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**SILCHESTER AND THE STUDY OF
ROMANO-BRITISH URBANISM**

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with contributions by

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Introduction

Michael Fulford

The majority of the papers presented here were given at a one-day meeting at The Society of Antiquaries of London in November 2009. The occasion marked the centenary of the completion (in 1909) of the Society's excavations at Silchester. The only paper given at the meeting and not published here is J. D. Creighton's summary of his geophysical survey of the town and its immediate environs. This is incorporated within a full publication of his survey which is due to be published as a Britannia Monograph by the Society for the Promotion of Roman Studies. Additional papers have been commissioned from J. Allen, K. Clark, R. Veal and P. Warry.

The Society of Antiquaries' excavations were not only remarkable for their scale, producing, as was believed at the time, the first-ever plan of a Roman town in Britain or from anywhere else in the Roman Empire, but also for their methodological innovation, especially in the recovery and analysis of botanical remains.¹ From the writing of F. Haverfield onwards, the excavations have exercised a profound influence on our thinking regarding the towns of Roman Britain and their constituent buildings, as can be found in all subsequent, major synthetic treatments of Roman Britain from R. G. Collingwood in the 1930s through to D. J. Mattingly in 2006, as well as in J. S. Wachter's major thematic study, *The towns of Roman Britain* (1974; revised edn. 1995).² The development of stratigraphic archaeology and of knowledge and understanding of the remains left by timber buildings in the archaeological record has begun to add two major strands to the antiquarian work at Silchester: insight into the chronological development of the town and change over time, and an architectural tradition of building in timber to complement the masonry documented by the early archaeologists.

Past research on the towns of Roman Britain more generally has tended to focus on two themes: their architectural characterisation, through the types of building found within them, and their legal and administrative status.³ Through epigraphic and other written sources, *coloniae* have been identified at the former legionary fortresses of Colchester, Gloucester and Lincoln, as well as alongside the fortress at York, while *Verulamium* is described by Tacitus (*Ann.* 14.33) as a *municipium* at the time of the Boudican revolt. For S. S. Frere, the combination of the association of a tribal name with a particular settlement, as in the case of *Calleva Atrebatum* (Silchester), with physical evidence for the existence of a forum with basilica was the basis for supporting the identification of self-governing tribal capitals, the *civitates peregrinae*, each with responsibility for the administration of justice and taxation in their respective tribal areas.⁴ The hierarchy determined by legal status provided the framework for the development of Wachter's study, with the *civitas*-capitals following on after London (treated as 'provincial capital') and the *coloniae*. The *civitas*-capitals are then grouped in chronological order — pre-Flavian, Flavian, and Hadrianic — according to when political circumstances determined the establishment of the next batch of self-governing communities.⁵ M. Millett too is interested in the social origins and development of towns, particularly from the perspective of tribal organisation and the differing responses to Rome in the wake of military conquest.⁶ The political and legal approach provided the framework for Wachter to bring together 21 towns, ranging from London, with a walled area of c.330 acres, to Carmarthen, *civitas*-capital of

1 See Boon 1974 for a synthesis of the Victorian- and Edwardian-era work, and Robinson, below, for an appreciation of the contribution of Clement Reid and others to environmental archaeology.

2 Haverfield 1906 and 1924; Collingwood and Myres 1936; Mattingly 2006; Hingley, below.

3 Wachter 1995, 33-81.

4 Frere 1999, 197.

5 Wachter 1995.

6 Millett 1990.

the Demetae, of c.32 acres.⁷ The criterion of defence then provided the basis for bringing together a large number of settlements as ‘small towns’, to which were added several undefended settlements with specialised religious and industrial functions, as well as a few where the area of settlement nucleation seems to have been the principal criterion for inclusion.⁸ This pre-occupation with area as a key determinant of classification has led to an explosion in the identification of ‘small towns’ across Roman Britain, with little or no attempt made to provide further evidence for the conferment of urban status.⁹

