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RURAL BATHS AND BATHING:
SOCIO-CULTURAL INTERACTIONS IN THE
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Rural Baths and Bathing: Socio-Cultural Interactions in the Romano-British Countryside

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Abstract

In the Roman Empire, an appreciation of baths and bathing was among the few common socio-cultural traits shared by people with the most diverse cultural and social backgrounds. Perhaps because of their popularity in antiquity and their archaeological distinctiveness, antiquarians, as well as many modern scholars, have tended to take for granted the function of these buildings and, more importantly, their socio-cultural significance. This is particularly true in a provincial context such as Britannia, where Romanists have been primarily interested in military and public baths, neglecting the variegated field of rural bathing.

Focusing on two specific regions, South-East and Central South-West England, this doctoral research reviews in detail the appearance and diffusion of privately-owned rural baths, explaining their chronological and regional variations, their functioning, costs, decoration, and social implications. By looking at this type of built material culture, this thesis aims to contribute to and expand current understanding of the cultural and social changes taking place in Britain following Roman conquest and annexation and during the consolidation of Roman rule. In particular, I have investigated the role that bathing practices had in constructing a ‘middle ground’ between the newcomers and the natives in South-East England and the reasons behind the early appearance of villa baths in this region, sometimes decades before the construction of their urban counterparts. Furthermore, I addressed the later fortunes of private bathing with a special emphasis on Gloucestershire, in the context of the exceptional prosperity experienced in and displayed by this region during the 4th century, and its role within the increased elite competition that characterised late antiquity.

Instead of viewing rural baths as merely functional buildings prerogative of the elite, this study demonstrates that their socio-cultural implications were very complex. The archaeological evidence suggests that some of them might have been accessible to at least a part of the rural population living in the surroundings of villas, potentially influencing and affecting the lives and identities of a far larger group of people than previously thought.

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Introduction

According to a funeral inscription from Rome dating to the Julio-Claudian period (*CIL* 6.15258), baths, together with wine and sex, are among the pleasures that *vitam faciunt*—“make life worth living”. This brief text, together with many other epigraphic and literary sources from all over the Roman world (Dunbabin 1989; Fagan 1999, 75-84, 319-321, 327-328), demonstrate the genuine appreciation of baths and bathing shared by people with the most diverse cultural and social backgrounds. Based on these attestations, it is tempting to consider this practice among the few common socio-cultural traits that made the empire, especially in its provincial components, something more than an odd assortment of communities kept together by the presence of the legions. Bathing took place in many forms and settings, in response to many different needs and expectations, including religious, therapeutic, hygienic and recreational concerns. This study will mainly look at the ‘private’ variant of this phenomenon in a precise geographical context, i.e. the Romano-British countryside. Focusing on two specific regions, South-East and Central South-West England, the appearance and diffusion of privately-owned rural baths will be reviewed in detail, explaining their chronological and regional variations, their functioning, costs, decoration, and social implications.

The latter aspect is particularly relevant since, from their advent in the early phases of Roman history, private baths soon presented distinct features from public ones and their potential as a source of information about social dynamics and interactions, particularly in the provinces, has not yet been fully exploited. In this introductory chapter, I will therefore summarise the development of private establishments in the Greco-Roman world as well as the arrival and spread of the bathing practice in Roman Britain. I will then provide an overview of current research, addressing past and recent trends in the study of Roman baths and bathing in Britain, and identifying potential gaps in the scholarship. This will be framed into the theoretical debate concerning the process of cultural change promoted by Rome in its provinces. Finally, I will set out the aims, objectives and research questions of this work, stressing its contribution to both the specialist field of bath studies and broader theoretical discussion within the discipline.

Private baths in the Greco-Roman world

As Nathalie De Haan (2011, 5) pointed out in the introduction of her recent work on the topic, it is important to define what we can consider as ‘private baths’ in antiquity before approaching the question of their evolution. In particular, she stresses the significance of two criteria: that private facilities should have been set up as permanent baths without any other purpose (e.g. as part of productive facilities); and that they should have been used only by occupant of the household (plus, of course, friends and family). From the data collected for this doctoral study, it is clear that it is sometimes difficult to establish the validity of the latter assumption from the archaeological evidence alone (see Chapter 6); however, for now, these criteria will be accepted as general guidelines.

