

# The RAG

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A scene seen in a bath Page 10

## A Brothel and Infanticide - *A dark side of Roman Britain or a Misinterpretation?*

Graves of 97 infants in close proximity under walls and courtyards have been discovered, or more accurately rediscovered, at an archaeological site known as Yewden Villa at Hambleton at Buckinghamshire in the Thames Valley. All of the infants were new-born at the time of death.

Some archaeologists speculate that the site is that of a brothel and the deaths were the result of associated infanticide. They rely on the alleged notions that at the time a new born was not considered to be fully human and that contraception was either not practised, or was likely to be largely ineffective when it was. The speculation has led to some sensational headlines centred around the theme of Roman barbarism. Hence, for example, 26 June 2010, Daily Mail, UK: “Romans killed dozens of unwanted babies at English 'brothel'.”

First excavation of the Hambleton site was in 1912, and the building remains were originally identified as those of a Roman villa of high status. The 1921 report of Archaeologist Alfred Cocks, was accompanied by photographs, and artefacts, including bones. However, the report and materials were forgotten until recently when they were rediscovered at Buckinghamshire County Museum.

The site is thought to have been in occupation from the first to the fourth centuries. Seen in this light the discovery of 97 infants is less striking. It also has to be considered that the infants, or some of them at least, may have been stillborn.

There is no evidence that the site was that of a brothel. It is quite a stretch to infer the existence of a brothel from the fact of infant deaths. Besides the site was rural. A rural brothel would seem to be a novel concept for the period.

Some archaeologists have hypothesized an even worse scenario than infanticide for the

purposes of a brothel—the site was a place of ritual human sacrifice. It is alleged that some evidence from other sites in Roman Britain establish that new-born infants were ritually used as building foundation deposits. Such hypotheses and allegations are not more than speculation at best.

In regard to the proposition that new-born infants were not considered to be fully human, it has to be wondered who did the surveys of public opinion, and whether the collected data were exposed to appropriate measures of mathematical analysis!

Then there is the matter of contraception. It is not impossible that contraception by use of, for instance, herbs, and who knows what else, and how many barrier methods, was a widespread practice. As to the effectiveness of contraception, an argument can be made that it must have played at least some role in the significant decline in population in the early centuries of the empire. See relevant discussion in John Riddle, 1997, *Eve's Herbs, A History of Abortion and Contraception in the West*, Harvard, 1999.

This is how English heritage describes the site: *A Romano-British homestead built before the mid-1st century and occupied until the end of the 4th, comprising four buildings with an enclosure wall . . . The principal dwelling house, 92 x 82 ft, was of the double corridor type; the large number of furnaces found suggest that the establishment was engaged in corn production on a large scale. Three adult and 97 infant burials were discovered; and some 800 coins (including a hoard) ranged from Claudius 1 (41-54) to Arcadius (383-408) . . .* Hence, sensational speculation notwithstanding, it seems the place was at least for some time at the centre of a large scale commercial corn farming operation. As for the why and how of the infant deaths—who knows? Benign explanations are as good as any.

Ed.

## Reconstructed Roman Window Glazing

*Martina Müller*



**Martina Müller has a degree in Mediterranean archaeology from the University of Bern (2005). She is currently living in Sydney but researching a PhD through UWA on full-size reconstructions of Roman buildings.**

Numerous reconstructions and replicas of Roman buildings have been built at heritage sites in north-western Europe. They attract numerous visitors keen to see what ancient buildings may have actually looked like above the foundations that are sometimes all that survive. They have been accused in some instances of 'Disneyfication', but at the best such of sites considerable effort has gone into striving for authenticity. That can still lead to problems as it may result in 'best-practice' discovered at a major site or building in antiquity being applied to all such buildings rather than being a rarity.

My PhD thesis encompasses a wide range of features of reconstructions of Roman buildings – e.g. wall paintings, flooring and roofing. At present I am investigating full size modern reconstructions of Roman windows, meaning that I am exploring all the sources available and comparing the archaeological evidence with replica windows at heritage sites in north-western Europe where scholars have striven for authenticity. My aim is to find out more on the accuracy of reconstructed Roman windows at such sites, with a particular focus on reconstructed houses and baths. During my investigations I have, amongst other questions, been dealing with the question of what types of window coverings the Romans would have used and whether the reconstructions accurately reflect everything we believe we know about them.

Finds as well as literary sources indicate that the Romans used thin membranes of various materials to cover window openings, particularly in rooms where it was important to retain heat while

at the same time admitting light. These coverings ranged from thinly cut panes of alabaster, marble, mica or selenite to various kinds of animal products such as parchment made from sheepskin or goatskin and even fabric such as oiled linen. No modern reconstruction however shows any of these types of coverings, instead most of the windows are glazed. This is quite legitimate because the Romans were the first to use window glazing, probably from the first half of the 1<sup>st</sup> century AD, and window glass has been found at many sites with Roman buildings. On the other hand, there is an ongoing discussion about how many windows would have actually been glazed. Modern research points towards more extensive use than previously thought, with glass being not very expensive and with finds of window glass also in the context of very modest buildings such as even stables. On the other hand there is firm evidence for windows which have certainly not been glazed.



