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DISCOVERING THE PORT OF ROMAN LONDON

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End of an Era

In the early 20th-century, London's enclosed dock system extended from the St Katherine's in the shadow of the Tower some 10km eastwards, including the Surrey Docks on the south bank, across Millwall and beyond to the Royal Docks at Beckton. This was one of the largest such complexes in the world and was perceived as the lifeblood of London: it seemed that our capital, set on the tidal Thames, had always been a port. In spite of severe damage during the Blitz, the port witnessed a revival in the 1950s and 1960s and was all set to continue as the driving force physically underpinning our international trade. But then the unthinkable happened- starting in the late 1960s, the smaller docks on the north bank and all the Surrey Docks closed, but worst was to follow when the great Royal Docks -the Victoria, Albert and George- were also closed. The last vessel loaded there left London on 7th December 1981. The complex had initially developed in an age of wooden, wind-powered sailing ships, had adapted to larger iron-clad steam-powered shipping and survived a brutal Blitz. But In less than fifteen years that entire system, built up from 1800, was suddenly abandoned- London was a port no more.

The economic and social impact was enormous, but we now know that this was not the first time the port had failed: a similar fate befell the much older Roman port, some 1,500 years before, with similar consequences but for rather different reasons. We now have a clear understanding of that distant period in the port's history. Ironically, this is because the major archaeological excavations that uncovered the remains of the Roman port were instigated as a direct result of redevelopments caused by the collapse of its latter-day counterpart.

Port Investigations

One of the earliest surviving contemporary references to Roman London is by Cornelius Tacitcus (cAD55-120), who wrote a brief description of a native uprising in AD 60 in the newly-occupied province of Britannia. Although the settlement was not described as a high-ranking *colonia*, it was nevertheless regarded as "an important centre for businessmen and merchandise". But there is little else in the meagre surviving documented history of the town to illuminate the development of that provincial port.

The archaeological evidence, by contrast, has revolutionised our understanding of the settlement: indeed, the associated harbour excavation programme conducted by archaeologists in the modern-day City developed into one of the largest such projects of its type. *Londinium* lies at the head of the sinuous Thames estuary just 50 miles from the North Sea. The river rises well to the west of London, passing through an agriculturally-rich valley in the temperate south-eastern corner of the province. The town thus enjoyed the benefit of an extensive and fertile hinterland, fresh water, fish stocks, a long navigable tidal waterway affording direct access to the sea, the channel ports and the European mainland. The majority of the Roman town lies beneath the financial district known as 'the City', and was very much smaller than the present day 32-borough conurbation of Greater London.

Our knowledge of the port's ancient history has been built up piecemeal, primarily the result of an intensive programme of rescue excavations conducted principally by archaeologists from the Museum of London. That systematic programme of waterfront excavations began in earnest in the early 1970s, but was preceded by an earlier generation of nautical archaeological investigations, beginning in February 1910 with the discovery of the first of three Roman ships. This was uncovered during the building of County Hall on a riverside site in Lambeth. The late 3rd-century vessel was about 20m long with a beam of 3m. The other two finds were the rather smaller New Guy's House vessel discovered in 1958 and the larger Blackfriars ship excavated in 1962-3.

Thus by the end of the 1960s, *Londinium* had three Roman ships, but little evidence of the harbour that accommodated them. However, this was precisely the period in which the adoption of containerisation led to the closure of the London's enclosed docks from 1967 to 1981. A modern container port needs a deep-water berth and acres of open space. By contrast, the Thames in central London was flanked by tall stacks of warehouses built not only in the enclosed docks to the east and south of the City, but even in the City reach itself. The advent of containerisation rendered these warehouses obsolete overnight, and a wholesale demolition programme began, both in the City of London and on the southern shore in Southwark. In their place a new generation of office buildings and other facilities were built, as London changed from working port to a financial centre.