The first well-attested tradition of baths in antiquity dates back to the Homeric poems, with their references to cold- or warm-water bathing in the early morning (*Od.*, III, 464-466), at the end of a trip or a battle (*Il.*, X, 572 f.) or before banquets (e.g. *Il.*, X, 576 and *Od.*, X 361; Ginouvès 1962, 156-157). In particular, the *Odyssey* offers descriptions of braziers to warm up water and of bathtubs in special rooms (e.g. *Od.*, III, 468), these echoing the small baths excavated in Minoan and Mycenaean palaces such as Knossos in Crete and Tiryns in Argolis (Evans 1921, 579-580; Müller 1930, 150-151; Cook 1959, 31-36). After the collapse of the Mycenaean palace system, little information is available about the use of private baths in Greek houses before the late 5th century BCE, with the exception of a possible bath-suite in a 7th century house excavated in Izmir, Turkey (Cook 1959, 36-37; Ginouvès 1962, 162).

Whereas some Greek baths, privately-owned but open to the public, appear already in the early 5th century (e.g. the Dipylon Baths in Athens; Trümper 2013, 37), the Centaur Baths at Corinth of the late 5th century (Fournet *et al.* 2013, 285, Cat. No 15, with bibliography) are seemingly among the earliest facilities with a strong domestic connotation recorded so far, although the function of the building they were attached to is uncertain. Rooms specifically dedicated to bathing are recognised in early Hellenistic houses in Delos (Chamonard 1922, 190-192; Déonna 1938, 84-89; Tang 2005, 36-37) and in 4th century houses in Olynthus, where several bath-suites have been identified (Robinson & Graham 1938, 198-204; Martin 1974, 229; Étienne *et al.* 2000, 149). These latter are small rectangular rooms with plastered walls in which a terracotta bathtub was fitted, often located near the kitchens in order to facilitate warming and

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water supply (Robinson & Graham 1938, 199-201; Ginouvès 1962, 176-177). Residences of North Africa and Sicily also present domestic bathing facilities from the mid- to late 4th century BCE, with examples from modern Tunisia (Kerkouane and Gammarth) and the Punic settlement of Motya in Sicily (Yegül 2013, 76-77, with bibliography). As Fentress (2013, 174-175) has argued, the relationships between members of the Italic elite and the owners of these houses and villas, merchants from Punic Africa travelling and living in Sicily and Campania, might have been significant in the transmission of bathing during the 3rd century.

While the connections between Greek and Roman bathing culture are extremely complex and their detailed examination is beyond the scope of this work (see Fagan 2001; Yegül 2013), a few general considerations are instrumental for an understanding of the development of private baths. The possible role played by the Punic merchants, proposed by Fentress, fits well in the greater cultural landscape of the Hellenistic Mediterranean, where Greek urban public and private baths were constantly adapted and improved (DeLaine 1989; Trümper 2010). The recent excavation of a very early public bath-house at *Fregellae* in *Latium Novum* (Phase I: late 3rd century; Phase II: 200–175 BCE; Tsiolis 2013) revealed a mix of influences from Magna Graecia and local innovations, especially in its first phase. When the structure was rebuilt at the turn of the 2nd century BCE, it was divided into two separate sets of rooms for men and women, both composed of a changing room and a hot room (Figure 0-1). An additional room in the men's section (Room 15) shows the earliest full hypocaust known to date, inclusive of *pilae* under the entire floor and *tubuli* for wall heating. Yegül (2013, 80) notices a “distinct domestic appearance” in the architecture of this building and proposes an alternative influence, namely the rustic Italic tradition of farmhouse *lavatrinae*.

