it was brought back from the Crusades by a member of an aristocratic family in the 13th century. The beaker, which has a narrow cylindrical base and a flared mouth, is decorated in red, blue, green, and white enamel as well as gold leaf. The vessel, which is currently in the Victoria and Albert Museum, was made in Syria in the 1200s. Because of the fragile nature of glass vessels, no other complete

examples have been found in Britain, though fragments have been recovered from archaeological excavations in London, Cornwall, and along the south coast.

In addition to glass, Syrian pottery has been found in archaeological excavations in London, Reigate, Dublin, Carmarthen, and other locations throughout the British Isles. Of particular interest is the neck and shoulder of a 13th-century jar in blue-green glazed Raqqa-ware, which was found at Grosmount Castle in Wales and is currently on display in the National Museum of Wales in Cardiff (Fig 6). Also of Syrian manufacture are a series of frit-ware jars (*alberellos*) recently excavated at Plantation Place in London and dated to the 14th century.

Although the Crusades are the best known connection between medieval Britain and the Islamic world, there were also well developed trading connections between Britain and Muslim Spain. Tin-glaze and common wares from Spain have been uncovered at excavations across Britain and Ireland. Compared with contemporaneous examples of British medieval pottery, these wares were highly sophisticated with attractive lustre (metallic) decoration (Fig 5). Even after Spain had been reconquered by the Christians, there was very little alteration in this trading pattern, suggesting that religious ideals were of little relevance to commerce.

It is highly probable that more material evidence of the connection between Britain and the Islamic world will be uncovered or identified in collections in the future. Dr Andrew Petersen is a lecturer in Islamic archaeology at the University of Wales and has carried out fieldwork across the Islamic world.
Richard Falkiner reviews the autumn and winter 2009 antiquities sales

The post-summer season of antiquities sales has seen a continuation of the trend that has become well established over the last decade. Essentially, the situation in Iraq has seen a diminution of antiquities hailing from what may loosely be termed the Bible Lands, which is to be greatly applauded. That does not mean to say antiquities of Biblical interest possessing a firmly established provenance should not change hands on a commercial basis, but the looting in the Near East has led to some objects appearing with unacceptable provenances, if any. The scene in Afghanistan, where conflict still rages, is similar. Unprovenanced artefacts from these parts of the world should go unhandled, although it would be sensible to salvage notes and photographs and preserve at least some element of them against an uncertain posterity. This is as it should be, at least for the present. The trade and auctioneers have taken the lead with their diligence in this respect.

Cahn

The autumn antiquities auction season kicked off with the Cahn auction in Basel, Switzerland, on 18 September, in which 356 lots were offered to a discerning public.

The highest price of the day was the SFr 90,000 (£55,550) paid for an Attic amphora (c. 470 BC) attributed to the Berlin Painter – one of the most celebrated vase-painters of Classical Greece (Fig 1). It is hardly a surprise that this vase did so well – the estimate...
was SFr 78,000 – considering it had a fascinating provenance going back to 1812 when the Earl of Sligo shipped it from Greece to his seat in Ireland on HMS *Pylades*, an act for which he was subsequently prosecuted and jailed for four months.

In reporting auctions it is often worth mentioning the lower end of the market. At the Cahn sale, an investment of as little as SFr 300 (£180) would have bought one of three lots, the most attractive of which was a red terracotta lamp from the 4th century BC featuring a figure of Eros (*Fig. 6*). A basalt relief portrait of an Egyptian Ptolemaic queen, wearing a vulture hood, dating to the 4th century BC featuring a figure of Isis (*Fig. 5*). A similar relief, dating to the same period, carved from red granite, and with an abraded lower portion, sold for SFr 78,000. (*Fig. 4*).

A dynamic, spiral torso of Pan (*Fig. 2*), dating to the 1st century AD, is a copy of a Hellenistic bronze statuette of c. 150 BC, known as the ‘Tail-Chaser’. The piece is 38.5cm in height, and although missing its head and legs below the knees, still fetched SFr 408,000.

Also sold in Basel was a Roman bronze statuette of Venus (H. 23.2cm), dating to the early 1st century AD (*Fig. 3*). The goddess is naked, her right hand (which has three cracked fingers) reaching out, while the left hand covers the pubic region. The eyes were originally inlaid with silver. The statuette sold for SFr 90,000.

