

LUCERNA



THE ROMAN FINDS GROUP
NEWSLETTER

Newsletter 36, July 2008

Lucerna

Roman Finds Group
Newsletter 36

Contents

Small Finds in the Bigger Picture.....	3
A valedictory forbidding mourning	10
A little poser from Einfield	11
Study Day Review	13
Obituary for John Dore	16
RFG Committee	17
Books	18
News, conferences, study days	22

Notes for contributors

Contributions are always welcome – particularly on new finds –so please send them to us, and share them with the rest of the Roman Finds Group!

E-mailed text should be sent as either a .doc, .txt or .rtf file. Please use sufficient formatting to make the hierarchy of any headings clear, and do not embed illustrations of graphs in the text but send them as separate files. E-mailed illustrations should preferably be simple line drawings or uncluttered b/w photos and sent as .tif or .jpg files. No textured backgrounds, please.

The address for e-mailed contributions is:

lindseyr.smith@btinternet.com
emma.durham@arch.ox.ac.uk

Contributions by post should be sent to:
Emma Durham, Institute of Archaeology
36 Beaumont Street, Oxford, OX1 2PG.

Editorial

Welcome to the 36th edition of Lucerna and it was nice to meet some of the members at the Study Day held in Leicester (see page 5 for a full review – many thanks Richard!)

In this issue you will find.....

Subscriptions 2007/8

Thank you to everyone who has paid the subscription promptly this year and to those who have paid their outstanding debts. We still have a number of subscriptions outstanding for the current year, so if you are one of the culprits, please send me your cheque, made out to the Roman Finds Group. We do not want to lose anyone, but postal prices are increasing and if subscriptions remain unpaid, members will be removed from the mailing list.

The subscription remains at £8 for an individual and £11 for two people at the same address. If payment by standing order would be more convenient, I can send the form, which can also be downloaded from the RFG web site.

Angela Wardle
RFG Treasurer
1 Stebbing Farm, Fishers Green
Stevenage, Herts. SG1 2JB

We hope you enjoy this newsletter and please don't forget to get in touch with any interesting articles or information you'd like to share with other members.

Emma Durham & Lindsey Smith

Small Finds in the Bigger Picture: 3d Scanning of Archaeological Objects for Education & Interpretation

Emma Jane O’Riordan

Introduction

The study of finds is perhaps one of the most exciting aspects of any excavation. However, these often small and fragile objects can require careful and or minimal handling. If an excavator is lucky enough to find something precious then they are likely only to see it fresh out of the ground and before it has been cleaned and conserved. After this process, usually only the relevant specialists will examine the majority of objects.

This is a great shame. Interaction with small finds can be one of the best ways to spark further interest in archaeology, especially in undergraduate students. These finds help the 21st century viewer to engage with the people who made, used or wore the object in question.

How then, can access to these objects be increased without compromising the object itself? One possible solution is the use of 3d colour computer models.

The department of Civil, Environmental and Geomatic Engineering at University College London (UCL)¹ have an Arius 3d laser scanner². Dr Stuart Robson kindly invited the Silchester Town Life project³ based at the University of Reading to bring along some objects for scanning. Whilst the aim for UCL was to test the limitations of the scanner with small sized objects and varying materials, it also provided a fantastic opportunity for the Silchester team.

The Silchester Town Life Project

The Silchester Town Life project is one of the largest research excavations currently taking place in the country. The 3000m² trench is also the training dig for Archaeology students at the University of Reading and up to 300 people participate every summer.

There have been over 4000 small finds recorded since the project began in 1997.

How does the laser scanner work?

The object to be scanned is placed on a podium and the scanner then passes a low power laser beam with three different laser wavelengths (red, green, blue) over the surface of the object and records the reflection values.

The x,y and z coordinates of each point are calculated with a combination of measurements involving the scanning mirror and laser triangulation within the camera. Colour information for each point is calculated from the intensity of the returned laser beam. This colour is a ‘true’ colour, as the red, green, blue information captured by the laser is not affected by ambient light, as happens with photography.

This recording method means that the find can be precisely measured and recorded in three dimensions, without any surface contact. This then allows the surface to be mapped as a series of 3D data points, called a ‘point cloud’. The maximum resolution can be up to 10 microns (0.010mm) and this is sufficient to capture, for example, tool marks on stone or brush strokes on paintings.

Why have 3d models?

The ability to have full colour, detailed, 3D models of some of these small finds could potentially alter the way in which they are experienced. Such detailed models can be measured, magnified, rotated, sectioned. As many people can handle the objects as are able to access a computer with no danger of object

¹ <http://www.cege.ucl.ac.uk>

² <http://www.arius3d.com/index.html>

³ <http://www.silchester.rdg.ac.uk>

degradation. Students, visitors to site or the research team could use the digital model on a computer anywhere in the world, whilst the object itself can remain safely in storage. 3d models can also be used as snapshots in time, so that the before and after results of any restoration processes can be easily documented. Models could also be used at kiosks in museums or on computers at universities as interactive teaching tools.

Why is colour scanning better than normal scanning?

There are many object scanners around, but what makes the Arius system special is how it captures colour. The capturing of the colour detail by laser rather than photograph means that the true colour is received as the system is immune to ambient lighting effects, and can be viewed from any angle. This is opposed to the need to take multiple photographs under different lighting conditions because photometric properties are not captured.

The Objects

The collection taken for test scanning comprised a brooch, candlestick and a seal box (all of copper alloy) sherds of black coated samian and fragments of stoneware dish. These objects are considered to be delicate and are rarely seen outside of the store. They all, however, play interesting parts in the story of life at Silchester. The most successful was the samian and this will be the focus of this piece with a brief summary of the other objects scanned.

Methodology

During February 2008 approximately 6 hours were set aside at UCL for working on the Silchester collection. Dr Robson made a quick assessment of the objects from a technical point of view and made some predictions on how good the scans would be based on their size and colour. He thought that the terracotta would scan well as it was light coloured, but the

copper alloy objects might prove problematic because of the shiny surfaces. The size of the objects was also at the limit of what the dynamic range of the system could cope with, and so that might be problematic.

Object 1: Hare Brooch (SF 832)



Figure 1: the hare brooch (Photo copyright The Silchester Town Life Project)



Figure 2: Hare Brooch Models front and back

The brooch is in the shape of a hare with blue and green enamel inlay and dates to the Late Roman period⁴. It still has its pin but is missing the tips of the hare's ears and nose as well as the front of the face. It measures 29mm in length and is approximately 12mm high.

As predicted, the shiny surface proved problematic to scan. The outline of the object was not clear and only a tiny patch of the enamel showed up at all. Fitting the scans of the back and front of the brooch together proved troublesome due to the lack of good registration points. The end scan was not good enough to make a model.

The original idea behind creating a 3d model was to provide the basis for a full digital

⁴ Williams, S (pers comm.)

reconstruction that could perhaps be used to create a replica in order to raise money for the excavation. After all, the hare became the logo for the project and can be seen on the front of the Silchester website. The quality of the model obtained is nowhere near good enough for this purpose.

Object 2: Candlestick (SF 583)



Figure 3: Photo of the candlestick



Figure 4: Candlestick during scanning

The candlestick belongs to the 2nd or 3rd century AD. This would originally have had three legs,

but one is completely broken off and the other two are bent and damaged. The legs curve outwards and end in a sub triangular foot which probably represents a stylized lions paw. The lower body has a decoration of pairs of pelta shaped openings and two parallel grooves. The corroded plain stem leads to a cup shaped drip collector with a central iron spike. The drip collector is damaged but was originally decorated with a single groove. The once lustrous copper alloy has turned greenish blue. It measures 58mm in height.

