

MOLAS LIBRARY

NEWS

No.19 April 1990



INTRODUCTION

Keep up the good work, thankyou again for all these articles. How about some reviews and cartoons?

I contacted 15 Archaeological Units about their work and have had answers from several - they sent summaries of their work. Do people want them circulated or edited down and added to the Newsletter (as the Winchester excavation news in this month's issue)? Please get back to me on this.

Olivia Belle

THE DEADLINE FOR THE NEXT NEWSLETTER IS: TUESDAY 24TH APRIL

DIARY**Lunchtime Lectures and workshops at 1.10pm :**

Wednesday 4th April: Uphall Camp, Ilford and Iron Age London, Pamela Greenwood

Thursday 5th April: Modern Urban Folklore, George Monger

Friday 6th April: May Day in London, Roy Judge

The Archaeology of London, a series of lectures at the British Museum, at 1.15pm in the Lecture Theatre:

Wednesday 2nd May: Managing London's Archaeology, John Maloney

Wednesday 9th May: London BC; the prehistory of the Greater London area, Nick Merriman

see next Newsletter for following lectures.

Environment and Economy in Anglo-Saxon England Conference

Monday 9th and Tuesday 10th April.

Contact the Environmental Dept. for programme and details.

STAFF

Tina Murphy has joined the Excavations Office as our Clerical Assistant. All leave cards, job applications, sick forms etc. should now be sent to Tina.

Resigned

Daniel Bone
Dave Fell
John Hudswell
Jo Lawson
Sue Leaver
Tim Longman
Indira Mann
Dave Mc Ewan-Cox
Vicky Roulinson
Paul Woolton

Appointments

Damian De Rosa, SA, 50 Gresham Street

COLLECT FROM	
Name	Museum London
Address	Dept Organ Archeology 150 London Wall London EC2
Post Code	

JOBS

DUA SA for 4-10 Artillery Lane, 10-12 week watching brief. Closing date: 5th April.

HBMC Publication Programme.

Applications are invited for three posts, each at Senior Archaeologist grade:

Post 1: Cutler Street, Archive Report (5-month contract)

Excavations at Cutler St. in 1978 revealed extensive evidence of 17/18th century buildings and streets. The successful applicant will be required to complete the Level 3 report.

Post 2: Medieval Waterfront Tenement (6-month contract)

This large project will describe medieval waterfront housing and two churches in the London Bridge area. The successful candidate will be required to prepare a summary report for publication on the Billingsgate sequence.

Post 3: Holy Trinity Priory (8-month contract)

Elucidation of the plan and history of the Priory, both through excavation and documentary/cartographic research, has been one of the DUA's main contribution to the study of medieval London. The successful application will be expected to complete a standard archive report for the MIT83 sites and prepare summaries for publication of some of the sites.

Closing date for applications: 17/4/90

Interviews will probably be held in the week beginning 23rd April.

Contact Francis Grew for further details.

ANNOUNCEMENT

Whoever ordered some pencil leads from UDO can collect them from Stuart in the EO.

THE ARCHAEOLOGY OF
LONDON

A series of lectures at
the British Museum by
Museum of London experts

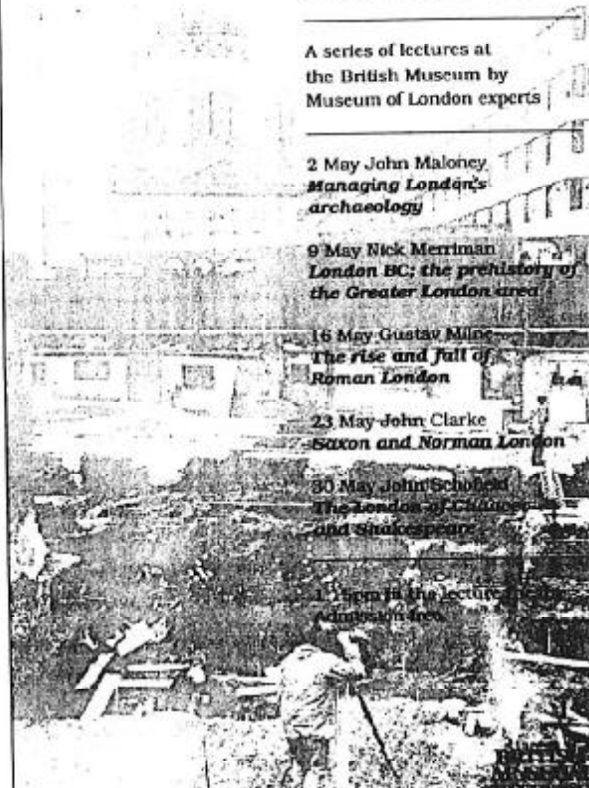
2 May John Maloney
*Managing London's
archaeology*

9 May Nick Merriman
*London BC: the prehistory of
the Greater London area*

16 May Gustav Milne
*The rise and fall of
Roman London*

23 May John Clarke
Saxon and Norman London

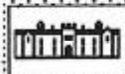
30 May John Schuchman
*The London of Chaucer
and Shakespeare*



The twelfth annual conference of the Theoretical Archaeology Group.

TAG 90 LAMPETER

17th-20th DECEMBER



Call for Sessions/Papers

Proposals for conference sessions or for
individual papers (c.300 words) should be
sent, by May 1st 1990, to:

TAG 90 Organising Committee,
Department of Archaeology,
St. David's University College,
Lampeter, Dyfed SA48 7ED.

Potential contributors are reminded that the content of sessions and papers should be primarily theoretical in nature. As a point of policy, it is requested that sexist uses of language should be avoided both in proposals and in papers presented to the conference itself.

NEWS DIGEST

English Heritage and Publications

Work proceeds on the two reviews to be compiled by Gill Andrews: the present state of knowledge in the London area and the outstanding (in more senses than one) publication backlog. Otherwise, no news as to the wider movements or intentions.

The post-ex grant for work on the English Heritage/HBMC publication programme in 1990-1 has arrived; all we have asked for has been granted, with the exception of the launching of Project 39, Post-Fire Tenements, which is deferred for separate discussion on a financial technicality. Some of the jobs therefore available within the publication programme are advertised elsewhere in this journal and generally; I would encourage you to apply if you want experience in post-excavation and publication, and think that you can make a good attempt. We wish to broaden our number of staff in post-excavation, and many colleagues have been complaining of a lack of opportunity to carry work forward after the excavation. Well, it may not be your excavation we are carrying forward just yet, but now is a good chance for you to widen your experience.

The department is currently working on a large number of publications. In the HBMC programme site volumes for Saxo-Norman London II (Finds and environmental data), Middle Walbrook and Saxon Embankments are in the pipeline for LAMAS Special Papers; Medieval Textiles and Dress Accessories (two separate studies) are off to HMSO; the CBA are receiving the first three of five related Research Reports on Roman London, those dealing with Upper Walbrook, West of Walbrook and SW Roman London. Summary articles on the Roman waterfront and on the Leadenhall Court Roman basilica excavations are with *Britannia*. The new Archaeological Recording Manual is printing. The Annual Review for 1989 is being planned, as is publication of the MoL Annual Lecture in 1989 by John Maloney. For the future, besides the remaining HBMC projects, site specific books are being discussed for three sites (Boys' School, Whitefriars; and two sites in Aldersgate). Publication is currently an exciting and innovative growth area.

Competitive tendering

As announced at the Staff Meeting on 6 March, the DUA has been asked to carry out the evaluation at Brooks Wharf, near Queenhithe; Cathy Rosborough and colleagues will contribute to the report, to be sent to the client Hammersons on 18 April. The DUA has also, despite considerable difficulties, secured the contract to excavate at Pinners' Hall in Austin Friars, a medium-sized excavation of up to 4 months from the end of April.

The generally unsatisfactory situation and lack of standards and guidelines is causing grave concern. First meetings are being held to formulate Museum thinking on standards, guidelines and specifications for various areas of archaeological work, as outlined last month. I hope that one document which covers Site Assessment and Data Retrieval (excavation to you and me), now in draft from the multiple pen of the Excavations Office, will be available for circulation and comment within the DUA at the end of April. Guidelines on standards for finds preparation to be permanently retained by the Museum have already been compiled.

Meanwhile we have been acquainting ourselves with the situation outside London. John Oxley, City Archaeologist at York, came at our invitation and described the situation there. Two sites are currently up for competitive tendering. He has prepared a detailed specification for the

are currently up for competitive tendering. He has prepared a detailed specification for the second and more important, Queen's Staith/Skeldergate, and hopes that he can add a decent specification to the first site which happened before he was appointed. Interestingly, YAT are written into the specification to provide things like ceramic dating and conservation. Secondly, ex-DUA supervisor Chris Evans called in to clarify a rumour that the new Cambridgeshire Archaeological Unit (directors: C Evans, I Hodder) might be on the prowl. Chris denies this as far as London is concerned, but wonders if there is a role for his unit in judging competing archaeological evaluations where a client does not have a consultant.

I have declined an invitation for the DUA to tender for the excavation of the Skeldergate site in York.

Premises

We have put in a serious bid for the premises at Great Eastern Street, as promised last month. This will enable most, if not all, of the site post-ex functions to be carried out in one building, which will make supervision and computerisation much easier. This would free Plaisterers Hall and probably part of Bridge House to accommodate expansions in existing functions. When we are a little further down the road of acquiring the place, we can talk about who goes where. Please do not be alarmed; we shall make considered decisions and with full consultation.

DUA/DGLA talks

Most of the planning and negotiation discussion papers are in, but few of the post-ex and publication papers; so news must be deferred until next month.

Housekeeping, money, budgets

On 22 March the Director gave clearance for us to go ahead with the implementation of trial covenant arrangements with Commercial Properties Ltd and of qualifying donations with MEPC. The new Budget Initiative of Gift Aid may also help sponsorship.

It seems generally inevitable, and good practice, that we should bring in timesheets for all members of staff. Most of you are used to them anyway, but they are not employed at the moment in HBMC post-excavation projects. After compilation of one (or at most two) variant forms, we hope to introduce them during April.

John Schofield

The Trust for British Archaeology

SMALL TOWNS AND ARCHAEOLOGY

Saturday, 28 April 1990
10 am to 5 pm

at
Grantham College of Further
Education, Stonebridge Road,
Grantham, Lincolnshire

Increasing developments in the small towns and cities of Britain is threatening their archaeology. Recent examples include Monmouth and Boston where large-scale development threatens to destroy the material evidence of their once-prosperous past.

This one-day conference is for those who live in small towns, who have to deal with them, or who simply care about the way they are changing. It will look at the problems and aims to find some solutions to them. Tickets (£5) and further information are available from Brian Simmons, Trust for Lincolnshire Archaeology, 28 Boston Road, Sleaford, Lincolnshire NG34 7EZ, or from Bob Jones, City of Bristol Museum and Art Gallery, Queen's Road, Bristol, BS8 1RL.

This looks like a very fine day out for anybody interested in small towns. Those featured will include Boston, Sleaford, towns in Essex, Monmouth, Grantham, Spalding, and in N.Lincs, and Cleveland. A suitable train leaves from Kings Cross at 8.25 am.