Cahn has been very active in recent months. A sale of archaeological books on 9 and 10 November saw 1704 lots come under the hammer. The catalogue from this sale is well worth saving because it furnishes a useful bibliography on a wide field of ancient art and archaeology.

**Christie’s London**

Christie’s sale in London on 27 October featured 203 lots, realising a total of £934,850. A fragment (14.5 x 4.25cm) of an Armana (c. 1353-35BC) relief (*Fig. 9*), depicting three boatmen in short kilts, and grasping oars in their hands, had been estimated at £2500-3500, but sold for £4200. A pair of Greek gold rosette ornaments from the 4th century BC (diam. 4.3cm) had an estimate of £50,000-80,000 and went to a private buyer for £169,250 (*Fig. 10*).

The most sensational lot, which obtained the highest price of the day, was the anthropoid painted sarcophagus panel that carried an estimate of £80,000-100,000 and on the day made £80,000 (*Fig. 11*). This elegant object was created during the Late New Kingdom period (1069-920 BC). Despite its function as a coffin panel, the piece carries a message of hope in the form of an ascension scene.

---

*Fig. 7. New York sales. Etruscan clay brazier, 6th century BC. Diam. 41.6cm. Sold for $500. Lot 129.*

*Fig. 8. New York sales. Roman silver Patera decorated with gilded vine leaves and grapes, c. 1st century AD. L. 24.1cm. Sold for $420,000. Lot 150.*

*Fig. 9. London sales. Armana relief fragment, c. 1353-35 BC. 14.5 x 4.25cm. Sold for £4200. Lot 87.*

*Fig. 10. London sales. A pair of Greek gold rosette ornaments, 4th century BC. Diam. 4.3cm. Sold for £169,250. Lot 120.*

*Fig. 11. London sales. Anthropoid sarcophagus panel, Late New Kingdom period, 1069-920 BC. H. 157.5cm. Sold for £80,000. Lot 84.*
Christie’s New York

Christie’s general sale of antiquities made available 207 lots, including a wide variety of desirable pieces. At the less expensive end of the auction, an Etruscan brown clay brazier featuring scenes of hunting and grazing animals in relief round the everted lip, which probably dates to the 6th century BC, was estimated at $3000-5000. However, it only required a bid of $500 (£308) to secure it (Fig 7). Such a sale emphasises the difficulty in forecasting what an object might achieve and the possibility of acquiring beautiful and interesting pieces at a comparatively affordable price. Because the brazier formed part of a deceased estate, it is likely that there was no reserve price set on it. A truly wonderful item, worthy of even the most fastidious museum, was a Roman silver patera decorated with gilded vine leaves and grapes, and dating to the 1st century AD (Fig 8). The estimate of $175,000-225,000 was soon left far behind, and it eventually required a bid of $420,000 (£259,259) to acquire the piece.

The total for Christie’s New York sale amounted to $8.28 million (£5.11 million), including the buyer’s premium.

Bonham’s

The Bonham’s antiquities sale in London occupied a long day on 28 October, when 401 lots sought a new home. The affordable sum of £350 would have bought you an attractive Megarian (c. 150-100 BC) red pottery bowl made to imitate what must have been a very appealing silver bowl, elegantly decorated with scrolling foliage (Fig 17). There were some significantly high prices at the sale. The highest achieved on the day was £170,000 paid for a vivid blue ushabti figure of the 19th Dynasty (Fig 14). This obviously rare example is inscribed with six lines of hieroglyphs confirming it to relate to king Menmaatre (Sety I). Hardly less exciting was the late period (c. 664-332 BC) Egyptian limestone head of Bes, which required a bid of £30,000 to take it home (Fig 13). Both these lots came from a collection formed in the United States between 1970 and 1989 and were offered from a deceased estate. This is clearly the sort of provenance that assists greatly in obtaining the best commercial results. The sale included a large onyx cameo (H. 4.5cm) of the empress Livia (58 BC - AD 29), her hair worn in characteristic braids, while a gauze veil falls from the back of her head (Fig 16). Provided with an estimate of £60,000-80,000, the finely carved piece achieved £96,000. The Egyptian marble bust of a child, probably a worshipper of Isis, and dating from c. 2nd century AD, has a delicately featured face, with small lips...
and ears, and almond-shaped eyes (Fig 12). Given an estimate of £6000-8000 it realised £52,800. The Roman cameo of a sleeping dog achieved a price of £26,000, far outstripping the £4000-6000 at which it had been responsibly estimated (Fig 15). This piece came from the Marlborough collection at Blenheim Palace and was dispersed at Christies in 1899. On this occasion it fell for £3-5-0 (£3.25) to an ancestor of the present vendor.