According to Varro (*Ling.* 9, 68), in the earlier centuries of Roman history, most houses were equipped with small and enclosed bathrooms called *lavatrinae* or *latrinae* (Sgobbo 1928; Broise & Jolivet 1991, 79-88). Seneca says that these rooms were furnished with a bench and a tub which wealthy Romans used every day for washing their limbs and for a full bath just once per week, or, more precisely, every nine days, i.e. on market days (*Sen. Ep.* 86, 12). Thanks to Seneca's famous account of Scipio's villa in *Liternum* (*Ep.* 86, 11; cf. Tosi 1976, 218-226; Lafon 1991, 99-100), we also know that at least by the beginning of the 2nd century BCE these dark and warm

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rooms were often placed near the kitchens for access to hot water and were supplied with non-filtered rainwater. From an archaeological point of view, the first examples of these *lavatrinae* are at the Latin colony of Cosa (Brown 1980, 65; Bruno & Scott 1993, 39-42, 154), founded in 273 BCE on the Tyrrhenian shore in modern south-western Tuscany, where *lavatrinae* and *culinae*, the kitchens, were often in the same room.

These two spaces became independent rooms (even if still often close to each other) only during the 2nd century BCE (Brown 1980, 64-69; Broise & Jolivet 1991, 81-82), when more comfortable bathing facilities started to appear in elite houses (Fabbricotti 1976, 32, 36, 56, 82). This period also has the first textual attestation of private establishments in the works of Plautus (*Asin.* 357, *Merc.* 127, *Persa* 90, *Poen.* 976, *Rud.* 383, *Trin.* 406) and Terentius (*Phorm.* 339). In particular, Plautus refers to private baths using the word *balineae* (*Most.* 756), later replaced by *balneum* and *balnearia* (Varro *Ling.* 9, 68; cf. Rebuffat 1991, 23-28). It is significant that these three terms derive from βαλανεῖον (see the lemma *balneum* on TLL and Rebuffat 1991, 23-28), revealing a connection with the Greek world that matches the architectonic influences identified at *Fregellae*.

The complex hypocaust of the second phase of these baths certainly constitutes an extremely significant precedent for the reconstruction of the Stabian public facilities at Pompeii in the second half of the 2nd century (VII 1, 8) (Eschebach 1979; PPM 1990, VI, 149-219; Yegül 1992, 61-63). The plan of the new building (Figure 0-2), superseding an earlier structure of debated design and chronology (4th–early 3rd century according to Eschebach 1979; *contra* Fagan 2001, 408-112), is more functional and efficient if compared to the baths at *Fregellae*, with a sequence of three adjoining compartments: the changing room (*apodyterium*), the warm room (*tepidarium*) and the hot room (*calidarium*). The cold room (*frigidarium*) was a later addition (c. 50 BCE). This so-called ‘Pompeian type’, although often in simplified versions, was to become the standard structure of both public and private baths (Yegül 1992, 63).

From the late Republican era, baths proliferated in Roman territory in Italy (Papi 1999) and were introduced in the territories that progressively fell under the Roman rule. As Rome founded towns, the substantial and rapid increase of public *balnea* and *thermae* slowly diminished the importance of private baths in town houses (Yegül 1992, 55), yet they became more common in rural villas. Though we have only

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few rural examples of the Republican era (Lafon 1991), the Villa delle Argerterie in the Pisanella district of Boscoreale, possibly dating to the beginning of the 1st century BCE or even earlier (Yegül 2013, 75), offers one of the most advanced examples, its baths being already composed of the familiar set of *apodyterium*, *tepidarium* and *calidarium* plus a possible *frigidarium* (Fabbriotti 1976, 66-71). During the early imperial period, wealthy villa owners in Italy and in the provinces started to view bath-suites as an essential comfort. The scale and structure of these facilities were influenced by the wealth, status and personality of the proprietors together with water supply, geographical and climatic conditions. Considering only the last two factors, it is possible to outline clear differences in architectural and building typologies between provinces. For instance, while in temperate regions we can easily find complexes with large windows and roofless rooms, especially *frigidaria* (e.g. the *frigidarium* of the Casa del Centenario in Pompeii (IX, 8, 6)), in colder provinces such as Britannia baths in villas were usually small-sized and seemingly with small windows in order to keep down the considerable heating costs (see Chapter 5). The next section will set these differences in context, providing an overview of bathing in this province, which became Roman only from the mid-1st century CE.