The major urban redevelopment programme that accompanied this coincided with the establishment of London's first full-time professional archaeological units. From 1971 onwards, rescue excavations were regularly undertaken as major redevelopments progressed all along the London waterfront. Sites were excavated from the Fleet Valley in the west to Custom House in the east, and also on a range of sites in Southwark, on the southern shore. Although the Museum of London's beneficent monopoly of excavation contracts with London developers ended abruptly in 1991, archaeological investigations of the waterfront continued through 1990s and into the next century, with work as Three Quays in 2011 and a return to Sugar Quay (Custom House) in 2016, for example.

Story of a Port

So what have we learned from this intensive forty-year study? Topographically, it was discovered that the first century AD river bank in the City did not lie below the modern quayside, but 100m inland, just north of Thames Street. Many well-reserved sections of heavily-built Roman timber quays structures were uncovered. Some survived up to their full height of over 2m, a series of squared baulks of oak, up to 600mm by 400mm in cross-section, with timbers up to 9m long, stacked one upon the other, up to six tiers high. Although some were openwork, most revetted an infill of gravel and clays thrown in behind the timbers, up to the level of the working surface of the quay. Many of the timber structures have been closely dated by dendrochronological analysis from the 1st to the 3rd centuries, working with a master oak chronology for Roman London running from 252BC to AD 294.

It now seems that the first really significant attempt at establishing a major harbour facility here was not in c AD50, when the first settlement was founded, but in c AD62-3. These were in those fraught years immediately following a devastating native rebellion that all but ended the Roman occupation less than 20 years after it had begun. Excavations up on the hillside near Fenchurch Street suggests part of the settlement had belatedly been defended by a temporary fortification to protect it from any further native insurrections. Contemporary with it, but on the waterfront just to the south, the first major timber quay was recorded below the site of Regis House, revealing warehouse buildings as well as a well-preserved section of a mid-first-century wooden quay. Some of the timbers were taken from military stock piles, since the end-grain has been branded with stamps, one of which may have read *TRAECAVG*, perhaps attesting to the presence of a Thracian unit. Other evidence for military involvement in the quay's construction, apart from its scale and style, include fragments of armour and part of a leather tent. Thus it can be surmised that London's first major harbour facility was built by the state (rather than by private merchants) representing a genuine desire on the part of the authorities to provide the essential infrastructure to kick-start the shattered economy of the province.

On the site immediately to the east, a large open-work landing stage was erected in c AD70, perhaps representing a ferry terminal before the bridge was constructed. This energetic programme of harbour

development continued unabated into the 3rd century, with a timber bridge built by AD85-90 as well as a succession of timber quay structures, each one set further south, out into the river. The sequence also extended to the east of the initial bridgehead focus, and west, first as far as the mouth of the Walbrook stream (a tributary of the Thames), and then, by AD 200, beyond it.

Clasiss Britannica

Unlike other provinces with a longer history of contact with Rome, Britannia simply did not have an indigenous fleet of merchant vessels. If the new province were to prosper, then such a fleet would have to be built to support not just the military machine but also the nascent programme of urbanisation. A country with no tradition of monumental masonry building, for example, would clearly have to import or develop all the requisite technology, expertise and facilities to start such a programme as well as providing a fleet of stone-carrying barges to transport the required stone tile and timber in the quantity required to transform the province. It is suggested that the Roman fleet, the *Classis Britannica,* facilitated that particular role.

The *Classis Britannica* fleet was raised in AD 43 to launch the Roman invasion of Britain. Bases have been excavated at Boulogne and at Dover, where the occupation of its fort is dated from the early 2nd to the early 3rd century. (This is, perhaps significantly, precisely the same date range as the Cripplegate Fort built in *Londinium).* In addition to its overtly military role transporting the legions serving the provincial governor, the *Classis Britannica* also played a major role in the economic development of the province. It was heavily involved with iron-working in the Weald, stone quarrying and tile industries and, crucially for an island province, provided a continuous shuttle service between Boulogne and Dover. It was this through this umbilical link with the rest of the empire that the Imperial mail passed, as did much of the exports and imports to and from *Londinium.* The fleet would have worked closely with the Procurator, the official responsible for the economic wellbeing of the province and the taxes and other imperial benefits that could be extracted from it. *Maenius Agrippa,* who was Prefect of the Fleet in c AD130, is also recorded as serving as the provincial procurator, for example. The port would suffer once the fleet was disbanded in the late 3rd century.

