Excavations at the Royal Opera House: Middle Saxon London

David Bowsher and Gordon Malcolm

SUMMARY

Excavations at the Royal Opera House during 1996 revealed the largest portion of the Middle Saxon settlement of Lundenwic *excavated to date. This excavation has provided important new information on the development of this settlement, identified internal features such as roads, the sequence of timber buildings and the range of craft activities carried out within the settlement.*

INTRODUCTION

The Royal Opera House is located on the north side of Covent Garden in an area which is known to lie in the heart of the Middle Saxon settlement of *Lundenwic* (Fig 2). This settlement flourished as a centre for trade and manufacture from the 7th to 9th centuries (Blackmore 1997; Vince 1990, 13–18). The Royal Opera House is the most recent and by far the largest excavation undertaken within this settlement and has provided a wealth of information about the social and economic infrastructure of the town. The main excavation area covered about 2,500 square metres with archaeological deposits up to 2m thick removed during an 18 week excavation by the Museum of London Archaeology Service, in 1996 (Blackmore *et al* 1998). Post excavation analysis of the excavation data has produced a detailed picture of the form of the settlement and the occupations and daily lives of the inhabitants. Dating of the main phases of activity has been refined into broad periods characterised chiefly by ceramics in use related to a complex stratigraphic sequence. This publication provides an opportunity to summarise the main findings of the analysis and air some of the more general trends apparent from the data.

EARLY DEVELOPMENT, CEMETERY AND FARMING DURING THE 7TH CENTURY

During the 7th century the Middle-Saxon settlement expanded into open land which had been used for burial earlier in the century. Only a few burials have been identified from the site and most had been disturbed by activity later in the Middle Saxon period. Two ring ditches have been identified indicating the presence of barrows although both had been severely truncated and the burials did not survive. A phase of refuse dumping (material presumably derived from the nearby 7th-century settlement), has been identified between the burials and the beginnings of the settlement at the Royal Opera House and continued whilst the first buildings were in use. A north-south road of compacted gravel was laid and maintained through successive developments until the end of the settlement. Adjacent to the road, wells predating the first buildings were dug, possibly serving another part of the settlement. A number of fence lines indicate that the land was divided into fields or plots, some of these alignments are reflected in the later buildings and alleys. The paucity of buildings during this period indicates the location of the site at the fringe of the settlement. Five separate buildings were constructed by the middle of the century and a large gravel yard developed around them. There was little evidence for industrial or craft activities, suggesting that the occupants were probably at least partly dependent on farming.

