

## CHAPTER 7

# THE MATERIAL EVIDENCE FROM SILCHESTER

In conducting the literature review which sought out the earlier excavations and fieldwork, a note has been made of material studies relating to Silchester. This section helps the reader navigate towards areas of material interest, to facilitate research using the material from the site. The purpose here has been to provide an annotated bibliography of the work that has been done, showing the development of research in the area, and headlining the key results. Where regional or national syntheses have been undertaken incorporating Silchester material, these have also been indicated.

### FAUNAL REPORTS

Analysis and mention of the faunal remains during the Antiquaries' excavations was sporadic until mid-way through. In the first season there were identifications by Woodward, including dog, red deer, roebuck and possibly fallow deer (Fox and St John Hope 1890, 741). In the second season this became a more formal report by Herbert James, though omitting the fallow deer identification from the previous season (Fox 1892, 285–8); a sketch biography of him is provided by Boon (1981a). The number of skulls of dogs caused particular comment, which James followed up the next season (Fox and St John Hope 1893a, 571–3), but thereafter things went quiet, and it is difficult to know what, if anything, was being collected. The animal remains from 1893 called 'for no special remark' (Fox and St John Hope 1894, 238), and from then until 1902 they got no mention at all with the exception of a few identifications by Garson from the 1899 season (St John Hope and Fox 1900, 111). It was only from the 1902 season that reporting became a regular feature of the annual publications, with identifications of mammals, birds and fish being made by Edwin T. Newton, who is perhaps better remembered as a palaeontologist (St John Hope 1903a, 423–5; St John Hope and Fox 1905a, 369; St John Hope 1906, 164–7; 1907a, 449; 1908, 213–14; 1909a, 485). The twentieth century saw no bone reports from the excavations by Cotton, Boon or Richmond, but a wide range of individuals have worked on the material thereafter. Graeme Barker examined those from the excavations by Collis (1983, 67). Mark Maltby carried out the work on the bones from Fulford's excavations on the defences, including the butchery-waste deposit from the south-west corner (Fulford 1984, 199–212). Annie Grant reported on the few from the Amphitheatre (Fulford 1989c, 137–8) and the Basilica (Fulford and Timby 2000, 425–82). Sheila Hamilton-Dyer examined the material from the North Gate, which was predominantly cattle waste from butchery. Other observations included that neonatal pig bones suggested they were kept in the town (Fulford *et al.* 1997, 131–5). Dale Serjeantson examined the bird bones from the Basilica (Fulford and Timby 2000, 484–500; see also Serjeantson and Morris 2011).

The animal bones from the most recent campaigns in Insula IX have been assessed by Claire Ingrem showing cattle predominating. There was a mix of butchery waste and a lack of visibility of major meat-bearing bones, suggesting the intensive processing of cattle limb-bones for marrow and grease (Fulford *et al.* 2006, 167–88; Fulford and Clarke 2011a, 244–70). Analysing the major species, particularly cattle, from all the quantified assemblages, Ingrem focused on butchery and processing, taxa representation, mortality profiles, stature of sheep and cattle, and placing the assemblage in its regional setting in comparison to other sites (Ingrem 2012).

## DOGS

The prevalence of dogs from the site, with over 50 from the Antiquaries' excavations, has often drawn comment (Fulford 2001, 202, 205), with more added to them from the Insula IX excavations by Kate Clark (Fulford *et al.* 2006, 189–95; Fulford and Clarke 2011a, 271–8). Cut marks were observed on some of the Late Roman dog bones suggesting butchery and skinning (for a discussion on a tanning industry at Silchester see p. 413). A description and discussion of the dog burials at Silchester in a national context is provided by both Smith (2006, 17–18) and Clark (2012), and their depositional context is discussed by Eckardt (Fulford *et al.* 2006, 227–8).

## FISH

Fish species were recognised and reported on in the later *Archaeologia* reports (see above for references). In later excavations they were reported on by Hamilton-Dyer (Fulford *et al.* 1997, 131–5; Fulford and Timby 2000, 485) and Ingreem (Fulford *et al.* 2006, 167–88); the finds have been set within their national context by Locker (2007, 153, 162).

## OYSTERS

Joyce discovered a major deposit of oysters which lay beneath the Forum, and this was explored further by the Antiquaries (Joyce 1881b, 355; Fox and St John Hope 1893a, 562). When Fulford came to excavate under the Basilica, oyster and mussel shells were present from the very earliest Iron Age phase onwards (Grant in Fulford and Timby 2000, 430). More detailed analysis was conducted by Elizabeth Somerville on samples from the North Gate where she considered those dating to around the construction of the Town Wall came from the south coast, judging by the pattern of infestation on them. She also noted they were of a good size (Fulford *et al.* 1997, 135–9). Sandie Williams and Somerville studied the oysters from the mid- to late deposits at Insula IX, suggesting similar patterns of infestation and therefore similarly a probable south coast origin for these slightly later deposits (Fulford *et al.* 2006, 196–9; Fulford and Clarke 2011a, 279–80).

HUMAN REMAINS — see Chapter 13

## INSECT REMAINS

When Lyell went through the botanical remains from the muds and silts of the Antiquaries' excavations, he also separated out many insect remains which were passed on to Charles Waterhouse at the Natural History Museum (a godson of Darwin). Unlike Lyell, his results remained unpublished until his manuscript and sorted samples were re-discovered by Boon in Reading Museum, whereupon the material was re-analysed, though with few revelations (Amsden and Boon 1975).

It was to be a century later that significant examination of insects would recommence at Silchester with Robinson's work on Insula IX. Mineralised arthropod remains were investigated from the later Roman latrines, again leading to few revelations since much related to the specific context rather than broader ecological issues. Similarly, comparable results were obtained from the mid-Roman cesspits. However, waterlogged samples from mid-Roman layers did contain good coleoptera samples indicative of grassland and sparsely vegetated disturbed ground habitats, as well as suggestive of widespread infestation of woodworm in buildings. However, the indication of the likely honey bee colony in the vicinity was perhaps the nicest addition to colouring the impression of the environment (Robinson in Fulford and Timby 2000, 212–16; and Fulford and Clarke 2011a, 281–93).

## BOTANICAL REPORTS

The earliest recorded floral remains appear to be three stone-pine cones in the Reading Museum

collections which Boon believed may have been recovered by Joyce; there are no records to go with them (Boon 1974, 165).

Flora was much neglected by the Antiquaries until half-way through the excavations. There had been an early mention by the animal bone specialist, Herbert James, of some cherry and plum stones in a mortarium from the 1891 season (Fox 1892, 285–8), but that was it. However, in the report for 1900 we learn that investigation had begun in 1899 with plant remains being recovered by Arthur Lyell and identified by Clement Reid, which he published in his grand survey of the origins of the flora of Britain (Reid 1899). Earlier studies had been laid before the Society, but for some reason Fox had chosen not to include them in his published annual reports. They finally started to appear with Reid in Fox *et al.* 1901 (252–6), and thereafter for every season until 1908, the last in the interior of the town (St John Hope 1902, 34–6; 1903a, 425–8; St John Hope and Fox 1905a, 367–8; St John Hope 1906, 164; 1907a, 449; 1908, 210–12; 1909a, 485). It is notable that the reporting of both the floral and faunal remains became far more regular after St John Hope took over as the lead writer.

Amongst the items noted as curiosities were the 1901 material from Insulae XXIIb and XXVII, where Reid noted the exceptional number of hemlock and belladonna seeds in the well deposits. By 1902 he associated the belladonna berries with cosmetics, and the hemlock as having come in with tall sedges for thatch. The 1903–4 remains from near the Public Baths included opium poppy (*papaver somniferum*), represented by ripe seeds rather than unripe capsules. The list of species identified as present grew every year until the last report on the 1908 season. The medlar stones he discovered from the 1903–4 excavations are still the only ones to have been found in Britain (Pollmann and Jacomet 2012, 65). Appreciations of his pioneering work have been compiled by Allen and Hughes (1991) and Robinson (2012, 213–16).