This candlestick is unique in Roman Britain but has close parallels from Roman settlements in Niederweis, Herstal and Vorsten in Belgium⁵.

It proved very difficult to scan as it had many curved and flat surfaces and was too reflective. Often a spot developer is used to mattify reflective surfaces and improve the quality of scanning but this object was too fragile to be sprayed.

There were large gaps in the final image where the scanner had not reached properly and again, registration proved difficult. Many viewing angles would have been needed to piece together a good image but the material proved to be unsuitable. The conclusion was reached that this is the sort of object that would be better captured with expert photography.

The original idea was to create a 3d model of the candlestick could have been used as the basis for an animation - recreating flickering candlelight and showing how Roman interiors could look different depending on the sort of candle used. The model is not good enough for this purpose.

⁵ Eckhardt, H
(<http://www.rdg.ac.uk/AcaDepts/la/silchester/publish/field/candlestick.php>)

Object 3: Seal Box (SF 4066)



Figure 5: Seal box. (Photo copyright Silchester Town Life Project)



Figure 6: seal box model

The round seal box is of a type normally found on early period military sites⁶ and is decorated with what looks like a Capricorn motif although there is some debate over this interpretation.

The seal box has curved surfaces and is shiny and reflective – not a perfect candidate for scanning based on the previous objects! It is also very small, measuring only 19mm in diameter and with a height of 5mm.

The seal box probably lies at the lower size limit of what the scanner can cope with. Due to time constraints the back of each piece was not scanned. The model shows the base of the box well, and the Capricorn on the lid is easy to make out. The studs do not show up so well with the colour on but the solid model is slightly clearer.

⁶ Williams, S (pers comm.)

The box is too fragile to frequently pass around the different specialists and so it was thought that a detailed model which could be magnified might aid them. The current model might go some way to serving this purpose as it is definitely easier to see the design on the model than the currently available photo. However, it would need a more detailed scan in order to fully pick up the complete surfaces and more detail on the hinge mechanism.

Another idea was to use the model to create an animation of the box opening and closing, as the hinge is still intact but too delicate to use often. The current model is not quite good enough for this purpose but a rescanning might be.

Object 4: Stoneware Black Pot

It took just two minutes to scan a small sherd of black pot. However, the resultant model was of very poor quality as the object was both dark and reflective.

Object 5: Samian Cup



Figure 7: samian cup

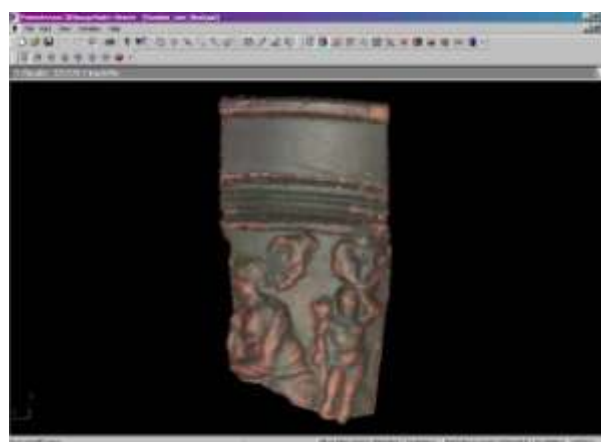
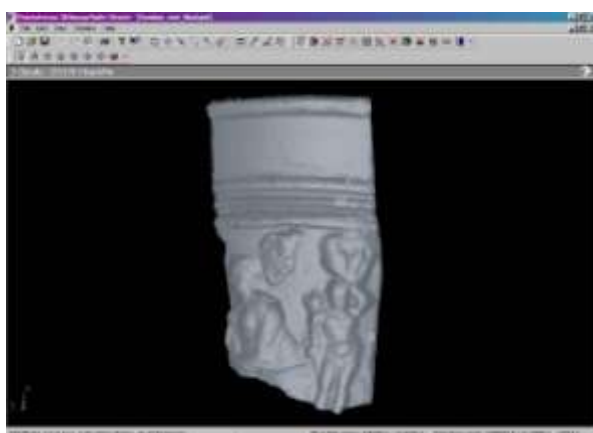
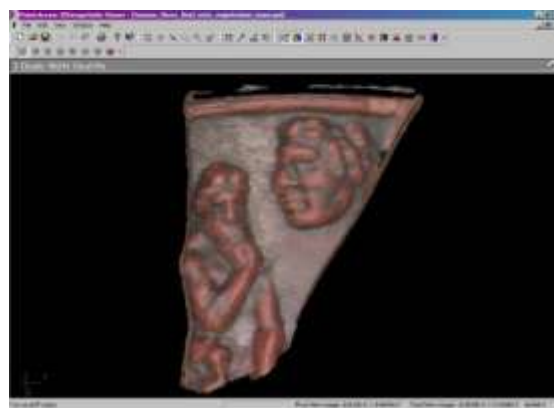
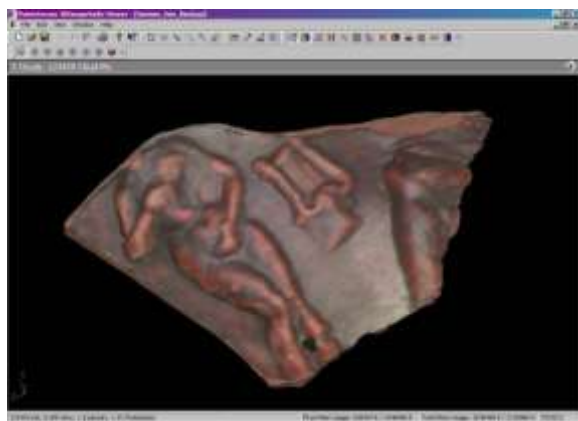


Figure 8: samian cup scans.

The most successful models came from the last object scanned – a fragmented black-coated samian ware cup. There are seven fragments and some of these can be fitted together.

The cup is decorated with moulding depicting Bacchus and his attendants. There is also a mask of a god and a male figure in the ‘thinker’ pose. There is a figure of a caryatid and a harp and another partial figure. There are two more masks above the figures. One of the figures is holding a trident in his right hand with his left hand raised. There is also a robed figure to the left⁷.

⁷ Crummy, N quoted from the Small Finds Record in the site Integrated Archaeological Database

The cup has a maker’s stamp which reads OF LIBERTI. OF is an abbreviation of OFFICINAL, meaning from the workshop of. LIBERTUS was a potter from Lezoux, an area in central France. This area started to export high quality samian to Britain from around 120AD until sometime in the late 2nd century. Lezoux fabric dating to before 120AD is rare in Britain.

The sherds were scanned at 0°, 30°, 60° and 180°. They vary in length from 25mm to 56mm and the thickness of the pieces varies from 2mm to 4mm. This means that they are a better size of object to scan than the previous pieces. It was easy to scan the front and back surfaces but for the edges the fragments had to be propped up with foam.

The geometry of the sherds was much easier to capture than the colour and so when the colour

is turned off in the viewer the shape and form of the samian is still very clear. However, with the colour, it is possible to see the effects of production. There is a shiny surface on the inside of one sherd that is not actually very clear on the actual object – could this be where it has been fired for longer or the glaze has worn off faster? These kinds of things are potentially very useful for the archaeologist or samian specialist.

As the pieces resulted in nice scans, registration was relatively simple and the accuracy was less than 30 microns.

The aim of scanning the samian pieces was to create a 3d model which had the potential to show decoration in more detail, form the basis for a full virtual reconstruction and be easier to measure than the actual object itself. The current model certainly shows the detail more clearly and is also easy to accurately measure.