Rescue

LETTERS

Dear Editor,

I was interested to read Chris Sparey-Green's Ideas on Archaeology and the Green Movement in the last issue of the Newsletter.

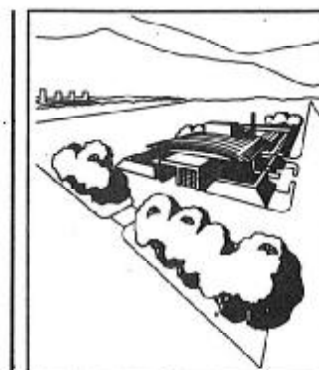
I don't know whether I agree with Chris or not, but I do notice that Chris's views appear to contradict those of a certain Dr. Geoffrey Wainwright writing in the March 1990 issue of 'English Heritage Magazine'.

In an article entitled "Archaeology and the Green Movement" Dr. Wainwright states: "A useful way of thinking through the issues is the formulation of a management plan The value of a management plan is that it provides a quarry (*sic*) of detailed information for decision making in the course of day to day activities and promote(s) continuity by emphasising the long term strategy Like all natural resources, the archaeological heritage needs to be understood in terms of quality and quantity of the reserves we have (and) how it can be most effectively managed so that valuable assets are not squandered or over exploited for short term gain".

Well Chris who do I believe? You or this Dr. Wainwright?

Kevin Wooldridge

P.S. One of my favourite radio programmes is 'Gardeners' Question Time'. Dick Malt says that his dad, who catches a lot of cod, says that if you bury the left over bits from cod in your garden and then plant broad beans, they come on a treat. I think that halibut are more likely to produce good celery. I was wondering whether your Green Correspondent has any views on the use of fish based fertilisers?



No 2 Poultry

Suffolk planners have given the "green" light for Europe's first ecologically-sound power station, which uses chicken droppings as fuel. Designed by London architects Lifschultz Davidson, the power station at Eye will produce 10 megawatts — enough electricity to supply a town of 10,000 people.

The power station owners, Fibropower, will obtain the chicken droppings from local farms, disposing of about half of Suffolk's annual poultry manure.

Fibropower claims this will cut the release of methane gas and nitrates into the atmosphere — both of which are produced by chicken droppings — and save valuable fossil fuels.

WOMEN AS INTERPRETERS OF ARCHAEOLOGY

who are we?
what do we do?
What are our aims?

Inspired by the gender studies session at TAG89, we have established a study group for women, and are in the process of setting up a series of open meetings with outside speakers.

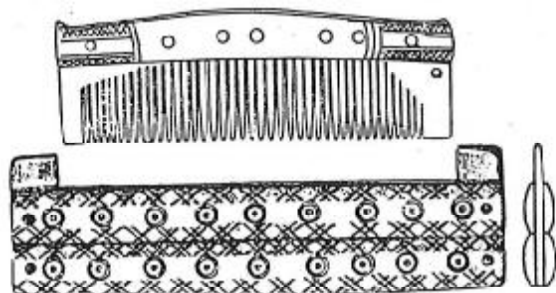
Women - why not come along to the next study group meeting? We need your support - and your ideas. Please come.

FINDS DEPARTMENT

Fleet Valley continues to yield finds worthy of note and this month has produced a pair of very well preserved medieval copper alloy tweezers from a waterlogged deposit. A Roman copper alloy brooch from the site will be X-rayed to allow further identification.

A test pit at the north end of the Vintry site uncovered a wattle-lined cess pit of medieval date containing two wooden bowls, an unusually large wooden comb and German and Spanish pottery imports. A glass *calender*, or linen smoother, was found in another part of the site.

A Leadenhall site (LHN 89) produced a short single-sided bone comb with its bone case. The case is decorated with ring and dot designs. The comb has both copper alloy and iron rivets which may indicate that it was repaired at some time. This object is of a familiar late Saxon type. The illustration shows a similar comb and case from Liverpool Street.

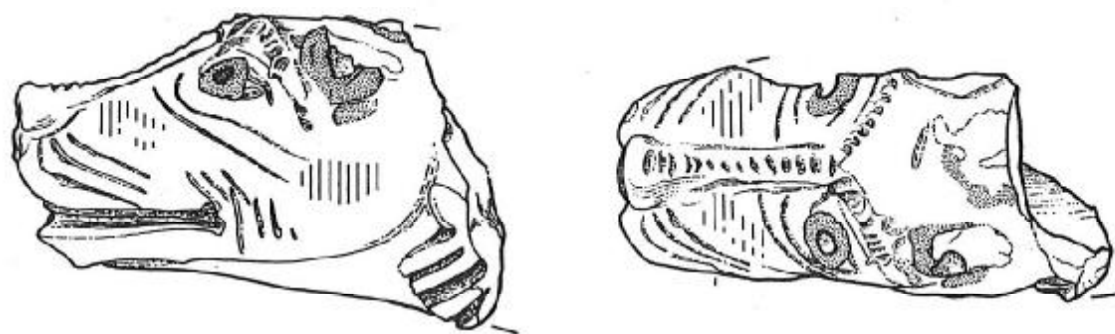


A couple of interesting items from Whittington Avenue have been discovered in the course of pot dating. These are a Central Gaulish lamp with a partially draped figure - probably a *Maenad* (Maria says it has lovely buttocks!) - and a North African red slipped ware bowl, decorated with rouletting. This type of bowl is rarely found in Britain. This example also has part of a stamp.

Further examination of the late Roman comb from Giltspur Street (reported in the November newsletter) has revealed the presence of animal shapes, probably lions, cut out of the middle section between the connecting plates.

The glass from the Billingsgate Bath House (BIL 75) is currently being examined by John Shepherd and consists an exceptional group of late Roman glass including a colourless beaker with geometric wheel-cut decoration and some cameo glass.

The sweetest find of the month is a medieval ceramic dog's head (illustrated) from Bishopsgate (PSO 90). It is green-glazed pottery, probably Kingston ware, and is of mid 13th to mid 14th century date. It may have been the spout of a zoomorphic jug or part of an aquamanile.



Staff News

Simon Pope (Finds/Site liaison) has moved desks and can now be contacted in the finds processing room on extension 316. Tilly Webb has resigned in order to satisfy her desire to travel round the world. Finally, the Finds Section would like to welcome Paula McCarroll who defected from Fleet Valley in mid March to become the new Finds Archive Assistant.

Victoria Cassely
Illustration by Gill Hale

ENVIRONMENTAL DEPARTMENT

Over the last couple of months we have had three new staff join us. John Giorgi, an archaeobotanist who has worked for some years in Rome and recently studied at Sheffield University on the MSc course in Environmental Archaeology, joined us on the 12th February. John will be working on archaeobotanical post-excavation projects. His is a new post and the work will involve HBMC and developer projects. On the 12th March two new staff joined from the DUA and DGLA Field Sections, Janet Stacey and Klara Spandl, as Environmental Assistants. They are both currently working on the samples that have been collected on the Fleet Valley Project.

At the beginning of April we will lose one of our longest serving colleagues. Dominique de Moulins is leaving to complete a PhD at the Institute of Archaeology on neolithic agriculture in Syria using material from the site at Tell Abu Hureyra. She has successfully obtained a SERC grant for this project. I would like to take this opportunity of thanking her for her contribution to the environmental section and its work over the last five years, and wish her luck with the research.

Dominique will be replaced by Liz Pearson who will be joining the section this month. She has spent the last year working on archaeobotanic projects in the Midlands while based at the Environmental Unit at Oxford University. She has already worked with us when she did her dissertation on material from Beddington for an MA at the Institute of Archaeology.

Two GCSE work experience students who spent two weeks with us recently were so interested and impressed that they have promised to come back! Meanwhile work continues on the processing of all the samples that have been taken. The London Wall samples have been finished and Roman samples from 40 Queen Street have been turning up lots of fish bones. We have reduced much of the backlog of bulk samples at the sieving operation in the Southwark warehouse and this recovery technique is fully repaying its effort in finds and environmental material. Nigel Nayling is coming to the end of a major dendro-dating exercise on the Bucklersbury site. Post-ex projects at the moment are largely DGLA but two major DUA projects on the Roman period and medieval riverside dumps are due to start shortly.

James Rackham

COMPUTING DEPARTMENT

UNFINISHED FIELD ARCHIVE REPORTS

Printed in the last newsletter was a list of all the completed Field section site archive reports that I have been given. All these reports are archived onto tape. If you have written up a site using a computer and your site is not on the list please contact me.

At the moment there are unfinished site reports that are no longer being worked on. I will now be archiving these onto tape. This will be a tape of only un-finished work and anyone using this tape will be told this. The main reason for archiving this work is for safe keeping. If you have any un-finished work that will not be completed in the near future please send it on a labelled disc to me at Ferroners House or inform Liz Shepherd or Andrew Westman.

CALLING ALL PC USERS - Tandon, Compaq, Epson, Shelton (!) BACKING UP YOUR WORK

Backing up your work means COPYING YOUR FILES TO A FLOPPY DISC. It is vitally important for you, that you copy all your files to a floppy disc for safe keeping. If you accidentally delete a file you will still have a copy on your floppy disc.

If you are using a PC which is running MS-DOS or CPM it is your responsibility to back it up. If you are not doing this please ring Duncan McDonell at Ferroners House NOW and he will tell you what to do.