While there was no obvious environmental sampling from Cotton's, Boon's or Collis' excavations, flotation samples began to be reported on from Fulford's commencement of work. Michael Monk examined flotation samples from the South-East Gate and Martin Jones examined the remains from the Manor Farm and Basilica excavations (Fulford 1984, 222–3; Fulford and Timby 2000, 505–12), while waterlogged, charred and mineralised plant remains from the Insula IX excavations were analysed by Mark Robinson and Lisa Lodwick (Fulford *et al.* 2006, 206–18, 374–9; Fulford and Clarke 2011a, 281–93, 485–96; Lodwick 2010; 2014b). The work is rich in detail with evidence for box hedges and holly from possible ornamental gardens; there is also evidence for a surprising shift in the mineralised assemblage from plums and bullaces in the second century to apples in the fourth. Preliminary work on the pre-conquest layers is also starting to reveal olive stones, coriander, dill and celery seeds showing *Calvea* was networked into a revolution in taste that was happening in other parts of continental north-west Europe. A partial synthesis can be found in Robinson (2012) and a broader synthesis has also been undertaken by Lodwick (2014a).

A number of individuals have studied pollen from the site. Michael Keith Lucas's work on the pollen from the South-East Gate confirmed the area had been alder carr and marsh prior to the Town Rampart's construction, and that the general landscape was largely open, comprising heathland, pasture, hay meadows and arable. The report nicely linked back to Reid's earlier work (Fulford 1984, 215–21). Antonie van Scheepen's work on the pollen beneath the seating bank of the Amphitheatre suggested that pasture had predominated *c.* A.D. 55–70 (Fulford 1989c, 147–59). Later work by Jameson Wooders and Keith-Lucas from the Iron Age levels under the Basilica investigated late first-century B.C. to conquest period deposits from wells, suggesting the landscape transformed from undisturbed woodland at the beginning of settlement in a clearing to wide open pasture and hay meadow surrounding the developed oppidum. A secondary important conclusion was that the latter profile was similar to that previously analysed by Kirstie Shedden under Grim's Bank, opening the possibility that this is Later Iron Age or Early Roman, rather than early medieval (Fulford and Timby 2000, 523–33; see also Shedden in Astill 1980). Within Insula IX pollen was analysed from an early second-century cesspit by Petra Dark (Fulford and Clarke 2011a, 294–300), providing an interesting complement to Robinson's macrofossil evidence. The predominance of dill and brassicas was notable.

Wood was analysed from various projects, including Ruth Morgan identifying the alder and

oak used as piles under the Town Wall (Fulford 1984, 212–15), Jacqui Watson's identification of the oak used to construct the Amphitheatre (Fulford 1989c, 139), and Vanessa Straker's examination of the charcoal from the Basilica (Fulford and Timby 2000, 425–82).

Alongside wood for heating purposes, coal has also been identified as potential fuel at Silchester. Fragments have been found ever since the Antiquaries' excavations (St John Hope 1907a, 449), and work has taken place to consider the main fuel supplies for Silchester (Veal 2012), as well as to place them in their national context (Dearne and Branigan 1995).

## COINAGE

Coins were amongst the earliest collected and recorded objects from the town. As early as Stair's excavations a gold coin of Allectus was commented upon (now in the British Museum) (Ward 1748, 609–13). Its findspot in later years 'gained the name silver hill, because more silver coins have been found there, than in any other part of the city' (Maclauchlan 1851), presumably marking a dispersed hoard, perhaps that shown to the British Archaeological Association when they visited the area in 1846 (Anon. 1846b). By the mid-nineteenth century the productivity of the site was so well established that fake coins were created and attributed to the site for collectors (Kell 1866, 358–9).

Often, during the Antiquaries' campaigns, the coin finds were not reported on. Remarks such as the following were common: 'the coins found were comparatively few in number, and of no special significance' (St John Hope and Fox 1896, 252). Only some of the hoards generally excited attention, so the evidence is more detailed, but even there Boon later dug out more from the Silchester collection than were originally published.

## COIN HOARDS

There are two hand-lists for Silchester, by Boon (1960) (elaborated upon with up-to-date references by Wythe (2011)) and Robertson (2001). Neither is complete, and there are discrepancies. A revised list in order of the terminal date of the hoard is given below with discrepancies indicated.

TABLE 7.1. COIN HOARDS FROM SILCHESTER

Date	Contextual information	Contents	References
1894	Insula IX, near Pit D, in a black vase	253–8 denarii, to Clodius Albinus, A.D. 194–5	Fox (1895, 455); catalogue by Grueber (Fox 1895, 473–88) and contextualised by Haverfield (Fox 1895, 489–94); see also Anon. (1898); May (1916b, 118); Boon (1960, Hoard I); Robertson (2001, Hoard 362). Details for 257 coins in Wythe (2011, 362–3).
1908	Insula XXXVI Pit 12	3 'silver coins', 2 of Antoninus Pius, 1 Gordian III, A.D. 238–44	St John Hope (1909a, 481). Not called a hoard by Boon or Robertson, though 3 silver coins together are not normal site finds.
1897	House XVIII.2, Room 15	22 radiates (incl. 1 copy), to Carausius A.D. 286–93	Originally unpublished. Boon (1960, Hoard II); Robertson (2001, Hoard 843). Details Wythe (2011, 363). See also (Casey 1977, 286 n.).
1865	House I.1 'in the room to the west of the triclinium'	40–2 radiates, to Carausius, A.D. 286–93	Joyce (1881a, 340–1) and Journal 24 Nov. 1865; see also Boon (1960, Hoard III); Robertson (2001, Hoard 842). Details of 42 coins in Wythe (2011, 363); Boon dismissed two of them from the hoard.

Date	Contextual information	Contents	References
1892	'a house south of the Forum'	6 or 8 Constantinian GLORIA EXERCITVS 2 standard coins and CONSTANTINOPOLIS A.D. 335	Originally unpublished. 6 coins stuck together identified by Boon (1960, Hoard IV); while Robertson (2001, Hoard 1182) and Wythe (2011, 363) report 8 based on a museum record.
1891	Insula I, under a quern in a passage leading northwards from the south frontage	1 barbarous radiate, 16 Constantinian, 1 FEL TEMP REPARATIO copy	Fox (1892, 269); see also Boon (1960, Hoard V); Robertson (2001, Hoard 1268); Brickstock (1987, Hoard 89). Details of 18 coins in Wythe (2011, 363). Note: Brickstock felt the latest FEL TEMP coin was a stray and was unusual compared to the others in a hoard.
1908	Block XXIX.VII, against the east wall of the main room	87 coins of Theodora and Constans, including 57 VICTORIAE DD AVGG Q NN and 21 GLORIA EXERCITVS	Original find and types listed: St John Hope (1909a, 478–9); see also Boon (1960, Hoard VI); Robertson (2001, Hoard 1231). Details of 87 coins in Wythe (2011, 363).
1891	Insula III, south-east corner, a pot concealed in the foundations	2 radiates and 34 later <i>aes</i> , latest coin VICTORIAE DD AVGG Q NN, A.D. 341–48	Fox (1892, 284); see also Boon (1960, Hoard 7); Robertson (2001, Hoard 1230); Brickstock (1987, Hoard 90). Details of 36 coins in Wythe (2011, 363–4).
1961	Insula IV, the 'church', during Richmond's excavation	1 radiate, 6 <i>aes</i> , latest coin FEL TEMP REP (probably not a hoard)	Frere (1976, 287–90, 297–9); see also Robertson (2001, Hoard 1273).
1874	A scattered hoard? No location, but excavation of House XXXIV.1 was underway	Fourth-century <i>aes</i> : 8 pre-A.D. 330, 88 A.D. 330–41, 6 A.D. 341–8, 1 Gratian; latest coin Gratian	Joyce's Journal, 7 Feb. and 16 July 1874; see also Boon (1974, 312); Robertson (2001, Hoard 1412).
1868	Forum	7 radiates, 28 Constantinian, 4 Valentinianic, the rest 'worthless', a silver of Licinius. Latest coin Valens I	Joyce's Journal, 27 Feb. 1868; see also Boon (1974, 321); Robertson (2001, Hoard 1452).
1869	No location, though most attention was being paid to the Forum that year	Theodosian <i>aes</i> , latest coin Arcadius	Joyce's Journal 21 September 1869; see also Boon (1974, 311); Robertson (2001, Hoard 1492).
1833	Insula VIII <i>Mansio</i> bath-house lead piping, during Coles' excavations	200 <i>aes</i> , probably fourth century judging by the interpretation	Kempe (1833, 125; 1838, 418); see also Robertson (2001, Hoard 1749).
1985–8	LP 2900, SU 6347 6212, just beneath the ramparts of Rampier Copse	51 siliquae, many significantly clipped, suggesting an early fifth-century deposit, along with several other coins and 7 whole or broken rings	Full report (Fulford <i>et al.</i> 1989); interim statements (Fulford <i>et al.</i> 1987; Frere <i>et al.</i> 1988, 477); see also Robertson (2001, misrecorded as two hoards 1534–5).
c. 1706	In a pot	No details	(Hearne 1889, 438)
Pre-1846	Possibly House XVI.3	A large number of silver coins (denarii or siliquae most likely) were displayed by the Revd Thomas Streatfield FSA as found 'some years since' at Silchester	This may be the eighteenth-century find from House XVI.3 which led to the area being referred to as 'Silver Hill' on Stair's map, though that was quite a few years earlier (Anon. 1846b; Taylor 1759).