Yet, when serious and extensive excavations have been undertaken at one of these ‘small towns’, the complexities around its characterisation have been recognised. As a consequence, greater caution has been exercised in its classification.¹⁰ Meanwhile, studies of individual categories of artefact (e.g., coins, lamps and nail-cleaners) have revealed different patterns of consumption between ‘large’ and ‘small’ towns, and also within these broad categories.¹¹ Similarly, studies of environmental data (e.g., plant remains and fish) have revealed differences in the pattern of consumption between and within the groupings of ‘large’ and ‘small’ towns.¹² These studies provide helpful pointers which identify ‘difference’ in identities and which point to the need to go beyond the study of the individual category of find and develop research projects to characterise further the different types of ‘large’ and ‘small’ urban community.

Most recently, A. Rogers’ study of *Late Roman towns in Britain* is concerned with the concept of decline from classical ideals.¹³ He takes Wachter’s 21 towns and reviews the Late Roman evidence associated with all types of public building, including for industrial activities, but not for the wider town (private houses, shops, industries, defences, etc.). He also considers the nature of late timber structures and their relationship with public buildings and looks at what they contribute to historic notions of ‘squatter occupation’. For him, it is important to move away from these value-laden terms of ‘decline’ and ‘squatter’:

There were changes in the organisation of towns, in some cases moving away from the classical style of urbanism, but these need not be translated as decline. Other settlement types such as small towns, for example, became prosperous and densely populated without adopting the classical style.¹⁴

These approaches to the towns of Roman Britain draw urgent attention to what is largely missing from modern research: an attempt to characterise their social and economic life (and particularly in the context of developer-funded archaeology, where there are opportunities for making these the explicit objective of the research at the outset).¹⁵ Increased use of the systematic and comprehensive reporting of finds (of both material and biological culture), however, is already leading to commentaries on social and economic conditions in overviews and concluding syntheses.¹⁶

An explicit aim of the ongoing Silchester ‘Town Life’ Project has been to recover evidence for the changing life of the town. One of the strategies by which this is being achieved is through the excavation of an area large enough to recover not only the plans of individual buildings but also those of the larger properties in which they sat. Context is all-important. While the buildings themselves,

7 Wachter 1995.

8 Burnham and Wachter 1990.

9 E.g., Brown 1995.

10 E.g., Atkinson and Preston 1998. More cautiously, too, Williams (2003) identifies only Canterbury as a town, distinguishing it from “other nucleated centres”, in his survey of recent work in Kent.

11 E.g., Reece 1993; Willis 1998; Cool and Baxter 1999; Evans 2001; Eckardt 2002 and 2005; Eckardt and Crummy 2008.

12 Locker 2007; van der Veen *et al.* 2007.

13 Rogers 2011.

14 *Ibid.* 179.

15 Cf. the aspirational research agenda developed for the study of towns in Roman Britain (Millett 2001; Burnham *et al.* 2001).

16 E.g., Woodward *et al.* 1993, 367-75; Cowan *et al.* 2009.

if swept clean, might not be expected to yield much evidence of the occupations and lifeways of their inhabitants, accumulations of rubbish or the contents of pits in back yards might provide this valuable information. However, the systematic application of geoarchaeological techniques (e.g., the chemical analysis of internal floors and external surfaces, and the application of micromorphology to gain insight into a building's function[s]) have proven very rewarding.¹⁷ Unlike the systematic recovery of seeds and plant remains, as well of microscopic artefacts and ecofacts, these approaches are not yet routinely applied in other urban archaeological contexts. In the case of *Insula IX* at Silchester, the application of a wide range of methodologies of recovery has proven to be worthwhile. A rich characterisation of the town is emerging from the research which has now reached back in 'full' publication from the abandonment of the town in the 5th-7th c. to the early 2nd c. A.D.¹⁸