**Window at the reconstructed Roman villa in Hechingen-Stein (Germany). The wooden lintel is based on finds in Pompeii.**

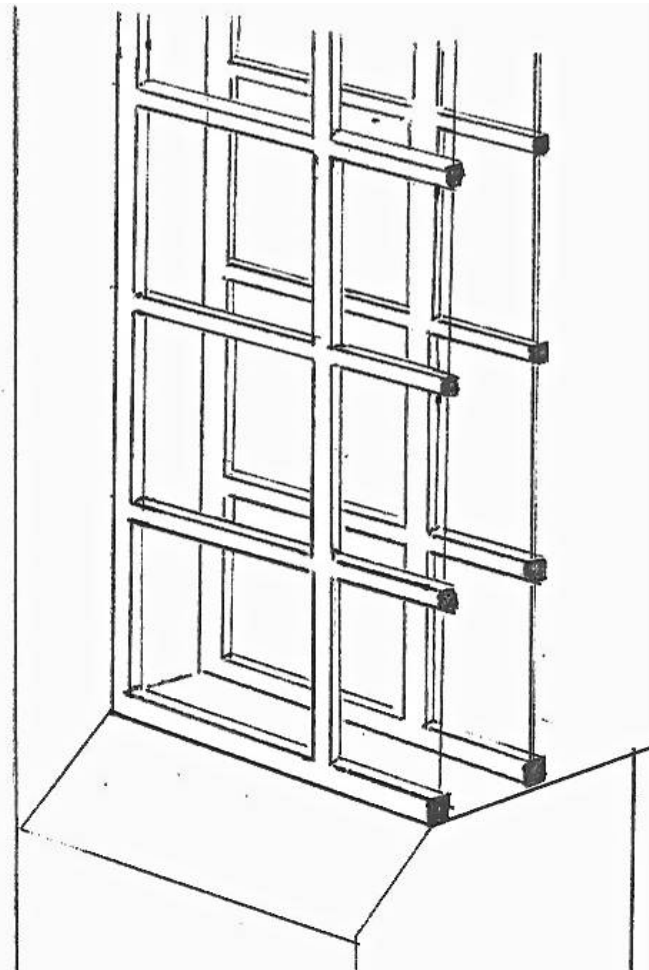
Early Roman window glass was not entirely transparent, because its surface was glossy on one side, but rough on the other. Even though, because of a difference in manufacturing technique, later glass would become thinner (often only around 1 to 2 mm thick) and glossy on both sides, it was still generally dotted with bubbles. The colour of Roman glass ranged from a vari-





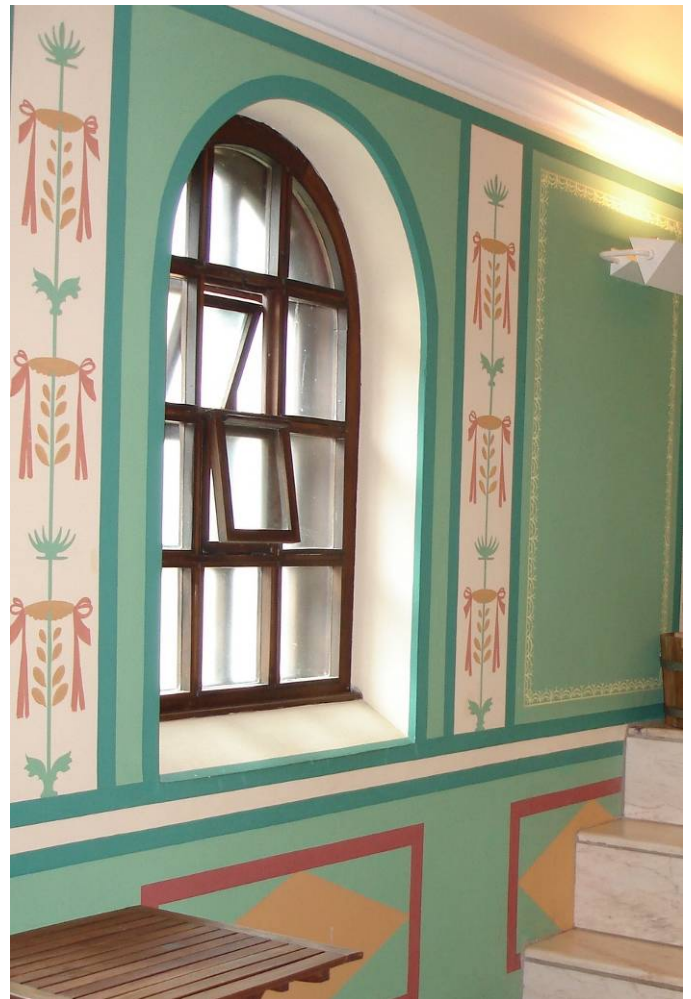
**Window glass in different colours found in Xanten and displayed in the museum.**

ety of blue and green shades to almost colourless. Square or rectangular panes of various sizes have survived. A window pane from Garden Hill (Britain) for instance was 23.5 x 27 cm, while a pane from Corbridge (Britain) was 60 x 60 cm. In



**Double-glazing' based on finds in Herculaneum. Drawing after G. Precht, *Archäologie im Experiment, Archäologie in Deutschland* 4, 1989, 24.**

smaller windows these glass panes could be cemented directly into the window reveal, but for larger windows several rectangular glass panes had to be fitted into wooden, metal or stone frames with vertical and horizontal bars which formed a grid pattern. Sometimes fastenings were used to secure the glass panes in their frames, but the panes could also be inserted into grooves and lead calmes or simply secured with cement. Based on the surviving evidence, reconstructed windows usually have glazing which consists of several glass panes set in wooden or metal frames. Most reconstructions also recreate the colours and translucency of Roman glass, many of them based on finds of glass found on site.



**'Double-glazed' windows at the reconstructed villa baths in Borg (Germany).**

In rooms with hypocausts (under-floor heating systems), and even more so in hot baths, it was particularly important to retain the heat produced. Not surprisingly, many finds of window glass have been made in or near public and private baths. Accordingly, all of the reconstructed baths (Xanten and Borg in Germany, Wallsend in Britain) are glazed throughout. In fact some of the windows in these baths are even 'double glazed'. It is by no means double-glazing as we know it today, but instead consists of two parallel frames with glass panes, set some centimeters apart from each other. To date the only firm evidence for such 'double-glazing' comes from the Suburban Baths in Herculaneum, where remains of the two frames have survived at the original location with some of the glass still attached. There

might also have been double-glazing at the South Baths in Bostra (Syria), where the mortises of two pairs of vertical bars have been preserved in the window reveal. These bars might have been part of two frames for glazing. But with such scarce evidence it is impossible to say whether such insulation glazing would have been common throughout the Roman Empire, and whether it would have been limited to baths.