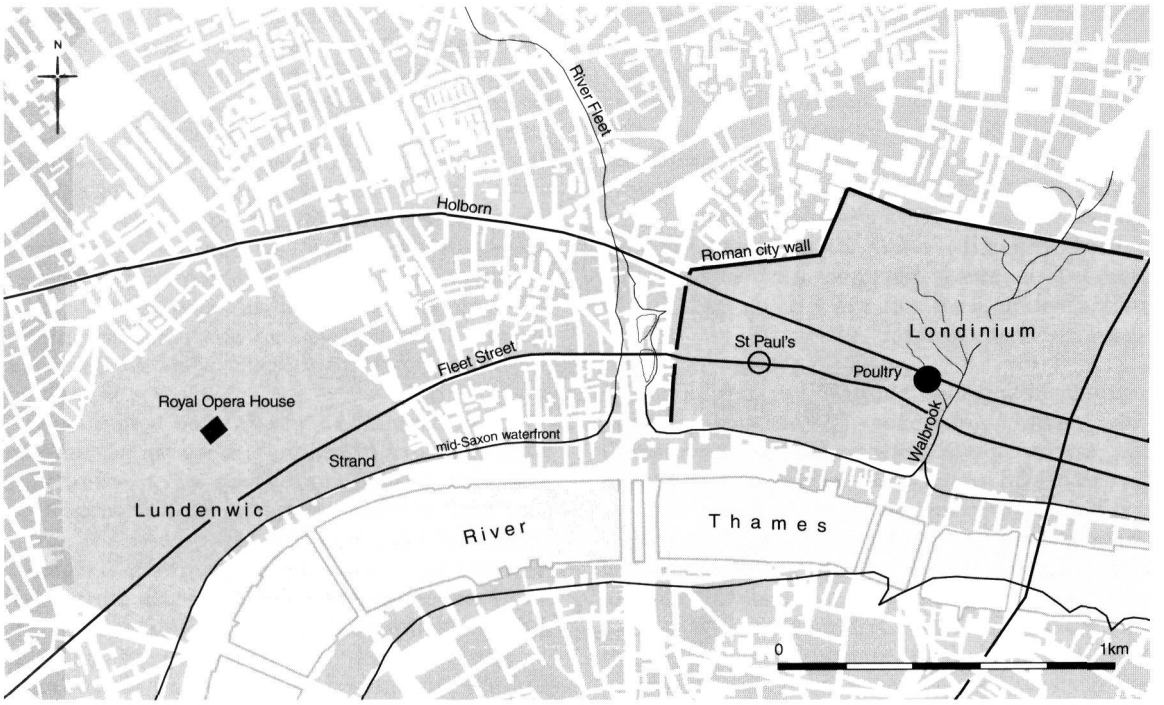

Fig 2. Site location plan showing the extent of Lundenwic *and the location of the walled Roman city* (MoLAS Susan Banks)

Whether this was their primary occupation or a seasonal activity which was coupled with a commercial interest in the settlement is unclear from the excavated remains.

THE LATE 7TH TO MID 8TH CENTURIES (AD 675–730)

At the start of the period there were only a few buildings surrounded by extensive yards into which wells and pits were dug. Although the north-south road was the main thoroughfare the buildings were sited without any particular reference to it or to the topographic profile of the site. The open yards became more enclosed during the period with new buildings constructed within fairly rigidly defined plot boundaries. These developments created linear access routes which became formalised as alleys or side streets by the end of the period. The street pattern was an irregular gridded layout with two main routes leading from the east side of the main road and two, or possibly three, identified to the west where modern truncation left only vestiges of the alleys and buildings. Between these alleys continuously occupied blocks of buildings were constructed, repaired and replaced. Further back from the road a second group of buildings becomes dependent on the alleys for access. To the east, one group of three buildings clustered around a courtyard with two of the structures seeming to control its usage, one a smithy and craft workshop, the other possibly a dormitory or residential block. To the west of the main road the evidence is more fragmented but similarities can be recognised with a secondary group of buildings positioned behind those fronting the main road.

At the end of the 7th century a number of new buildings were added and existing structures replaced. A second phase of activity at the start of the 8th century included the consolidation of the access routes into communal alleys with a number of narrow paths divided from the larger spaces remaining as parts of individual property plots. The disposal of rubbish near to the properties and its subsequent dispersal across the site is shown clearly by the presence of linked sherds from individual pots in more than one location. Not surprisingly areas adjacent to buildings have links most often but there is also evidence for a wider dispersal of material possibly attributable to widescale phases of destruction