The contributions presented here enrich our knowledge and understanding of urbanism in Roman Britain through the prism of Silchester. Most of the chapters exploit the well-contextualised datasets from Silchester, particularly over the last 30-40 years, which have been retained or discarded after recording (as in the case of ceramic building material and unworked stone). Indeed, it is only within that period that it has become customary for certain categories of material, formerly disposed of on site without further study,¹⁹ to be retained in full for post-excavation research. In addition to hand-collected material, systematically-recovered sieved samples have provided valuable material for research on the contributions made by bird, fish and small mammal remains to diet and environment and by the microscopic residues of metalworking (e.g., hammerscale) and other associated detritus to our knowledge of occupational behaviour. Plant remains have a history of research which takes us back to Clement Reid's pioneering work, but modern sampling methods and quantitative approaches are now offering us new perspectives on diet and environment. In the case of pottery, systematic attention to the quantification of form and fabric/ware has provided important new insights into patterns of consumption and supply.

The first two chapters help set the studies of material and biological culture, which occupy the core of the book, in a wider chronological and geographical context. B. Cunliffe considers reasons for the location of *Calleva* and its origins in the Late Iron Age against the background of developments linking Britain (and particularly southern Britain) with the Continent. In terms of the development of connectivity between southern England and the Continent, *Calleva*, with its location close to the Thames, was well placed to exploit the productive areas of the Hampshire and Wiltshire chalklands and the upper Thames Valley with the Cotswolds beyond. R. Hingley considers the history and character of antiquarian studies of Silchester into the early 20th c., which led to the development of Haverfield's ideas about Romanisation and his characterisation of Silchester as a Romano-British city.

Those chapters set the scene for others which develop the insights to be derived from the study of the material and biological finds from Silchester. First, two categories of material culture, one (ceramic building material) mostly discarded on site,²⁰ the other (metalworking residues or slags) more commonly reported on but rarely with scientific characterisation, are considered in greater depth. Both shed light on industry in the town over time. P. Warry considers the typological characteristics of the ceramic building material recorded from the *Insula IX* and forum-basilica excavations and that which was retained in the Museum of Reading from the antiquarian excavations. This has enabled him to develop a sense of the scale of production of roof-, floor- and flue-tiles to service the town over time and how the local tile industry might have operated. He concludes

17 Banerjea 2011; Cook *et al.* 2005; Cook 2011.

18 Fulford *et al.* 2006; Fulford and Clarke 2011.

19 E.g., animal bone, pottery body sherds, slags, as well as ceramic and stone building materials. Fulford and Clarke (2002, 295-300) offer an insight into Victorian disposal practices on site at Silchester.

20 Though increasingly with some quantitative assessment.

that probably no more than four tileries, each with a single kiln, were required to produce what was needed by the town in the 1st-2nd c. A.D. J. R. L. Allen, from his review of metalworking slags retained from the *Insula IX* and forum-basilica excavations and through microscopic and chemical analysis, has shed light on the making of iron in the town from the Late Iron Age to the latest deposits of the 5th c. A.D. Normally the hearth bottoms are interpreted as the waste of the smithing, not the smelting of iron, but his research reveals that the basins represent the residue of smelting in bowl-shaped furnaces and the continuation of prehistoric technologies of iron-making through the Roman period. Given the ubiquity of what is often regarded as evidence of smithing when no further scientific characterisation is done, the implications are that the smelting of iron was probably much more widespread in the countryside as well as in the town, rather than concentrated in regions like the Weald, Forest of Dean, and East Midlands, as previously believed.²¹

Allen's study of the building of the town wall of the late 3rd c. A.D. provides an insight into the construction of one, albeit very large, monument. While G. C. Boon had earlier drawn attention to the sheer scale of the project and the volume of material, as estimated by numbers of wagon-loads required,²² Allen takes us to the manner of its building. By identifying the working lengths, it becomes possible to build up a picture of the numbers of gangs required to work on the circuit, or particular stretches of it, at any one time. With this information it becomes possible to estimate the manpower requirements and its organisation for the construction. This can be set alongside estimates for the quarrying and transport of materials, preparation of mortar, and so forth. This analysis of a sample of the town wall is an important step towards understanding the impact of the construction process on the economy of the town and the *civitas*.