The Samian – 3d model or traditional rubbing?

The traditional way of recording decorated samian is to take a rubbing using thin paper and the thumb of the illustrator dipped in graphite. 17g paper, or cigarette type, is capable of taking up the irregularities of relief decoration. The rubbing is then fixed with spray and can then be photocopied or scanned. Sometimes, photos are taken from casts of latex moulds.

This is a time consuming method and involves rubbing the actual object. This is where the scanner definitely wins.

The final models are clear and details can easily be zoomed in on or magnified with the tool. Extremely accurate measurements can be taken with the measurement tool that might be harder to make on the actual piece or drawing.

Are the models worth the effort?

Only a few hours were spent scanning the objects, and some of that time was spent

figuring out the best way to do so. If we were to repeat the experiment, probably only the samian and the seal box would be scanned, thus enabling more detailed models to be created in the same timeframe. Objects as small and reflective as the brooch or as reflective and curved as the candlestick are probably not worth the effort though, no matter how much time is spent on them.

The greatest amount of time and effort after the initial scanning was probably in the removing of the foam backing from the model and then matching the registration points. This was especially problematic for the brooch, where the edges did not appear clearly.

To quote from a paper by one of the developers of the Arius technology: “If the only purpose is photorealistic images for visualisation then image based rendering techniques are fine. If the goal is to analyse works, preserve and share a record of geometry and appearance then explicit shape information is required.”⁸ And this is precisely what 3d colour models can provide.

Do they fulfill the possibilities?

It was initially thought that the models could be used as study material for students as well as tools for aiding the core research team in interpretation. In order to do this, the models would need to be of a better quality than a photograph. We have already seen for the majority of the test artefacts that this is not the case. The only model that we may make further use of would be the samian cup.

The Silchester project already uses a Virtual Research Environment for collaboration on documents and primary archaeological data. This Integrated Archaeological Database (IADB)⁹ is under constant development and one of the plans for 2008 is a 3D visualisation

⁸ Beraldin, JA, Picard, M. El Hakim, S et al 2005 *Combining 3d Technologies for Cultural Heritage Interpretation and*

Entertainment National Research Council for Canada, Canada

⁹ <http://www.iadb.org.uk/>

module for contexts. The IADB can already be used by researchers to look at photographs of artefacts - good quality 3d models, like the samian cup, could be manipulated and studied in greater detail, and in a collaborative environment.

Do they provide increased access to the objects?

Taking the samian and the seal box, as they are the only objects that we would consider scanning in more detail, the models created by the Arius technology do indeed have the potential to provide increased access.

The samian cup fragments could, as they stand, be used for studying the art and symbols as well as the techniques of manufacture. The file size of the models varies between 1MB and 4.7MB. This is easily small enough to send via email or download quickly from the Silchester website. The viewer needed to examine them is around 20MB and can be downloaded for free from the Arius website. This means that as many people could look at the Samian as could be bothered to download the models, as opposed to how much wear and tear the actual object could take. There is also the possibility that the point clouds could be turned into small animated movies, perhaps quicktime, and viewed on the website with no need to download. This is how many of the objects scanned using the Arius technology are currently available to view, for example on the Canada Museums website¹⁰.

Conclusion

The opportunity to model some of the Silchester objects with UCL and the Arius scanner was both interesting and useful.

It has shown the limits of what can be achieved in just under one day and what type of objects would be best suited to further scanning and study. It was equally as useful to see what does

not scan well and how else we might capture that sort of data.

It should be noted that the Arius system is not the only one to use this kind of laser and colour capture technique. There are alternative systems that may be better suited to capturing reflective copper alloy. For example, Conservation Technologies at the National Conservation Centre in Liverpool¹¹, for example, also use laser scanning technologies for small items and seem to have more success with reflective surfaces and very small objects such as an amber finger ring¹².

Future plans include utilizing the samian model on the revamped Silchester website and creating a list of suitable small finds for possible further modeling.

Thanks go to Dr Stuart Robson for allowing us this opportunity and to Sandie Williams and Klare Tootell for letting the small finds out of the building!

Emma Jane O'Riordan

Research Assistant, Virtual Environments for Research in Archaeology
Department of Archaeology
University of Reading

Don't forget that visitors are welcome to the excavation site at Silchester during the season (23rd June - 3rd August). We are open DAILY between 10am and 4.30pm, except for Fridays (also with disabled access during this time). Group visits are welcomed, preferably by arrangement. We are keen to encourage a wide range of visitors of all ages to the excavation. Please contact the Field School Director, Amanda Clarke, in the Department of Archaeology on 0118 378 6255 or email a.s.clarke@reading.ac.uk

¹⁰ see for example <http://www.rom.on.ca/exhibits/ivory/toc.php>

¹¹ <http://www.liverpoolmuseums.org.uk/conservation/technologies/>

¹² 3d colour scanning conference, UCL, 27th and 28th March 2008

Two Open Days will be held on Saturday 12th July and Saturday 26th July. These offer expert tours, talks, and demonstrations, and a range of children's activities, typically including tours, a mini excavation, dressing up, finds handling and planning. As usual, admission and activities are free.

A Valedictory forbidding mourning

As I have decided to forsake the Oxford Institute of Archaeology in September in order to follow my dream of training for the ordained ministry of the Anglican Church at St Stephen's House, Oxford, I thought I might provide a retrospective comment on what seems to be rather frighteningly 40 years of 'writing up' small finds. My retirement, let me assure friends is far more symbolic than actual; indeed I have a number of boxes of small finds from Alchester to work on during the summer as well as a few gems from sites throughout Britain.

I have written a piece for *Current Archaeology* about my general sense of dissatisfaction with the way archaeology of the sort I practice is treated in Academia and my comments in *Lucerna* are concerned with aspects, so central to my life though concerned with small finds and the minor arts. These comments do have a connection with the shape my life is taking in the future too.

Why study small finds? My reason from the very beginning, when I discovered a gem showing a beautiful youth holding a sword in the then Guildhall Museum, London, was to get close to the people who used them and to empathise with their thoughts and dreams. The youth on the intaglio was of course Theseus and this gem was most probably worn by a young soldier at the start of his military service when he was avid for glory (rather like the youthful Agricola). Gems were a wonderful introduction

to a lost world of faith, of sensibility and enjoyment of life as image followed image. I adored the colour and texture and where the stone was a rich cornelian, garnet, amethyst or chrome chalcedony its dazzling intensity of colour. Commenting on the gems from the Main Drain at Bath was a thrilling introduction both to thesis work and small find reporting but I was puzzled that the excavator (in this case Barry Cunliffe) was not equally enthusiastic; he rather took it for granted that someone would write up the finds. The important thing (for him) was to describe the site itself!

Many gem reports followed for Cunliffe, Frere and others, and also much reporting on other small finds for reports, works of bronze and bone. I examined finds from Carthage for Henry Hurst though nobody thought good to pay for me to go out there and enrich my treatment by encouraging me to publish some of the museum material there. I also wrote up so much else for example, small finds from Bath in Somerset, Uley and Kingscote in Gloucestershire and Gestingthorpe in Essex. I certainly felt that these all brought me close to the people who lived in Roman times and also the joy of discussing small finds with civilised scholars such as Catherine Johns, Nina Crummy, the late Hugh Chapman and others who shared my enthusiasm and outlook.