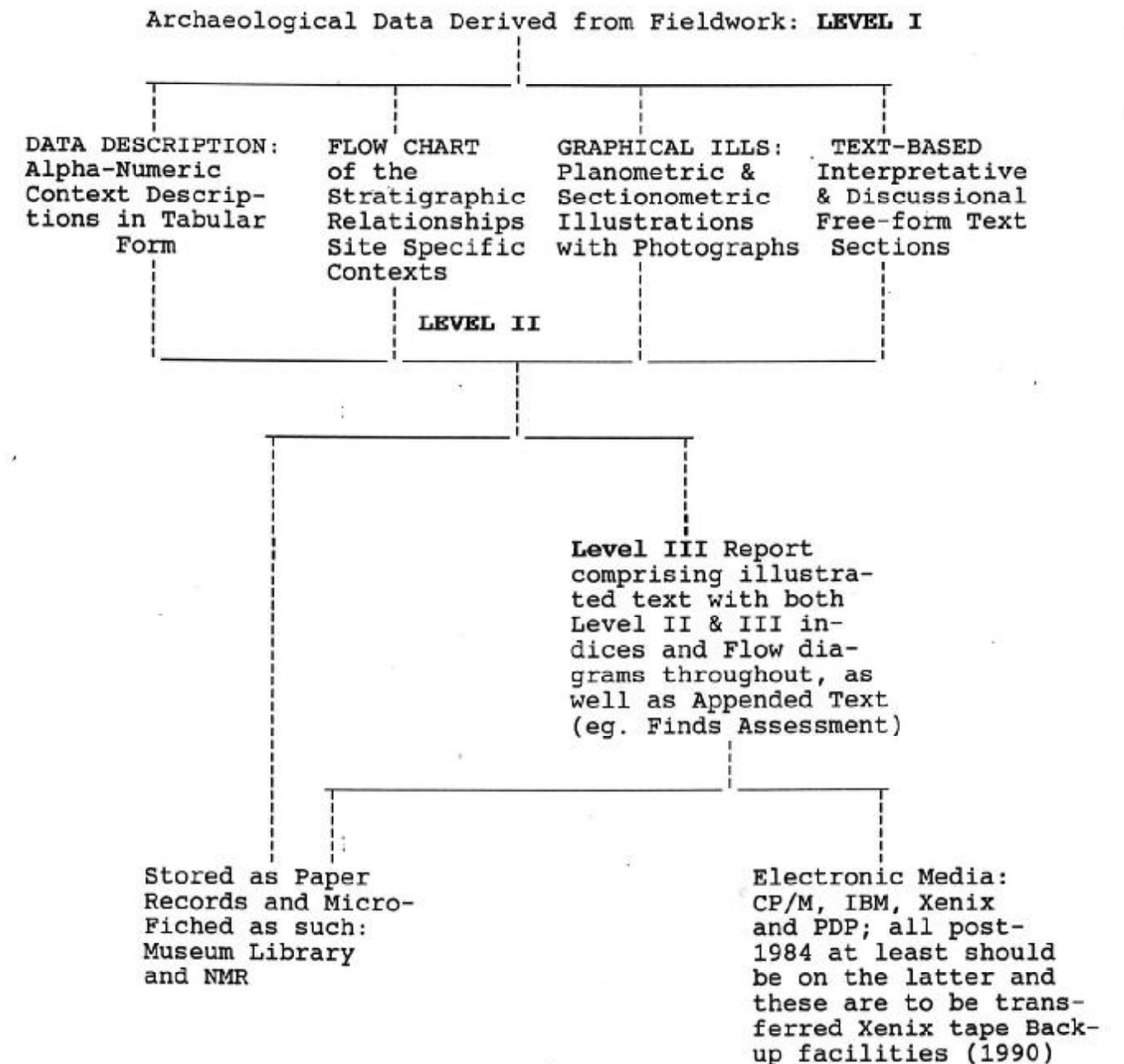
Also don't forget save your work every ten minutes!

Zoe Tomlinson. Ferroners House. 796 3040.

DATABASES AND/OR MAPBASES

A pilot research project was conducted from November 1989 to February 1990 at the University College of London's Department of Photogrammetry and Surveying to look into the possible use of Geographical Information Systems (GIS: text- and graphics- based database management systems) in the context of archaeology within the City. This largely entailed the compiling of a bibliography of GIS work in both the academic and commercial sectors with a view towards its potential within the archaeological community. Following a survey of user requirements for such graphical systems, the various components which would comprise such a system were investigated. In practical terms, the project was mainly concerned with exploring ways of creating better access to the DUA/MoL archive, not only as a pure research tool but also as an aid to field archaeologists on and off site. It was also planned to provide a more solidly based research design for further study with a mind to possibly implementing a GIS within the Department in the long term.

Chart 1: Primary Level II Datapath to Level III Report for the DUA/MoL Archaeological Archive



While Robin, Computing Manager, is busy setting up the new relational database management system, ORACLE (RDBMS), and Mark, Survey Co-ordinator, continues to build on the graphics (AutoCad) side of things (previous Newsletter), largely the acquiring OS maps of the City on electronic media, Dave Chapman and myself are looking at both fundamental GIS components with particular reference to the marriage or interfacing of the two data banks in order to run the system under one overall archaeological database or geographical information system (GIS). A data model, which would allow queries of the text-based data from sites, was established with archaeological data from a recently excavated site in the City for use in the building of a small-scale prototype GIS within an ORACLE RDBMS via a loose coupling of an object-oriented graphical management system.

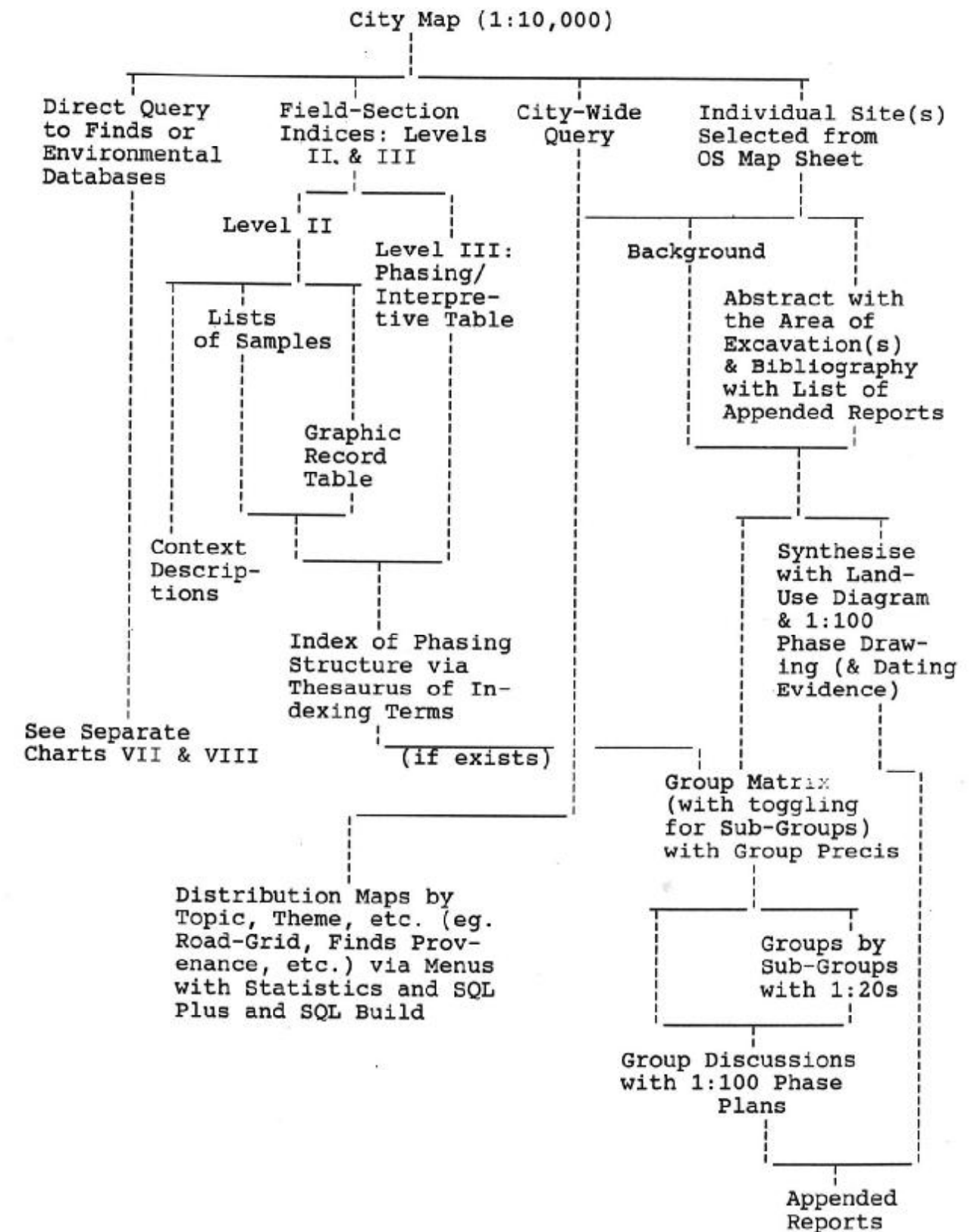
The three primary databases (Finds, Field and Environmental) comprising the archaeological archive are all cross-referenced by site code and context numbers, but as separate data banks the information they hold cannot be queried simultaneously. A series of input programmes, all linked by site code and context numbers, were developed under Standard Query Language: SQL PLUS (Macintosh) within an ORACLE RDBMS (front-ended by Hypercard). These input programmes include context descriptions, level II (graphic record table) & level III (a graduated series of interpretations by field) indices, as well as a completely new programme to handle incoming graphical or spatial data (ie. level II plans and sections). Another programme involving the machine-generated construction of the context stratigraphic flow chart (matrix) was built, as well as a suite of debugging programme. Although it had already shown that the process could be achieved for simple matrices, it needed to be tried on a more complex site, entered directly from the level II sheets (warts and all), as this would be typical of urban archaeological conditions. Once constructed, this system would allow full interrogation of both the text and spatial information held within the newly developing system (RDBMS).

Ultimately, this process was to lead to the building of a prototyping of a small-scale system, not only with the text-based data but with a selection of graphical data (eg. level III phase drawings), as well. The series of programmes (above) with accompanying data were mounted on an ORACLE (MAC) RDBMS which was linked to Intergraph's MAC MicroStation (CAD package) on a MAC SE II. This proved to be a successful marriage, even though the hardware proved to have insufficient memory to function efficiently. Nevertheless, it showed that the text-based RDBMS and the graphics-based CAD package, MicroStation in this instance, could function together. Unlike AutoCad, MicroStation is bundled with links to various database packages, including ORACLE. A site will now be chosen for its full level II data to be loaded into the prototype (data model) and run as a complete pilot example to form a demonstration of the system. Although the programmes were written under the Macintosh system, they can be exported as simple ASCII text files for used under the Department's Xenix system. In the end (or in the beginning, I should say!) the system would allow queries across the various types of information sources whether separately or in association with other data (ie. graphics and text), allowing syntheses of the ever growing archaeological data to facilitate the formation of conclusions of the history of London's past.

This foundational work continues, and Dave and Robin will be presenting a paper on the results of the machine-generated matrix portion of the research at the CAA'90 conference this month. Recently, we have catalogued the state of archival material from Field Section which presently exists on Xenix (backup) tape (2.90); and currently, we are transforming and converting to one format and one form all the level II and III indices that we have at our disposal (3.90). These will probably be the first batch of data to be loaded into the new RDBMS as actual data, at least the ones which allow this standardising!

Mike Shea

Chart 2: Accessing a Central Archaeological Archive



ARCHAEOLOGY IN THE CITY OF LONDON, AN OVER-VIEW

INTRODUCTION

How do you view the archaeology of the City of London? To me at present seated in Bridge House it appears to consist of piles of context sheets, which I am attempting to arrange in a close semblance to stratigraphic order or failing that put the sheets in numerical order, then place them in ring binders - so at least they will look tidy. Perhaps to other members of the DUA the archaeology of the City seems to be mountains of unwashed finds or an endless succession of muddy trenches, run by harassed senior archaeologists. To property developers it may appear just another expensive planning hurdle. In fact it seems to me that we each hold a different piece of the jig-saw. A day school last month attempted to join all the pieces together to provide an over-view.

ORIGINS

The history of the City of London starts soon after the Roman invasion of south-east England in AD 43. By about AD 50 the area of modern Cornhill was being settled. It has been suggested that this settlement was a planned town and pre-dated the Cripplegate fortress (see fig. 1), so London did not develop of a vicus outside a fortress - like many Romano-British urban centres, but as a port. Ephemeral traces of Prehistoric activity found within the City appears to be coincidence.

