

HAVING JUST completed a year working on a large City excavation, I hope it will not be considered amiss if I try to consider some problems of Roman London from the point of view of someone who has not been concerned with London for a long time, but who has worked on quite a large number of other towns of the Roman Empire. I am quite aware that the problems of Roman London have been written about by many great archaeologists, notably Sir Mortimer Wheeler, Professor Grimes and Ralph Merrifield. However, I hope I can raise a few new ideas as well as to revive some old ones.

Geological and environmental background

One of the most important aspects of Roman London which still needs much study is the geological and environmental background. Sir Mortimer Wheeler's writings and maps of the late 1920s¹ are still of great importance, though it is now considered that there was much more forest in the London area than he postulates². Recently Peter Marsden has published a map of the natural land surface under London³ and I think this deserves a much wider circulation among archaeologists than *The Geographical Magazine* can give it even though it was used as the basis of Map 6 in *The Future of London's Past*⁴. Fig. 1 is based on Peter Marsden's plan but contains a few corrections in the south-eastern part of the City and along the waterfront. Mr. Marsden's many years' work in the City and Southwark have been of enormous importance, not least because he recognised the fact that it is important to record not only archaeological levels but also the Ordnance Datum heights and nature of the underlying drift deposits. It is immediately apparent from this map why London grew up first on the eastern of the two low rounded hills opposite Southwark, only spreading to the western hill later.






Perhaps the most important single factor contributing to the positioning of London was the level of the river and the western limit of the tide in the Thames estuary in the mid-1st century A.D. New light has been thrown on this by the discovery of a Roman timber quay in the south-eastern part of the City⁵. It seems certain now that the river level in the early Roman period was at -0.5 metres O.D. or lower. If it had been above this it would have swamped the Roman timber quay found on the

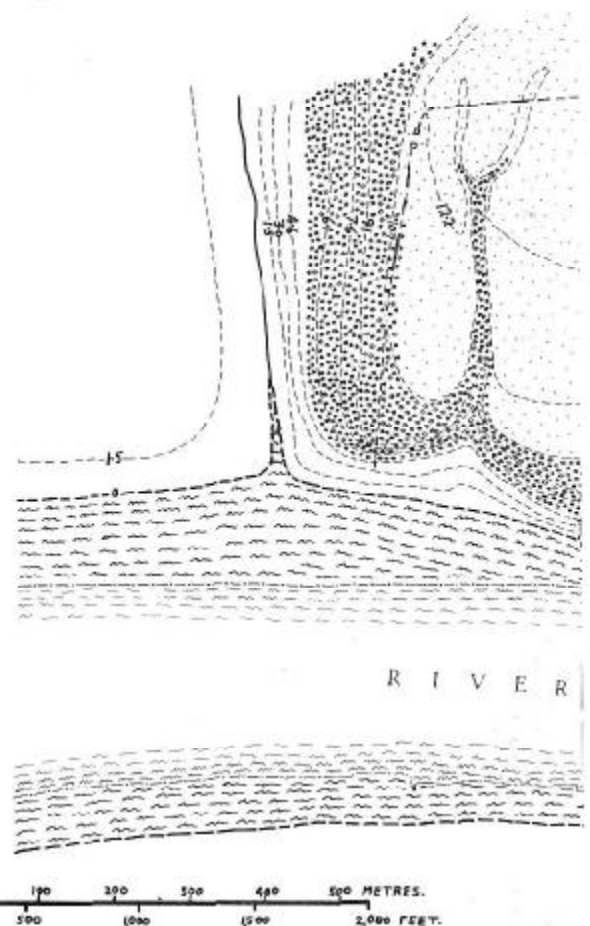
1. *Royal Commission on Historical Monuments*, Vol. III (Roman London) and *London Museum Catalogue*, (1930).
2. Ralph Merrifield, *Roman London* (1969) 10.
3. Peter Marsden, Mapping the birth of Londinium *The Geographical Magazine* (September 1972).
4. *The Future of London's Past*, M. Biddle and D. Hudson, Rescue 1973.
5. On the Custom House site in 1973 *op. cit* below and on the New Fresh Wharf site (1974).