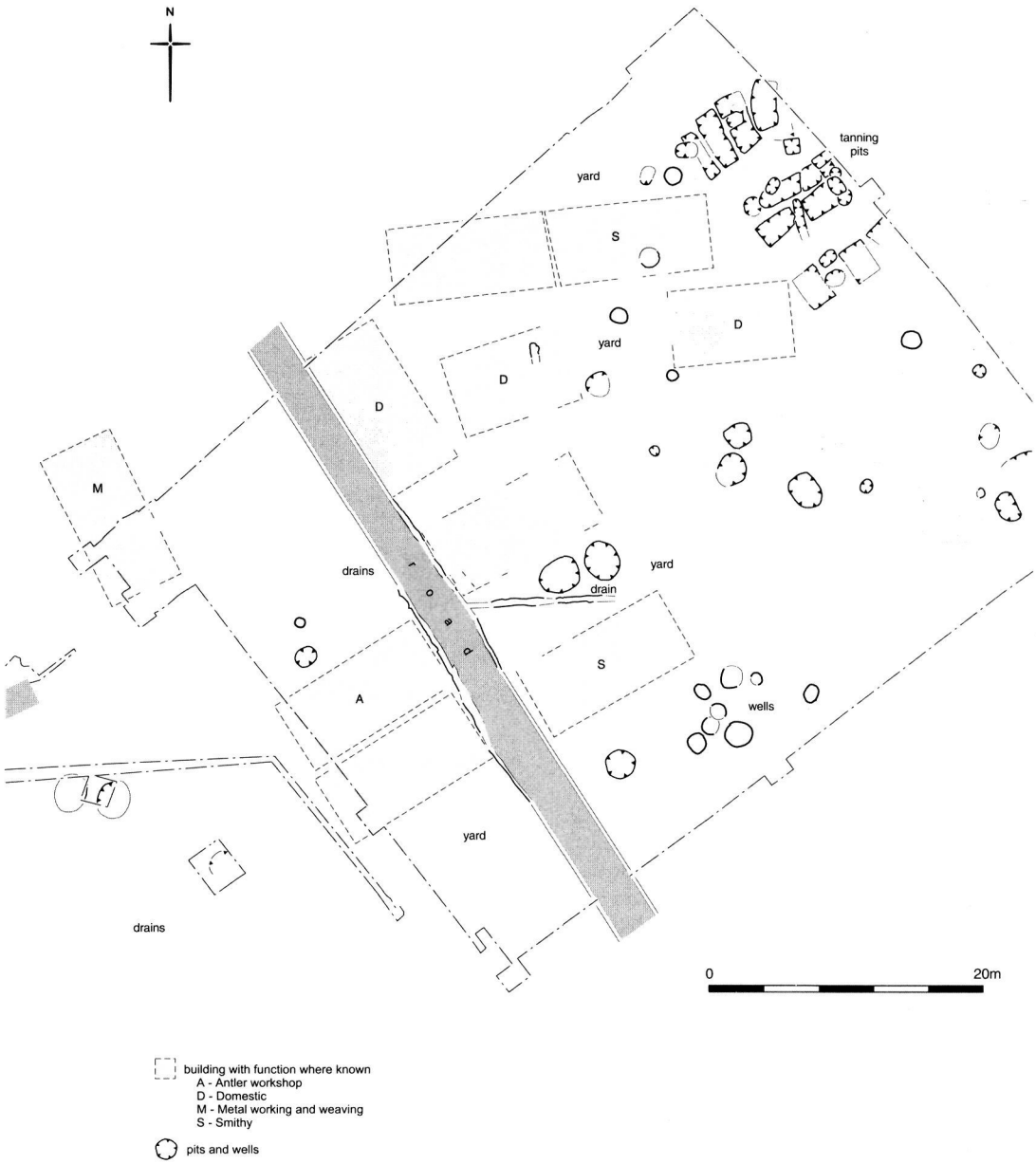

Fig 3. Site plan showing the layout of buildings and streets (MoLAS Susan Banks)

which were followed by a general levelling of the ground and rebuilding. There was an increase in population and economic activity during this period reflected by the increase in the volume of pottery used, broken and discarded on the site. In general the disposal of rubbish became more of a problem as the previous open spaces where pits could be dug decreased in size. The absence of extensive midden-type dumps may in part explain the relative paucity of some types of artefacts and it may provide clues about contemporary attitudes to material culture. Whilst the degree to which the inhabitants recycled goods and used waste products was infinitely greater than modern practice, the relative levels of prosperity between the early and mid 8th century suggest that there was a general decline in recycling during the 8th century. The level of

economic activity generated less waste in relation to later in the 8th century and the degree to which the people recycled and reused items was greater leading to a much smaller volume of discarded material for the archaeologist to find. Pottery is a partial exception to this being both durable and of little use once broken.

The botanical remains provide evidence for food preparation and also indicate that fruit was a dietary component at this time. A single grape pip may be evidence for viticulture or Mediterranean trade but the botanical remains have provided few clues to the functions of the buildings.

The animal bone shows a continuation of the distribution networks identified in the 7th century with some species specific assemblages indicative of feasting. There is evidence for a butcher's shop, or practice, and specialist tanning activity. Unlike the earlier animal bone assemblages, those from the early 8th century tended to be less well preserved, with a substantially greater quantity of eroded bones. Poorer levels of preservation can be related either to the soil matrix and degree of acidity or to the depth of cover and exposure to the elements.

A small number of red deer and dog fragments were recorded together with small rodent and fish, none of which could be identified to species. Both bird and fish bones were relatively frequent, although not abundant and showing a relatively greater representation of birds and fish in comparison to the 7th century. There was under exploitation of the bird domesticates as well as game species (including deer). The large quantities of bone and particularly antler waste and objects indicate the importance of the bone working craft with some new styles of preparing the materials compared to the 7th century. A total of 4kg of waste was recovered with combs and pins the most important products. Tines were the most common part of the antler found although there were also ten burrs and a number of beam sections. Iron smithing was probably an important activity, but few artefacts associated with production have survived due to continual recycling of the raw material and the value of tools which were retained and repaired rather than being discarded when damaged.

Textile production and weaving were practised but in a much more limited fashion than the explosion of the craft seen in the later 8th century. A few artefacts such as pin beaters and loomweights are present. There is little typological distinction between the 8th century and later loomweights.