Baths and bathing in Roman Britain

In a well-known passage of his *De vita et moribus Iulii Agricola* (21, 2), Tacitus lists *balnea* among the *delenimenta vitiorum*—the Roman “lures of vices”—that are claimed to have tempted the wild spirit of the Britons during the second half of the 1st century CE. According to the historian, his father-in-law Gnaeus Julius Agricola, governor of Roman Britain from 77 to 85 CE, introduced the Britons to the Roman way of life in order to weaken their hostility and to accustom them to peace and *otium*. To do so, he started to build temples, *fora*, houses and, not surprisingly, baths.

Although we need to take into consideration the strong moralist and rhetorical elements of Tacitus’s account, this passage clearly attests the perceived importance of baths in the process of cultural change promoted by Rome in a recently conquered province. Agricola was first of all a general and the evidence seems to suggest that the army had a significant role in the construction of the first baths in Britain. Early examples of box flue-tiles, or *tubuli*, have been recovered only from a few sites of pre-Boudican date, including three proto-urban centres (Colchester, Canterbury and London) and two Neronian military bases (Exeter in Devon and Usk in Wales) (Black

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1987, 12; Brodrigg 1987, 65-67; Black 1996, 60-61; Pringle 2007). In most of these cases, a military workforce or at least supervision has been postulated (Black 1992, 122-123; Pringle 2007, 208). On the other hand, these tiles have been also found at six villas in the South East of England, all dating to the Neronian or early Flavian periods—a remarkable phenomenon discussed in more detail in Sections 6.1.2 and 6.1.3.

Military bathing facilities dating from the second half of the 1st century CE onwards are better attested archaeologically and differ considerably in architectural complexity and decorative luxury. Early examples of large and elaborate legionary bath-houses include Exeter (c. 60 CE), Chester (late Vespasianic, Figure 0-3) and Caerleon (c. 75 CE), while small and more basic auxiliary bath-houses occur at Castell Collen (Figure 0-4) of Flavian date (Alcock 1956, 12-19; Newman 1981) or the later group of auxiliary baths on and near Hadrian's Wall (Bewcastle, Chesters, Netherby, Carrawburgh and Benwell) (Revell 2007, with bibliography).

Following Krencker's typological classification (1929), the row type with the standard sequence of four adjoining rooms (*apodyterium*, *frigidarium*, *tepidarium*, and *calidarium*) was the most common arrangement in both military and civilian public baths in Britain. These facilities are seen to be “conservative in design”, maintaining across the whole Roman era the model fashionable at the time of the conquest or immediately after (Nielsen 1990, vol. 1, 84). By the end of the 2nd century all the major Romano-British towns and many *vici* (although baths in *vici* are typically connected to *mansiones*—see Bennett 1980, 25; Black 1995a) were provided with at least one public bath-house. Some of these baths were associated with religious buildings (e.g. Verulamium—Niblett 2005, 105). The massive thermal complex at Bath aside (Cunliffe 1969; 1971a), some sanctuaries such as **Lydney Park** (Glos.) (Wheeler & Wheeler 1932; Casey & Hoffman 1999) and Blacklands, School Farm (Kent) (Wilkinson 2013, 31) were also equipped with bathing establishments. Almost every major urban centre (16 of 22) had aqueducts and where they are not known this is likely due to a current lack of archaeological evidence (Burgers 1997, 195-212). Apart from the huge public baths on Huggin Hill in London (Marsden 1976; Rowsome 1999), impressive examples occur at Wroxeter and Leicester. The first *thermae* of Wroxeter were developed around 90 CE but were, oddly, left unfinished and then were demolished in c. 120 CE; the reason for this is not yet clear (White & Barker 1998, 73-75; Wachter 1995, 362-366). In any case, new stately *thermae* of the axial half-symmetric row type were then built

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there in the middle of the 2nd century with later additions (4,550 sq. m.) (Figure 0-5). During the same period, Leicester was provided with a 4,200 sq. m. axial symmetric row type *thermae* with a *basilica* (Nielsen 1990, vol. 2, 19-20, with bibliography).