Sotheby’s

A major sale at Sotheby’s, which now keeps its antiquities department in New York, took place on 10 December. A red granite head, dating from early in the reign of Tuthmosis III (c. 1479-1450), and measuring 18.7cm, depicts either a man or a deity (Fig 20). Wearing a beard, the face was carved with full lips and almond-shaped eyes. With an estimate of $40,000-60,000, the head eventually went for $272,500. A large (H. 59.5cm) Attic black-figure amphora of c. 520-510, was decorated with Athena in her quadriga, with Herakles nearby, while Hermes leads the team of horses (Fig 22). On the reverse, Apollo is depicted flanked by a satyr and a goddess. With an estimate of $120-180,000, the amphora achieved $290,500. Given an estimate of $60-90,000, the marble head of an over-lifesize (H. 37.1cm) statue of Hermes (Fig 21), a Roman copy from the early 2nd century AD of Lysippus’ statue of the god in the act of sandal-binding, the piece was sold for $182,500. With an estimate of $150,000-250,000, a bronze figure of Aphrodite (H. 51.1cm), depicted the goddess standing and wearing sandals, a chiton, and himation (Fig 18). The goddess’s wavy hair is shown with a centre parting bound with a diadem. Thought to come from the island of Melos, the bronze dates to the 1st-2nd century AD. The statue achieved $530,000. The highlight of this sale was a Roman sarcophagus relief with a lively Dionysiac scene contained in five panels (Fig 19). Its well recorded and interesting provenance stretches back some five centuries. First recorded in the Borghese family, and in more recent times it has belonged to Emile Zola, who acquired it in 1893 (his estate sold it in 1903); the actress Cecile Sorel; and French Prime Minister Paul Reynaud. Given the artistry of the sarcophagus, and its recent history, it was eagerly competed for by six bidders, eventually falling to an anonymous telephone bidder for $1.3 million.

The total for the entire Sotheby’s sale was $4,789 million (£2.956 million). This was well in excess of the estimate of $2.3-3.5 million, 86 percent of the lots finding a new home. Prices quoted above are the ‘hammer’ price.
This book is a colour photographic catalogue of early Anglo-Saxon artefact types, focusing on metalwork. Hammond aims the book at a popular audience and specifically at metal-detectorists and collectors. The book begins with the mistitled section ‘Introduction to the Early Anglo-Saxon Period’, which actually outlines advice about finding, buying, collecting and valuing early Anglo-Saxon artefacts. This is followed by a disappointing and hyper-traditional account of early Anglo-Saxon history (‘Outline of the Early Anglo-Saxon Period’) in which Gildas’ writings are attributed to the end rather than the beginning of the 6th century AD; Bede is implausibly called a ‘careful scholar’ who painted a ‘vivid picture of life in early England’; and the poem Beowulf is incautiously claimed to have 6th century origins. Even a brief summary of early Anglo-Saxon archaeology would have been a useful addition.

When Hammond gets into his element he provides a competent and readable introduction to early Anglo-Saxon metalworking and ceramic production. This is followed by a superbly straightforward introduction to the established styles of early Anglo-Saxon metalwork. The real value of the volume, however, is the catalogue. The text here is detailed and descriptive and artefact dating is discussed in broad terms. The functions of artefacts are also fully reported and the possible religious meanings of the animal art receive attention. The text is accompanied by useful distribution maps. For each artefact type there are superbly reproduced and accurately scaled colour photographs of the finds; the first time I believe any book has done this for early Anglo-Saxon artefacts. Moreover, some of the artefacts depicted are clearly recent metal-detector finds, published in colour for the first time. Others are from museum collections and many of these too have not appeared before in colour. There are also line-illustrations from existing publications. A disappointing lapse seems to have occurred in that none of the images are referenced for their provenance or context of discovery. Equally, the book does not acknowledge museums or collectors for image rights. These errors will presumably be rectified in future volumes of the series.