## SITE FINDS

Cataloguing of the Iron Age finds from the area began with Seaby (1938) listing the few found in Berkshire and the Silchester district, but none with locations. Boon built on this, collating the 23 known Iron Age coin finds (4 Durotriges; 1 Tasciovanus; 6 Cunobelin; 1 Epaticcus; 1 Dobunni; 1 Trinovantes; 1 'Brigantes'; 1 Gaulish?; 1 Gaulish GERMANVS INDVTILLI L; 6 Uncertain British), and was somewhat concerned by the predominance of coin from dominions other than those of the Atrebates (Boon 1954a). He updated his list of Iron Age coins in the Basilica report (Fulford and Timby 2000, 163–70, Schedule B).

For general coin lists, the 2,000 or so from the Antiquaries' excavations were initially published by Pearce (1929). Allen reported on those found during Cotton's excavations (Cotton 1947, 147–9). Boon (1969, 45–6) reported on his own finds and those from the 'church' (Frere 1976, 298–9). Posthumously, much of Boon's work identifying and collating the collections within Reading Museum and Stratfield Saye House was revisited by Wythe's publication of 13,400 coins found in and around Silchester which had been recorded by Boon in the 1950s (Wythe 2011). Reece identified those found by Collis (1983, 65).

Goodburn, Esmonde Cleary and Boon identified the coins from Fulford's early work on the town defences (Fulford 1984, 109–10). Boon identified the coins from the Amphitheatre (Fulford 1989c, 77–9), North Gate (Fulford *et al.* 1997, 109–11) and the Basilica excavation (Fulford and Timby 2000, 127–62, Schedule A). The coins from the first two volumes from Insula IX were identified by Besly (Fulford *et al.* 2006, 81–5; Fulford and Clarke 2011a, 96–9).

## OTHER DISCUSSIONS

In terms of specific aspects, a list of the 12 Roman gold coin finds known from the site forms part of a national survey (Bland and Loriot 2010, 73–4, 162–5); Boon (1951) discussed the plated coins from the site and also the hypothesised Carausius II, after finding the fabled coin while re-sorting the Reading Museum collections (Boon 1955). Boon also summated and discussed all the early pre-Flavian coinage, including the Claudian copies, when he wrote up the coin finds for the Basilica report (Fulford and Timby 2000, 170–9, Schedule C).

## IRON AGE COIN PELLET MOULDS

The Antiquaries' excavations produced eight fragments of pellet moulds, though only two had any locational information. One came from Insula II, close to the Basilica; the other is from a pit which had been truncated by the Town Rampart ditch just outside the West Gate (St John Hope and Stephenson 1910, 324–6). Neither was remarked upon at the time, but Boon reviewed and described them from the collection in Reading Museum (Boon 1954b). The identification of the pit can be narrowed down to one of two, both containing pre-Claudian material, but also post-conquest to early second-century pottery. Both pits were inside and more-or-less adjacent to the Inner Earthwork boundary. The fragments are described in detail by Boon.

Corney's fieldwalking also produced a fragment amongst a spread of pre-Claudian material from Rampier Copse (LP 6805, PC:7, see Exterior 21) which was located over the boundary of the hypothesised Rampier Copse enclosure. In his conclusion he provides a plot of the location of other fragments known from the site which includes two otherwise unreferenced locations from near the 'church' and near the Public Baths, which could be the two additional fragments Boon reported as having been found near the Forum in 1961 (Boon 1969, 25; Corney 1984, 287, fig. 84).

From the Basilica excavations came 21 further fragments, which were written up with a good review of our understanding of how these moulds were used provided by Northover and Palk (Fulford and Timby 2000, 413–15). More have come to light in the Insula IX excavations which will be reported on in due course (Fulford *et al.* 2011, 4).

## POTTERY STUDIES

During the Antiquaries' excavations, throughout the annual reports there are casual but unsystematic references to the ceramics. By the fifth season the excavation committee still had not identified anyone to examine it all: 'the pottery found at Silchester has not as yet been taken in hand by any specialist, though it is seldom such an opportunity occurs, or is likely to occur again, for a careful examination of such varied amount of material, found also on one site and without any earlier or later admixture. The study, no doubt, would require some patience, and the leisure which few in these days appear to possess, but it certainly would repay the trouble bestowed upon it' (Fox 1895, 459). A few years later Fox wrote a short piece examining the 'pseudo-samian' from the site (Fox 1898), and then an extended essay about the material in an annual report (St John Hope and Fox 1900, 101–8). Thomas May finally came to the rescue, bringing to the task extensive knowledge, having written on the ceramics from a range of sites in the North and having developed a specialism in potter's marks on terra sigillata. His work was perhaps as detailed as it could be given there was little contextual information (May 1916b; a).

Contextualisation, however, was fundamental within Cotton's report as she tried to date the defences. Specific groups were well described along with reports on the samian by Davies Pryce and Stanfield (Cotton 1947, 149–67). Boon analysed his own material and integrated lists of the ceramics found into the structural reports of his trenches, before then describing stratigraphically important groups (Boon 1969, 52–80). Frere's write-up of Richmond's excavation of the 'church' was aided by a samian list by Hartley and analysis of the coarseware by Wilson (Frere 1976, 299–302).

Broad use was made of the collection. The 'Belgic' material was used in arguments over the invasion (or otherwise) of the Belgae by Hawkes and Dunning (1930, 331), while the terra sigillata was entered into national surveys by Stanfield (1929, 134 and 144; 1936, 114); and Hartley used the stamps from Silchester as a control for a 'normal' background against which to judge the pattern from sites in Scotland (Hartley 1972, 26). Since then the extant material from all of these early excavations by the Antiquaries, Cotton, Boon and Richmond in Reading Museum has been re-catalogued by Bird and Dickinson (the samian) and Timby (the coarsewares) as part of a re-documentation programme.

In the modern excavations led by Fulford, and some of the evaluations, analysis has been dominated by Timby and Bird, with additional input from Tyers and Dickinson (Fulford 1984, 122–95; 1989c, 80–123; Fulford *et al.* 1997, 118–29, 147–53, 162–6; Fulford and Timby 2000, 180–312; Fulford *et al.* 2006, 86–115; Fulford and Clarke 2011a, 143–203, 399–422).

Timby, who has done most of the recent site work and also studied other key sites in central southern England over the years, has written an excellent contextualising article (Timby 2012). Pitts has also done some interesting work using Timby's and others' data to compare the assemblages in various British *oppida* and early Roman towns (Pitts 2010).