An important consideration has been whether the British climate influenced the structure of Roman public baths in the province. Nielsen (1990, vol. 1, 84) points out three main modifications to the ‘traditional’ Mediterranean plan: a comparatively rapid development from *palaestra* to *basilica*; the early abandonment of open-air swimming pools; and a steady increment in the number of *praefurnia*. The fortress baths at Chester are the prototype of covered *basilicae* in the country (Zienkiewicz 1986, vol. 1, 164; Mason 2005, 44-45) and while several establishments, both military and civilian, were originally equipped with *piscinae* (see Section 4.3.1), few were kept active for longer than a century. Exceptions to this rule are pools associated with the military baths at Caerleon (75–early 3rd century CE) (Zienkiewicz 1986, vol. 1, 37-45) and the public baths at Canterbury (early 2nd–early 4th centuries) (Blockley *et al.* 1995, 96). A cooler and damper climate brought further design changes: the vaults of bath-houses were probably “protected by walls and timber superstructures supporting tiled roofs” (de la Bédoyère 1991, 110).

Regarding domestic residences in towns in Roman Britain, John Wachter (1995, 49) notes the rarity of private baths and the reason for this, he argues, was “more one of fashion, since even the richest, like other inhabitants of the town, might have made use of the public baths, and a visit often assumed the guise of a social event”. Dominic Perring (2002, 173), in his work on Roman town houses, concurs and emphasises how “the Roman baths were first built in Britain in military and public facilities” and that “baths were more of an urban than a domestic habit”. It is therefore not surprising that house baths in urban contexts are considered exceptional—although Perring (2002, 178) does recognise a preference in scholarship towards interpreting them as privately-owned public structures, rather than domestic. So far, there are very few examples from London and from other well-explored towns such as Cirencester. In London, the only certain bath-suite attached to a private house is that found in 1848 beneath the old Coal Exchange site at Billingsgate (Chaffers 1849) and re-excavated from 1968 by Peter Marsden (1980, 151-155) (Figure 0-6A). The small bath-block (Building 6) explored by Gustav Milne (1985, 138-141) at Pudding Lane has been also interpreted as a private facility, possibly attached to an inn. Another bath-suite was

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located on the north side of Cheapside, but it was seemingly military in origin (Marsden 1976, 30-40). In Cirencester, a private bath-suite was part of Building XII.1 (The Beeches Houses) (McWhirr *et al.* 1986, 30-36) (Figure 0-6B) and likewise of Building XXb.1 (Ashcroft Villas; Haverfield 1902, 377; 1920, table of mosaics, no. 20; Cosh & Neal 2010, 115), while another bath-suite was partially excavated in *insula* IX at Bingham Hall Garden (Rennie 1986; see Sections 6.3.1 and 6.3.2).

In contrast, private facilities were common in rural villas and a number of these appear early on, especially in South-East England (e.g. **Angmering** (West Sussex) and **Eccles** (Kent), both of Neronian date). Since there are similarities between these early examples and some private facilities on the continent (Figure 0-7), Perring (2002, 173) assumes that rather than being inspired by Romano-British public baths, “the builders of these early houses were influenced by contemporary practice in neighbouring provinces”. The stimulus of military architects in the first phase of these private baths has also been suggested, at least at Eccles and **Ashted Common** (Surrey) (Detsicas 1965, 89; Walthew 1975, 196; Bird 2004c, 116-8). The social significance of these two distinctive influences and the way technological exchange between architects, tile manufacturers and local craftsmen took place will be examined in Chapter 6.

During the 1st and early 2nd centuries, villa baths are usually detached from the main house (see Section 4.3.1), seemingly to prevent the fire risk from furnaces at a time when many of these residences were largely built of timber (Perring 2002, 177; but see the small baths attached to a timber house at **Garden Hill, Hartfield** (East Sussex)). In this study, a different interpretation will be explored, based on the hypothesis that some of these early buildings were accessible to a part of the local rural population (see Chapter 6). From the second half of the 2nd century, private baths more regularly became incorporated into the main villa building (see Section 4.3.2). Olivia Reyes Hernando (2000, 374-375) stresses a connection between the plan of the villa and the detachment of baths. She observes that most of the examples of attached facilities in the 2nd century relate to courtyard residences, mentioning in particular the sites at Rockbourne (Hants.), **Chedworth** (Glos.) and **Woodchester** (Glos.). In comparison with corridor villa plans, the spatial organisation of these buildings would have been more inclusive and so aimed to ‘enclose’ the baths inside their perimeter. However appealing this explanation might appear, it is based on a poor understanding of the chronological phases of these sites, since only Woodchester was indeed a courtyard

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house at the time of the construction of its attached baths and, even so, it is likely that a detached bath-house existed in the area north of this villa (Richmond 1969, 62; Clarke 1982, 214-215).