Next come three studies of material culture from the *Insula IX* and other excavations. R. Stein re-assesses the Silchester wooden force-pump, one of only two so far found in Britain, while N. Crummy places the 'small finds' assemblage from the same *insula* into a wider context. She shows that the overall character of the assemblage is "clearly urban rather than rural", and proceeds to consider a number of individual themes (literacy, ritual behaviour, and duality of function) and category of object (toilet instruments, tools and brooches). With this level of analysis it becomes possible to begin to draw out the distinctiveness of *Insula IX* and to contemplate the reconstruction of different communities and identities within the town. She draws attention to the high incidence of *styli* and links with the west/south-west of England as reflected in the brooch assemblage. J. Timby uses the pottery data recovered from recent excavations within the town as a means of characterising the changing relationship between it and its hinterland from the Late Iron Age to the end of the Roman period. For the Late Iron Age in particular, but also down to the 2nd/early 3rd c., there is little evidence for the supply of imported pottery to the hinterland, by contrast with the comparative abundance from the town. Is this just an indication of differences in wealth between the town and rural settlements in question, or is it an indication that the town did not serve as a market for its hinterland? Similar observations were made with regard to the lack of evidence for the consumption of imported and specialised wares in the hinterland of Wroxeter.²³ Through analyses of material such as pottery we have a way of addressing such fundamental questions as the relationship between larger towns and their countryside in Britain.

The contributions concerned with material culture are followed by four chapters which consider a number of themes relating to the biological evidence derived from stratigraphic excavations at Silchester. K. Clark and C. Ingrams consider aspects of the faunal assemblages, while M. Robinson and R. Veal review the developing archaeobotanical record. Until comparatively recently in Britain, faunal remains, like certain categories of artefact, were discarded with little systematic

21 E.g., Jones and Mattingly 1990, 192-95.

22 Boon 1974, 100-2.

23 Gaffney *et al.* 2007, 272.

recording. Now it has become clear that such assemblages have much to tell about the consumption of meat and animal husbandry over time, as well as of practices relating to butchery and disposal, including through ritual practices.

Clark's focus is on dogs. The Silchester assemblages allow her to re-evaluate a number of ideas against the background of evidence from Roman Britain as a whole: they relate to such themes as the size and shape of the dog, the pathology, evidence for butchery and skinning, and evidence for deposition. This leads to a clearer idea of the rôle of the dog in towns and its contribution to the urban environment, as well as to a better understanding of the relationship between dogs and humans. She takes, for example, the case of the 'small dog'. Traditionally interpreted as evidence for the introduction of 'lap dogs', she argues persuasively that the breed developed as a predator of the black rat, whose remains are increasingly being found in urban contexts in Roman Britain, including in Silchester. Dogs were also exploited in the town for their skins and fur.²⁴ The size of the animals leads to the fascinating inference that the skins were too small to act as 'cloaks' in their own right, but that they could be sewn into larger garments as pelt 'pieces'.

Ingreem considers the wider faunal assemblage from Silchester, evaluating the evidence for change in assemblage composition over time between the mid-1st and early 5th c. A.D. She also evaluates variation in the consumption of animals and in the manner of their disposal across the town, noting significant contrasts between the *Insula IX* and forum-basilica assemblages at different times. The picture of urban consumption is then placed in the context of the Silchester hinterland in order to evaluate differences between town and country and the development of stock-breeding for the market. Parallels among the western provinces are also explored, and the rôle of animals in symbolic behaviour within the town is surveyed.

Robinson shows how the study of modern, systematically-collected, macroscopic plant remains from well-dated contexts within the town can complement the work of Clement Reid. He draws attention to the evidence for the early introduction of Roman exotic food flavourings even before the conquest of southern Britain in A.D. 43, and also to the paucity of charred plant remains which he sees, on the one hand, as negative evidence for the cultivation of cereals close to the town (as has been argued by G. C. Boon²⁵) and, on the other, as positive evidence of Silchester's 'fully urban' character by the 2nd c. A.D. In contrast, the evidence for animal fodder and bedding argues for the presence of stock within the town and, by implication, the existence of stockraising in its environs. The availability of a sequence of dated deposits through the life of the town shows that the population enjoyed the import of exotic foodstuffs throughout.