Roman London Some Current Pr

LONDON SURFACE GEOLOGY

KEY

brickearth	
gravel (river terrace)	
london clay	
modern waterfront	
height above O.D. in metres.	



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roblems

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Fig. 1. A contour map of the City with the Roman walls, fort and other features shown.



Custom House site.⁶ More waterfront excavation is needed before one can be certain, but it still seems highly likely that the London Bridge region was the limit of the tide in the 1st century A.D. Dio's description of the "flood-tide forming a lake" near where the Thames empties into the ocean⁷ may just possibly refer to the Pool of London which had many inlets and creeks on the south side, including one under New Guy House where a Roman boat was found.⁸

Roman roads and early military sites

Roman roads in the London area have been dealt with in detail by many writers⁹ but, until recently¹⁰, little has been written on the early military sites. It is surely important to connect the two because it is from the earliest military sites that the primary roads start¹¹. London is, I am certain, no exception to this rule, and a study of the main Roman roads in the London area should tell one much about the primary military layout.

Watling Street and the Silchester-Colchester road are clearly the two primary Roman roads in the area, and it is significant that both of them miss the City altogether. Stane Street and Ermine Street on the other hand both originate at London Bridge and were presumably built after some sort of military sites had been established north and south of the river. It is at this time that the first bridge from the City to Southwark must have been built though an earlier bridge may have existed at Westminster where Watling Street crossed the Thames¹². The most likely date for the establishment of these two military sites north and south of London Bridge and for the building of the first bridge here is during the summer of A.D. 43 after the initial defeats of the Britons and before the arrival of the emperor Claudius. At this time also, Stane Street would have been built to connect London with the supply base at Fishbourne (and the loyal Atrebatians under Cogidubnus). As soon as this had been completed, Vespasian's campaign in the south-west could begin. Ermine Street was perhaps built slightly later than Stane Street because the advance to Lincoln could not begin until after the defeat of Camulodunum, while the road to Chichester through the Weald was mostly in friendly territory; the main problem here being the clearance of dense oak forest in the

central Weald.

One of the biggest unsolved problems in the tracing of Roman roads in the London area is Watling Street. Between Marble Arch and Greenwich virtually nothing is known of its course, and it has always been suggested that it took a bend to the south so as to keep to the higher ground. However, on the basis of the evidence given above of a very much lower level of the river in the mid-1st century A.D., it seems quite possible that Watling Street ran all the way from Greenwich to Westminster by a straight route, the bend to the south only coming in later as a result of the rise in sea level. Perhaps one of the S.A.E.C.'s future excavations will find traces of Watling Street north of New Cross and covered by later silts. It is quite possible that the very large meander of the Thames which now extends as far as Deptford and Greenwich did not extend this far south in the 1st century A.D.

Roman London Bridge

Much has been written in the pages of *the London Archaeologist* on the position of Roman London Bridge, and it seems unnecessary to add much to this, except to say that to the writer the only possible position for it seems to be on the site of the later medieval bridge. It is just possible that it was a little further east and ran from the bottom of Pudding Lane¹³, but the present writer cannot subscribe to Graham Dawson's theory of an "upstream" bridge, mainly because his theory does not fit the few known facts, particularly now that the Montague Close road has been found to run south-west/north-east.

However, the nature of the bridge itself has not been discussed in *the London Archaeologist* and a few points relating to this can be mentioned here. A recent book on the Roman bridges at Trier has a section at the end on the construction of Roman bridges in northern Europe (i.e. outside the Mediterranean area)¹⁴ and from this one can infer several things about the London Bridge(s). First, the bridge would have had stone piers, presumably with double cutwaters as at Newcastle-upon-Tyne, and above this would have been a timber superstructure. The picture on Trajan's column of Apollodorus's famous bridge over the Danube shows what the superstructure may have looked like though a reconstruction

6. *London Archaeol.* 2 No. 7 (1974) 155 and *Trans. London Middlesex Archaeol. Soc.* 25, (1974) forthcoming for the full report.