Even more speculative are windows which have one or two (in some cases even four) panes that can be opened. These movable panes are either hinged at the top, at the bottom or at the side. We know of a window in the Forum Baths in Pompeii that could be operated. There, however, the whole frame, which was still holding four glass panes when found, could be rotated around two pivots in the centre. For single movable panes we have no archaeological evidence. In the reconstructed baths at Xanten (Germany) these movable openings can even be operated with a metal suspension rod. It is attached to two panes so that they can be opened and closed simultaneously. Such a suspension rod is particularly convenient for windows which are set high up on the wall and cannot be reached from the ground. We know that a suspension rod was used to move the round iron plate (*clypeus*) which closed a circular opening in the vault of the *laconicum* of the Forum Baths in Pompeii. But again, a suspension rod as well as movable panes are a highly conjectural detail. Speculative features such as these are one of the reasons why full-size reconstructions continue to be a very contentious issue.

Following are three photographs of 'double-glazed' windows at the reconstructed baths in Xanten and Borg.





## The Divine Emperors of Rome

*Kevin O'Toole*

Apparently King James the 1st wanted to ensure that his little son Henry grew up with the right attitude. He admonished the little prince to love god, for “he made you a little God to sitte on his throne and rule over other men.” James wrote extensively on the subject of monarchy in which he advocated the divine right of kings. Basing his conviction on biblical authority he considered kings to be superior to the rest of mankind, although the plain of existence occupied by kings was not without its disadvantages: “the highest bench is the sliddriest to sit upon”.

If a medieval monarch was not a god he was at least an appointee and earthly agent of God. It is thus hardly surprising that *rex non potest peccare* (“the king can do no wrong”) became a legal maxim in England and France. Solon said that “if once you raise a man too high you will find it hard to bring him down.” This is perhaps what Louis the 14th was thinking when (and if) he said: “*L'État, c'est moi*” (“I am the state”).

The idea of the god-king has a long history, but an earthly king is manifestly human, and will not for long be able to pass himself off as being *in fact* a god—omnipotent, omniscient, ubiquitous and eternal, in each respect the opposite of what a human being experiences of him/herself. It was not part of the royal ideology of the Pharaohs of Egypt, or of the monarchies of Mesopotamia and Persia, that the king was in fact a god. He came close in Pharaonic Egypt, but even there the Pharaoh was not more than an avatar. It could not be otherwise because Egyptians, or at least enough of them, knew that Pharaohs like every one else got sick and died. A politically viable god-king is a priest-king; not a god, but an exclusive agent of the divine. That is not to say *exclusively* a priest. In Pharaonic Egypt, for example, the demands of administration of ritual required delegation by the Pharaoh, but in the political theology the priests appointed for the purpose, when performing ritual, merely incarnated the Pharaoh; they were not agents of the divine in their own right—naturally in due course they began to think they were and this led to political fragmentation.

Domitian (reign AD 81—96) came to declare that he was on intimate terms with Jupiter, a presumption that no doubt played a part in his assassination. At least in the early empire divinity for oneself was not a polite or prudent claim. Even, Augustus, had to die before he could be enrolled as *divus*. By the 4th century there were Roman emperors who were openly claiming divine affiliation. Aurelian (reign AD 270—275), for example, had coins minted asserting of him that he was *deo et domino nato* (“god and master born”). The average Roman citizen then might have thought the idea interesting, but would otherwise have been perplexed. If his or her response was not an indifferent “if you say so” it might have been, a respectful, “what do you mean?” The reason why the claim would have been ineffectual in what was intended for it, the elevation of the emperor's authority, is that from the point of view of political theology the claim was made in an ideological vacuum. It was Constantine (reign AD 306—337) who saw the need to attach his monarchy to a validating ideology. He discovered the potential of Christianity. Whilst before this he had openly associated himself with Apollo and Sol, what Christianity offered was the opportunity

for him to be perceived as plausibly divine. The Christian god was, like Apollo and Sol, unexamined and irrefutable, but unlike them, he was the creature of a coherent and contemporary narrative in which humankind played a central role—it was a narrative in which its faithful adherents were offered a reward of eternal life by a god who was not only omnipotent and omniscient, but omnibenevolent as well (albeit that that made him omniparadoxical—he was *obliged* to be good).

By the sign at the Milvian Bridge Constantine had himself endorsed by God, and at once he became God's agent. His position was anomalous. He was king but not priest; to Christians he had no doctrinal authority. That authority was held by someone else. Thus, it is at least arguable that by that time the Christian narrative, or at least one version of it (undoubtedly there were more than a few), had it that the position of priest had been the direct bequest of Christ to Peter and his successors who, as the vicars of Christ on earth, occupied some space betwixt earth and heaven: hence Matthew 16.19, “I will give unto thee the keys to the kingdom of Heaven and whatsoever thou shalt bind on earth shall be bound in Heaven and whatsoever thou shalt loose on earth shall be loosed in Heaven.” It would be a millennium before any monarch in the West would successfully challenge the successors to Peter—so to cut out the middle man as it were—and claim a direct agency from God. Constantine left the inevitable and much sooner rupture in the East to his Byzantine successors, and assumed no more than the role of a divinely appointed protector of Christian doctrine. In this way he safely wrote himself into the Christian narrative, and the augmented narrative became for Christians a potent validation of Constantine's monarchy. Hence, Eusebius had him as the head of the earthly defenders of the faith, and Christ head of the heavenly—in their respective spheres they were each viceroys of God.