ROMAN PORT

The actual choice of site may have been dictated by the decision during the late 1st century AD to locate a bridge here to link the north and south banks of the River Thames. A possible timber pier base was found at the junction of Fish Street Hill and Lower Thames Street in 1981. One factor in the siting of the bridge was probably the very low-lying topography in Southwark, prone to flood at high tide, topographic considerations appear to have persuaded the engineers to site the roads across Southwark on the largest ridge of high ground - opposite Fish Street Hill. A bridge would have attracted all the local overland traffic, as a diversion would have been preferable to fording the Thames at Westminster during low tide. Therefore the bridge would have offered a good site for trading or retailing.

Docks here would have been a convenient point to off-load cargoes from large sea going craft to smaller river craft, for shipment upstream and tax collection. Goods handled by the port included barrels of wine, imported pottery - amphorae containing wine or olives and bulk loads of samian tableware from Gaul.

Along the shoreline by the end of the 1st century AD along was a complex of wooden quays and warehouses. The 1st century shoreline was the north side of modern Thames Street, all the land further south has been reclaimed from the estuarine foreshore. This process of reclamation and ground build-up (by dumping rubbish behind the quays and revetments) has created the depth and richness of the archaeological deposits of the foreshore.

ROMAN CITY

To the north of the quays on the south facing slopes of the two low hills each side of the Walbrook stream (see fig. 1), the City rapidly developed during the 2nd century AD. The impact of urban growth is shown in changing patterns of *diatoms* (algae) within the Walbrook sediments. During the Prehistoric period the Walbrook was a quiet shady stream flanked by deciduous woodland. However the growing City soon began to pollute the stream. It became a sewer and a rubbish dump. The local glassmakers and leather workers threw all their waste

products into the stream. In fact the Romano-Britons appear to have had the urge to throw all manner of objects into the Walbrook including shoes, skulls and statues. The modern equivalent of this behaviour is the throwing of supermarket trolleys into any water course.

Along the south facing slope, each side of the Walbrook during the early 2nd century a series of monumental stone buildings were constructed. The basilica/forum was rebuilt and enlarged, a palatial complex of buildings (now partly under Cannon Street station) are believed to be the Provincial governor's palace. Nearby at Huggin Hill a large complex of heated rooms is interpreted as a public baths, built during the late 1st century was enlarged during the early 2nd century. While on the top of the hill at Guildhall Yard an amphitheatre was built. No trace of a theatre has yet been found, perhaps it lay outside the City walls?

Good building stone is not locally available within central London, so stone would have been expensive and therefore is only likely to have been used in high status buildings or public works. In 1962 reclamation work at Blackfriars Bridge revealed the wreck of a 2nd century boat or sailing barge with a cargo of ragstone. Most houses, shops and workshops were built of brickearth/cob or timber-framed construction. Such structures could have been two storeys high. The major streets appear to have been lined with strip buildings, often one room wide extending back from the street frontage.

The City walls and gates date from circa 220-250, while the riverside wall dates from the late 3rd century. The construction of the riverwall cut off access to the quays and closed the port. The redundant warehouses became houses or shops.

THE CITY IN DECLINE

The last monumental Roman building to be erected in the City was at St. Peter's Hill. Here excavation has revealed stout oak piles and inter-laced timber work, serving as foundations for massive stone foundations. Due to truncated down to foundation level, both the plan and interpretation of this structure are uncertain. It has been suggested that it was a palace or temple. To find and date a Roman structure is one thing, to prove who built it or its function is quite another - a point people tend to gloss over.

Dendrochronology proves that the foundations of the St. Peter's Hill structure were built of timber felled during AD 293-294, during the reign of the rebel Allectus (293-296), an enterprising individual who set himself up as Emperor in England and Gaul - after murdering the previous rebel Emperor. Perhaps like the late President Ceausescu of Romania, Allectus may have had a passion for erecting grandiose public buildings as a monument to his reign. If this suggestion is true it is quite possible that the St. Peter's Hill complex was never finished as Allectus was deposed and London reconquered by Imperial forces in AD 296.

From this time onward London appears to be in a decline, the Basilica fell into disrepair and may have been partly demolished during the 4th century. At Huggin Hill, the baths were demolished down to ground level and brickearth and timber-framed houses and workshops for glass and iron working built on the site. Certainly the City was not abandoned, as judging by finds of coins, settlement continued until the end of the 4th century.

THE STRAND

From the 5th until the 9th century activity and settlement appears to have been concentrated with the Strand area between the Cities of London and Westminster. Here the Anglo-Saxons like many modern developers chose a "green field site" rather than a decaying city centre. Here at Lundenwic another part was established. This appears to have been a beach market - the early medieval equivalent of a car boot sale, where local people would have sold or exchanged good from their boats. There would have been no need for specialist merchants or

warehouses. However the former Roman City had not lost all importance as in 604 Mellitus, first Bishop of London dedicated a church to St. Paul on the site of the present Baroque cathedral.

ALFRED'S CITY

In 886 King Alfred ordered the reoccupation and fortification of the City of London, as the undefended Strand settlement had been raided by the Vikings in 841, 851 and 871. Harbours were established at Queenhithe, Dowgate, and Billingsgate (see fig. 2). A new network of streets aligned north-south was established, leading uphill from the river.

By the 10th century reclamation of the foreshore had begun again. The first revetments were lines of timber stakes, earth banks and wattle structures. By the 12th century more substantial structures with horizontal planks and angle braces were being erected. The space behind these revetments was infilled with domestic rubbish, so excavation of these deposits produces a wealth of finds. Study of the pottery from dumps correlated with waterfront structures - dated by dendrochronology - has allowed closer dating of many medieval pottery types than was previously possible. Construction of new warehouses along the waterfront also begun during the 12th century. This process of reclamation continued until the construction of a stone-built river wall during the late 15th century.

THE POST-MEDIEVAL PORT AND CITY

By the 15th century London was a major international port. This phase of the capital's history is still echoed by place-names such as Fish Street Hill, where the fishmongers gathered. The church name - St. James Garlickhythe (garlic harbour) recalls another cargo.

London remained a major port until the middle of this century and much of the City's waterfront was still occupied by Victorian warehouses until the 1970's. However the development of bulk carriers (too large to use the 19th century docks) and container traffic have made these warehouses redundant, so these sites have been redeveloped to provide office accommodation. Today London has the third largest Stock Exchange in the world (after Wall Street and Tokyo) and is a banking and insurance centre of international importance. These new functions create an endless demand for office accommodation with the City of London.

THE FUTURE

Looking around London today, there are few reminders of its past roles as a Roman City or an international port. Every year its skyline becomes more like that of Hong Kong or New York - an ugly mass of steel and glass.

Current redevelopment is destroying the archaeology of the last 2000 years at an alarming rate. Before the DUA was established in 1973 it has been estimated that some 60% of the archaeology of the City had been destroyed, since then another 20% has been either excavated or destroyed. This means that we are not only working ourselves out of a job, but that judging by the present rate of destruction there is likely to be nothing left by 2020.

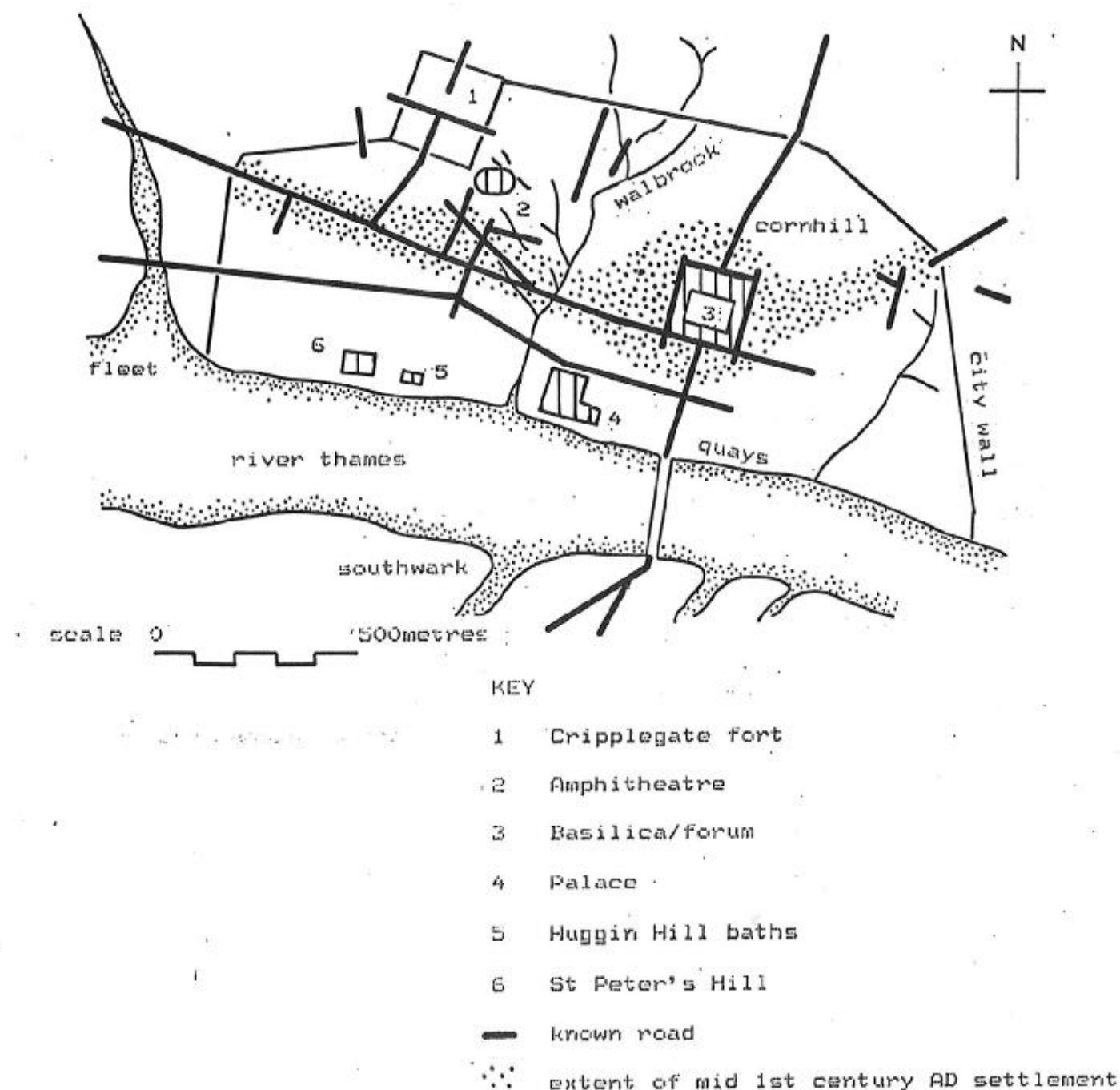
Clearly a conservation policy is called for to prevent further destruction, but conservation of archaeological deposits would hinder development and conservation would not earn profits or peerages for anyone. What price this citadel?