International Trade

The archaeological evidence for the cargoes handled in *Londinium* when the port was thriving include commodities such wine, fish sauce and olive oil, all of which were transported in amphorae, a common ceramic find in London. These containers have been sourced to France, Spain, Italy, North Africa and the East Mediterranean, representing the range of contacts this provincial port engaged with directly or indirectly: most cargoes arrived on the Thames having been transhipped several times through the extensive Roman entrepot network.

Another major import was tableware: the London waterfront assemblages include large quantities of broken but unused Samian ware from Gaul, representing breakages in transit or warehouse clearance of old stock. A remarkable 2nd-century inscription excavated from a London temple, and has been translated by Roger Tomlin, from Oxford University. It names a merchant of London (*moritix Londiniensi*) called *Tiberinius Celerianus*, a citizen of the *Bellovaci*, near Beauvis in northern France, but represents a clear personal and commercial link between the provinces of Gaul and the Britannia.

Exports included lead ingots representing the mineral wealth of the province: three stamped examples were recovered from an excavation of a waterfront warehouse. There would also presumably have been wool and textiles, as well as the items noted by Strabo, grain, hunting-dogs and slaves. Although the latter usually make little impression on the archaeological record, a writing tablet from the excavations at No 1 Poultry actually records the sale of a slave girl, *Fortunata*, for 600 denarii (two year's salary for a legionary) in about AD 100.

It was not just the harbour that was a hive of activity for, on top of the hill that overlooked it, a massive new forum and basilica had been constructed by the early 2nd century. This great town hall and market place was one of the largest buildings in Roman Britain, reflecting the political and economic importance of the expanding city. In the heart of the town, a thriving industrial quarter had been laid out in the valley of the Walbrook stream. From here evidence has been recovered for pottery manufacture, a smithy, boneworking, leatherworking, shoe-

making as well as glass recycling and reworking. On the Southbank islands in Southwark, a number of workshops for metalworking have been recorded, again on a significant scale, as well as a timber-built warehouse, designed with a ramp to allow barrels to be rolled in and out.

To this catalogue of industrial activity which the shipping in the harbour would no doubt have serviced, can be added the evidence near Billingsgate of a fish-sauce processing unit, a common delicacy in that era, but one that depended on a vibrant fishing industry. Then there were watermills, on both the River Fleet to the west of the town, and on the mouth of the Walbrook stream, in the centre of the city's waterfront. Again sacks of grain could have been readily transported to both locations by barge, while sacks of flour could have subsequently been exported by similar means.

Decline and Fall?

But it seemed it was all too good to last. Changes in the organisation of the province in c. AD 200 and again in c. AD300 lessened the role and importance of Londinium; the town was not immune to economic problems that beset the wider empire, while repeated barbarian incursions and invasions unsettled the island, for example. The gradual collapse of the port is evident from several archaeological sites. By the end of the 3rd century the waterfront buildings were severed from the river by the tall riverside defensive wall, an extension of the early 2nd-century landward wall. Clearly the protection of the city had priority over the traffic and trade in those increasingly-turbulent years. It is of significance to note that the C2nd-century masonry defences were constructed with stone freshly quarried near the River Medway in Kent, and shipped to Londinium in quantity. This implies a large fleet of robust barges were on hand, a service no doubt provided by the Classis Britannica. However, by the late 3rd century, that organisation had been disbanded, leaving London to build its defences, not from freshly quarried stone from the distant Medway, but by pulling down masonry buildings within the city and reusing the stone in the late Roman defences.