7. *Dio Cassius*, LX, 20.

8. P. R. V. Marsden, *Trans. London Middlesex Archaeol. Soc.* 20 (1961) 168.

9. R. Merrifield, *op. cit.* Chapters 3 and 4 is the best recent account. See also I.D. Margery *Roman Roads in Britain*, 3rd ed. (1973) 53.

10. Hugh Chapman and Tony Johnson, *Trans. London Middlesex Archaeol. Soc.* 24 (1973) 71.

11. E.g. the road from Cirencester to Gloucester is aligned

on Kingsholm, a Claudian military site, and was only later diverted in its final stretch to the north gate of Gloucester.

12. This may be the bridge referred to as being "a little way upstream" in *Dio Cassius* LX, 20.

13. As suggested by Miss M. Honeybourne in 'The Pre-Norman bridge of London' in *Studies in London History*, ed. A. E. J. Hollaender and W. Kelloway (1969). An earlier and a later Roman bridge, side by side (as at Trier) could also be the solution.

14. Heinz Coppers, *Die Trierer Römerbrücken* (1969) 173.



Fig. 2. A reconstruction of Roman London by Forester in the 1930's showing quays in front of the river wall. (London Museum)

based on existing remains of a simpler superstructure is postulated for Trier¹⁵. One thing which seems to be common to all these bridges is that apart from the stone piers they were all made of wood; stone-arched bridges only appear to occur in the Mediterranean area¹⁶. One of the other noticeable things about these Roman bridges is that the piers and foundations were often reused for the later medieval bridges on the same site, e.g. at Trier itself and Newcastle-upon-Tyne¹⁷. It therefore seems quite possible that the foundations for the medieval piers or "starlings" are Roman. Unfortunately only one detailed examination has been made of this¹⁸ and at first sight William Knight's drawing, made in 1826 when one "starling" was demolished, appears to show no earlier foundation. However, the double cutwater at the centre and the piles in a V-shape may indeed be earlier remains. Unfortunately all the old "starlings" in the present river bed have now been removed, and the only ones left are sealed in the north and south banks of the river (i.e. under Adelaide House and Fennings wharves). It is very much hoped that at some future date they may be fully excavated. (I would also like to put in a plea for the full publication of Messrs. Beeby and Dawson's excavations south of Tooley Street from 1965-69, particularly the very important 1967 excavations).

Southern defensive wall of Roman London

An old theory which goes back to Fitzstephen's description of London in the 12th century (quoted in Stow's *Survey of London*), is that there was a defensive wall on the south side of London which at an earlier period was undermined and destroyed

15. *op. cit.* above 152, Abb. 151.

16. This would agree with Peter of Colechurch's bridge being the first one in London.

17. If at a future date, Roman piers were found with

by the Thames. Since the 1920s most modern writers have discounted this as unlikely and the current theory is that there was no continuous Roman defensive wall on the river side of London. However, it is most unlikely that the southern side of the city would be left undefended after much time and trouble had been spent on building the landward walls.

A southern wall would be even more important in the later 3rd and 4th centuries when the bastions were built because of the seaborne raids of the Saxons. After all, the fact that the seaward walls of Richborough, Reculver, Burgh Castle, and Bitterne have been eroded away does not mean that no wall was built on this side originally. Recent evidence for a large post-Roman marine transgression has come from the Custom House site¹⁹ and this now makes it very likely that Fitzstephen's account is based on true stories handed down to him by earlier generations. It also seems quite likely that the large late-2nd century timber quay was built at the same time as the defensive wall, presumably to increase the area of quays after they had been cut off by the defensive wall from direct access to the area immediately to the north.

With the many new excavations taking place in the Greater London area, it is to be hoped that many of the above problems will be solved. At the same time, Roman London badly needs a detailed study from the social and economic point of view, and this can only come after a much more detailed study of the finds from excavations, particularly pottery. Let us hope that in the next few years we will see a "revolution" in our knowledge of Roman London.

double cutwaters, this would be a good, though not definite, pointer to the river having been tidal.

18. *Archaeologia* 23 (1830) 117-9.

19. See note 6.