As in the 7th century, chaff-tempered wares are the most common (73% by weight), and these include a range of forms, but there is an increasing range of other wares which reflect growth in trade contacts. In addition to Surrey types, the non-local wares include vessels probably made in the West Midlands (Oolitic and igneous rock-tempered wares) and others which may come from this area or from East Anglia. Of particular interest are the slag-tempered wares.

The imports now include imported blackwares as well as greywares, suggesting contact with Quentovic; a small greyware Kugeltopf-type pot may be from Frisia. This may have arrived together with a number of oxidised vessels from the Rhine Vorgebirge (Walberberg), via Dorestad, where the same types of jar, deep bowls and amphorae, which are typical of the period 675–730, have been found. Other artefacts such as the lava querns also point to Anglo-Frisian trade with the stones possibly serving as ballast on the ships as well as being a trade item.

One pottery vessel may be from Maastricht, while a Normandy Whiteware cooking pot may have come from the area of Rouen. Although the numbers are small, the wide range of types, with Badorf and Normandy wares well stratified for the first time in *Lundenwic*, suggests widespread international connections, The presence of different non-local and imported wares alongside more local types suggests the presence of distinct communities within the settlement.

Overall the period from about 675–730 may be seen as one in which there was a gradual development of the infrastructure, production techniques and trading links which led to rapid growth later in the 8th century. *Lundenwic* benefited from the political stability provided by the Mercian ascendancy and it is to this period which Bede's statement of London being 'a trading centre for many nations who visit it by land and sea' probably refers when he composed his work in 731 (Sherley-Price 1990, 107–8).

THE LATER 8TH CENTURY (730–770)

The mid 8th century was the heyday of the settlement with intensive occupation and evidence for a large population sustained entirely by trade and manufacturing. The main road was retained

and improved a number of times and many of the previous spaces between buildings were infilled with new structures, indicating the demand for space and the importance of location. The building types show a wide variety of constructional techniques but retain a basic rectangular form approximately 11m in length and 5–6m wide. The positioning of the buildings reflect a relatively stable street layout with structures lining both the main road and the side streets. Very limited space was left for yards attached to these buildings so refuse would have rapidly accumulated in those spaces that did remain. The main streets were frequently repaired and rubbish kept clear, suggesting that refuse disposal was in some way organised either by the local neighbourhood or, more likely, by some form of central authority in the town, possibly the reeve.

The 8th century was a period of rapid growth and expansion for the urban sectors of the economy. Trends identified earlier in the century were intensified and expanded to create a vibrant urban landscape with a high degree of specialisation, but based on co-operative diversity rather than the narrow craft-centred clustering of trades seen later in the medieval period. The amount of economic activity and the growth of population seems to have reached a level at which specialist craftsmen were able to support themselves from trade all the year round. This stimulated the growth of secondary support industries such as butchers and bakers and created conditions suitable for the development of a true urban community.

Property plots were fixed by the beginning of the period and, despite frequent reconstruction after fires, a thread of continuous development and replacement can be followed in most instances. None of the plots appeared to have a standard size or configuration and thus in that sense they are relics of the early development of the settlement, but the buildings which are erected have a much greater degree of standardisation. All retain their own particular eccentricities in terms of detail but most are of a similar size and follow a basic layout with centrally located doors in the long faces and hearths on the building centrelines. Several, possibly all, had attendant yards for the dumping of waste and possibly the setting up of stalls or booths for the selling of products. The nature of the buildings reflect the activities of the occupants in only a general way, although a large smithy may have been a purpose built workshop.

During the period there was a gathering awareness of the importance of location reflected in the maintenance of the alleys and the encroachment of the buildings onto the main road. Realignment of structures to provide direct access to the road, reminiscent of shop fronts, can be seen in at least one case and subdivision within buildings suggests a second level of specialisation where parts of buildings are devoted to particular industries. The growth of the economy can be seen most readily in the production and trade in luxury goods such as jewellery, highly decorated bone handles and imported quernstones. Although the settlement may have been established to provide a trading focus for the import of luxuries, to satisfy the demands of a ruling elite, the items had filtered down to a much lower level of urban society by the 8th century as many of the finds from the site attest. The activities in the buildings identify the occupants as artisans and traders but their material culture points to a degree of sophistication with glass vessels, imported pottery and all manner of dress fittings and personal items.