Constantine's Byzantine successors would in due course break with the bishops of Rome and combine in themselves, Pharaoh-like, the secular and the divine. It is thus portentous that, as early as AD 361, Themistius the official panegyrist, and a pagan as it happens, was able to say of his Christian emperor Jovian: “The king . . . is the living law, divine law descended from on high, incarnation in time of the Eternal Good, emanation of its nature, Providence on earth, in constant contemplation of God, chosen to be his present reflection . . .” (Orations 5.64 b-c. Translation in Garnsey, P. and Humfress, C. (2001): *The Evolution of the Late Antique World*, Cambridge, p. 25).

As for King James the 1st, he was perhaps pleased, watching as he sat in Heaven, no doubt at the right hand of God, when in 1953 the successor in name, Elizabeth the 2nd, to his predecessor, Elizabeth the 1st, was initiated to the priesthood at her coronation: “The Queen is dressed in sacerdotal robes, in cope and stole; she moves slowly backwards and forwards across the theatre to the sound of anthems and the shouts of welcoming acolytes; she holds a Bible in her hand. The Church proclaims her its servant and she kneels humbly to the ministrations of the Church. The ritual is predominantly ecclesiastical; deliberately the monarch becomes a hierophant.” (Nicholson, Harold (1962): *Kings, Courts and Monarchy*, New York, p. 306).

## Roman presence in the Tayside area of Eastern Scotland

*Norah Cooper*

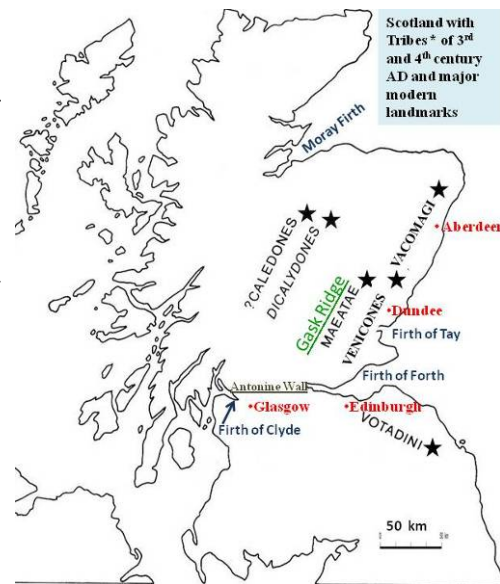
The expression “Roman Britain” is misleading. The province was, of course, called Britannia but it did not, ever, include the most northerly part of the island. As far as we can tell, Roman forces never penetrating the Highlands which occupy half of modern Scotland and their occupation of central and southern Scotland was short-lived. In the areas they did occupy, attention has always been focused on the Roman things – Roman forts, the Antonine Wall, Roman artefacts. Only relatively recently has there been much more attention given to the indigenous tribes and their culture. The Picts, the Painted People, have, of course, been famous as Rome’s protagonists in the last generations of their province – not least for those brought up on the Roman stories in Kipling’s *Puck of Pook Hill*. There was much more to the northern Britons, however, and recent research has started to give them a fuller three-dimensions. Amongst their structures were two which survive in large numbers, brochs and souterrains. This article focuses on the second of these and we will look at brochs in a later article.

The Roman period in Scotland began in the Flavian period from AD 78 when the governor, Cn. Julius Agricola started his campaign. By 80 his armies had reached the Tay in a reconnaissance campaign followed by construction of a dozen forts across the Forth-Clyde isthmus with some further north on the Gask Ridge in Perthshire (map below). In 84, Agricola was replaced, resulting in withdrawal of troops and abandonment of the Gask line forts.



The Gask Ridge at around 70 metres above sea level lies between the Highland massif and Fife, and forms part of a corridor northwards towards the coastal strip of richer agricultural land that extends to the Moray Firth (map next column). The Gask Road and the towers alongside it in this scenario guard the strategically important link to the harbours at the Firths of Tay and Forth and the southern part of the province.

In 140, the emperor Antoninus Pius instructed his governor Quintus Lollius Urbicus to mount a fresh series of campaigns in



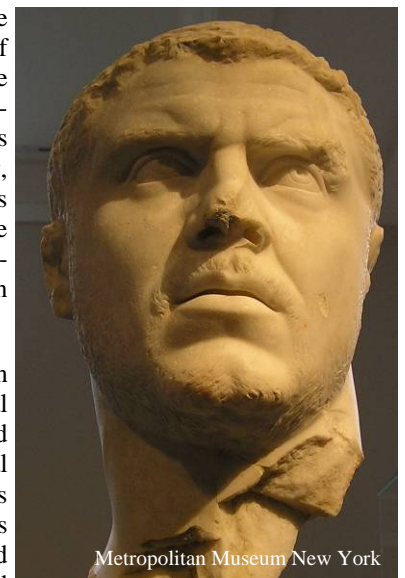
Scotland and the reestablishment of Agricola’s old line of forts. Urbicus now constructed the so-called Antonine Wall from (broadly) the Clyde west of Glasgow to the Forth west of Edinburgh, with new forts controlling the road northeast into the heart of native territory. The tribes of eastern Scotland recog-

nised the might of the Romans and paid tribute in the form of grain and other produce.

A third Roman advance into the region north of the Ford-Clyde line occurred in the 3<sup>rd</sup> century, when Emperor Septimius Severus came to Britannia in 208 and campaigned against a confederacy of tribes, the *Maeatae*, bringing them to submission before they re-revolted. As far as we can tell, this confederation spanned east-central Scotland in, broadly, Stirlingshire, Perthshire and Fife. Severus died at York in 211 leaving his two sons Geta and Caracalla (below) who made peace with the *Maeatae* before they returned to Rome.