Bruce Watson

NOTES

1) Archaeology in the City of London, a day school, held at the Museum of London on 10/2/90. This article is based on lectures by: G. Egan, J. Maloney, G. Milne, J. Murray, M. Rhodes, J. Schofield and T. Williams.

Fig 1: Roman London



**NOTES ON THE WARP-HBMC CONFERENCE
OF THE 15TH JANUARY 1990**

As it is unlikely that the subject matter of this day conference will be of central interest to most of you, here is just a very brief outline of what took place. It was important in the sense that the speakers were ostensibly there to develop and illustrate sections of the draft "Guidelines on waterlogged wood". This document was drawn up to provide distilled advice on the subjects of excavating, recording, processing, dendro sampling and the initial conservation requirements of waterlogged structural timbers. The document has now been offered for comment and when revised it will be issued nationally in a few weeks. As it follows established DUA procedure and methods in nearly all its suggestions we should have no difficulty in using it as a "standard document". Most other units will have to greatly improve their work to match its basic requirements. The excavations office and I have a copy of the draft "Guidelines" should any one want to see them. Of course they must be required reading for the responsible archaeologists involved with all aspects of the Brooks Wharf site including the honourable consultant!

The conference was started by a brief outline of the HBMC Archaeological Wood Survey, fluently given by *Nigel Nayling*, and a summary of general information on sites yielding waterlogged wood in Britain over the last year or so. He noted that he was able to list 480 sites yielding waterlogged timbers excavated over the last few years. One might think that this was enough to have spurred the development of an "Archaeology of Wood", also such a child of the labour of love that is recording ancient timbers yet to be weaned. Nigel Nayling carried out the bulk of the work before joining the Museum, but is still up dating the computerised index so if you know of sites that produced wood, dug in the last few years, you could let him know about them. There are several Neolithic and Bronze Age sites, 16 Iron age, 194 Roman sites (88 of them in the London area), 70 Dark Age, 140 medieval, and 46 Post-Med (mainly boats and ships).

Next *Gustav Milne*, doyenne of the waterfront, gave an overview of both the basic process we use in the DUA to record timber structures and the aims of that process, and also the actual realities of digging up waterlogged timbers in an Urban rescue context. He bemoaned the fact that so much [99.9%] of the timber excavated has been thrown away due to lack of funding and inclination to preserve this part of our material heritage. He also outlined how in London we have suffered from an embarrassment of riches which has resulted in confusion about what to keep which has in turn resulted in the timber largely being dumped out of sight and mind (with the rare exception of parts of several waterfronts from Billingsgate, and more recently some material from Southwark). Preservation through record to a high basic standard is essential. He also made one or two more general points about some of the long term objectives of a systematic approach to recording archaeological timbers. One of these was the possibility of reconstructing the trees and thus the landscape that was used to produce the raw material, hence his title "Seeing the wood in the trees". He also illustrated the effect of contemporary Philistine attitudes are having on our work on the waterfront, unregulated competitive tendering and all.

The freelance wooden artefacts specialist *Carole Morris* gave the next talk which covered the questions of "what should be recorded?" at the detailed level of tool marks, timber conversion etc. Her talk was illustrated as much with slides of experiments in early woodworking as by archaeological material, and the fact that she does not have to deal with large quantities of big timbers put her at a disadvantage. However her talk got over the message that recording ancient timbers is recording ancient wood workings, and thus it must be done with the help of

someone who knows something of wood working practice not just how to hold a tape or use a level. In other words, as the "Guidelines" suggest we could do with some more archaeologists with some of the special 'Nouse' sorely needed. Interestingly there are no academic courses at all as yet though this might change. The guidelines are weak on this point, failing to address the obvious that unless people are able to recognise say an axe mark or a *stopped splayed scarf with undersquinted butts* we can't preserve them through record, or adequately advise curators on what they should consider keeping.

J. Hillam a tree ring specialist from Sheffield, then gave a review of the state of tree ring studies in Britain and its potential for dating, studying aspects of woodland management, and reconstructing past climates. She also showed how detailed tree ring studies can reveal rebuilds in structures, the unrecorded reuse of timbers, and how the section of the tree used in a timber may also be noted by the dendro specialist. The various approaches to actually getting your sample, chain sawing coring etc. were also run through. The hope that chronologies based on non oak timbers and cross matching across species was also raised.

Before lunch *Michel Colardelle* gave us a colourful outline of work carried out on the waterlogged medieval site in eastern France at Charavines. Here the logistical backup is to be envied, but the conservation of nearly everything organic seemed impractical to this author. Though such an approach does allow for the reinvestigation of material it is also likely to submerge existing facilities so that future more significant finds may have to be dumped. It also allows recording to be of a lower standard than is desirable, a lot of archaeological storage in Britain groans under the weight of stinking tanks full of unidentified uncared for wood that eventually gets thrown away without proper record.

After lunch *Jim Sprigs*, chief conservator of the York trust gave a succinct account of the conservators role in processing timbers, from presence on site to lifting and storage. The possibilities of selectively using controlled air drying and preservation in situ, much more than we do now, were touched on. Why more effort is not expended in this area of conservation research is hard to fathom, particularly when the Dutch, for example, have been using methods of controlled air drying for many years on a very large scale. One might suspect that some think that if a method is cheap and "low tech" it can't be any good! This is not to say that the majority of archaeological waterlogged wood should be air dried but just that the method should be considered and developed (the DUA has used this method with some success with the 17th century ships timbers from the BOY 86 site).

An interesting talk was then given by *David Lawson*, a museum curator from Somerset. However it seemed, to me at least, largely irrelevant to the problems being discussed except in so far as we heard at least one curator suggest that the public and archaeologists of the future should have the possibility of seeing this fragile but fundamental part of our common heritage on display and in store. The body Mr. Lawson works for now has the responsibility for the curation of material from the Somerset Levels so I hope that we shall be able to see such material on display over the next few years. The lack of funding for dealing with this type of material in most museums was highlighted. An interesting aside here is that Hackney museum, well known for its vast resources in this field managed to acquire (in a few weeks) the funds for the conservation of a Saxon boat found in its area, more than our museum has been able to do, in 16 years. Is the lesson here that "where there is a will there is a way"? Has the will been lacking some where in the Museum of London??? It is of course much cheaper to display the stuff museums have been displaying for at least a hundred years, but does it do justice to the archaeology or the consuming public, or are the images presented a sanitized form of an inorganic past so different from our field experience of it?

The last paper of the day was a review of the future logistics of the conservation of archaeological waterlogged timbers, by *Kate Foley* of HBMC lab. Apart from the point she made about the need to quantify waterlogged timber assemblages in terms of volume, not numbers of sites that may be producing it, her talk was very disappointing. No workable solutions to the problem of where to get funding were offered, HBMC can not be seen as a reliable source in this respect. The present system of no system at all was offered as adequate, piecemeal funding to the rescue! Fortunately *Susan Keene* of the MoL conservation lab was there to present the DUA experience in relation to the Billingsgate waterfronts, in the following discussion. Her clear description of the funding situation there effectively rules out the hope that K. Foley had raised.

The overall message of the conference was that the archaeology of wood is on its way up as a respectable subject but no money is on the table for it yet. Here the DUA stands out as a beacon of hope in this respect at least at the recording and initial processing end, we must build on this despite current temptations to axe "fringe" expenses.

One of the most well considered comments made at the end of the day was made by *G. Wainwright*, who suggested that we should throw away all the timbers now in store and start afresh! If this policy was adopted as the government line it would be one founded on the most serene ignorance imaginable. None of the basic questions that must be asked of that material have been asked in a systematic way. English Heritage rescues and protects our heritage again? These questions are:

- a. Has this material been examined by competent people? (do we know what's there?)
- b. Do additional details have to be checked and recorded?
- c. Have local curatorial bodies been fully informed of the potential and importance of the material?
- d. Have botanical and dendro samples been taken?
- e. Should parts of the collection be kept for an ancient wood working reference collection?
- f. Could casts be made or selected timbers conserved for display?
- g. Would the material be of possible interest to either a specialist British museum, such as a museum of timber buildings, or a foreign museum?
- h. Is long term low cost storage or reburial a possibility.

D.M. Goodburn
DUA Archaeological Timber Specialist,
Bridge House.

P.S. The DUA put up a poster display on timber recording in the City and some highlights of the new finds. (Thanks Julie and Tracy)

EXCAVATION NEWS FROM WINCHESTER

1. HIGH STREET

The site is located within the walled area of the town.

Roman Period: Discoveries include a sequence of buildings dating from the late 1st century through to the late 3rd century; a Roman street running north south which had been resurfaced 15 times and a yard enclosed from the street by a flint wall.

A thick layer of dark soil covers all late Roman remains.

Saxon period: No evidence of activity remains apart from a residual find in a post medieval feature: a half of a glass ball, made up of small glass fragments and multicoloured millefiore glass, melted down, shaped and pierced to form the ornament. Similar objects are known from high status pagan saxon graves from the 5th and 6th centuries.

Medieval period: The pitting that damaged most of the Roman stratigraphy occurred now. The pits were lined with wickerwork or jointed beams and planks.

The area was levelled in the 13th century and divided into 2 separate tenements - several phases of floor and occupation deposits were found, as well as a cobbled yard and an outhouse.

Post medieval period: One of the tenements was destroyed and there is no evidence of activity until the Woolworths store was constructed in 1928-29.

The other tenement became a garden and there is some evidence of 17th and 18th century pitting.

2. 28-29 STAPLE GARDENS

The site lies in the Orams Arbour Iron Age Enclosure, in the north west quarter of the Roman and medieval city.

Iron Age periods: No evidence of activity.

Roman period: No much activity apart from a north-south street and a gravelled yard surface. A thick layer of dark soil covers the site in the 3rd and 4th centuries. During the late Roman period a cobbled surface was laid re-using Roman building material.

Late Saxon period: The site was intensively occupied. A sequence of timber buildings with compacted clay floors and hearths was discovered.

A severe fire destroyed these 2 buildings leaving remains of the roof structure, a chalk tempered cooking post (containing dried uncooked beans) a crucible with its iron based contents spilt on the floor, quernstones and the base of a wooden bowl or bucket.

Following the fire the buildings were rebuilt twice and finally fell out of use by the end of the 10th century when the site was levelled.

Saxo Norman period: A thick gravel surface was laid across the site and repaired at least twice. This surface was cut by a number of pits and sealed by a thick compacted chalk surface, possibly the floor of a 12th century timber building.

Late and post medieval period: The site became a garden or an orchard in the 16th century and occurred in the 18th and 19th century.

3. 1-3 STAPLE GARDENS

The site lies within the town defences.

Romano-British period: The earliest deposits are of late Roman date: slight remains of a timber building and the remains of a late masonry building with an associated lane and garden.

Late Saxon period: Following a build up of grey soils a cemetery, broadly dated to the late Saxon period, was laid out. A total of 206 Christian burials were excavated, 6 burials produced grave goods (one or more Roman coins in the hands or abdominal area). Remains of an east-west street sealed the graves.