Thematic articles drawing specifically upon the Silchester material have included work on residue analysis (Marshall *et al.* 2008) and ritual holes in pots (Fulford and Timby 2001). While placing the material into its national context has included a study of graffiti on pots (Raybould 1999); discussion of the earliest identified Central Gaulish imports (Rigby and Freestone 1986); the distribution of Silchester ware (Charles 1979); Black-burnished ware (Allen and Fulford 1996, 244, 279); Rhenish products (Ward Perkins 1940, 71); and inkwells (Willis 2005). Experiments in laser scanning the decorated samian can be seen in O'Riordan (2008). Finally, a circular pastry mould was found, made from clay, bearing the impression showing various people making a sacrifice standing around a tripod; while rare in Britain, such moulds are better known in the Balkans. Boon thought these might represent Septimius Severus and Caracalla, perhaps marking their victory in the British War of Severus, or the elevation of Geta to the rank of Augustus in A.D. 209 (Boon 1958b; Liversidge 1968, 185; Marsden 1997, 3).

## BRIQUETAGE

The Late Iron Age phases under the Basilica produced a large assemblage of briquetage for

which Timby found parallels in Kent more than on the South Coast, though heavy mineral analysis by Williams, only comparing the Silchester samples with Kentish specimens, was more ambiguous about the attribution (Williams 1993a; Fulford and Timby 2000, 287–91). Little has been reported from Insula IX so far in the mid- to late Roman reports.

## BRONZE AND STONE STATUARY

### FROM THE FORUM

Super-human-scale fragments belonging to three statues have been recovered from the Forum. First, in 1890, within the northern apse of the Basilica came a lappet from the mailed skirt of a bronze statue in armour, perhaps over twice normal size (Fox and St John Hope 1893a, 557–8; Boon 1974, 118; Cunliffe and Fulford 1982, no. 153). Richmond considered it pre-Hadrianic in style and believed it must be an Imperial statue (Richmond 1944), or perhaps Jupiter in the guise of an emperor. Durham wondered whether the bronze Silchester Eagle was once part of such a statue, but it is much smaller in scale (Toynbee 1964, 52; Durham 2013, 101). Twenty-five further fragments of bronze statuary came from Fulford's excavation, written up by Boon (Fulford and Timby 2000, 348–57, 587–8).

Secondly, Joyce discovered, close to the steps leading into the Curia in the Basilica, a one-and-a-half-normal-size female stone head (Fox and St John Hope 1893a, 558–9). This was subsequently identified by Boon as a Tutela of the town; though made of Portland stone, he considered the craftsmanship to have a strong Mediterranean style (Boon 1973; 1974, 118–19). It was thought to be late second or early third century by Cunliffe and Fulford (1982, no. 97). In Fulford's excavations a fragment of a stone cornucopia was also found in the Basilica, a characteristic sometimes associated with Tyche, though it was not especially large (Boon in Fulford and Timby 2000, 391–2).

Thirdly, a sandstone sandaled foot on a super-human scale was discovered (referenced to an addendum to Joyce's journal in 1882; Boon 1974, 119; Cunliffe and Fulford 1982, no. 147).

Other fragments of sculpture from the Forum included six pieces in chalk, white marble and oolitic limestone suggesting a number of statues (Cunliffe and Fulford 1982, nos 148–52). Much may have been lost in the eighteenth century. Gough, in his translation of and additions to Camden's *Britannia*, relayed a conversation with Stair about his discoveries, saying that he had 'found twelve or more pedestals, and fragments of stone statues, too imperfect to bring away: he shewed me the small alabaster head of a man with curled hair, about three inches high, and said that many copper penates had been found' (Gough's addition to Camden, relayed in Brayley and Britton 1805, 249).

### FROM ELSEWHERE

A stone head of Serapis was found in a secondary context (Col. Karlake's back garden, where it had been used as a shot-put and a cheese-press weight). Similarly made of Portland stone in a strong classical style, it may have come from one of the temples, or from the Forum-Basilica complex (St John Hope and Fox 1900, 110–11; Toynbee 1964, 93–5; Boon 1973; 1974, 167; Cunliffe and Fulford 1982, no. 112).

From the temple in Insula XXV came six fragments from two or three statues, one twice-life-size, another normal size. Associated inscriptions suggested there might have been statues of Victory, Mars and Pax, with that of Victory being the larger of the three (*RIB* 69–71). Greaves hinted at Mars being depicted, and the cornucopia could be associated with Mars or Pax (St John Hope 1908, 208; Boon 1974, 154; Cunliffe and Fulford 1982, no. 146; Frere and Fulford 2002).

Other carvings and statues reported in *CSIR* include a carved taper-holder depicting Mercury(?) from Insula V and an unfinished Lion in Greensand (St John Hope 1906, 163; Cunliffe and Fulford 1982, nos 109 and 163). The latter suggested stone carving was taking place on site.

## FIGURINES

The most iconic figurine from Silchester is the Eagle found by Joyce in the Basilica (Joyce 1881b, 363–4; Boon 1974, 71, 119–20); its parallels have been comprehensively reviewed by Durham (2012; 2013; see also Henig 2012), and its context now suggests it is a first-century piece buried in A.D. 125–50 during the construction of the masonry Basilica.

A large number, for Britain, of bronze figurines has been found at Silchester. Summaries of these can be found in the secondary literature in various corpora. Pitts collated 26 alongside others from southern Britain (Pitts 1979); Durham's corpus has 18 bronze figurines (Durham 2011); 12 appear in Green's corpus of religious material (Green 1976); and 11 are referenced in Toynbee's classic survey (Toynbee 1964).

Some material which does not appear in any of these includes: a 0.12 m high bronze of a male deity with 12 rays of sun coming from his head, holding three ears of corn in his right hand, and a crescent moon on a handle in his left (Peake 1917); and two earlier discoveries of eagles (not the famous Silchester Eagle discovered by Joyce), one a small flat bronze figure of an eagle (Anon. 1849b, 295; another eagle was shown to a different Society which may be the same one: Anon. 1849a, 383), the other a much earlier discovery brought up by the plough: 'June 5, 1788. The bishop of Carlisle exhibited a curious Roman eagle in steel, supposed to have been a military ensign, and found latterly at Silchester, by the Rev. Mr. Powis, rector of that place' (Brayley and Britton 1805, 249; see also Anon. 1789; King 1801, 156).

While many of the objects have been analysed from museum collections divorced from their archaeological context, here are the primary sources for the few that we do have additional information for: a bronze Venus found *c.* 1826 (Fox 1897, 74; fig. 4; St John Hope and Fox 1896, 239); a bronze Lar Compitalis, found *c.* 1827 holding a disc (Ditchfield 1897); a bronze



FIG. 7.1. Two early recovered bronze statuettes from Silchester. Left: a flute girl from House XXIII.2 (Fox, St John Hope and Reid 1901, 249–50). Right: an earlier Lar Compitalis discovered *c.* 1827 (St John Hope and Fox 1896, 239).

eagle, cockerel and dog (Joyce 1881b, 354); a bronze Hercules (Fox 1897); a bronze flute girl and Venus Anadyomene (Fox and St John Hope 1901, 249–50); a pipeclay Venus (St John Hope 1903a, 423); a bronze Bacchus (Fox and St John Hope 1893a, 561); a white pipeclay Venus (Cotton 1947, 147); a pipeclay lion and Venus (Fulford and Timby 2000, 34); and a pipeclay Venus from Insula IX (Crummy 2012, 115–17).

### INSCRIPTIONS

The inscriptions from the site are well published in *RIB* I (Collingwood and Wright 1965, nos 67–87). No additional entries appear in the later *RIB* III or volumes of *Britannia* up to 2013. However, a new Purbeck marble fragment has come from Fulford's excavations in Insula III with the letters '...]BA[...', plausibly Atre]ba[tum (Fulford *et al.* 2014, 9).