That Londinium- and indeed the whole province- was relying less and less on imports is reflected by the finds of British-made pottery replacing most of the ceramic forms produced on the continent that had once been ubiquitous across the country in the previous centuries. This reflects a pronounced shift in culture from full "Romanisation" to a more inward-looking Romano-British take. It is no coincidence that this is the late 3rd-century period when Britannia under Carausius and subsequently Allectus, actually declared independence from the wider Roman Empire. In some ways, this situation had similarities with the secession of the American colonies from its own *alma mater* in the 18th century, but the result in the late Roman period enjoyed a different outcome, with a successful re-invasion by the old empire re-imposing its will by force on its rebellious colonies.

These dramatic economic and political changes are reflected in the archaeological record. Once the tall riverside defensive wall had severed the connection to the quayside and the river, everything changed. After that, timber quays were neither extended or even maintained, and had been largely dismantled by the 4th century. A different fate awaited the ranks of riverside *horrea*, which once represented the vitality of the early Roman port. These were initially open-plan, open-fronted, timber-floored warehouses, set 5m behind the quay, serving a similar function to latter-day transit sheds. But these warehouses were transformed, as the internal space was subdivided into smaller self-contained units with hearths: in other words, they were converted into flats. This situation bizarrely presages that in the modern port, when loft-living provided obsolete 19th-century riverside warehouses with a new lease of life.

But had Londinium turned its back on the river, or had the Thames turned its back on the town? Study of the Roman Thames shows that its width, depth, salinity and tidal range have all changed markedly since the 1st century. Today, the Thames is a tidal canal, restricted to a width in central London of some 250m between solid river walls on both banks. In the Roman period, the situation was very different: although the tidal range was only just over 1m, the difference between the riparian topography at low tide and high tide was particularly dramatic on the south bank. Here, at high tide, low islands just projected above the water, with a river up to 1km wide to the east. At low tide, the river retreated to reveal an inhospitable expanse of marshes and mudflats, in contrast to the steeply rising dry hillside on the north bank. But research now shows that the level of the river relative to the land actually *fell* in the late Roman period, for complex isostatic and eustatic reasons. Such a situation is quite at odds with the longer-term trend. Indeed, it seems that in late Roman London the tidal head

(often regarded as the natural limit for sea-going navigation) must have drifted further east, taking with it, the primary rationale for the settlement of London to serve as a port.

Separation from Rome

The town and the province were the children of the empire: they prospered when Rome prospered. The converse was, alas, also true, and reverses in the wider economy could impact particularly harshly on the peripheries. In that over-connected culture and economy, it proved hard if not impossible to survive. Our distant province found itself divorced from the powers that had nurtured it and excluded from economy that supported it. Britannia's Brexit from the Roman Empire did not go well.

Further Reading

Londinium
Marsden, P, 1980 Roman London
Merrifield, R, 1983 London: city of the Romans
Milne, G, 1995 *Roman London: urban archaeology in the nation's capital*
Perring, D, 1991 Roman London

Also see the *Museum of London Archaeology* research publication series

Roman Port
Brigham, T, 1990 'The waterfront in Late Roman London', *Britannia* **21**, 99-183
Marsden, P 1994 *Ships of the Port of London: 1st to 11th centuries AD,* English Heritage Arch Rep **3**
Milne, G, 1985 (2nd ed 1993) *The Port of Roman London*
Watson, B, Brigham, T & Dyson, T, 2001 *London Bridge: 2000 years of a river crossing*

Classis Britannica
Eliott, S & Lambert, A 2016 *Sea-eagles of Empire: the Classis Britannica and the Battles for Britian*
Mason, D, 2009 *Roman Britain and the Roman Navy*
Milne, G, 1996 'Blackfriars ship 1: Romano-Celtic, Gallo-Roman or *Classis Britannicae*?'
        International Journal Nautical Archaeology **25**, 234-8
Milne, G, 2000 'A Roman provincial fleet: the *Classis Britannica* reconsidered',
         in G Oliver et al (eds) *The Sea in Antiquity*, BAR **899**, 127-131
Starr, C, 1941 *The Roman Imperial Navy: 31 B. C.–A. D. 324*