Medieval period: A build up of occupation soils associated with pits and a possible timber structure were uncovered. In the 13th century a masonry building was constructed and replaced in the 14th century with a substantial masonry structure which had continuous use until the 16th century.

Post medieval: The only signs of activity are garderobe pits and a well.

From: *Winchester Museums Service Newsletter, Issue 6, Feb.90*

If you want more details, you can consult our copy of the Newsletter in the Exc. Off.

WET DREAMS OF A GREEN ARCHAEOLOGY

The Greens recently made it to the pages of *Antiquity* with a call for 'Perestroika', with the involvement of archaeology in wider conservation issues and the appreciation of 'dead' sites within the context of the present 'living' landscape (Greeves 1989).

Greeves rightly bemoans the seeming impotence of the archaeological community to conserve many of the sites degraded since the war and now threatened with total erasure from the palimpsest of the classic English countryside. Equally the lack of care or concern amongst country people for their local sites amazes him - "What have the Sussex Downsmen been doing?...". Preservation by record had taken place before some destruction but why not conservation in the first place, the threat too easily became an excuse to dig."

This, of course, points up one of the major differences between the archaeologist and the curator of the living landscape: in the last resort the former can say "okay, you win, we'll dig and record it, then you can have your extra grain/pine trees/gravel". The latter can only say

"this is a rare piece of downland/peat bog/marsh, we can only plead that you conserve it intact for its intrinsic value, there is no compromise, simply to record it is pointless, its true value is as part of the living system of the planet which supports us". The archaeologist has an easy cop-out reluctantly (s)he can accept controlled destruction, it provides some enjoyable fieldwork, grist for the academic mill, a source of funds and kudos. I know, I have done it. For the ecologist or conservationist there is that awful fear that another piece of drainage or woodland clearance may mean another extinction, another species only known from the textbook or the taxidermist's skill.

As Greeves put it "Archaeologists are still collecting eggs not birdwatching" Herein also is a factor telling against archaeologists in that they do not have that 'vital' element, neither the world or nature nor the human race depends on their knowledge, it is perceived as neither valuable, life-enhancing or life supporting.

Greeves proposes areas for the 90's in which archaeology could relate to wider conservation issues but his stress is on education or raising local awareness of the aesthetic or cultural value of the Past in the present landscape. Conservation is only mentioned in relation to archaeologically rich areas written off by ecologists and does not mention co-operation. By quoting Hardy's view of Egdon Heath and its antiquity he illustrates the use of the past as a counterbalance to the turbulence of the present, Hardy here also pre-figuring the views of his later social acquaintance Pitt Rivers who saw the Past as a means of calming pressures for rapid change and improvement in the common lot - evolution not revolution was what he considered archaeology showed to have characterised human development and be still the best course for the future.

At least Pitt Rivers was her putting his knowledge to work even if only to reinforce the status quo and a cosy view of the past. Today that is not what is needed, when some in other disciplines are saying that we cannot go on like this, we must radically alter human processes of exploitation, interference with eco-systems and use of material resources. Now we need conservation and non-invasive study of both archaeology and ecology to build up a time-picture of inter-related man-made and natural processes that are degrading the planet and threatening the life of our species and nature at large. That could itself be claimed as a contentious statement but there is surely enough evidence of change to require such study as check on whether these developments are linear, exponential or cyclical. To know what to plan for, now that we have the skill to prepare the future, we need to know what happened, where we stand against a longer timespan.

One area of particular concern in conservation circles is the fate of present day wetlands, something that equally has come to the fore in archaeological circles. As Coles stated recently "it is generally acknowledged that (wetlands) are the most threatened of all land forms wetlands reflect and document in their watery foundations varied combinations of major climatic and geological change alterations in the interaction of land and water and human interference with the landscape" (Coles 1986). Here is a particularly rich archaeological resource where checks can be made against data from less well preserved contexts since much nearer the totality of material culture survives set against its ecological background. The present wetlands are a bit like our version of the rain forests they produce "as much as eight times the volume of plants that a dryland (including cultivated fields) can, are capable of supporting and sheltering many forms of life (particularly marine life in the early stages of growth), or regulating the flow of freshwater (while storing and purifying it) of housing and feeding a myriad of permanent and transitory wildlife" (Coles *ibid*).

Such sites are of more than archaeological interest, and the archaeological data itself is of more than academic interest, for amongst the wealth of environmental material is a host of

indicators as to the natural world in which these sites existed; the very burial of the sites is a record of climatic change and they are encapsulated in yet longer sequences, the accumulations of part natural, part human agencies and an incomparable record of long term climatic or ecological change.

Pressure Groups such as Friends of the Earth are presently mounting a campaign for the preservation of wetlands from agricultural drainage, afforestation and peat cuttings, surely something the archaeological community should applaud but apparently with little visible input from it at this stage. Here surely is a common, if soggy, ground, a meeting place for 'west', where interests in conservation overlap in the way that Greaves hinted at. But it is surely more than simply an interest in the preservation of a landscape it is also that in such places the record of the past and present come together and provide us with the information we need to plan for the future and avoid an ecological Armageddon. Here is where archaeology could discover its soul and become something of vital significance, rising about the dictates of developer funding, market forces, the Heritage Industry and speak to a different audience than those who simply seek entertainment or the massaging of a corporate image. Raising an aesthetic awareness for the past in the landscape or understanding the processes in its creation could be a means to the end of conserving the planet. The preservation of a barrow or a crannog might actually affect our lives and that of future generations.

Christopher Sparey-Green

Coles J.M.: Precision, Purpose and Priorities in Wetland Archaeology *in* *Antiquaries Journal* 1986 Vol LXVI pt II 227-247.

Greaves T Archaeology and the Green movement: a case of 'Perestroika'. *in* *Antiquity* 63 (1989) 659-66.

London Wall

A ROMAN built up London Wall,
With his big bricks and his little bricks
A Roman built up London Wall
With its straw and its lime and its mortar and all.

Then he stood on the top, so stalwart and tall,
On the big bricks and the little bricks,
He stood on the top so stalwart and tall,
With his spear and his shield and his helmet and all.

He looked down on London, all bustle and brawl
And big bricks and little bricks,
He looked down on London, all bustle and brawl,
With its streets and its chimneys and markets
and all.

With its mansions, its rivers, its parks and
Whitehall,
And its big bricks and its little bricks,
With its mansions, its rivers, its parks and
Whitehall,
Its prisons, its churches, its Tower and St. Paul.

82

"I've built up a Wall that never can fall,
With my big bricks and my little bricks,
I've built up a Wall that never can fall
By cannon, or thunder, or earthquake and all!"

But London laughed low and began for to crawl
Through the big bricks and the little bricks,
London laughed low and began for to crawl
To the North, to the West, to the
South, East and all.

There came a great crack in the
side of the Wall,
In the big bricks and the little
bricks,
There came a great crack in the
side of the Wall,
And down fell the Wall and the
Roman and all!



33

DUA EXCAVATIONS NEWS



Summaries of sites: March 1990

1 St Mary Axe

The fourth phase of excavation finished on the 16th March, after the excavation of a series of large pits. The main (only?) item of interest in the last few weeks was the skeleton of a large dog, dumped in the pit fills. The beast appears to have died whilst lying on its back and scratching itself under the chin (!)

The next phase of excavation is expected to start in late May, but could be later as a result of delayed demolishing of the last standing buildings on the site.

Finds Report

A first look at the Roman painted wall plaster found in the second and third phases has pieced together a (painted) classical column, between panels of imitation breccia, as well as abstract design. No figures yet!

2 Fleet Valley

Both the Duffer's and Madeira Vaults excavations ended this month. In Duffer's reclamation dumps have been provisionally dated 1150-1350. A number of chalk foundations had been cut into these, the most westerly being supported on large wooden piles. Another was associated with a well-made chalk drain. A wattle-lined pit contained medieval shoes and a copper tweezers. It is expected that excavations will resume following demolition of the viaduct.

Skeletons of 20 individuals, including 3 fetuses, were excavated in Madeira vaults. The majority were severely truncated and there was some evidence of early grave robbing. Roman pits beneath the burials yielded a 1st century AD brooch and a leaden lampholder. The pits were cut into Roman reclamation dumps.

In McDaniel's, robbed-out walls of the post Gordon Riots prison building have been excavated. The wooden raft remained and was well preserved. Demolition and fire horizons sealed a robber trench from an earlier phase of the prison and which also contained a timber raft. Medieval dump/reclamation layers are presently being excavated.

An immediate return to Area 3 has been successfully negotiated. Work will concentrate on the section which will not be available during the post-demolition development phase. The previous constraints of water ingress are now less critical.

An evaluation of the applicability of the radar technique to areas of complex stratigraphy is now under way. This will use both radar and excavated data from the Fleet Valley. If the technique is successful, the copyright in any data-base arising from the evaluation will remain with the Museum of London.

3 Billingsgate Bath House

The Bath House

The *Caldarium* has now been fully recorded and the *pilae* reconstructed by Nimbus have been planned.

A second area of tessellated pavement (Area 1 on the plan) in the *Frigidarium* has been lifted and replaced on a D.P.C. The underlying mortar slab was recorded and sampled for mortar composition. This process was recorded on video. No post-conservation records have been made in the *Frigidarium*.

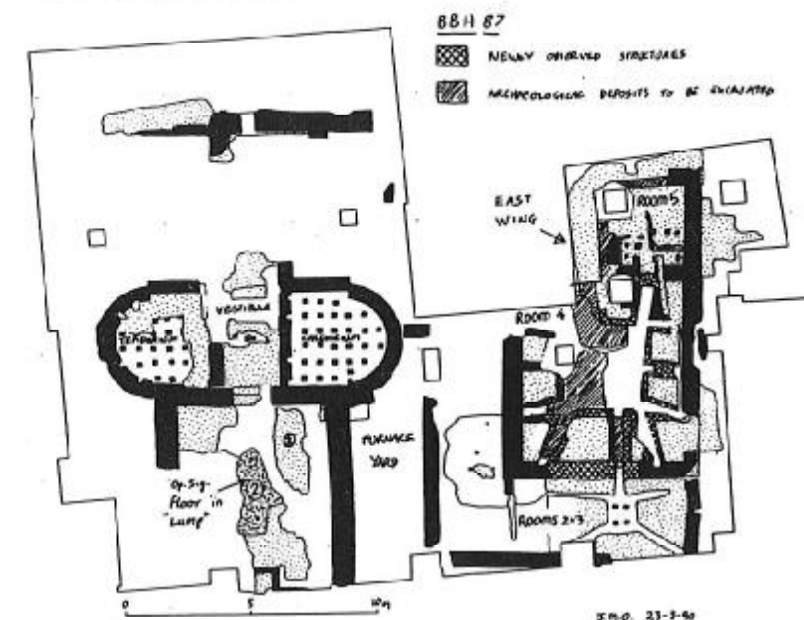
A conclusion is yet to be reached over the fate of the "Lump" (2 on the plan). Ron Harris (DUA) has provided an estimate for the cost of casting the *Opus Signinum* floor, for display. The floor could then be removed and the underlying deposits excavated to retrieve finds and environmental samples. English Heritage have requested a report to justify further excavation of this material.