I have two further critical comments about the book. First, the contexts in which artefacts are found and the process of their discovery are downplayed. Even when a ‘grave-group’ is discussed (pp. 107-108) the text fails to make clear to the reader that these artefacts tell us most about early Anglo-Saxon society and culture when excavated scientifically within stratified contexts, usually graves but also from settlement sites. The book also tends to downplay the colossal contribution made by responsible metal-detector users who chance upon Anglo-Saxon contexts that have been damaged or destroyed by ploughing, and who will carefully plot the location of finds and report the discovery to the Portable Antiquities Scheme. Sadly, numerous early Anglo-Saxon cemeteries have been ransacked by nighthawks and information lost when artefacts are not reported and are sold on without reporting or provenance.

Second, the series title is called ‘British artefacts’, and yet the Introduction to the Series reveals an explicit bias by claiming the books ‘will show the developing “material culture” of England’ and highlighting the ‘immense importance in the story of the nation’ and ‘English history’ of the Anglo-Saxon period. Like some other recent popular histories of early Anglo-Saxon England, this patriotic statement is worthy of the days of early Victorian Teutonism! As the book’s distribution maps clearly show, ‘early Anglo-Saxon England’ means areas of Germanic-style burials, settlements and artefact types found in only some parts of southern and eastern England. Other areas in the south and east, most of western and northern England, and all of Wales and Scotland in the period AD 450-650 have produced either no evidence or very different archaeological traces that are not discussed at all in this volume. Perhaps the series needs to be re-named ‘English Artefacts’, or else a subsequent volume will address Britain for the period AD 450-650?

There may be more detailed introductions available for early Anglo-Saxon burial and settlement archaeology as well as studies of early Anglo-Saxon art, crafts and costume. Yet as a popular and visual introduction to the range of early Anglo-Saxon metalwork, this book is a most welcome first and an invaluable guide.

Dr Howard Williams

To Wake The Dead
Marina Belozerskaya
308pp, frontis, 26 b/w illus.
Hardback, £17.99

In 1421, Cyriacus Pizzecolli, now better known as Cyriacus of Ancona, was a 30-year-old book-keeper of limited education who seemed an unlikely saviour of the past – yet that is what he became.

It was Trajan’s Arch in his home city that set him upon that road. He had passed the landmark almost daily since childhood, but he began to examine it in detail. He had no knowledge of Latin but recognised Trajan’s name. It set him wondering about the past and the places and ancient monuments he had already seen in his young life while he travelled the Mediterranean on business for merchants.

Hardly any of his contemporaries took any notice or indeed had any time for these ancient relics, but Cyriacus was suddenly fascinated, and resolved to begin documenting what he saw. He wanted not only to record the monuments but to look beyond them for what they could tell of past ages. His passion for antiquities was to bring him into contact with the scholars, artists and rulers of the Renaissance. Many of them were to use his discoveries and records as inspiration for their own work. Cyriacus could count Popes amongst those he came into contact with.

His travels and ready acceptance in business around the Mediterranean led his obsession, for so it became, for preserving the material remains of classical cultures. They also led him on to other paths, acting as a papal
spy and tirelessly campaigning for a Crusade against the Ottoman Turks to bring his beloved monuments in the east under European control. Truly he pioneered the science of archaeology. His own account, Later Travels, based on his detailed letters to friends and clients, is a mine of information that records a past and its monuments that have often long since gone.

As the Renaissance got under way, the scholars and humanists began to look to the past, and Cyriacus’ records, particularly his drawings, were often their road into it. The scholars stayed ensconced in their libraries; it was Cyriacus who brought rare and costly books and manuscripts back to them from the Near East, especially from Byzantine Constantinople and monasteries.

He was the first traveller since antiquity to observe and record the monuments of Athens, where he spent two weeks in 1436, and it is to him that we owe sketches of the Parthenon before the disastrous explosion of 1687 all but destroyed it. He saw and drew Hadrian’s remarkable villa at Tivoli long before the site was ravaged by its sculptures.

This is a fascinating account, often in his own words, of a man whose obsession with the past gave it a future into our own times. Peter A. Clayton, FSA.

---

**Egyptian Fakes. Masterpieces That Doped the Art World and the Experts Who Uncovered Them**  
Jean-Jacques Fiechter  
(Distributed in North America by Rizzoli)  
248pp, 220 colour & b/w illus.  
Hardback, £22.50 ($45)

First published in French in 2009 as *Faux-saïres d’Égypte*, this book is a fascinating compendium of many of the greatest forgeries of Egyptian art. It begins with a brief treatment of Egyptian forgeries produced in ancient times by the Phoenicians and Romans, and of 17th and 18th century forgeries brought back by early European travellers to Egypt. The 19th century brought about a prolific trade in fakes. Many of these entered the major museums, which were then amassing their first collections. By the late 19th century, skilled forgers sold a number of well executed pieces, which would not be condemned until many decades later. One of the treasures of the British Museum, the New Kingdom limestone statuette of Queen Tjetetri, acquired by E.A. Wallace Budge in 1890, was not unmasked by the curator W. V. Davies until 1984. A late 19th century forger also produced excellent black stone copies of the dignitary Rahotep in the posture of a scribe, one of which was acquired by the Metropolitan Museum of Art in 1924 and condemned by the museum’s curator Henry Fischer in 1978.