Over half of the inscriptions came from the Forum. The floors of the tribunals within the apses were raised and were faced with thin slabs of Purbeck marble, held in position by small iron clamps. In all probability these had inscriptions on them. The findspot distribution of those known around the building was plotted by Isserlin (1998), even if some of the locations are not quite as precisely known as the illustration suggests; Revell (2007) has discussed the inscriptions in the broader context of display within British fora; and a short article by Tracey (2004) examines the letter size and material of the inscriptions.

Several other inscriptions have drawn specific comment or discussion worth noting:

**RIB 67**, the famous Hercules of the Segontiaci inscription in 'black marble', now lost, was dug up by Stair at the north end of the Forum in 1744. Occasionally some sources get its location wrong and position it at the southern end, but the most detailed map of Stair's excavations showed it as coming from somewhere in the mid-northern range of the Forum (FIG. 3.3). Boon took this to be the apsidal room, which would be a fitting location (Taylor 1759; Boon 1974, 110). Ward's more sketchy map, however, placed it at the southern end of the Basilica, and various sources followed suit (Ward 1744–5, 1748; Wright and Fairholt 1845, 153). It is worth noting that within two feet of the spot indicated on Taylor's plan, a large bronze moulding was also discovered, which Boon later reinterpreted as a massive, 0.84 m-square, bronze-mounted statue base. This may have been associated with the inscription and presumed, now-missing statue of Hercules associated with *RIB* 67 which Stair said was found within two feet of the statue base (Ward 1748, 608; Chandler 1821, 16; Boon 1980). Black 'marble' (or another form of polished stone) is exceptionally rare as a medium for inscriptions in Britain, although some inscriptions are known on black limestone from the Low Countries, such as the altars from Colijnsplaat (NL) where a number of *negotiatores* made their last stop and dedications before sailing across to Britain (Stuart and Bogaers 2001). The Silchester inscription has not been traced since, together with the bronze frame found nearby, it was in the possession of the collector and British Museum trustee Matthew Duane, who died in 1785 according to Gough's edition of Camden (1789, 141); so a petrological analysis of it is not possible.

Because this was conveniently found in 1744 when there was an active debate over whether the town was called *Caer Segont* or *Calleva* (see p. 6), and also this was only three years before the first mention in a letter to Stukeley of the 'discovery' of the forged chronicle of Richard of Cirencester, which similarly created new road itineraries to consolidate the *Caer Segont* identification of the town, it is worth considering if the inscription itself was also a forgery. The chronicle certainly was years in the making, being the result of detailed research by Charles Bertram, and it probably existed by the time he started his correspondence with Stukeley in 1746. Alas we know little detail of Bertram's early life, though in the years he was conceiving the forgery he was in Copenhagen, having arrived there with his silk-dyer father as part of the retinue of George II's daughter come to marry Crown Prince Frederick of Denmark. It is difficult to see a direct link with Silchester, which might have been possible had the chronicle been the work of someone based in, say, Oxford. Also, if the inscription were a forgery, white marble or limestone would have been the more obvious material than wholly exceptional 'black marble'. While its material is unusual, and its finding was exceptionally fortuitous for those with a set toponymic agenda, there is no specific reason to doubt its authenticity.

*RIB 69–71* were dedicatory inscriptions mentioning the Guild of Peregrini from the temple to Victory, Mars and Pax in Insula XXXV; the guild has been discussed, together with associated literature, by Frere and Fulford (2002).

*RIB 87* was a memorial to Flavia Victorina; it was the earliest find recorded around 1577, being noted by Camden and Horsley (Camden 1610, 272; Horsley 1732, 332 pl. 75). The tombstone is discussed in its national context in Adams and Tobler (2007, 106).

## BUILDING MATERIALS

### STONE

The Antiquaries' excavations observed that the construction of the buildings was mainly flint rubble with brick quoins. Occasionally they mentioned the use of 'ironstone' and particularly Purbeck marble in carved stonework; otherwise they only tended to focus on lithologies and sources when it came to examining mosaics or describing marble fragments, assisted by the likes of Woodward, the Keeper of Geology at the British Museum (e.g. Fox and St John Hope 1890, 737–8, 746, 750).

As conservation work on the Town Wall began, analysis of its stonework also took place. Melville from the Geological Survey analysed Cotton's samples, identifying the bonding slabs as Oolite or Forest marble from anywhere along the Jurassic Zone, and the 'ironstone' from the gateway as from the local Bagshot Beds (Cotton 1947, 143). Collis' later work provided no further analyses of the Town Wall stone origins.

The carved stone from the Amphitheatre was looked at by Fulford (1989c, 136), while the rock-types in the arena walls were analysed by Sellwood (Fulford 1989c, 139–42), following up his work on the Town Wall (Sellwood in Fulford 1984, 224–30). Wooders analysed the lithologies of all the material from the Basilica, sourcing the majority, and particularly noting the increased emphasis on exotic and more distant stone when the Basilica was rebuilt in stone in Period 6 (though more limited than at Fishbourne or London). He also provided detailed descriptions of the carved stone, types of flooring and wall veneers (Fulford and Timby 2000, 83–100). The lithologies were similarly reviewed from Insula IX by Hayward and Allen (Fulford and Clarke 2011a, 204–19); not surprisingly they showed a narrower range of material than from the Basilica.

Beyond the excavation reports, other work on the geology of the site has included analysis of the Town Walls by Allen (2012b; 2013a; 2013b).

Putting the material into its national context, Hayward undertook a study focusing on the stone used for first-century funerary architecture in Southern Britain (Hayward 2009, 149–52, 188); while Blagg's analyses have been the foremost of those examining the Corinthian capitals and other decorative stonework from Silchester (Blagg 1977; 2002; Cunliffe and Fulford 1982, no. 193). Many of the original pen and ink with colourwash drawings by Fox of the architectural fragments from the Antiquaries' excavations are in the Society of Antiquaries' archives.

Williams' survey of South-East England sets the overall picture for the range of building materials used on Roman sites, frequently mentioning Silchester (Williams 1971).

### TILES

Green reported on the tiles from the defences, showing that those from the South-East Gate and South Gate were of two very different sizes, which was interpreted as indicating they came from different sources or batches (Fulford 1984, 196–9). Brick and tile from the Amphitheatre largely appeared to be re-used debris to level the arena, while a large dump of mixed tiles and stone slates was found outside the North Gate, both described by Fulford and Timby (Fulford 1989c, 136; Fulford *et al.* 1997, 127–8). The sample from the Basilica was large enough to include specimens with a wide range of tally marks and other features. It was noticeable here that tiles appeared on the site even from Period 1 in the late first century B.C., and from Period 2 their numbers are sufficient to mean that it is hard to explain them away as being intrusive. Fulford

added to Timby's analysis with a description of the Neronian circular stamped tiles from the site, three from the Basilica and two found elsewhere; and Cram contributed a discussion of the foot-impressed tiles, building upon earlier work with Fulford (Fulford and Timby 2000, 116–26; Cram and Fulford 1979).

Within Insula IX the later Roman pit deposits were analysed, looking at the proportions of *imbrices*, *tegulae* and bricks, though much of the material was thought to be residual rather than from contemporary buildings. It was also observed that there were fewer stamps on the *tegulae* than from the Basilica site, but this could have been a function of sample size (Davies and Eckardt in Fulford *et al.* 2006, 135–8). Warry provided an extensive report of the mid-Roman material with much more comparative data, drawn from his thesis, and elaborated upon in other articles. Again it was difficult to make specific correlations between tile scatters and specific buildings. His work shows the potential of CBM from sites. In addition, Timby provided a note on ceramic ventilators or finials (Fulford and Clarke 2011a, 220–31; Warry 2006; 2010; 2012).

In addition to Warry's work, other national surveys which make use of Silchester material include a corpus of relief-patterned tiles (Betts *et al.* 1997), though few come from this site.