No towns or villas were established in this area of Scotland during the Flavian, Antonine and Severan occupation. There was no monetary economy, although Roman coins were present, no evidence of the development of literacy or imitation of Roman architecture.

The Roman occupation would have required local foods, animal fodder and products, building material and labour. Roman goods found are mainly items associated with eating and drinking e.g. glassware and pottery or dress e.g. brooches, and thousands of coins. These would have been obtained by trade or as ‘diplomatic’ gifts.



Metropolitan Museum New York

Who were the people who confronted Rome at the height of its power and what were they building for themselves? Roman



writers have little to say, and much of it is essentially dismissive of uncivilized savages. That was not true and archaeology has done a great deal to reveal the domestic architecture of the place and time. One of the strangest is the phenomenon of souterrains, taking its name from the French meaning ‘underground’.

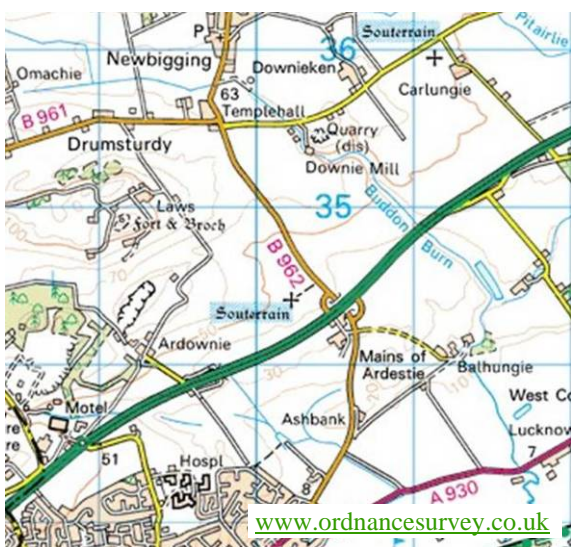
There are about 90 souterrains in Scotland with the majority (c. 55) between the Firth of Forth and the Moray Firth, the low-lying valley system and low hills east of the Highlands, and the area that coincides with the major zone of Roman military control in successive phases of occupation. According to Roman writers, this is also in the territory of the tribes like the Venicones and Vacomagi; later, broadly the territory of the Maeatic confederacy (see again map of forts).

One mile east of the city boundary of Dundee, signposted from the A92 Dundee-Arbroath road, set in the middle of an enclosure amidst arable fields is one of the best-known examples at Carlungie (picture below—main curvilinear passageway).



© Norah Cooper

This Earthhouse or *souterrain* lies just north of the A92. West of the Monifieth-Monikie crossroad, is a second souterrain, known as Ardestie (see map below). These are easily accessible *Historic Scotland* sites and worth visiting.



Souterrains are large complex structures consisting of a long sharply curving passage (at Carlungie it is 42.6metres long) with secondary chambers which served as workshops and storage areas. These chambers are below ground, with walls constructed from massive boulders with upper courses corbelled into a narrow

gap, covered originally by roofing slabs. The souterrains are now roofless. The floors are paved and in the case of Ardestie a drain prevents water seepage. There is evidence above ground of huts and a timber roundhouse on the sites.



© Norah Cooper

These dark underground passages were constructed primarily as cellars for storage of surplus agricultural produce. The long oblique entrance passageway kept the main storage space free from natural light and the doors kept the interior dark and cool with low humidity. A watertight roof was essential. In Tayside (shire of Angus) the souterrains are concentrated in good arable land and so they were used for storage of grain, meat and dairy produce. Today, this area is still one of the most fertile in Scotland. You stand at the Ardestie souterrain in amongst fertile fields gently sloping down toward the River Tay (picture above).

Souterrains have been radiocarbon dated from 1<sup>st</sup> century BC with Roman finds from souterrain sites generally from 2<sup>nd</sup> to mid 3<sup>rd</sup> centuries, including a *Gauloise 12* amphora from Carlungie, (picture opposite) which probably arrived during the Severan period (AD 193-235). The *Gauloise 12* amphora is a flat-based two-handled amphora with a thick projecting rim with multiple grooves on the upper surface. It is often decorated with horizontal bands of combed wavy lines on the upper body and was made of fine sandy red or yellow fabrics in the later 2<sup>nd</sup> to 3<sup>rd</sup> centuries AD in Normandy, France.



© National Museums Scotland

Although there is clearly a correlation between these sites and Roman occupation, there is no evidence that they were built for or used to supply the Roman Army with surplus agricultural produce. Some of the sites may well have been abandoned at the time the Antonine forces were pulled out of Scotland.

The long-established settlements like roundhouses and souterrains went out of use at roughly the same time as the supply of Roman goods appears to end, signalling widespread social and political changes.

I would like to thank Maggie Copland and Marianna Bultjens who were my knowledgeable guides to the souterrain sites.

REFERENCE: Dunwell, A. and Ralston, I. *Archaeology and early history of Angus*, 2008, Stroud (Tempus)

## APAAME on Flickr

*David Kennedy and Stafford Smith*

A previous issue (RAG 3.3) reported the award of a generous grant from the Packard Humanities Institute for, amongst other things, the digitization of thousands of film photographs taken of archaeological sites in the Middle East, especially Jordan. Together with more recent photographs taken with a digital camera, all of these 'images' were to be made available on a web site archive.

The Aerial Photographic Archive for Archaeology in the Middle East, APAAME, web site has now been made live on Flickr. To date there are over 12,000 images on the site, all named (where known or assigned a distinctive label), geo-tagged with co-ordinates and provided with key words (fort, road, village, Kite etc). The site is fully searchable. More photographs are being added regularly as digitization proceeds; recent seasons where images are already digital can be catalogued and uploaded quite rapidly. For example, the most recent season (September-October 2009) ended with some 10,000 new images of c. 1000 sites. Almost all of those are now on Flickr. We expect to have all the film photos digitized and on the site by the end of 2010 and will then be able to concentrate in future years on simply cataloguing and uploading the new digital images year by year. By the end of 2010 we expect the site to be hosting some 25,000 photographs.