However, in my euphoria I failed to see that the people who ran archaeology in universities were truly really interested in budding excavators and frankly were quite unprepared to sponsor finds researchers for academic posts. This may not just have been an English failing. It was implied to me by a continental archaeologist who was amazed to find me working on gems as, revealing the prevalence of male chauvinism in archaeological circles she told me that only women in Continental Europe (employed as research assistants for the most part) worked on gems; men, on the other hand, excavated sites. That almost at a stroke converted me (if I was not so converted already) to a radical feminism and accentuated suspicion of the male chauvinism bedevilling the profession...as well

as making me ever more passionate about gems and everything that did not reflect a world still dominated by Wheeler-type men.

I really think that looking at gems, amber, silver-plate, bronze figurines, bone and ivory and the like brings one far closer to the people of the past and their world than the sweaty world of the site-excavator. We after all, through Cicero, Pliny, Petronius, the Philostrati, and the poets of the Greek Anthology know what was really and truly valued in Antiquity? And so increasingly I saw the study of small finds as a branch of art history, often at least as useful as an art history blinkered by a boring obsession with large-scale sculpture and Pompeian wall-painting.

It was wonderful finding from time to time pupils who shared my obsessions and with whom I could share my aesthetic tastes, but they were assuredly not the people who ran the archaeological world. Jocelyn Toynbee, my sponsor in Oxford, who encouraged me in my gem work, was long retired when I met her in Oxford. John Boardman, was in post (at first a museum post), and was indeed an art historian and a (virtually non excavating) Greek archaeologist, but though I admire him inordinately he was without influence on the development of Roman archaeology in Oxford or elsewhere (although his encouragement has boosted my morale and helped to keep me going).

Indeed, the archaeology that approaches the Roman period through material culture is very rare and almost entirely now confined to museums. Many smaller museums, indeed, have closed or are run by pen-pushers who would not know a Minerva spatula like the one figured in the last edition of *Lucerna*, if they saw one. There is a small group of finds people acquiring considerable expertise with the *PAS* scheme but that is constantly under threat, and as a general point we all need to wonder whether it is right that the scientific study of the past should be at the whim of people who are to some degree all too often looters of the heritage.

Who cares? Well as I have implied the big boys [and most of them are men] don't seem to care enough to provide a proper career for the finds researcher. Central to any humane study is surely respect for others and the duty to help those with a similar sensitivity (embracing both dead Romans and living contemporaries) with the means to enlighten others. Let small-finds archaeology be about more than the boosting of individual egos which is I fear is all too prevalent in the archaeological world in general. The simple beauty of a couple of early Christian rings in the British Museum and discussing them with one of my inspirational pupils who later wrote a paper on Christianity in Roman Britain as reflected by finds, have pushed me towards a new way of 'connecting'. But even in my theological college I will keep a gem-book to hand on my desk.

Martin Henig

A Little Poser from Enfield.....

The subject of this note (illustration 1) comes from the Bush Hill Park (Enfield) Roman roadline settlement, the first significant settlement north of Londinium on Ermine Street. The settlement is completely covered by modern housing and a school and the item was recovered by the tenant of one of the houses during or after a rescue excavation by the Enfield Archaeological Society in his back garden in 1966. This had sought to establish the nature of a ditch or ditches he had encountered in digging a deep hole (for unestablished reasons) and recovered a range of late first to fourth century material, suggesting rubbish disposal but also possibly disturbed cremations. But it was hampered by his predilection for digging into cut sections when the excavators had gone home!

The item was at least (privately) passed to a member of the excavation team later but only

came to the author's attention nearly 40 years later when the holder wondered if it "was of any interest", knowing that the author was evaluating all past work on the settlement. Based on more recent excavation nearby, the site was farmland throughout the Medieval and modern periods until the building of the houses in 1902, so is the item Roman? If so is it horse harness decoration? And is it military? I'd be most interested if anyone has seen anything similar.

Six (three joining) fragments of 1.0 -2.0 mm thick copper alloy plate, some areas retaining a brassy appearance but others with variable degrees of bronze disease, plus smaller detached chips (and one joining fragment of mineralised ?leather), from a c. 80.0 mm diameter circular ornament with two incised lines around the edge of the upper face of a marginal flange which rises slightly to a large central boss with a nearly central decorative bun headed Ae rivet. The flange retains three similar Ae rivets which hold it to substantial areas of what appears to be Fe mineralised ?leather 1.0 to 2.0 mm thick. Part of this ?leather, at a point towards the edge of the area under the boss, seems to be ?pierced by an iron fitting consisting of a narrow 12.0 mm long bar (or two rivet heads corroded into the appearance of a bar) on the upper surface, securing, on the underside, two 11.5 mm long, 4.5 mm wide rectangular stubs (?from a rectangular sectioned loop) 6.5 mm apart and at right angles to the 'bar'.

There are also traces of one side of a second ?loop in line with the first, 11.5 mm from it, again near the edge of the boss and probably corresponding with a ?rivet head on the upper surface of the mineralised ?leather.

Heavier iron corrosion products are also present on the underside of the mineralised ?leather but are restricted to areas corresponding to the flange of the copper alloy plate rather than to under the boss, and do not continue to the outer edge of the flange but rather have a definite curvilinear edge slightly deviating from it.

The significance of the iron corrosion products on the underside of the mineralised ?leather cannot be certain but they seem most likely to represent an annular iron ring. However, it is not certain that there would be sufficient space for the Ae rivets to have held the Ae mount to both the leather and such a ring, and it could be that an annular ring was in contact with but not affixed to the back of the leather at the time of burial.

In any event, the Ae fitting, mineralised ?leather and traces of Fe fittings riveted to it appear to represent a decorative mount (for which, if Roman, the most obvious context of use would be on (?military) horse harness)) with a leather backing disc from which protruded two central, in line loops under its boss by which it was presumably attached to a narrow strap, perhaps c. 65.0 mm wide. It is conceivable that this strap in turn held an annular iron ring loosely to the back of the leather disc, but unless the ring served to connect to other harness elements it is difficult to suggest its function. Alternatively, if the annular ring was riveted to the ?leather disc and Ae fitting, it may have served purely to secure the ?leather in place.

The rarity of preserved leather in association with horse harness fittings makes this item of some interest if it is Roman, as it would suggest that in some instances at least they did not have integral attachments for the leather straps which they were applied to but were secured via fittings riveted to a leather backing which is usually missing. The resemblance of the fitting to an umbo or shield boss, though it is far too small to be one, might be noted. However, the author is not aware of any similar fitting from a secure Roman context and, whilst the site does not appear to have produced any non-Roman material, the circumstances of its recovery must leave its date in doubt.

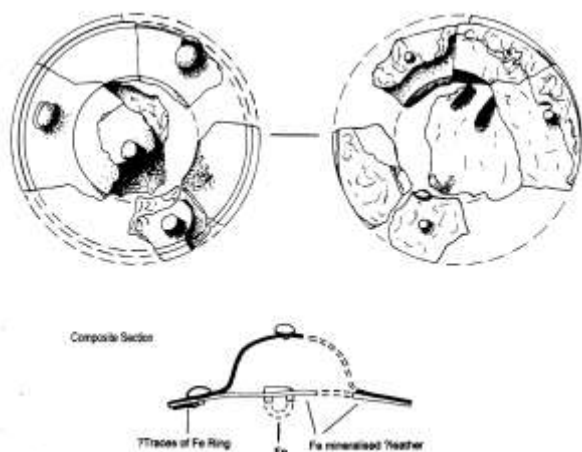


Illustration 1: Roman horse harness piece?

Martin J. Dearne (martin.dearne@tesco.net)

Study Day Review

ROMAN FINDS GROUP

12th May 2008

University of Leicester and Jewry Wall Museum, Leicester.

A select group of Roman Finds Group members heard five excellent papers split between two sessions and two venues. Thanks to Dr Simon James, University of Leicester, for hosting the morning session, and Laura Hadland for the afternoon at Jewry Wall Museum.