There was expansion of the built-up area and increased activity from earlier in the 8th century. New growth can be seen where buildings were constructed over backfilled pits in what had previously been open areas. Several industries which leave archaeological traces have been identified. Many of the buildings have evidence for weaving and smithing, a number have evidence of bone working with combs one of the main products. Excluding the shavings and very small pieces, a total of 10.16kg of antler waste was recovered from the mid-late 8th century with a marked cluster in the buildings on the west side of the main road. The range of finished bone and antler objects is much greater than previous assemblages, although combs and pins are still the most common. Items associated with textile production are more frequent with spindlewhorls and threadpickers both present. A gaming piece/spindlewhorl and a finely decorated knife handle point to higher status items.

The widespread distribution suggests that bone working was a relatively non-specialised activity with household production of most objects. Buildings on the west side of the main road were an exception to this with more intensive production and the occupants were probably responsible for some of the more prestigious

items with ornate decoration and customised objects produced to order which indicates more specialisation at the 'higher' end of the market. An antler brooch mould, highly decorated handles and sword guards are all items which would have had intrinsic value or were produced to support another craft activity such as jewellery or sword/tool repair. This compatibility of industries is a trait of the site and suggests complex interrelations between the artisan groups.

Destruction of buildings by fire was a common occurrence necessitating constant new construction mainly in identical positions and on similar alignments and resulting in considerable redeposition of material across the site. The fires were both localised affecting part of a building and more general conflagrations in which swathes of buildings were apparently levelled.

The relative economic importance of the period can be seen in the material recovered reflecting both actual volume and less repair and reuse of damaged goods. The pottery assemblage from the mid to late 8th century amounts to 51% of the total sherds from the site and almost 50% by weight.

Considering the overall distributions, the largest group was found in middens outside a building where silver and copper alloys were being worked and possibly jewellery and coinage produced, where *c.*16% of the period assemblage was discarded. The next largest group was associated with a complex of buildings surrounding a courtyard and including a smithy. The assemblages from most of the other buildings and open areas all had remarkably even numbers of sherds. This suggests that rubbish from the two principal building plots was dumped on the adjacent yard areas but that most of the other buildings disposed of their waste elsewhere.

Alleys and yards were often covered in surface middens, particularly of animal bones and oyster shell, although disposal of such refuse also continues in pits. The alleys to the north and south of the central building range both have concentrations of primary processing waste suggesting that there was the continuing presence of a butcher in an adjacent building or regular visits by a travelling butcher. The middens of the jewellery workshop and the alleys to the north and south provided about 400kg of the bones. Approximately 100kg of bones were recovered from the courtyard building complex; the great majority of the bones could be identified to species belonging to cattle, sheep/goat and pig.

In addition to the cattle, the mid to late 8th-century deposits provided a wide array of other species, including both large and small mammalian domesticates, plus a variety of domestic birds and game species. The great majority of these species would have contributed to the meat diet, this is in keeping with the general food waste characteristics of the period and overall site assemblages. The additional food species included a variety of domestic/wild birds and wild/game animals. Chicken and goose being the most common bird bones, with the former the more abundant of the two. Both were extensively, though not intensively, exploited. The absence of very young birds suggests a market purchase rather than local breeding.

The game animals were very poorly represented, red deer being the most abundant species in this category, although this has more to do with the antlerworking industry than acquisition for venison, shown by the large proportion of red deer antler pieces.

Other species of interest included whalebone which was in fair condition, suggesting it arrived at the site with meat attached and had not been exposed overlong to the elements, the specimen was cut up and apportioned fairly quickly.

There were a total of 138 iron objects from this period. Most are from buildings, and many were once probably structural fittings although no longer readily identifiable. Some iron tools have been recovered but their value probably restricted the numbers deliberately discarded and lost. The most unexpected iron finds are a cauldron and trivet from a well. Both were in good condition with very little damage, and were clearly of value. The best assemblage of iron objects is associated with the smithy from the courtyard building complex. The larger number of discards from dumps and middens towards the end of the period are indicative of the economic decline which is so marked at the site at the end of the 8th century.

Weaving was a common craft in the settlement and loomweights, pins, threadpickers and spindlewhorls have been found in many of the buildings on the site. Particular concentrations have been noted in the smithy and the jewellery workshops where nearly 200 loomweights were found. These buildings may have been producing highly decorated textiles as a complement to the

jewellery, possibly including gold and silver embroidery.

The pottery wares in the mid to late 8th century represent a gradual decline of chaff-tempered ware, and the increase in the use of Ipswich-type wares. Altogether imports accounted for 26.7% of the period assemblage with reduced wares the most common. True Badorf-type wares of the later 8th century are extremely rare.