## SLATES

Hexagonal roofing slates were common at Silchester, in Stonesfield Slate, Pennant Sandstone and Old Red Sandstone, though Alan identified a dump of half a tonne of Purbeck limestone tiles mixed in with ceramic tiles near the North Gate (Fulford *et al.* 1997). Wooders found them relatively under-represented from the Basilica (Fulford and Timby 2000, 99–100). In Insula IX, from the late Roman layers, there was a scatter of slate fragments across the site, but not in any particular concentrations or in the final potential demolition phases, suggesting much of it was residual and not from late Roman roofing (Shaffrey in Fulford *et al.* 2006, 133–4, 337–8). For the mid-Roman deposits a detailed lithology of the material present was provided by Hayward and Allen (Fulford and Clarke 2011a, 204–19); they showed a narrow range of material from the Basilica. Again there were far fewer slates than ceramic tiles, with a slight concentration in the south-east of the trench suggesting they related to a building there; the slates were mainly calcareous sandstones from Pusey Flags and Stonesfield in south and west Oxfordshire respectively. The early material from the excavations awaits publication; however analysis of all the building stone throughout the phases of the building of the main diagonal House IX.I has been carried out (Hayward in Clarke *et al.* 2007).

Like ceramic tiles, some slates had markings on them; one had a rough sketch of a *bos longifrons* (Le Schonix 1894).

## MOSAICS

References to descriptions and interpretations of mosaics have been included in the 'Mapping the Interior' section. Fox provided excellent watercolours of the Antiquaries' finds and the recent corpus by Neal and Cosh (Neal and Cosh 2009) comprehensively summates existing knowledge, while several other works view the Silchester mosaics in their regional context (Johnston 1977; Johnson 1993; Neal 1981). Specific work on the lithology of tesserae includes Allen and Fulford (Allen and Fulford 2004; Fulford and Clarke 2011a, 211–14; Allen 2013b).

## WALL-PLASTER

Throughout the Antiquaries' excavations wall-plaster fragments were occasionally found and where evident, schema were commented upon (St John Hope and Fox 1896, 248–52; 1899a; Fox *et al.* 1901, 241; St John Hope 1902, 19; 1906, 154), as was possible evidence for plastered ceilings (Fox and St John Hope 1894, 217; St John Hope 1907a, 442–3). The remains from within House XIV.1 received particular attention from Ling (1984), and fragments depicting Cupid have been mentioned in the context of national parallels by Smith (1977, 113, no. 24).

Mary Bird analysed the material from the Basilica, suggesting a largely red and white schema

in the main hall with a richly decorated northern apse where the over-life-sized bronze statue of the emperor probably once stood (Fulford and Timby 2000, 100–15).

## OTHER WORKED STONE

### JET AND SHALE

Objects of jet and shale from Silchester pre-dating the Basilica excavation were examined by Lawson (1972; 1976); alas little material had contextual detail. Since this survey additional objects include a shale bracelet from the South Gate (Fulford 1984, 116), and a slightly wider range of material from the Basilica (Boon in Fulford and Timby 2000, 379–81) and Insula IX (Crummy in Fulford *et al.* 2006, 121–32; Fulford and Clarke 2011a, 365–90).

The assemblage predominantly includes beads and armlets; there are also three waste cores from the production of shale armlets, which made Boon wonder if shale objects were being manufactured on site. Lawson doubted this as there was no other evidence; however, a shale fragment which could have been wall veneer or possibly an off-cut from shale-working did come from the recent Insula IX excavations (Boon 1974, 284; Lawson 1976, 256; Fulford *et al.* 2006, 127). The extensive collection of dishes, platters and trays is noticeable both from the Antiquaries' excavations and the Basilica. Other material includes table tops and legs, couch legs (Liversidge 1968, 154), and spinning equipment.

The burnt shale from Early Roman Silchester used in mosaics has been examined in the context of the broader Purbeck industries by Allen *et al.* (2007). A recent thesis has examined the material nationally (Denford 2000; 1995).

### AMBER

The limited Silchester material is brought together in a Northern European corpus by Morris (2010, 173).

### QUERNSTONES, MILLSTONES AND WHETSTONES

From the earlier excavations Shaffrey has reviewed 79 quernstones in Reading Museum, though it is suspected many were never retained as some described in publications cannot be matched with specimens (Shaffrey 2003). Fulford, Bailey, Peacock and Sellwood identified the finds from the defences (Fulford 1984, 118–20) and the Amphitheatre (Fulford 1989c, 133–6); Williams identified five fragments from the UoRSP fieldwalking around the town (Ford and Hopkins 2011, 26–8); Wooders identified those from the Basilica (Fulford and Timby 2000, 337–57); and Shaffrey and Hayward inspected those from Insula IX (Fulford *et al.* 2006, 133–4; Fulford and Clarke 2011a, 209–10, 215–19).

From her overall survey Shaffrey found more variety at Silchester than many sites, and identified a chronological shift from the Late Iron Age to the mid-Roman period from Lodsworth (57 km to the south) to Old Red Sandstone (120 km to the west in south Wales). Lodsworth production was surveyed by Peacock (1987).

Relating to mill and quernstones, Manning reinterpreted as a pivot in an animal-driven mill a piece of iron from the 1890 iron hoard (Evans 1894; Manning 1964); as a result House XVIII.3 was interpreted as a possible mill-house.

References to whetstones can often be found in the quernstone reports cited above, but a full review with detailed lithology of 87 specimens from the site can be found in Allen (2014).

### INTAGLIOS, GEMS AND CAMEOS

Boon did a lot of early work on the Silchester gem collection, but left much of it in manuscript form unpublished, although he drew from this knowledge in his syntheses (Boon 1974, 68, 142, 162–3, 171–2, 309, 336; Henig 1970, 259). Since then Henig has dominated studies. A description of 36

gemstones can be found in his corpus (Henig 1974) and other works (Henig 1972, 211; 1995; Greenaway and Henig 1975). Original reports referencing the early finds include Anon. 1787; Fairholt 1871, 84; Watkin 1876, 263; Fox 1895, 468–9; St John Hope and Fox 1900, 111; Fox and St John Hope 1901, 250; St John Hope 1909a, 485. Subsequently more have been found including eight from Insula IX by the end of the 2010 season (Crummy 2012, 117).

## ALABASTER

A portion of an oil bottle or *alabastron*, possibly of Egyptian alabaster, was found close to the temple in Insula VII (Fox and St John Hope 1894, 209). These are very unusual, though parallels from Caerwent and Trier were known to Boon (1957, 123; 1974, 158; 1981b). Given the lack of finds from bathhouses, Boon suspected them of being associated with rituals in the temple (Boon 1981b).

## GLASS

Glass often called for no special remarks in Joyce's or the Antiquaries' reports, but occasionally more detail was recorded if something special was found, such as the following: a pillared vessel of clear glass, a square bottle and a bowl of marbled glass (sapphire blue colour streaked with white and with yellow spots) (St John Hope and Fox 1896, 231–2, 252); more variegated glass, beads and 'a square panel of rare mosaic glass of a deep blue with pink flowers and yellow leaves' (St John Hope 1897a, 430); millefiori glass and a pale greenish-blue globular vase (St John Hope and Fox 1900, 108, 111, fig. 7); more millefiori glass (Fox and St John Hope 1901, 250); engraved glass with a fish and a palm branch on it (St John Hope 1902, 32); more sapphire blue glass and a nearly whole flanged bowl of clear glass (St John Hope 1906, 163); and a twisted glass rod from a pit outside the North Gate (St John Hope and Stephenson 1910, 326).

Window glass was reported from only Insulae I, II, III and the Public Baths (Fox and St John Hope 1890, 740; Fox 1892, 284; St John Hope and Fox 1896; St John Hope and Fox 1905a, 361). However the general lack of reporting of window glass after the first few seasons probably suggests its subsequent lack of novelty rather than marking a real distribution as it has been found in all the subsequent excavations in the interior.

Boon suggested that he was writing an account of all the glass from the site from 1864 to the late 1960s for Reading Museum; but it was not published, although it may still exist in an archive (Boon 1969, 34 n. 10).