Nick Cooper: 'Leicester's past revealed: recent archaeological excavations for the Shires extension'

There has been a great deal of regeneration in Leicester during the last decade, not least the large Shires shopping centre development. More archaeological investigation has been

carried out in the city over the last four years than the last one hundred. Nick outlined a number of sites which he and the University of Leicester Archaeology Unit have recently been working on.

Sanvey Gate: Roman and Medieval ditches have been excavated; a small section of the Roman town wall was found. Unfortunately, a lot of the original wall was sold off. Also discovered was a piece of cornice from a Roman façade.

Vine Street: a large area was surveyed and excavated. There is evidence for a large courtyard building, and another very large building ('Building 4') with thick heavy walls - function unclear. Masonry strip buildings of the 2nd century developed into a stone building of courtyard structure. A small fragment of corridor mosaic pavement was found. Also found was a hypocaust room with a small plunge bath. The layout of this large courtyard building compares very favourably with the villa at Norfolk Street, found outside the town in the 1850s and further excavated in 1981. Was the same architect responsible for both?

In the later phases, the courtyard building was transformed into a series of workshops. A culvert was added for the running out of water. From this phase came the most interesting finds: two curse tablets (unrolled), a large lead pig, and a coin hoard dating to the House of Constantine. One of the curse tablets had been mortared into the wall. It refers to a thief who stole the cloak of Servandus, followed by nineteen names, Roman and Celtic (e.g. Cunovendus). This has added considerably to the number of names known from Roman Leicester. The cloak had been stolen from the 'paedagogium' – possibly 'slave quarters', possibly 'Building 4'? The other curse refers to the theft of coinage: 'silver coins of Sabinianus'. Also found were lead seals referring to legions VI and XX, a signet ring and a number of steelyards.

Free School lane site: here was found a collapsed Roman wall – it was still possible to see traces of tile arches. It collapsed in the post-Roman period, because Anglo Saxon pottery was found underneath.

Vicki Store and Simon James: ‘The discovery and analysis of the East Leicestershire Hoard’

Vicki Store: The site received a great deal of media attention, when it was first located during a field walking survey in 2000 (see *Lucerna* 26, July 2003, for one of the first reports on the discovery). Ken Wallace returned with a metal detector, and began to find large numbers of Iron Age and Roman coins. Since then there has been six seasons of excavation by the Leicester University Archaeological Unit.

The site is on top of a hill. Geophysical survey, in addition to showing up the lines of Medieval ridge and furrow, indicated that there were various enclosures dating to the 2nd to 4th centuries, as well as some Iron Age round huts. Detecting and excavation located thirteen distinct coin hoards, which had all been buried in the entranceway to an enclosure, in a boundary ditch running north-south. There was also a dog burial, placed as if ritually guarding the site. To the east, a mass of animal bones was also found, in the form of pits crammed with partially articulated bone. Nearly all the pigs were slaughtered when under a year old, and missing their front right legs. Radio carbon dates from the pig bone suggest 40BC to 55 AD.

In addition to the coin hoards, excavators also found broken silver objects, a silver ingot and a bowl. There was also evidence of metal working in the form of a crucible base with melted down coins. Another pit produced a Roman cavalry helmet, which was lifted in its entirety (as were the coin hoards), and brought to The British Museum for examination and excavation. This work is still ongoing, and will take several years to complete.

Simon James: the helmet survives only as oxidised iron and silver chloride (the helmet cladding). At present, it is known that there is one helmet bowl and a group of plates/ attachments (e.g. at least one ear guard) with a large number of coins. There is also feasting material. Attempts to X-ray the block was largely unsuccessful, because of the density of the clay.

There are at least four cheek pieces in the block. The clearest shows a mounted horse and probably a fallen barbarian; behind the horseman is a winged Victory. The design is however surprisingly unsophisticated. There are no obvious signs of additional silver cladding on the bowl.

There are some British parallels for the helmet (e.g. Brough and Leicester itself), but the best parallel is the Xanten-Wardt ‘Weiler’ type. On these types of helmet, the bowl has simulated hair in repousse. The fact that the East Leicestershire example does not have traces of this might suggest that it originally had real hair; there are parallels for this with the Kops Plateau example from Nijmegen. As for the decoration on this example, the best parallel comes from the river Waal (also Nijmegen), which also has a mounted figure on the cheek-piece. This example has protrusions from the crown of the helmet, which include an imperial bust.

What the helmet is doing on the site is unclear. Simon speculated that it may even have come in as a diplomatic gift before the Roman conquest.

Wendy Scott: ‘Recent discoveries in Leicestershire’

Wendy is the Finds Liaison Officer with the Portable Antiquities Scheme. Although the vast majority of the Roman finds recorded from the county are coins and brooches, Wendy has also recorded a number of kiln bars which have expanded our knowledge of the county’s pottery industry. These include discoveries at Huncote and Peckleton (54 kiln bar fragments), alongside wasters. A discovery at Leighfield

indicated a previously unknown location for pottery kilns.

Other sites are coming up as a result of the Scheme. For example Barkby Thorpe, just north-east of the city. Sam Moorhead is going through detected coin finds from a site of a possible temple, where there is a Valentinianic peak.

At Bosworth, a funded survey is being conducted to try and pinpoint the site of the famous battle. Metal detecting has produced evidence of a Roman temple site, including a small statuette and eagle mounts. There are also a large number of unusual brooches, including one with a raptor and a double-axe plate brooch. Yet the largest group are horse and rider brooches – sixty-four have been found on the site to date, out of a total of 154 brooches. The horse and rider brooches are of variable quality, which implies mass production. Many have traces of red and blue enamel, some the more unusual yellow and green. The site has also produced casting waste, and lots of blobs of silver. Wendy asks: why are there so many horse and rider brooches? (In the discussion afterwards, it was suggested that these were dedications to the cult, rather than for personal use).

Laura Hadland: 'Changing attitudes to Leicester's Roman heritage'

The discovery of an inscription changed the name of Roman Leicester from 'Ratae Coritani' to 'Ratae Corieltavorum', which is also supported by the Ravenna Cosmography (probably). Andrew Breeze suggested in 2002 it might mean 'army of many rivers'.

Kathleen Kenyon excavated the Jewry wall just before the war. It was evidently part of a Roman public building, and she argued it was part of the basilica. It is now known that this cannot be the case, for the forum was located elsewhere, in the part of the town now occupied by BBC Leicester. The Jewry wall was actually part of a large 2nd century bath house.

In the late 1930s, there was a great deal of disagreement on the preservation of the wall, for this area was to be where some new municipal baths were to be built. One letter objected that the Romans 'were conquerors who treated us like slaves', so why preserve their remains? A petition helped to ensure that the wall was preserved, and the Jewry Wall Museum was opened in 1966.

Laura argued that the character of the museum has changed for the worse. Originally, the museum was about the site and Leicester's Roman history - in more recent years the museum is principally about 'Roman Britain'.

Some of the finds were shown to demonstrate what the museum holds and the difficulties posed by antiquarian collections. A horse harness pendant (possibly) with two opposed horse's heads in an openwork design. Laura passed a replica of this around. An iron, half-size ornamental gladius, said to have been found in a cemetery in the 19th century – yet is it a 19th century fake? (In the discussion after, Chris Lydamore suggested it might be ethnographic).

Chris Lydamore: 'Reproduction artefacts: research, learning and interpretation'

Replicas are facsimiles of an object in their current state; reproductions how they would have looked in their original form.

Good use of reproductions include an original fragment of mortaria placed on top of a reproduction, and spade shoes at Salberg, because most people won't realise that the wooden part very rarely survives.