On the Flickr site each image is available for viewing in a variety of sizes. The geo-tagging is a crucial element in the cataloguing and is enormously assisted by using a GPS-enabled Nikon D3 camera. The Geopic II GPS inserted in the hot-shoe and plugged into the camera automatically embeds the co-ordinates of the *camera* in the metadata of each photograph. From that the location of the *site* can be traced on Google Earth and the co-ordinates put into the metadata.

Although we have a full programme of flying in progress systematically recording sites and landscapes which are often under threat, there is scope occasionally to work with current or prospective archaeological projects. We invite colleagues to look at Flickr and, if interested, contact us about how we may be able to help them.

The Flickr site can be viewed free by anyone but we would like users to register (this is a simple process). Comments on photos or the site and suggestions are very welcome.

Flickr site: <http://www.flickr.com/photos/36925516@N05/APAAME> Project: [http://www.classics.uwa.edu.au/Aerial\\_archaeology](http://www.classics.uwa.edu.au/Aerial_archaeology)

The screenshot shows the Flickr interface for the APAAME photostream. Red arrows point from text boxes to specific features on the page:

- TO SEARCH THE ARCHIVE** points to the search bar at the top right.
- FOR INFORMATION ON THE PROJECT** points to the navigation menu below the profile picture.
- INTERESTING SETS OF PHOTOS** points to the 'Featured Sets' section.
- BROWSE PHOTOS BY YEAR** points to the '1997 Flight' and '1998 Flights' sections.
- TO JOIN FLICKR AND BECOME AN APAAME MEMBER** points to the 'Sign in | Create Your Free Account' link at the bottom.

The page content includes:

- Flickr logo and navigation: Home, The Tour, Sign Up, Explore.
- Search bar: Search APAAME's photostream.
- Profile: APAAME's photostream (pro), with links for Collections, Sets, Galleries, Tags, People, Archives, Favorites, Profile.
- Featured Sets: 2 sets.
- 1997 Flight: 1 set.
- 1998 Flights: 9 sets.
- 2009 Flights: 7 sets.
- Footer: Sign in | Create Your Free Account, Bookmark on Delicious, Explore (Places, Last 7 Days, This Month, Popular Tags, The Commons, Creative Commons, Search), Help (Community Guidelines, The Help Forum, FAQ, Sitemap, Get Help).



## The Baths of Caracalla in Rome

*Sandra Ottley*

*Dr Sandra Ottley recently had her PhD awarded for her thesis on the Praetorian Guard during the civil wars of AD 68-70. She is a part-time tutor in Classics and Ancient History.*

At a time when Rome's crowded tenements had few sanitary facilities or running water, the more than 50 baths (*thermae*) in the imperial capital played an important part in the lives of the cities' population. The largest and most impressive of these were the Baths of Caracalla (*Thermae Antoninianae*) which, when dedicated in AD 216, were the largest public baths in the Roman world. They were functional until AD 537 when the aqueducts which fed them were destroyed by the besieging Visigoths. Decline, collapsed roofs, wholesale looting of building material left a shattered rump but even today the immense soaring ruins, once capable of holding 1600 bathers, remain one of the most remarkable sites in Rome impressing visitors by their magnificence.

The Roman idea of the bath had originated in southern Italy where hot springs often provided the necessary water. With the development of the hypocaust (underground furnaces and passageways for hot air which heated halls and pools to the required constant temperature) public bathing complexes could be constructed in every town. It was Marcus Agrippa, the trusted friend of the emperor Augustus (27 BC – AD 14), who began the tradition of providing luxurious baths for the public. The baths he constructed on the Campus Martius at Rome were free to enter but probably only contained the basic bathing pools themselves. The emperor Nero (AD 54 – 68) built new baths in the 60's and it is believed that a next door gymnasium led to the idea of combining bathing and exercise rooms. By the time of the emperor Trajan (AD 98 – 117) the standard form of a bath complex with cold, warm and hot baths, swimming pools and gymnasia had been perfected. It is believed

that men and women originally bathed nude and together but from the second century AD male and female bathers were segregated; in some cases by having separate facilities but usually by confining women to the mornings and men to the rest of the day.



It is easy to assume that life in a city which had as many bathhouses as Rome must have been healthy. However, this is somewhat of a misconception. Writing in the first century AD, A. Cornelius Celsus prescribed baths for people suffering from dysentery, fever caused by typhus and malaria, tuberculosis, paralysis, tumours of the liver, cholera, bowel disorders, diarrhea, worms and maggots, gonorrhoea, rabies, boils, psoriasis, diseases of the eye and lice. All of this in water without chemical control. It was only in the second century AD that the emperor Hadrian (AD 117 – 138) came up with the idea of reserving special hours in the baths for the sick.

The Baths of Caracalla are easily the most impressive remains of any bathing complex. They are situated to the south east of ancient Rome's centre at the foot of the Aventine Hill. The construction of the enormous complex began in AD 212 and the main building of the complex was completed in AD 216 during the reign of the emperor Caracalla (officially Marcus Aurelius Antoninus, hence their name). The side buildings were erected by Caracalla's distant cousin and successor, Heliogabalus (AD 218 – 22), while the finishing touches were completed during the reign of the last member of the dynasty, Severus Alexander (AD 222 – 35).

The ruins themselves are free of modern buildings allowing the



visitor to fully grasp their vast scale and architectural magnificence. The bath complex covered approximately 13 hectares (33 acres) while the bath building itself was approximately 228 m long, 116 m wide and estimated to be 38.5 m high. Huge frescoed vaults covered the large rooms. The enormous complex was however, more like a leisure centre than just a series of baths, as it also housed libraries, gardens, art galleries, restaurants, shops and music pavilions. In addition to all this, one of the side buildings housed an underground temple to Mithras.