Many of the craft activities continued throughout building sequences, suggesting that there was continuity of occupation over long periods of time related possibly to kin or craft associations. At the end of this period the decline in the settlement at this site had begun, the latest phase of many buildings occuring at the end of the period. Whether this decline was a result of a more general economic decline or a consequence of growing political turbulence is unclear from the archaeological record but the heyday of the settlement was past.

DECLINE AND CONTRACTION IN THE 9TH CENTURY (770–?886)

The decline which followed led to significant changes in both the layout and density of occupation. Although the main road was retained and kept relatively clear of refuse many of the buildings previously occupied were cleared and previously stable plots and side streets incorporated into properties. This suggests that not only was there less economic activity but that the previous population was at least partially replaced either by new immigrants or by a redistribution of the land among those remaining. The breakdown of central authority can be seen by the disruption to refuse clearance with the reappearance of rubbish pits in the open areas surrounded by dumps of material discarded close to the surviving buildings. Some manufacturing continued and the presence of items such as locks and keys suggest a new awareness of security. Iron smithing remained one of the main activities but the availability of recycled material seems to have outstripped demand for new objects. The overall impression is one of continuance but decline with some highly decorated objects indicating that a market for high status goods remained but that there had been a severe contraction of this market. Long distance trade perhaps suffered less than regional links with evidence of items paralleled at Birka, Sweden, being common. The dominant pottery type were Ipswich wares which formed 81% of the assemblage by weight. They were increasingly supplemented by shell-tempered wares related to 9th to 10th century wares from Late Saxon London. The range and number of fish bones recovered from the 9th-century deposits show that this was an important source of food and that deep water species were being caught, species present include cyprinids (carp sp.), eels, gadids (cod sp.) and plaice.

By far the most important feature from this period was a large defensive ditch dug across the northern part of the site. The ditch had been reinforced with an abattis of sharpened stakes or branches pointing to the north evidenced by the large number of stakeholes in the southern face of the feature. It may have had a bank with a palisade although evidence for this did not survive because of truncation and dark earth formation. The dating of the ditch is based upon pottery which indicates it was dug after 770 but the burial of a hoard of Northumbrian *styccas* in the berm suggests that it remained a prominent landscape feature in the mid 9th century. The excavation of such a large labour intensive feature which truncated existing building plots implies a high degree of central organisation and indicates a response to an external threat. Several interpretations for the excavation of the ditch are possible based on known documentary and archaeological evidence but without more precise dating all remain possible. The interpretation currently favoured is that the ditch was dug in the mid 9th century, probably in the 840s in response to earlier Viking attacks on *Lundenwic* (Swanton 1996, 65). It was therefore a reflection of the damage caused by these attacks and indicates that the defended area of the settlement was reduced at this time to within a more defensible circuit. The provision of the defences was unsuccessful as a Viking army occupied London in 871 and may have maintained a garrison in the town until expelled by Alfred in 886. Regardless of the details of its last years, *Lundenwic* was abandoned sometime during the 9th century and Saxon occupation removed to the City of London area known then as *Lundenburh* (see Wroe-Brown this volume, Blackmore 1997, 128). A mixed deposit of soil build-up or 'dark earth', representing the latest phases of occupation and subsequently reworked by bioturbation, has obscured this vital period in the history of London. So far no undisturbed

sequence of material from this period has been excavated and the material from the Royal Opera House although providing much new evidence cannot resolve the issue of the end of *Lundenwic*.

CONCLUSIONS

The excavations at the Royal Opera House have provided the best evidence for the Middle Saxon settlement of *Lundenwic* recorded so far. They comprise an important part of the townscape with buildings, streets and yards all discovered together with artefacts and cultural material which allow the structures to be placed into context and permit observations about the inhabitants to be made with some confidence. The site is a segment of Middle Saxon London and gives archaeologists and historians an opportunity to examine the lives, commercial interactions and social infrastructure of the inhabitants in far greater detail than has previously been possible (Cowie & Whytehead 1989). In the wider study of the period the site provides a large body of evidence which is directly comparable with that from *Hamwic*, Fishergate, Lincoln and Ipswich in England and many of the Continental settlements which were at the other end of the trading routes which stimulated the growth of *Lundenwic*.

Although not the first Middle Saxon site excavated in London, the Royal Opera House has an incomparable archaeological sequence and range of cultural material; a solid base to inform and shape future research criteria and around which further studies can be developed.

The full results of the analysis will be published in 2001 as part of the MoLAS monograph series.

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