Reproductions can be useful for experimentation purposes. For instance, experiments with a replica of a split nib pen showed that it worked very well for writing on both parchment and on wooden writing tablets, like those found at Vindolanda. Food historian Sally Grainger has shown how a Roman

banquet could be reproduced using all the different elements of a Roman meal – oven, the right vessels, the authentic ingredients. Chris has produced a replica plumbata, to show how they were probably made rather differently than previously thought (see Lucerna 34, December 2007).

Richard Hobbs
The British Museum



John Dore (1951-2008)

We are sad to report the death of John Dore at the age of just fifty-six. John was well known in the archaeological world as one of Britain's leading expert on Roman coarseware.

He was part of the team, led by Roberta Tomber, that established and published the Roman National Fabric Reference Collection for Britain, a work which has become a reference standard. (The reference collection itself is available for study at the British Museum). John is also known for his work in Libya. His own website says: 'the most formative events of my

professional career were going to Libya, in 1972, to work on the excavation of the Hellenistic and Roman city of Berenice, in modern Benghazi; suddenly developing an interest in Roman pottery on an excavation in Lancaster in 1973, and then, in 1974, becoming research assistant to John Gillam (the leading authority until his death in 1985, on Roman coarse pottery in northern Britain).'

In 2004 John was asked to lead the pottery team working on the large amount of material from the Anglo-American Project in Pompeii (AAPP) excavations of Insula VI, 1 at Pompeii, Italy. John came out every summer and threw himself into the task with characteristic enthusiasm. We also enjoyed many a Birra Moretti at the end of each day, and John was also an enthusiastic patron of one of our favourite eating spots, the harbour front at nearby Castellamare, with Vesuvius in the distance across the bay.

John was buried in West Road cemetery, Newcastle, and I'm sure he would have been very moved by the large numbers of family and ex-colleagues who came to pay their respects.

John asked that anyone who would like to honour him may do so by sending a donation to either Cancer Research UK (www.cancerresearchuk.org) or Medecins sans Frontieres (www.msf.org.uk).

Richard Hobbs
The British Museum

RFG Committee

President: Roy Friendship-Taylor, Toad Hall,
86 Main Road, Hackleton, Northants. NN7 2AD
Tel: 01604 870312. e-mail: roy@friendship-taylor.freeserve.co.uk

Minutes and General Secretary: Richard
Hobbs, Prehistory & Europe, The British
Museum, Great Russell Street, London WC1B
3DG. e-mail: rhobbs@thebritishmuseum.ac.uk

Treasurer: Jenny Hall, Museum of London,
150 London Wall, London EC2Y 5HN. Tel:
0207 814 5739. e-mail:
jhall@musuemoflondon.org.uk

Membership Secretary: Angela Wardle, 1
Stebbing Farm, Fishers Green, Stevenage, Herts.
SG1 2JB. Tel: (work) 0207 566 9322. e-mail:
awardle@molass.org.uk

Meetings Co-ordinator: Chris Lydamore,
Harlow Museum, Passmores House, Third
Avenue, Harlow, CM18 6YL, Tel 01279
454959. e-mail: chris.lydamore@harlow.gov.uk.

Publications Co-ordinators: Gillian Dunn,
Chester Archaeological Service, 27 Grosvenor
Street, Chester CH1 2DD. e-mail:
g.dunn@chester.gov.uk

Newsletter Editors: Emma Durham, Institute of
Archaeology. 36 Beaumont Street, Oxford, OX1
2PG. e-mail: emma.durham@arch.ox.ac.uk

&

Lindsey Smith, The Cupola, 3 Race Farm Court,
Rectory Lane, Kingston Bagpuize, OX13 5DS.
e-mail: l.r.smith@reading.ac.uk

Website Manager: position vacant.

Committee member: Ellen Swift,
Lecturer in Archaeology, Cornwallis Building
University of Kent, Canterbury
KENT, CT2 7NF. e-mail:
E.V.Swift@kent.ac.uk

NEXT RFG MEETING

The next RFG meeting will take place on **13th October** in the British Museum. Further notice will be sent nearer the time.

Books books books books books books books books books books

Lampes antiques d'Algérie II.

Lampes tardives et lampes chrétiennes.

By J. Bussière

Monographies *Instrumentum*, 35, 2007.

ISBN 978-2-35518022-6.

200 pp., nbr. ill., 141 pl. h.t. €55 + p&p. from Éditions Monique Mergoïl, 12 rue des Moulins, F – 34530 Montagnac, France. email: emmergoil@aol.com; www.editions-monique-mergoil.com

Completing the series on the ancient lamps of Algeria published in the same collection some years ago (*Lampes antiques d'Algérie* [Monographies *Instrumentum*, 16], Montagnac, 2000), this study of nearly 2000 late Roman and Christian lamps produced from the 4th to the 7th-8th centuries forms an exhaustive corpus of lychnological material found in an important geographical area that has for a long time remained little known. The two volumes together fill the gap between the two existing catalogues dedicated to the ancient lighting of Morocco and Tunisia. With seven new variants, the study enhances the Atlanta typology established by Barbera and Petriaggi in 1993. It brings to light a number of important unpublished types of decoration and more than fifty new florets ornamenting the discuses and rims of lamps of Hayes Type II.

Although always open to external influences, especially those of the large workshops making vessels and lamps in the African stamped ware of neighbouring Zeugitana and Byzacena, the provinces of Numidia, Mauretania Sitifensis and Mauretania Caesarinsis also made their own local products during the Late Imperial period. These have so far remained essentially unpublished, and therefore an intensive study of this material constitutes a notable advance in our understanding of the activity of Late Antique ceramic workshops in the Maghreb.

The author outlines several potential lines of research. For example, physical and chemical comparative analysis between lamps found in potter's workshop at Timgad and some of identical shape and decoration recovered on the major production site of Sidi Marzouk Tounsi in central Tunisia. Similarly, fabric analysis of the great quantity of stamped pottery found at Tiddis, as, in the absence of kilns or other conventional proof of the existence of workshops, it is difficult to say whether it was made at the site or imported from Tunisia. It is clear that this lavishly illustrated volume will not only be useful to lamp specialists, but also to researchers in the various fields covering artisanal techniques and, more widely, the economic history of the Mediterranean world in Late Antiquity.

Le Travail de l'os, du bois de cerf et de la corne à l'époque romaine: un artisanat en marge?

Actes de la table ronde instrumentum, Chauvigny (Vienne, F), 8-9 décembre 2005.

By Isabelle Bertrand

Monographies *Instrumentum* 34, 2008

ISBN: 978-2-35518-004-4

342 pp., numerous figs and tables. €50 + p&p. from Éditions Monique Mergoïl, 12 rue des Moulins, F – 34530 Montagnac, France. email: emmergoil@aol.com; www.editions-monique-mergoil.com

This volume is the proceedings of the *Instrumentum* Round Table held at Chauvigny in December 2005, and was jointly produced by the Association des Publications Chauvinoises and Éditions Monique Mergoïl. Those familiar with both house-styles will note here the APC's trademark use of colour and imaginative placing of illustrations as departures from the usual workaday EMM style. Much of the colour is

used for site plans, but in a volume dealing essentially with a monochrome material the occasional strong background colour for object shots is welcome, and in an article by Philippe Prévot reviewing bone-working in Orange, it is also used concisely to illustrate the chops and cuts needed to transform an animal bone into an artefact.