Subsequently excavation glass has been written up as follows: the Basilica by Allen with Price (Fulford and Timby 2000, 312–21); the Amphitheatre by Allen and Timby (Fulford 1989c, 125–6); the defences by Price (Fulford 1984, 116–18); and Insula IX by Allen (Fulford *et al.* 2006, 116–19; Fulford and Clarke 2011a, 133–42). Particular work on glass beads includes that by Fulford (1989c, 126) from the Amphitheatre and Allen and Boon from the Basilica (Fulford and Timby 2000, 321–2). Of these assemblages, that from the Basilica had a surprisingly high proportion of unguent bottles from the timber basilica Period 5. From Insula IX the work so far has shown a steady decrease in the quantity of glass through from Period 3 to 4 to the Later Roman period.

## METALWORK

### BROOCHES

Mackreth's brooch corpus contained 250 brooches, including those in Reading Museum from the Antiquaries' excavations, and those of Cotton's, Boon's, Collis' and the Basilica excavations, and a few other random finds (Mackreth 2011) ( original reports: Cotton 1947, 143–5; Boon 1969, 47–9; Corney in Fulford 1989c, 127; and Fulford and Timby 2000, 322–38). Additional fibulae have been found in the Insula IX excavations. Although Crummy has been publishing the material by group rather than artefact type, the appendices provide outline details of all (Fulford *et al.* 2006, 121–32; Fulford and Clarke 2011a, 100–32).

Crummy compared the brooch assemblages from Insula IX and those in Reading Museum with Plouviez's analysis of London, showing that Silchester tended to have more Nauheim derivative, Langton Down and Colchester types than the capital, betraying its Iron Age origins. The Nauheim concentration is not uncommon in central southern England, notably from Winchester and Fishbourne (Crummy 2012). This gives a regionally distinctive flavour to the brooch assemblages, which may relate to long-term contacts or networks. Some comparative data for different *oppida* can be found in Pitts (2010).

The Silchester collection was also drawn on for the analyses of penannular brooches by Fowler (1963) and enamelled brooches by Bateson (1981, 37, 43); in addition, a number of articles have discussed an embossed 'Celtic' triskele design on one particular disc brooch (Boon 1959, 85, n. 16; Megaw and Merrifield 1969; Laing 2005, 147–8).

## COPPER-ALLOY OBJECTS

Since Cotton, all the major excavations have had comprehensive small finds reports including copper-alloy object reports: Cotton (1947, 145–7); Boon (1969, 50); the defences by Corney (Fulford 1984, 111–12); the Amphitheatre by Fulford (1989c, 128); the Basilica by Boon (Fulford and Timby 2000, 338–57); Insula IX, partly reported so far, by Crummy (Fulford *et al.* 2006, 121–32; Fulford and Clarke 2011a, 100–32). These originals are best scanned for specific object searches. However, various classes of bronze object have been picked up in the broader literature or where there are some specific pre-Cotton references to them. They are referred to here:

**Surgical instruments:** condée-type forceps were identified (Liversidge 1968, 341–2; Boon 1974, 137, fig. 16.7; Jackson and Leahy 1990).

**Ex-voto miniatures:** a diminutive bronze axe was dug up in 1821 at the East Gate, at which point it was reported seven others had also been in the collection of John Stair, by that time held by his daughter-in-law (Bartlett 1854, 57). Close by, the temples in Insula XXX produced two more (St John Hope 1903a, 422; Boon 1974, 156, 332). From Insula IX has also come an assemblage Crummy would associate with a possible nearby temple, including a miniature axe along with a halved silver wheel amulet and miniature brooches (Crummy 2012, 117–19). Kiernan provides a full corpus of the 12 miniature axes known amongst the Silchester finds; various studies on these include: Green 1976, 195–6; Fauduet 1983, fig. 3b; Robinson 1995; Kiernan 2009, 146, 175, 229–30.

**Amulets:** these include a find from 1896 of a bull biting on a branch which terminates in a phallus on one side, and a clenched fist making the *fica* gesture on the other (St John Hope 1897a, 429; Boon 1974, 170; Read *et al.* 1986).

**Knives, razors and wax spatulae:** one folding-knife with a little dog on it from earlier excavations was published by Boon (1991, fig. 1g), while another with a pair of copulating dogs came from Insula IX (Fulford and Clarke 2011a, 110–13; Eckardt and Crummy 2002). References to razors include the following: Boon 1991, 27, fig. 3g; 1974, 133, fig. 16.6; Fulford 1985d; however some of these have been reinterpreted as spatulae for smoothing over pages on wax tablets (Crummy 2002; 2003).

**Toilet sets and instruments:** the Silchester material is set in a national context in work by Eckardt and Crummy: Eckardt and Crummy 2004 (toilet instruments); Crummy 2001 (nail-cleaners); Crummy 2012, 113–14 (toilet instruments from Insula IX); and Eckardt and Crummy 2008, 167–76 (a broad survey of equipment in Britain with toilet sets and much more).

**Seal-boxes:** the Antiquaries' excavation reports only mentioned one seal-box (St John Hope 1909a, 480), as do the national surveys of seal-boxes by Tongue (2004), Andrews (2012, 144) and Bateson (1981, 48, 58). An additional find from Insula IX appears in O'Riordan (2008).

**Steelyards and steelyard weights:** as well as those from the Antiquaries' excavations (see finds from Insulae XVII or XVIII and Insulae XIX or XX above), another bust-weight from the collection of the tenant farmer Mr Barton in the mid-nineteenth century is illustrated (Anon. 1846a, 147).

**Late Roman spurs:** a find from Silchester written up by Boon (Rutland and Greenaway

1969, 38–9) was included in a survey by Shortt (1959) which has been updated by Worrell (2004) showing a central-southern British cluster of these.

**Lighting equipment:** a survey of 65 lamps putting them into a national context can be found in Eckardt (2002, 416–18); a particular candlestick has also received additional attention (Eckardt 2000; O’Riordan 2008).

**Single object discussions with parallels:** a silhouette horse from the Basilica area (Jope 2000, 144, 268; Toynbee 1964, 125); a jug handle (Crummy 2006); tubular ferrules (Williams 2005a); a bronze appliqué of a woman, possibly from a jewel-box (Read and Henig 1985); two square plaques of embossed thin copper alloy (Jope 2000, 284); a panel from a rare enamelled hexagonal bronze vessel (Henry 1933, 144; Jope 1955, 43, fig. 1.6; 2000, 304; Cool 1997; Eckardt 2014, 198); a perfume box of unknown date (Bish-Webb 1859); and styli from Insula IX (Crummy 2012, 111).

Silchester material has also been worked into national corpora in the following categories: strap-ends (Simpson 1976, nos 37, 49–52); various objects relating to Christianity (Mawer 1995); mirrors (Lloyd-Morgan 1977, 249; though add the Latchmere Green find in Fulford and Creighton 1998, and the Mortimer Hill Farm find in Taylor 2011).

### MILITARY METALWORK

Boon compiled a number of lists of military-related objects from the site (Boon 1969, 44–5 and fig. 5; 2000). He elaborated further on the brass rosette and hinges from a first-century segmental cuirass from Insula XXIII Pit X (Boon 1974, 67). A reassessment of these and an analysis of the Insula IX finds has been undertaken by Rimmell (2013).

### JEWELLERY

Jewellery from Silchester includes: a gold filigree ring set with a garnet (Liversidge 1968, 144); an over-large inscribed gold ring found in 1785 (Anon. 1787), which has been speculated to be the ring lost and mentioned in a curse tablet found in Lydney (Haverfield 1920, 283); and four earrings (Allason-Jones 1989, nos 48–60, 477; Liversidge 1968, 140; Boon 1957, 112; Johns 1996, 130). For inscriptions on rings, see *RIB* II 2422.14, 25 and 42 (Raybould 1999, 252, 354).