The main buildings of the baths were based around a huge central hall and consisted of a central *frigidarium* (cold bath) approximately 55 m x 24 m under three 33 m high groin vaults; a double pool *tepidarium* (warm bath) and a 35 m diameter *caldarium* (hot room), as well as two *palaestrae* (gymnasia). The north end of the bath building contained a *natatio* (outdoor swimming pool). The *natatio* was roofless with bronze mirrors which were mounted overhead to direct sunlight into the pool area. It has been estimated that 9,000 workmen laboured for five years on the site.



Roman citizens had free access to the baths which could accommodate up to 1600 bathers at any given time. As was usual since the time of the emperor Trajan, the building was constructed in such a way that visitors could easily walk from one facility to another. Bathers would normally enter through one of two vestibules into the *apodyteria* (changing rooms), then go on to the *palaestrae* (gymnasia) to exercise before heading to the sauna to induce an even greater sweat. The bather then passed into the *caldarium*, after which his skin would be scraped clean with a strigil and to the *tepidarium* for a cooler bath and finally to the *frigidarium* for a bracing plunge in the cold water. A regimen recommended by Galen, the noted Roman doctor.

Libraries were located in the *exedrae* on the east and west side of the complex and the entire north wall was devoted to shops. The baths were the second such complex to house a public library and like other public libraries in Rome, there were two separate but equally sized rooms or buildings; one for Greek language texts and the other for Latin language texts.



The Baths of Caracalla were known for their rich interior which featured marble seats, mosaics (picture above) covered walls and floors as well as fountains and statues. The sculptures for which the baths were famous included the massive figures of the Farnese Bull and Farnese Hercules, so called because in the sixteenth century the concession to take away all the valuable objects from the Bath complex was granted to the Farnese family. Other mosaics and statues, such as the *Torso of the Belvedere* which shows the demigod Hercules, can be seen today in the Vatican Museum.

The floors were covered with brightly coloured mosaics. The coloured mosaics were often abstract and made from all kinds of natural stone, like grey granite from Egypt, yellow marble from Numidia, and green and purple porphyry from Sparta and Egypt. Other mosaics were black and white and showed maritime figures, like fish and sea horses. Some of these black

and white mosaics are still visible in the bath buildings today (see photograph at top).

The entire bath building was constructed on a 6 m high platform to allow for storage and furnaces under the building. Indeed below the main buildings were two levels, the upper one was used for service and for heating the water, while the lower level was used for drainage. The vast complex had 12 furnaces of which 8 were under the great central floor of the *calidarium*. Hundreds of stokers would have been employed to burn the ten tonnes of wood every day which were needed to keep the water at the



right temperature. The delivery of fuel - on dozens of carts daily, was considered such an important task that the emperor Severus Alexander counted it among his personal responsibilities. A complex water distribution system ensured a constant flow of water. Indeed the bath complex was fed by a branch of the Aqua Marcia aqueduct which was built specifically for this purpose between AD 212–17.

The hundreds of visitors to the baths must have made a prodigious noise. Seneca (AD 4–65), the noted first century AD philosopher and advisor to the emperor Nero, describes the cacophony of a bathhouse in the provinces:

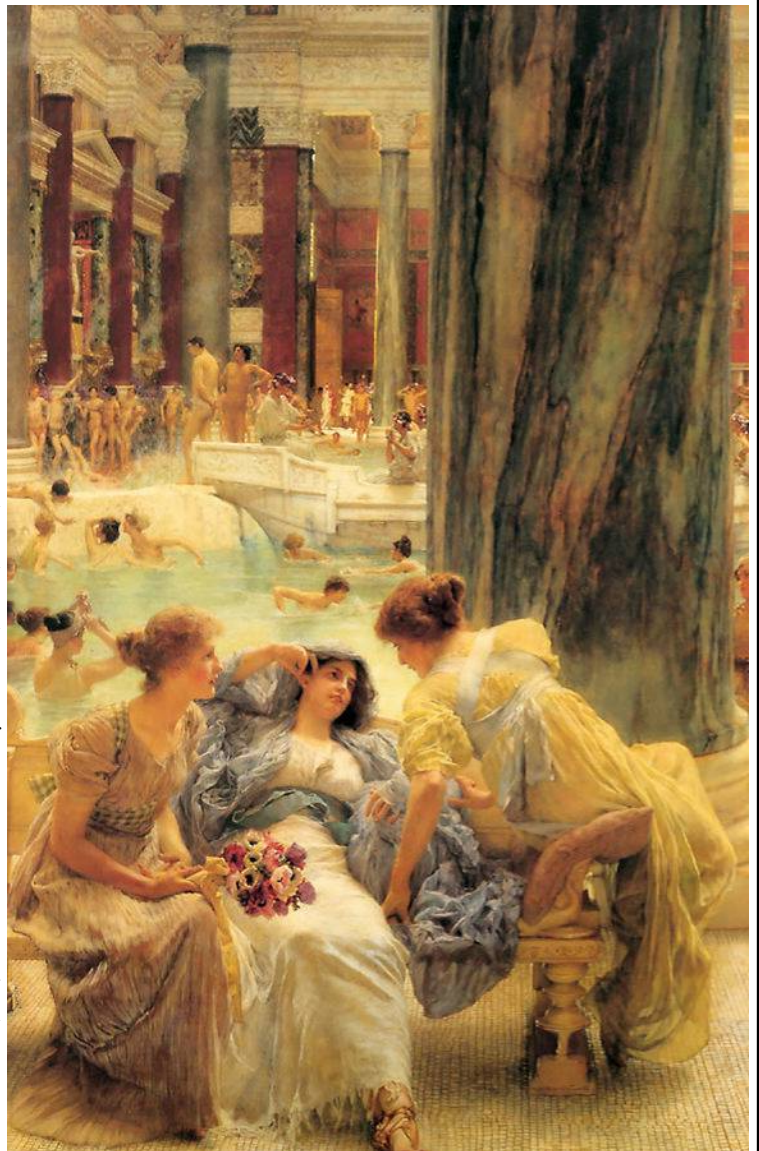


*Just imagine all those voices, which make you begin to hate your own ears. When those musclemen work out by swinging around lead weights in their hands and exert themselves (or pretend to), you can hear them groaning. Whenever they exhale the air they have been holding in, you can hear it escape with a squeaking, squealing sound. Whenever you see a passive type who is content with a cheap massage, you can hear the sound of the hand striking the shoulder if the hand was flat or cupped. A ball player running in to announce the score is the straw that broke the camel's back.*

*Letters 56*

Seneca goes on to complain about the troublemakers and pickpockets being arrested and the men who like to sing in the bath. Then, says Seneca, there are the alcohol vendors, the sausage sellers, the pastry bakers and the barman, each crying out praise for his services in every possible way. The noise at the Baths of Caracalla must have been on an even larger scale.

Later emperors, such as Aurelian (AD 270 – 75) and Diocletian (AD 284 – 305), ordered repairs to the Baths of Caracalla and even the Ostrogothic king Theodoric (b. AD 454 – d. 526) was 'Roman' enough to restore a part of the complex that had fallen into disrepair. The baths were in use until AD 537 when their water supply was cut off in the Visigoth invasion. Neglect, looting and an earthquake have taken their toll. In the 18<sup>th</sup> and 19<sup>th</sup> centuries western tourists were impressed by them and they were made famous in one of the titillating portraits (opposite) by Sir Lawrence Alma-Tadema in 1899. More recently, from 1937 – 1993, they were used for opera performances during the summer months and they remain to this day impressive symbols of the power and wealth of Rome.



# Roman Archaeology at UWA

## Notes and News

Public Lecture: Wednesday July 28, Fox Lecture Hall 6.00 PM, Professor John Melville-Jones.

*'The House of the Coloured Capitals and the House of the Ancient Hunt—Pompeii'*

Professor John Melville-Jones worked at Pompeii for two short periods in the 1980s, assisting the members of the Sydney Expedition to Pompeii in writing reports on two houses there. He will describe the houses, which were very different in form, and speculate on the ways in which they were used by their inhabitants.

## Fieldwork Reports

### Jordan

Professor Kennedy and Stafford Smith spent almost 4 weeks in Jordan on the 2010 season of the Aerial Archaeology in Jordan project. They were joined at various points in the field and on flights by Bob Bewley and Francesca Radcliffe, Don Boyer and Nadja Qaisi. Field trips took them out into the eastern desert for two days to search for the Cairn of the Mermaids and others took them to the Roman village of Masuh reported on in the previous issue (RAG 5.1). Amongst other finds at the latter was a 'lost' Roman inscription which turned out to be a well-preserved milestone in the name of the Emperor Septimius Severus (AD 193-211).

*Prof. Kennedy in Paris and*

### Czech Republic

In Paris David gave a paper at the XI International Conference on the History and Archaeology of Jordan. Later, in Rome, he was able to spend an enlightening day amongst the c. 2 million aerial photographs of Italy taken in 1943-45 by the RAF and USAF held by Aerofotoceta. Also in Italy he was able to follow in the footsteps of Horace (and Rodney Greaves—RAG 4.4) along the Via Appia, then in visits to Albanum and Tusculum as well as to numerous museums and sites in Rome itself. Then two days in the company of Dr Martin Gojda in the Czech Republic culminated in a visit to the aerial archive that Dr Gojda has established in Prague, and in a fascinating flight in late summer sunlight over archaeological sites in northern Bohemia.

## London

Finally, over several days at the National Archives at Kew David got to see, amongst much else, hundreds of aerial photos of Palestine and Transjordan taken by the German Air Force in 1918.

### Don Boyer Roman Archaeology Travel Scholarship.

The 2010 scholarship has been awarded to Ben Barwood, a current undergraduate. Ben plans to take part in the University of Reading training excavation at the Roman city of Silchester in Hampshire. Then he embarks on an ambitious tour of sites and museums that will take him through Germany to Turkey and Syria.

### Iain Gately

Iain, a previous recipient of the Travel Scholarship (RAG 4.4), has just participated in a programme of underwater archaeology off Cyprus. This was a marvellous opportunity and fitted well with his current Honours dissertation research on shipwrecks in the Roman Mediterranean. He will tell us all in the next issue.

## RAG 2010

### Winter/Spring Lecture Programme

Social Science Lecture

1.30-5.00

### Saturday 28 August.

TOPIC: The Romans on the Bay of Naples: Pompeii and its Neighbours

Glenys Wootton

*'Tread carefully: painters at work'. The House of Julius Polybius and others. Wall painters and painting at Pompeii*

Nathan Leber

*This one's not for the kids. A candid look at Pompeian graffiti*

David Kennedy

*What lies beneath. Sanitation at Pompeii and Herculaneum*

### Saturday 2 October

Kevin O'Toole

*The Divine Emperors of Rome*

### Saturday 31 October

Annual General meeting

David Kennedy

*What's new in Roman Britain - 2010*

# Membership of The RAG

\$25.00 Ordinary membership

\$35.00 Family membership 1 (2 adults; 1 copy of RAG magazine)

\$50.00 Family membership 2 (4 family members; 1 copy of RAG magazine)

\$50.00 School membership (2 copies of RAG magazine)

\$10.00 Student membership

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