There are nineteen articles in all, chiefly dealing with the evidence for bone-working in France, but with contributions from Austria, Switzerland and Italy as well. The volume starts with an overview by Isabelle Bertrand of both the history of bone-working studies – a marginal pursuit for archaeologists until comparatively recently – and the use of bone for artefacts in the Roman period (chiefly in Gaul), beginning with the raw material and proceeding through the chain of production to the sale of the end product, with particular emphasis on the location of bone-working activity – on villas, in town centres or in the suburbs, *etc.* There follows a matching article for Celtic Iron Age Europe by Delphine Minni, and then a presentation by Michel Feugère, Vianney Forest and Philippe Prévot of a useful methodology for studying bone-working debris, which crosses the boundaries between ecofacts and artefacts. The classification of both the primary debris (offcuts) and secondary debris (partly-worked pieces) requires collaboration between specialists, and this method offers the two disciplines not only a clear-cut working procedure but also expounds the various sub-levels of manufacture, such as acquiring the raw material, preparing it, roughing-out the shape, and then finishing.

Then follows a series of case studies on towns such as Amiens, Chartres, Rom and Orange (and several others), some reviewing current knowledge, others presenting interim reports of work in progress, most dealing with both primary and secondary debris from bone and antler-working workshops, others taking as their starting point a single object or small group of objects (*e.g.* knife handles, funerary couches) and extrapolating outwards. Perhaps of

particular interest here are the case studies where bone-working (and metal-working) has taken place in what might be thought of as unusual locations, such as the villa-sanctuary at Vieil-Évreux (Eure). The Vieil-Évreux material typifies a long-standing conundrum for bone-working researchers – was the dump of debris from the manufacture of hairpins in a primary context (*i.e.* was it found *in situ* in a workshop), or was it in a secondary context (*i.e.* was it dumped when a nearby workshop was cleared out). As the material found in the most recent excavations was dumped in a cellar, over the layers representing the demolition of the cellar roof, it yet again points to the workshop itself being an illusive structure – present in the vicinity, yet not positively located. The same situation pertains for Britain and other places, and has led me to propose that bone-workers might have been itinerant, setting up stalls in market places leaving their debris to be tidied away by the civic authorities (Crummy 2001). That this may be a step too far is shown by Prévot's article on the material from Orange, where two buildings close to the town wall seem to have been used both as living quarters and as bone-working workshops. Unless the bone-working episodes were short-lived, the amount of debris recovered from these buildings probably represents only the final phase of the workshops, as this craft produces a great deal of waste material, pointing to spasmodic clear-outs when material might be dumped in nearby abandoned buildings or waste ground.

This review cannot do justice to every article within the monograph, but I can guarantee that for anyone researching an assemblage of bone-working debris, or wishing to put in perspective the odd fragment or two of primary or secondary debris that they find, this volume is essential reading. Well-produced and clearly set out, it contains many useful papers covering the working of bone and related materials from the 1st century BC to Late Antiquity, with the illustrations of a wide range of end-products also of value for seekers after identifications or parallels for specific artefact-types. Bone-

working may have been a marginal activity in the Roman period, but thanks to the Chauvigny conference and the publication of its proceedings it is clearly no longer a marginal subject of study for archaeologists and has found its place in the study of the economic life of the Roman period.

Nina Crummy,
Copford, Colchester
nina@crummy.org.uk

Reference

Crummy, N., 2001 'Bone-working in Roman Britain: a model for itinerant craftsmen?' in M. Polfer (ed.), *L'artisanat romain: évolutions, continuités et ruptures (Italie et provinces occidentales)* Monographie Instrumentum 20 (Montagnac), 97-109

Feeding the Roman Army

edited by Sue Stallibrass and Richard Thomas

169p, b/w illus (Oxbow Books 2008).

ISBN-13: 978-1-84217-323-7

ISBN-10: 1-84217-323-5 Paperback. Price £30.00

These ten papers from two Theoretical Roman Archaeology Conference (2007) sessions bring together a growing body of new archaeological evidence in an attempt to reconsider the way in which the Roman army was provisioned. Clearly, the adequate supply of food was essential to the success of the Roman military. But what was the nature of those supply networks? Did the army rely on imperial supply lines from the continent, as certainly appears to be the case for some commodities, or were provisions requisitioned from local agricultural communities? If the latter was the case, was unsustainable pressure placed on such resources and how did local communities respond? Alternatively, did the early stages of conquest include not only the development of a military infrastructure, but also an effective supply-chain

network based on contracts? Beyond the initial stages of conquest, how were provisioning arrangements maintained in the longer term, did supply chains remain static or did they change over time and, if so, what precipitated those changes?

Addressing such questions is critical if we are to understand the nature of Roman conquest and the extent of interaction between indigenous communities and the Roman army. Case studies come from Roman Britain (Alchester, Cheshire, Dorset), France, the Netherlands and the Rhine Delta, looking at evidence from animal products, military settlements, the size of cattle, horses, pottery and salt. The editors also provide a review of current research and suggest a future agenda for economic and environmental research.

Becoming Roman, Being Gallic, Staying British: Research and Excavations at Ditches 'hillfort' and villa 1984-2006

by Stephen Trow, Simon James and Tom Moore

200p, 54 b/w illus (Oxbow Books 2008)

ISBN-13: 978-1-84217-336-7

ISBN-10: 1-84217-336-7

Paperback. Not yet published - advance orders taken. Price £25.00

Excavations carried out from 1984-1985 at Ditches in Gloucestershire identified a large, late Iron Age enclosure which contained a remarkably early Roman villa. This long awaited excavation report reinterprets this evidence in the light of more recent studies of the late Iron Age-Roman transition. It extends our understanding of the Ditches-Bagendon-Cirencester *oppida* complex, and corroborates the latest thinking on the nature of Romanisation.

New conceptions are challenging the significance of the Claudian invasion of AD 43, suggesting that Roman political influence in southern Britain was much more important than commonly thought decades before this. The Roman take-over was a long drawn-out process, which began especially with intimate links between Caesar and his successors and the dynasts they supported or implanted in Britain on the other. High status archaeological sites are central to these relations, including the so-called *oppida*, developed in southern Britain in the decades between Caesar's raids and the Claudian occupation. Ditches provides further corroborative evidence.

Several phases of Romano-British building were uncovered, revealing an unusual sequence of development for a villa in the region and representing an exceptionally early villa beyond south-east England. Discoveries included a well-preserved cellar and a range of finds, including Gallo-Belgic wares, Iron Age coins, coin moulds, Venus figurines and brooches indicating high-status occupation. The form and date of the villa also provides evidence of connections between the late Iron Age elites and communities of southern England and Gaul. Further evidence suggests the villa was abandoned in the later second century AD, emphasising the unusual sequence of the site.

Ritual Landscapes of Roman South-East Britain

edited by David Rudling

Index. xii + 214 pages, 87 illustrations in colour and black & white. (Heritage Marketing and Publications jointly with Oxbow Books 2008)

ISBN-13: 978-1-905223-18-3

ISBN-10: 1-905223-18-8

Paperback. Not yet published - advance orders taken. Price £24.95

Roman Britain was a multi-cultural mix of Celtic natives of different tribes and religions, of Romans with their own pantheon of deities, and of the soldiers and traders who brought

their own practices and beliefs from all parts of Europe and North Africa and the East. This volume explores the way in which they practiced their religions in the relatively peaceful and prosperous areas of south eastern Britain, in towns and in the countryside, at temples and shrines, in cemeteries, and in their houses.