### PEWTER

Many fragments of vessels came from the Antiquaries’ excavations. The following were reported at the time: a vessel with a hole in the bottom; two pewter cups near the ‘church’; a jug from the pit with the ogham stone; a vase handle terminating in a lion’s head; a jug from Insula XVIII; another jug with ornamental handle from Pit XXVII.VI; and a dish and a bucket from Pit XXII.VIII (Fox and St John Hope 1890, 743; 1893a, 564; 1894, 238; Fox 1895, 441, 471; St John Hope and Fox 1899a, 241; St John Hope 1902, 32). The later excavations have recovered a vessel base from Insula IX (Fulford *et al.* 2006, 127).

Ten fragments from six moulds were discovered in 1892 in the Forum, but not reported that year. The full publication of them was by Blagg and Read (1977), but there are other references to them, such as original archive drawings (Fox ND, Box 4, sheet 64), early parallels recognised in material from Bath (Bush 1909, 38) and Langton (Goodall 1972), and Boon’s work (Boon 1974, 274, fig. 40). A new mould fragment in Bath stone was found in the Basilica excavations (Wooders in Fulford and Timby 2000, 391).

While pewter vessels came from the town, none of them related to these moulds, and the nature of the excavation means there is no dating evidence associated with them. Beagrie and Lee discussed the material within the context of the pewter industry in Britain as a whole (Beagrie 1989, 187; Lee 2009). Fulford mentioned the piercing of pewter vessels in a discussion of ritual (Fulford 2001, 201–2), and Raybould noted the marking of ownership on a pewter vessel in a broader discussion on graffiti (Raybould 1999, 351; *RIB* II 2417.31).

## LEAD

Lead sheet was noted by the Antiquaries. A contemporary account observed that ‘small pieces of lead sheet pierced with nail holes have recently been found at Silchester’ (Cox 1895, 36), suggesting lead roofing in places; however the final reports never mentioned it, and this could have been what the excavators regarded as sheeting for cisterns (Fox and St John Hope 1894, 223).

Joyce and the Antiquaries, however, certainly collected lead finds. Those from the Forum, near the church, received special mention as they included a Chi-Rho monogram, inscribed [P]MC: *P(rovincia) M(axima) C(aesariensis)* (Joyce 1881b, 363; Boon 1974, 184, fig. 24.7; Frere *et al.* 1989, 345); for a wider contextual discussion see Pearce (2008, 201).

Lead appears in later reports more systematically. Boon reported on the material from the Basilica (Fulford and Timby 2000, 357–9) and finds from Insula IX are gradually being published including a lead weight and a re-frozen lead puddle (Fulford *et al.* 2006, 127).

A lead curse tablet from the Wellington Collection found before 1901, curiously labelled ‘Silchester lead tablet no. 16 ...’ as if there are or were at least 15 more originally, was published recently (Chapman *et al.* 2009, 323–4).

## IRON

It was the two large iron-tool hoards of 1890 and 1900 that drew ironwork to the attention of the Antiquaries (Fox and St John Hope 1890, 742; Evans 1894; May 1916b, 129; Manning 1972, 236; Hingley 2006, 250; Jope 2000, 216). Some of the individual finds within these led to later debate. There was discussion on whether some objects were tent-pegs or portable anvils for scythe-sharpening or other types of metalwork (Jones 1889–91; Allen 1894), and these might be the finds that were reinterpreted as shoe-making anvils by Liversidge, though she provided no reference to check (Liversidge 1968, 179). Both hoards contained ploughs, and the coulter was brought into discussions about Roman ability to cultivate heavier soils (Hawkes 1935; Payne 1947, 95). Adzes and their possible use in stone masonry have also been examined (Evans 1894, 148, fig. 13; Blagg 1976, 157–9), while other agricultural implements were discussed by Rees (1979). Finally the iron handcuffs or slave-shackles from the site were investigated as part of a national survey by Thompson (1993, 107–10, 145; St John Hope and Fox 1899a, 241).

Subsequently, finds from the modern excavations have been analysed by Cotton (Cotton 1947, 147), Boon (Boon 1969, 50–1), the Defences by Corney (Fulford 1984, 112–15), the Basilica and Amphitheatre by Richards (Fulford 1989c, 129–31; Fulford and Timby 2000, 360–79), and Insula IX by Crummy (Fulford *et al.* 2006, 121–32).

Particular ironwork which has been commented upon in individual articles includes a linch pin found below the gravel road in the 1955 excavations (Boon 1956), and unsurprisingly a discussion suggesting that none of the horse-shoes recovered from the site were actually Roman (Ward 1937).

## METAL-WORKING RESIDUES AND SLAG

The Antiquaries found evidence for a very specific residue, including lead, which could have been from smelting together lead and copper ores for the extraction of copper (Gowland 1900), but it could also have been from ‘melting together argentiferous lead and argentiferous copper with a view to desilverise the copper. Cakes or discs of such an alloy would be placed on a sloping hearth and heated to a temperature well above the melting point of lead with a view to sweat out the lead from the copper, which could be left behind as a sponge. The lead would carry away the silver it originally contains, as well as any silver present in the copper. Elaborate accounts of this process were published in the sixteenth century, but it is interesting to find indications of its use in later Roman times ...’ (Cox 1895, 37). As a technology for removing trace silver from useless third-century billon coin, this is very interesting to observe. Gowland and Professor W. Roberts-Austin from the Royal College of Mines and the Mint favoured smelting, while the Revd J. Charles Fox favoured silver extraction from copper alloys.

Cotton found a crucible fragment from Site C2, but there was no reported examination of it (Cotton 1947, 160). Boon's excavations came across a range of metallurgical debris from Trench B (inside the town across the Inner Earthwork Ditch), and a smaller amount in Trench A. There were, however, no specific reports analysing the material (Boon 1969, 6, 51–2).

Twentieth-century analysis revived when metal-working residues and slags from the South Gate, the south-west angle of the defences and Manor Farm were examined by Bayley (Fulford 1984, 120–1). Slag from the Amphitheatre was examined by Richards (Fulford 1989c, 131) and metallurgical debris from the Basilica by Northover and Palk with Henderson and Meeks (Fulford and Timby 2000, 395–423), with some of the crucibles analysed by Williams (1993b).

The small finds from Insula IX were indicative of metal-working, with evidence for casting copper alloy from a strap-hinge (as used on first-century gaming-boards and box lids) with flashings remaining, and two miscastings: a nail-cleaner and a one-piece brooch (Crummy 2012, 112). Beyond that, a very detailed picture is emerging of metal- and particularly iron-working within the insula from the work of Tootel and Allen. As well as the usual crucible and slag analysis, furnace bottoms and microscopic slags and hammerscale are being examined. The insula has been producing less slag than from the Basilica excavation, but the work is revealing the small-scale and episodic nature of production in the Roman town, with little activity in the mid-Roman period and slightly more in the later phases. The early material awaits publication (Allen and Tootel in Fulford *et al.* 2006, 145–63; Fulford and Clarke 2011a, 232–40; Allen 2012a).

The material from the Basilica and the later deposits in Insula IX is discussed in a wider context by Rogers (2011, 130–48).

#### WORKED BONE AND ANTLER

Worked bone and antler has been reported on by Boon from his own excavations and from the Basilica (Boon 1969, 51; Fulford and Timby 2000, 382–4), by Corney from the Defences (Fulford 1984, 115–16) and Crummy from Insula IX (Fulford *et al.* 2006, 121–32). 530 bone pins have been recorded from the site between 1890 and 1977; even so, Crummy has observed that there is a curious preponderance of metal as opposed to bone hairpins in the overall assemblage, and in the more carefully excavated Insula IX group, in comparison to several other cities (Crummy 2012, 110–11).

Amongst specific finds picked up on elsewhere was an unpublished bone lamella used as a bone tag, similar to inscribed *tesserae nummulariae* thought by some to be used to tie and seal bags of coin (Beal 1983; Riddler 1998); two bone stoppers (Williams 2005b); a note of an inscription on a bone roundel (Raybould 1999, 532–3; *RIB* II 2440.70 and 97); and a discussion of a Late Roman antler comb amongst others nationally (Boon 1974, fig.16.1; Cooke 2000).