The East Wing

Recording of the east wing continues room 4 (see plan) has been recorded, before the removal of 1960's concrete by Nimbus. That part of the original Roman structure which has been revealed so far indicates that the consolidation was carried out with little understanding of the interpretation of the Roman building.

The line of the south wall of room 4 can now be clearly determined, as can the radial layout of the hypocaust heating ducts, (see plan). Consent has been granted for the excavation of deposits filling the hypocaust ducts.

The exposed parts of room 5 have also been recorded and work has begun on the overlying deposits which will be partially excavated for finds and environmental data, and to define the northern and western extent of the room more clearly.



Plan of the bathhouse

FINDS REPORT

The excavation of deposits in the east wing will hopefully provide new dating evidence for the alterations to the structure.

4 50 Gresham Street

Two weeks of excavation took place in March. Deposits lay immediately below the basement slab, and consisted of a medieval chalk wall, a ?cellar and numerous pits cut into dark earth. Beneath this were thin layers under which was a gravelled surface from which a Roman coin was recovered. Brickearth separated this from the natural gravels. Conclusions drawn from this suggest the site lay open and unoccupied for a long while.

5 Cutlers Court (123-125 Houndsditch)

The site lies outside the city wall, to the north of Houndsditch. So far, the excavation has revealed a large of Roman and medieval pits, and two burials; one heavily truncated Roman mortar burial and the other a Roman burial redeposited in a medieval pit which appears to have been reinterred and laid out.

6 274-306 Bishopsgate

Work continues on both sites. The gravel path running north-south has been completely exposed, and the adjoining stake holes excavated. Three medieval burials and a medieval timber-lined well have also been excavated. A series of curious circular features is visible in the natural sands and gravels. Initial investigations suggest that they may have occurred during the Ice Age (c.10,000 BC).

PRESS CUTTINGS

CITY'S ARCHAEOLOGICAL STOCK DOWN TO 20 PER CENT

Only twenty per cent of the City of London's 'archaeological stock' is now left underground, John Maloney, excavation officer with the Department of Urban Archaeology told a Museum of London day school.

He had explained how the developments within the city walls since Roman times had left layers of remains, how Victorian developers had made spectacular finds but had lost more than they recorded and how 20th century redevelopment with its deep foundations and cellars had stripped away much of the remains of the past.

When his department was set up at the Museum of London 15 years ago about 60 per cent of the archaeological mound built up over a period of 2,000 years had gone. It had been between four and eight metres deep in the city and up to ten metres deep where the earth was waterlogged near rivers.

The amount of the archaeological mound now removed could be as high as 80 per cent, said Mr

Maloney, so we are approaching the last 20 per cent of the city's archaeology. We must ensure that we make adequate provision for that.

He said the Corporation of London had adopted policies that ensured each site where redevelopment was planned was made known to his department and there was a reasonable opportunity for excavations to take place.

In addition the Museum of London had produced its own code of practice for developers which had been nationally recognised and nearly all excavations in the City of London were now financed by the developers themselves.

"Last year" said Mr Maloney, "we financed 54 sites and raised funding of about £3 million from the developers."

Because of the extensive work done by the department in many parts of the city and because of the expertise of the department's staff, developers could often be told of likely finds on their sites.

Even so, there could be some archaeological surprises; like the chapel that was discovered when the foundations were being dug for a development at the junction of Leadenhall and Fenchurch Street, (the remains of the chapel have been retained within the building but are not open to public view) and the Roman amphitheatre found under the Guildhall site.

"The Corporation of London commissioned a feasibility study which presented a number of options for display, including a method of reconstruction by projection techniques. But we will have to await the outcome as the public inquiry has rejected the scheme put forward by the Corporation. It could be that more will be preserved for public viewing in the future."

Twentieth century city dwellers will leave little behind for future archaeologists to discover details about their daily lives a video film revealed. In the past, daily rubbish was left where it fell; today the council takes it all away in black plastic sacks.

Common land threat

From the Director of the Council for British Archaeology, Sir, in its 1987 election manifesto the present Government committed itself to the introduction of legislation relating to common land in England and Wales. It has had before it since 1986 the report of the Common Land Forum, which demonstrated a remarkable degree of unanimity between conservation and recreation groups on the one hand and land-owning and land-management groups on the other.

As a member of that forum I am convinced that common land legislation should be included in the next Green Paper, otherwise the momentum and consensus engendered by the report risks being lost.

One aspect of common land that has received little attention in the present debate is the fact that it has great archaeological significance, both in its own right as material evidence of past forms of land tenure and settlement, and also because traditional methods of common management have ensured the survival of earlier elements of the historic landscape.

Without new legislation there is a grave danger that deregulation of commons to permit development will increase and that some of our best preserved ancient monuments will as a result be destroyed.

Yours faithfully
HENRY CLEARER, Director,
Council for British Archaeology,
112 Kennington Road, SE11,
March 20.

Archaeology
TIMES 8/3/88
Mechanical quarrying endangers a vital source of ancient axes

By Norman Hammond, Archaeology Correspondent

Some of Britain's oldest archaeological sites are in danger of destruction, according to a recent report. Dating back to the ice ages of the Pleistocene period, up to 350,000 years ago, the sites offer evidence for the first penetration of Homo sapiens, or even his ancestor Homo erectus, into the glacial fringes of north-west Europe.

Many sites of this Lower Palaeolithic period are in areas, such as that at Porthmadog, near Rhyl in North Wales, where the remains of several hundreds of a quarter of a million years ago have been found, but a substantial number were open-air camps and workshops. It is these that are endangered, because the early hunters and gatherers who moved into southern Britain gravitated towards river valleys where game, tree crops and water were abundant.

The vast gravel of such drainages as the Thames have been exploited for building material for over a century, and some of the best known Palaeolithic sites in the country have been found during gravel working, shaped and polished axes and other implements as they look out the gravel by hand.

Modern extraction methods, however, mean that "any tools are whisked away into crushers or crushers before anyone can see them or study the contexts to which they belong", according to Dr Jane Rendell, of Cambridge University.

The problem of reconciling commercial and heritage interests has recently become acute, she says in the Prehistoric Society's newsletter *Past*, with the proposed quarrying of a site at Dunbridge in the Fen Valley of southern Hampshire. Dunbridge lies between Salisbury and Romsey, where the River Dunpennant flows and where a large area of gravel is exposed at the confluence.

The existence of a Lower Palaeolithic site at Dunbridge has been known since the beginning of this century, and more than a thousand tools are scattered across two dozen museums. Recent study has shown that many of them are exceptionally fresh conditions, and may still be where they were used, while others have been blunted and rolled by redeposition of some of the gravel, Dr Rendell says.

Most of the tools are Achulean handaxes, but some are of later forms, indicating occupation by successive generations of early hunters from around 300,000 to about 125,000 years ago.

Only about a dozen sites in Britain, Dunbridge being one, have yielded sufficient large quantities of tools for the structure of the stone-working industry to be properly analysed and Dr Rendell says that it is surprising that no coherent programme of research has ever been carried out at Dunbridge.

The site is now threatened by a proposal to extract gravel over its 15 hectares (37 acres) to a depth of six metres (20 feet), which would obliterate the recent deposit.

The Nature Conservancy Council has made part of the area an SSSI (site of special scientific interest) because of the importance of the sequence for understanding the geomorphology of the Solent basin, as well as its archaeological interests. The Department of the Environment gave permission last June, however, for the extraction to go ahead, with a months' visit from an English Heritage archaeological inspector.

One visit per month hardly seems an adequate way of resisting the high-speed mechanical destruction of the region," Dr Rendell says.

Nearly two centuries of intensive gravel extraction in southern Britain means that the number of handaxes which preserve Lower Palaeolithic material is rapidly diminishing. Those in which parts of the original deposit survive are even more scarce: the fact that at Dunbridge some of the tools may still be in situ makes it particularly valuable.

"There is a chance here of recovering meaningful associations of tools and other evidence of human activity. It would be a tragedy if these were mechanically destroyed, unrecognised and unrecorded."

Source: *Past*, No. 8:1-3.

Yard investigates £40m silver hoard

By Our Art Market Correspondent
TIMES 8/3/88

Southend Yard's Art and Antiques Squad has launched a wide-ranging investigation into the mysterious £40 million Roman silver hoard that Sotheby's plans to auction in the autumn.

The police inquiry, which began about the origin of the silver, which experts say is the most magnificent and historically important Roman treasure found in modern times.

The hoard, named after an inscription on one of the objects, is owned by Lord Northampton, who is said to have discovered the 14 pieces, one by one from a dealer in Switzerland.

Among those whom the police plan to interview is the Lebanese-born art dealer Mr Yusef Karim, who operates in premises just off Bond Street. Based in Britain since 1974, he is understood to have alerted Lebanon state Sotheby's announced the sale on February 9.

Police are also expected to seek the help of Sotheby's staff, although there is a question mark over their jurisdiction because the silver could have come from any one of 29 countries in the Roman Empire, and it was sold to Lord Northampton in Switzerland, and has been on display in New York.

Contact is also being made with the American Federal Bureau of Investigation.

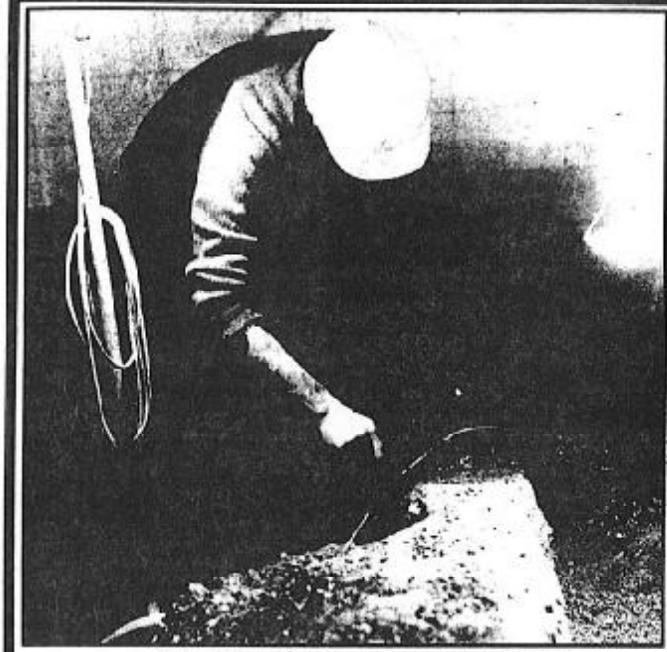
Southend Yard's inquiry follows growing concern in the London art world at the silver's apparent lack of provenance.

There was also suspicion throughout the world of archaeology that such an important find could have been exported by any nation legally.

Yesterday Mr Charles Allsopp, chairman of Christie's, confirmed that he had been offered the hoard several years ago but had turned it down, having just had export licence problems over a Goya painting illegally exported from Spain.

It is alleged other galleries and other parties. An eminent West End dealer has privately confirmed to *The Times* that, when the silver was first being offered around the trade, he saw about 10 pieces.