The book provides an up-to-date review of the evidence; it is written in a style that will appeal to both the general reader and the specialist. It is extensively illustrated with photos in colour and black and white, and with drawings and maps. Contributors: Pagan Belief in Rural South-East Britain: Contexts, Deities and Belief (Ernest Black); Places of Worship in Roman London and Beyond (Jenny Hall and John Shepherd); Springhead, Kent: Old Temples, New Discoveries (Phil Andrews); Roman Period Temples and Religion in Surrey (David Bird); The Wanborough Temple Site (David Williams); Roman Period Temples, Shrines and Religion in Sussex (David Rudling); Hayling Island: A Gallo-Roman Temple in Britain (Anthony King and Graham Soffe); Aspects of Votive Offerings in South-East Britain (Jean Bagnall Smith); The Fate of Roman Temples in South-East Britain during the Late and Post-Roman Period (Alex Smith); 'And Did Those Feet in Ancient Times': Christian Churches and Pagan Shrines in South-East Britain (Martin Henig).

news conferences study days news conferences study days news study

Hadrian: Empire & Conflict - British Museum

24th July – 26th October 2008

Bringing together over 180 loans from 31 countries – from Italy to Georgia, Israel to Newcastle – the exhibition will display dramatic sculpture, exquisite bronzes and architectural fragments, many of which will be seen for the first time in the UK. The show also includes objects from the Museum's own collection including the famous Vindolanda tablets from Hadrian's Wall. Following First Emperor, the exhibition will be the second to be held in the Museum's historic Round Reading Room, the dome of which has been compared to the Pantheon in Rome, one of Hadrian's architectural masterpieces. Opening hours for the exhibition: Daily 10.00–17.30 (last entry 16.20), Open late on Thursdays and Fridays until 20.30 (last entry 19.20)

T: (+44) (0)207 323 8181

Further Information: www.thebritishmuseum.ac.uk

Archaeology and education 2008

4th - 6th September 2008-05-25

The next CBA Archaeology and Education conference is being held at the University of York St. John in York. There will be a range of speakers and activity-based workshops. The conference covers the whole spectrum of education from schools up to higher education, and is aimed at anyone with an interest in archaeology and education, e.g. teachers of archaeology, and archaeologists interested in working with audiences of all ages in formal education: 5-14 in schools, 14-18 including AS/A level, continuing education and full-time higher education. Work in informal education through community archaeology is also included. Contributions are invited for the following formats: short talks giving an account of projects or activities you have been involved in; discussion or activity based workshops (these can be half a day or a full day in length);

small seminars based around a number of speakers with discussion; longer talks addressing key issues in archaeology education. The conference will have input and support from the Portable Antiquities Scheme, and other organisations will be welcome as partners or sponsors of the event. All contributions and enquiries are welcome. For more information contact Don Henson at Head of Education & Outreach, CBA, St Mary's House, 66 Bootham, York YO30 7BZ, tel 01904 671417, email donhenson@britarch.ac.uk.

From Desert to Wetland. 27th and 28th September 2008

This weekend conference in honour of Profs. Bryony Coles and Valerie Maxfield on their retirement, will take place at Streatham Court at the University of Exeter's Streatham Campus.

Speakers are:

David Breeze – Barbarians and the nature of Roman frontiers
Bill Hanson – Fort annexes in Roman Scotland
Rebecca Jones – Roman camps in Britannia
Lindsay Allason-Jones – Urban angst in RB
Alan Bowman – Vindolanda tablets and the army
Neil Holbrook – Roman South-West
Mark Hassal – Legion II Augusta – epigraphic evidence
Henrietta Quinnell – Devon Archaeology 1972-2008
Ralph Fyfe – Palaeoecology in upland SW
Paul Mellars – *Homo sapiens* explosion
Denis Ramseyer – Wetland arch in Switzerland
Anthony Harding – Biskupin
Alison Sheridan – Developments in wetland arch
Linda Hurcombe – Tree and plant craftsapes
John Coles – Rock art in southern Scandinavia.

Cost for both days is £40.00 (Sat or Sunday only £25.00) plus lunch at £10 per day. For more information contact the Department of Archaeology, University of Exeter, Laver Building, Exeter, EX4

4QE. Tel: 01392 264350, e-mail: archaeology@exeter.ac.uk, web <http://www.sogaer.ex.ac.uk/archaeology/conference/s/present/desert-wetland2008-programme.shtml>

Debating urbanism: within and beyond the walls **15th November 2008.**

A day conference on life within and around towns from cAD 300–700. A conference hosted by the School of Archaeology of the University of Leicester will contain papers and discussion on late Roman and early medieval urban change in Europe from both an archaeological and historical perspective. This conference will provide a forum in particular to post-graduate researchers, with discussions framed by established scholars. This will stimulate debate and discussion to illustrate the ways in which towns were constantly changing and evolving or decaying from the late Roman Empire into early medieval Europe. Alternative contact [Denis Sami](mailto:Denis.Sami@le.ac.uk). For more information contact Gavin Speed at c/o School of Archaeology & Ancient History, University of Leicester, University Road, Leicester LE1 7RH, email gs50@le.ac.uk, web www.le.ac.uk/ar/research/conf/debatingurbanism.html. The cost is £tba.

TAG 2008 (UK) **15th – 17th December 2008**

Held at the University of Southampton. Abstracts for sessions at TAG2008 are now being accepted online until 30.6.08. For more information contact the organising committee at TAG 2008, Department of Archaeology, School of Humanities, University of Southampton SO17 1BF, email tag2008@soton.ac.uk, web www.tagconference.org/2008. The cost is £tba.

RAC 2009 **3rd -5th April, 2009.**

The 8th Roman Archaeology Conference will be hosted by The University of Michigan, Ann Arbor.

The RAC program will comprise 18 half-day sessions spread over three days. Sessions will commence at 9 am on Friday, April 3 and all sessions will conclude by 4:30 pm on Sunday, April 5. Thus far the Organizing Committee has approved the following sessions for inclusion in the program. They are presented here in no particular order.

- The Late Republican period in “native” Southern Italy
- Kings, Clans and Conflict: Italic Warfare in the first millennium BC
- Rome and the Alps
- Current Approaches to the Archaeology of first millennium BC Italian Urbanism
- The Roman city as ‘written space’
- Between Canon and Kitsch: Eclecticism in Roman Homes
- Rethinking Britannia. New Approaches to a Grand Old Lady
- Irrelevant Wall or Untapped Resource? Challenging Preconceptions of Hadrian’s Wall
- Dura-Europos
- Roman Imperialism in Africa Proconsularis
- The Troubled Adolescence of Late Antique Studies: Archaeological approaches to ‘change’ in Late Antiquity
- Incorporating coin finds into the archaeological and historical narrative
- Roman villa landscapes in the Latin west: economy, culture and lifestyles
- Aelia Capitolina – The Establishment and Development of a Roman City in Palestine Comparative issues in the archaeology of the Roman rural landscape, site classification between

survey, excavation and historical categories

- Alteration, influence, transfer and exchange: architectural relations between Rome and the Greek East
Archaeology-based approaches to the study of food and drink in the Western Roman Empire
- The Lives of Others: peoples of the peripheries

See <http://sitemaker.umich.edu/rac2009/home> for further information.

TAG 2009

1st – 3rd May 2009

The 2009 meeting of the international Theoretical Archaeology Group will be held at Stanford Archaeology Center, Stanford University, Palo Alto, California, USA.

The intention of this TAG conference is to provide a forum for the diverse and interesting theoretical perspectives that exist in the United States, and to bring together both Classical and anthropological archaeology. TAG is centered around a plenary session in which a handful of scholars will comment on this year's theme, "The Future of Things". Deadline for session abstracts is 15.11.08 and for papers 15.2.09. For more information contact the organisational committee, email TAG2009@stanford.edu, web archaeology.stanford.edu/TAG2009. The cost is £tba.