When, in 1928, the Met announced the acquisition of the gold treasures of the foreign wives of Tuthmosis III, partly by excavation and partly by purchase from dealers at Luxor, they did not realise that the three gold goblets inscribed with the names of the princesses were the work of forgers. These were condemned following studies made between 1972 and 1983. The famous painted limestone bust of the 18th Dynasty Queen Ahmose-Nefertari, with its leopard head-adorned garment, was purchased in 1926-27 by James Henry Breasted for the Chicago Oriental Institute. Suspicions were first voiced in 1984 by Ingegerd Lindblad, and elaborated on by Henry Fischer in 1987. In 1992 the Louvre acquired the famous Amarna ‘wood head of a harp’. It was withdrawn from display in the 1980s and finally condemned officially in 1991 as a result of a test indicating that the tropical wood used was not used in ancient Egypt and that it was not more than about 400 years old. The Louvre’s ‘blue head’, acquired in 1923, was determined in 2001 to be a modern piece, probably made between 1920 and 1923 and influenced by Art Deco. In 1930 Ludwig Borchardt published a major article on 56 Egyptian forgeries that had entered European public and private collections in less than ten years, including 11 pieces in the prestigious collection of the Brussels collector Adolphe Stoclet. These were selected from some 250 top-quality forgeries uncovered by him during that time. Borchardt was threatened with a lawsuit from Stoclet, but he held his ground. Fiechter’s fascinating chapter on Borchardt, based upon his extensive research into his archives, is essential reading. It was in these archives that Fiechter came across the name of the man directly or indirectly responsible for creating many of the best forgeries of the first three decades of the 20th century, Oaxon Aslanian (1887-1968). Through research in the Met’s archives Fiechter also discovered that in the 1920s Herbert Winlock had already realised that Aslanian was the source of many forgeries. Neither had published his name for fear of a lawsuit. After 1930 most experts referred to him simply as ‘The Master of Berlin’. Two chapters illustrate a number of his productions as well as some of the originals from which he drew his inspiration.

A chapter is devoted to Paolo Dingli, Mario Riccino and their colleagues who, in addition to their work as restorers in the Egyptian Museum, were also gifted forgers. They and others in Egypt produced thousands of forgeries during the first third of the 20th century, most of which were sold to unsuspecting tourists, dealers and collectors in Europe and America from about 1920 to 1940. Another chapter deals with the ‘Mansour Collection’, a large group of Amarna-style sculptures and reliefs, over 100 in all, that are in all probability still being offered for sale. The affair of the granodiorite statue of the Middle Kingdom pharaoh Sesotiris III, acquired by François Pinault in Paris in 1998, and of the alabaster torso of an Amarna princess created by Shaun Greenhalgh and purchased in 2003 by the Bolton Museum (see this issue of Minerva, pp. 8-9) are, of course, included in this very up-to-date work.

Some of the modern techniques for detecting forgeries are discussed, as is the work of some of those Egyptologists who were expert at detecting forgeries, such as John D. Cooney, Henry Fischer, and Dietrich Wildung. ‘The Aesthetics of the Forger’ (*Minerva*, May/June 1991, pp. 10-15) is also treated in some detail.

Unfortunately, the quality of the illustrations is very poor and indeed several are accidentally omitted even though there are references to them in the text (such as Figs 2, 3 – the wrong illustration – and 74). The translation is excellent and the bibliography and index are of great assistance to those who wish to do further research into this fascinating topic. The book is a lively read and a must for those interested in Egyptian antiquities. The author previously published a scholarly work on forgeries in *Faux et faussaires en art égyptien*, in 2005, that is highly recommended to scholars.

*Dr Jerome M. Eisenberg*

The Louvre’s ‘blue head’, acquired in 1923, was determined in 2001 to be a modern piece, probably made between 1920 and 1923 and influenced by Art Deco.