Sotheby's insists it has made ownership checks to ensure the silver was legally exported from Lebanon.



Excavation work goes on, rain or shine... (205416)



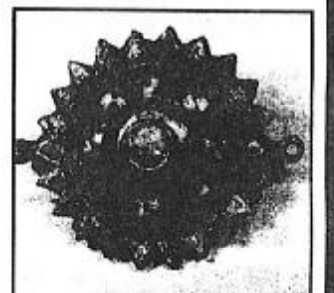
Enid Hill marks a pot fragment in the museum for cataloguing. (205616)

History on dangerous ground?



Delicate 15th century German glass found east of the old City wall near America Square. (205627)

Archaeologists from the Museum of London are steeing themselves to defend the British queen Boudicca who rampaged through the City almost 2,000 years ago. Reporter Tim Ross went to their Barbican bunker to find out why.



A first or second century enameled copper brooch found near St Paul's. (205623)

THE City of London has been the happy hunting ground of archaeologists for at least 15 years. The work of the Museum of London's unit, set up in 1974, has gone hand in hand with the development boom. Every building torn down means another doorway opened to the past.

Now there are moves afoot to topple archaeology's ivory tower and lay more commercial foundations

for its work, but there are implications that trouble the unit.

Archaeological consultants are already selling their services to companies and competitive tendering is looking for a place in history.

The unit fears such tendencies are ill-prepared and could lead to poorer research. Financial pressure makes a change in role inevitable.

Much of their work is mundane. A fragment is uncovered, sent to the lab in the basement of the Museum of London, cleaned, dried, marked and catalogued. An accident or act of violence 500 or more years ago, a moment in someone's life becomes an entry on a page.

Occasionally a spectacular find will grab the headlines. A recent discovery that

lightened the hearts of museum academics was a German glass from the middle ages. "We now know more about this type of glass than the Germans," said one, proudly.

Survey

A good deal of co-operation is required before the trowels and tape measures come out. All planning applications go through Guildhall where an officer has responsibility for liaising with the museum.

The archaeologists will then survey the area and report what they might find. A period of negotiation follows with the developers who will finance the dig. Time limits and costs are agreed and then there is a race against the clock.

Fortunately most companies accept the situation and some such as MEPC have discovered that archaeology can be a useful tool for public relations.

Managing director James Tuckey said in the introduction to a lavishly brochure: "We believe that preserving the history and characteristics of the City of London is of great importance to the City."

Not all companies agree. Senior excavations officer Simon Thompson said: "In general we get on very well, but certain developers are more difficult than others, saying they want us to carry on investigating while the building is being demolished or not turning up to meetings.

providing a service, VAT will have to be paid.

On top of that the Government grant of £500,000 for publication is expected to diminish from 1991 making outside sources of income vital. But while the unit embraces the prospect of more commercial work, such as charging for photographs and giving lectures, a more insidious problem is emerging.

Mr Thompson explained that because archaeological teams are based in an area they tend to have a monopoly. To ensure they are getting a good deal in agreements developers are turning to freelance consultants.

"Some are promoting competitive tendering," said Mr Thompson. "But there are a lot of problems. There are no standards for archaeologists and the brief cannot be perfect because it's trying to predict what's hidden in the ground."

"We have done more than 400 sites since 1974 and while outside competitors may put in a lower bid the results are not likely to be as good. Another long-term difficulty is what happens to the material found. Each site we do is like a piece in a big jigsaw."



Scraping away layers of history in Leadenhall Street. (205424)

But the corporation itself is sympathetic and has the power to impose conditions when granting applications to ensure work is carried out.

The result is an increasingly detailed picture of how our ancestors lived and how the city developed. But all this could change because of money.

Vital

The unit is currently talking with Customs and Excise about the nature of its work. If it decides the archaeologists are

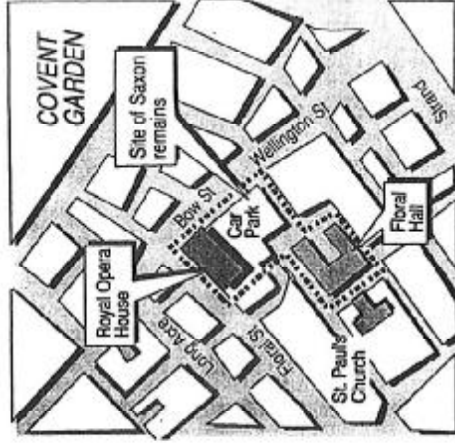
Signs

Mr Thompson believes signs of what will happen are already visible. "The Oxford unit has carried out work in Southwark and it was a foul-up." And he argues that when competitive tendering was introduced in the United States in the 1970s the quality of work fell until universal standards were agreed.

From the outside it may look like a closed shop. But much of the unit's work is not commercial. It would be a shame if Boudicca's chariot tracks were lost for the sake of a few pounds.

Redevelopment plans for the ROH at Covent Garden are bedevilled by a row over the excavation of important remains. Jean Stead reports

Saxon London is phantom of the opera



THE multi-million pound redevelopment of the Royal Opera House at Covent Garden and the neighbouring Floral Hall is being delayed while archaeologists fight for the right to excavate what they believe is the most important site in existence of Saxon London.

The huge Saxon town, Londonwic, stretching under the Strand from Trafalgar Square to St. Paul's church in Fleet Street, was discovered in 1981. Professor Martin Biddle of DePaul University, who discovered the town, has already developed the necessary archaeological plans for the site.

The Royal Opera House redevelopment scheme has already run into lengthy and costly delays because of Covent Garden

community protest and now faces another serious hold-up. The development proposals have been agreed in principle by a Westminster city council planning committee, but the committee has asked for amendments, including agreements on archaeological work and full-scale excavation is justified.

"We are here to act as honest brokers and to get agreement between the two sides. But we have the bottom line of being able to impose a planning condition that archaeological work should be carried out before planning is granted," said Bill Stewart, Westminster planning officer.

The Royal Opera House's latest proposed amendments to its plans will be considered by the planning and development committee, but do not meet the archaeologists' requirements.

The Royal Opera House says it cannot afford to fund the ar-

chaeology, nor to hold up development for long. "We do not have the money to pay for it. There are no funds at the opera house for this, in fact we have made a public appeal for money for the redevelopment," said Richard Pinar, chief executive of the opera house.

"We have told the Museum of London we will make facilities available for archaeological investigation up to a point, but that we cannot pay for it. We are not like commercial developers, and we just don't have the money."

The museum's Greater London Council department has carried out trial work at the house and the Floral Hall which in November and December yielded the first evidence that remains of the Saxon town might lie beneath the opera house site.

The department to be

leave the whole area of the opera house could be worth excavating. This could take months, longer than the Royal Opera House is prepared to wait to start rebuilding.

It assumes the dig alone will cost £200,000. The excavations have been planned between the Museum of London and Mr. Biddle in the past few weeks but have ended in impasse.

"This is the most important discovery in London in the past 10 years, more important even than the discovery of the Rose Theatre," said George Daniels, chief executive of the archaeology department.

"It covers 200 years of London's history we know nothing about, and no other site has done that. We have evidence now that a Saxon settlement started in the 7th century and went into the 9th century and that the discovery has involved the

what the Venerable Bede (673-755) meant when he described London as "an emporium of many people coming by land and sea."

The redevelopment of the Jubilee Hall in the 1980s was the first of the Saxon town to be excavated. Previously placed together from documents and museum exhibits by Professor Biddle and Dr. Vince, working separately, Dr. Vince has just published a book on the discovery, Saxon London.

The Jubilee site contained a Saxon street, a skeleton of a Saxon house and a skeleton of a Saxon tower.

Hand digging by archaeologists revealed pottery, glass and millstones from the Rhineland and seeds of fruit and cereals, showing that a market existed in Covent Garden even in Saxon times.

"Only four years ago, archaeologists were saying that the Saxon town had been completely destroyed around the Saxon

Saxon occupation could be found in the old walled city of London," said Professor Bidde. "Now we know that at the time, it was the biggest trading empire in north-west Europe in the world."

"This is a very new discovery and we need to know more."

Bob Cowie, in charge of the Covent Garden Opera House site for the Museum of London, described the Saxon town as "the most complete development in the country."

"The idea that there might be a Saxon street in Covent Garden was first proposed by Mortimer Wheeler in 1985. But it had always been a puzzle that there were no Saxon remains inside the old Roman city of London."

"There was no evidence of occupation from the time when the Romans left to the 10th century when the city was rebuilt. The worst looting damage from the 7th to 9th century were found around the Savoy."

Bard's birthday opening for Globe Theatre in jeopardy

RECONSTRUCTION WORK on the Globe Theatre will come to an abrupt halt next week after developers failed to raise the £5m needed to finance the second phase of the ambitious £20m project.

So far £4m has been raised to recreate the Shakespearean theatre - built in 1599 only to be gutted by fire 14 years later - along the South Bank of the Thames.

The International Shakespeare Globe Centre, which is developing the site, is currently trying to put together a new deal to allow work to continue.

But even if the additional money can be found, the project's chief architect, Theo Crosby, believes work on the site will not restart for "some months", putting the 23 April 1992 completion date (Shakespeare's birthday) in serious jeopardy.

"We were due to start the second phase shortly, but just now we have no idea of when that will be. It is a question of getting that £5m," said Crosby.

The new Globe is the centrepiece of the Globe Centre,

which also includes the recreation of an Inigo Jones theatre and the construction of shops, flats and a pub.

Contractor Lovell has been on-site since June excavating a large basement and constructing a raft slab within an existing diaphragm wall for the new Globe. The second stage will include constructing a reinforced concrete frame, stairs and intermediate level floor slabs up to and including the piazza slab.

The second phase is the costliest, because it is an engineering project that must be completed in one go.

"The engineering contract is one bite. After that things will be a bit easier and we can go about them one at a time."

"The international fund raising effort will be stepped up during the next few months," added Crosby.

It is more than 20 years since American film director and actor Sam Wanamaker began his campaign to reconstruct the Globe only yards away from its original site.

The 24-sided Globe is to be rebuilt using medieval building techniques.

ADIG

TUES 26/3/90 JL

Let us consider, briefly, what the late Walt Disney has to offer the late William Shakespeare. Within a small area south of Southwark Bridge we have no fewer than three rival excavations. There is Lord Hanson in more-or-less proud possession of the original Globe site; there is the Rose revived; and there is Sam Wanamaker, who, at considerable financial and career cost, has spent 20 years trying to bring Shakespeare back to life in its original, or near-original, setting.

The danger is that the three projects will degenerate into bickering on separate committees, if not intercommunal warfare. What we need, adapted from old Walt in Florida and California, is Shakespeariland: an upmarket intellectual and academic artistic Disneyland where tourists and scholars alike can spend a day and/or night surrounded by Shakespearean theatres, museums and perhaps even a 16th century-style restaurant. Ideally, Wanamaker should be asked to preside over a scheme which would unite the individual sites under one organization while allowing each to preserve its original intentions.

Wanamaker and life-long inspiration