While the collection and reporting of macrobotanical plant remains has become more embedded in British excavation practice over the last 20-30 years, that of wood charcoal continues to be generally neglected. Veal's review of the wood charcoal of the 4th and 5th c. A.D. from *Insula IX* makes a valuable contribution to our understanding of fuel consumption in the town, as well as shedding light on the natural environment and the management of woodland beyond the town walls, both in its own right and in conjunction with the evidence derived from pollen studies. For example, coppicing is not strongly evidenced. The study also shows the potential for distinguishing between different patterns of behaviour among households and between public (represented by the forum-basilica area) and private consumers. This parallels some of the conclusions of Ingreem and Allen.

The last two chapters contribute towards a social archaeology of the Roman town. Eckardt exploits the epigraphy from the town, as well as aspects of the material culture, to consider questions of identity. While the inscriptions highlight the presence of *peregrini* in the town, certain characteristics of the material culture point to the possibility of defining identities which distinguish

²⁴ Clark 2011, 277-78, figs. 126-27.

²⁵ Boon 1974, 249-52.

the population from that of nearby, cosmopolitan London or Colchester, the latter with its recorded status as a *colonia*. While isotopic analysis of human bone has much to offer in terms of distinguishing 'foreigners' from 'locals', such an approach is not always possible, not least in the case of Silchester where none of the cemeteries has been excavated.

The final chapter considers the evidence for change over time within the town, drawing on the extensive information derived from the *Insula IX* project and focusing in particular on the built environment, the material culture assemblages, water supply, population, households, and ritualised behaviour. Despite evidence for some significant interruption in the life of the *insula*, and for decline in population numbers, it is argued that there was a large measure of continuity in core occupations and behaviour throughout the Roman period. The individual household also reveals evidence of multiple occupations, behaviour which could be interpreted as spreading the risks inherent in sustaining daily life. In terms of daily life, the 'Early Roman' town cannot easily be distinguished from its 'Late Roman' counterpart. Together these essays try to address the question which M. Millett recently raised in relation to Britain: 'What constituted Roman urbanism?'²⁶

In conclusion, the richness of the inferences that can be derived from the archaeological record cannot be underestimated and lead us to develop completely new lines of thinking about urban life. The contributions which follow present a number of striking examples. Crummy's comment on the high incidence of *styli* recorded from Silchester *Insula IX* leads me to reflect on levels of literacy and the provision of education in the urban context. Was it organised by household or were there schools in such provincial towns? The incidence of trauma among the dog population discussed by Clark leads me to think of violence within the community and whether the dog and other domestic animals may provide a good proxy for such analysis across the town and over time. Finally, Robinson's observation that the mineralised hemlock seeds in a Late Roman cesspit may have been used medicinally immediately enriches my perception of the possibilities available to even a very modest urban household.

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Bibliography

- Atkinson, M. and S. J. Preston 1998. "The Late Iron Age and Roman settlement at Elms Farm, Heybridge, Essex, excavations 1993-5: an interim report," *Britannia* 29, 85-110.
- Banerjea, R. 2011. "Microscopic perspectives on the use of Period 3 MRTB 1/ERTB 1," in Fulford and Clarke 2011, 63-95.
- Boon, G. C. 1974. *Silchester: the Roman town of Calleva* (Newton Abbot).
- Brown, A. E. 1995. *Roman small towns in eastern England and beyond* (Oxford).
- Burnham, B. C. and J. Wachter 1990. *The 'small towns' of Roman Britain* (London).
- Burnham, B. *et al.* 2001. "Themes for urban research, c.100 BC to AD 200," in James and Millett 2001, 67-76.
- Clark, K. 2011. "The dog assemblage," in Fulford and Clarke 2011, 271-78.
- Collingwood, R. G. and J. N. L. Myres 1936. *Roman Britain and the English settlements* (Oxford).
- Cook, S. R. 2011. "The geochemistry of 'House 1' in periods 3 and 4," in Fulford and Clarke 2011, 53-62.
- Cook, S. R., A. Clarke, and M. G. Fulford 2005. "Soil geochemistry and detection of Early Roman precious metal and copper alloy working in the Roman town of Calleva Atrebatum (Silchester, Hampshire, UK)," *JArchSci* 32.5, 805-12.

²⁶ Millett 2001, 65-66.

- Cool, H. E. M. and M. J. Baxter 1999. "Peeling the onion: an approach to comparing vessel glass assemblages," *JRA* 12, 72-100.
- Cowan, C. *et al.* 2009. *Roman Southwark settlement and economy. Excavations in Southwark 1973-91* (MoLAS Monog. 42).
- Eckardt, H. 2002. *Illuminating Roman Britain* (Monog. *Instrumentum* 23; Montagnac).
- Eckardt, H. 2005. "The social distribution of Roman artefacts: the case of nail cleaners and brooches in Britain," *JRA* 18, 139-60.
- Eckardt, H. and N. Crummy 2008. *Styling the body in Late Iron Age and Roman Britain: a contextual approach to toilet instruments* (Monog. *Instrumentum* 36; Montagnac).
- Evans, J. 2001. "Material approaches to the identification of different Romano-British site types," in James and Millett 2001, 26-35.
- Frere, S. 1999. *Britannia. A history of Roman Britain* (3rd edn. rev., London).
- Fulford, M. and A. Clarke 2002. "Victorian excavation methodology: The Society of Antiquaries at Silchester in 1893," *AntJ* 82, 285-306.
- Fulford, M. and A. Clarke 2011. *Silchester: city in transition. The mid-Roman occupation of Insula IX c.A.D. 125-250/300. A report on excavations undertaken since 1997* (Britannia Monog. 25).
- Fulford, M., A. Clarke and H. Eckardt 2006. *Life and labour in Late Roman Silchester. Excavations in Insula IX since 1997* (Britannia Monog. 22).
- Gaffney, V. L. and R. H. White with H. Goodchild 2007. *Wroxeter, the Cornovii, and the urban process. Final report on the Wroxeter Hinterland Project 1994-1997*, vol. 1. *Researching the hinterland* (JRA Suppl. 68).
- Haverfield, F. 1906. "The Romanization of Britain," *ProcBritAc* 2, 185-217.
- Haverfield, F. 1924. *The Roman occupation of Britain. Being six Ford Lectures delivered by F. Haverfield now revised by George Macdonald with a notice of Haverfield's life and a list of his writings* (Oxford).
- James, S. and M. Millett (edd) 2001. *Britons and Romans: advancing an archaeological agenda* (York).
- Jones, G. D. B. and D. Mattingly 1990. *An atlas of Roman Britain* (Oxford).
- Locker, A. 2007. "In piscibus diversis: the bone evidence for fish consumption in Roman Britain," *Britannia* 38, 141-80.
- Mattingly, D. 2006. *An imperial possession. Britain in the Roman Empire* (London).
- Millett, M. 1990. *The Romanization of Britain* (Cambridge).
- Millett, M. 2001. "Approaches to urban societies," in James and Millett 2001, 60-66.
- Reece, R. 1993. "British sites and their Roman coins," *Antiquity* 57, 863-69.
- Rogers, A. 2011. *Late Roman towns in Britain* (Cambridge).
- van der Veen, M., A. Livarda and A. Hill 2007. "The archaeobotany of Roman Britain: current state and identification of research priorities," *Britannia* 38, 181-210.
- Wacher, J. S. 1995. *The towns of Roman Britain* (2nd edn., London).
- Williams, J. H. 2003. "New light on Roman Kent," *JRA* 16, 219-36.
- Willis, S. 1998. "Samian pottery in Britain," *ArchJ* 155, 82-133.
- Woodward, P. J., S. M. Davies and A. H. Graham 1993. *Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester, 1981-1984* (DorsetNatHistArchSoc Monog. 12).