In the 2nd century some sites were provided with more than one bath-suite (e.g. Ashted Common (Surrey), North Leigh (Oxon.) and Rockbourne (Hants.)), usually with the addition of smaller, attached facilities. The social significance of this duplication of baths—a phenomenon that occurs also in later periods—is problematic and cannot be easily generalised. The possibility that at least some of these separate facilities were converted for the use of the estate workers will be considered in Chapter 6. New segregated establishments for women cannot be excluded, “although this is unlikely to have been a pressing need in domestic contexts” (Perring 2002, 177). In some cases such as Chedworth, a distinction between dry-heat bathing and wet-heat bathing facilities has been proposed (Reyes Hernando 2000, 379; Esmonde Cleary 2013, 110), but, as we will see in Section 6.3.2, the evidence for this is meagre.

Regarding the late fortunes of baths in urban contexts, in discussing the decline of Roman towns during the 4th century, Neil Faulkner (2000, 123) reports that “in a survey of fifteen urban baths (...) nine were still in use in *c.*300, but none as late *c.*400”. David Mattingly (2006, 341) identifies a possible reason for this failure in the inability of maintaining of an aqueduct-fed water supply, as seems to be the case in London (Williams, T. 2003, 248-9). Adam Rogers (2011, 85) analyses in detail public bath-houses in 21 major Romano-British towns and he observes that 12 of these buildings were still at least partially standing by the turn of the 5th century, although it is difficult to establish when they ceased to function as baths and when they started to be utilised for other activities (e.g. metalworking in the robbed *laconicum* and *piscina* of the public baths at Canterbury in the second half of the 4th century—Blockley *et al.* 1995, 185). The baths *basilica* at Wroxeter constitutes an impressive example of this re-functionalisation. According to the excavator (Barker *et al.* 1997, 240-241), the building was converted to industrial use in the 5th century and then adapted into an open-air market (early 6th century), before being re-developed as a large residence (possibly of a sub-Roman ruler or a bishop—see Barker *et al.* 1997, 237)—a reconstruction recently confirmed by zooarchaeological analyses (Hammon 2011).

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After a general decline in rural bath construction during the 3rd century (see Chapter 4), the late 3rd and 4th centuries are marked by some striking cases of new-built elaborate and luxurious facilities, as best seen at **Bax Farm, Teynham** (Kent), **Bignor** (West Sussex), Chedworth and Holcombe (Devon; Pollard 1974, 94-101) (see Section 6.3.1). These improvements are clear signs of the wealth of their owners in this period. The socio-economic implications of this wealth are broad and will be analysed in detail in Section 6.3.2. Instead, here I briefly underline two general considerations. Private baths in villas were usually not as dependent on aqueducts as urban public facilities; although a consideration of water supply was ignored in most excavations during the 1800s and the first part of the 1900s and so resulted often in a lack of records (see Chapter 2), springs and wells appear to be the most likely source of a water supply to private baths in villas (Burgers 1997, 218-220; see Section 5.2.3). This means that these facilities and villas in general were mostly self-sufficient entities and were less affected by water scarcity than towns. On the other hand, in evaluating these elaborate bath-suites we should take into account Bowes' recent analysis of elite houses and villas in Late Antiquity (2010). If these residences were "machines for competition", then luxurious facilities could be part of "a conversation, a competitive discourse between neighbouring homeowners" that challenged and tried to impress each other in order "to grease the wheels of social advancement" (Bowes 2010, 95-98; see Section 6.3).

As demonstrated in this brief overview, baths and bathing in Britain took different forms and settings, embedding diverse social and cultural meanings according to their location and chronology. In the next section, I will look at how this complexity has been addressed in academic scholarship, identifying potential gaps and situating bath studies within recent theoretical debates.

Studying Roman baths in Britain

An unpublished paper presented to the Society of Antiquarians by William Stukeley in 1761 is certainly one of the earliest contributions specifically dedicated to the study of baths in Roman Britain. An examination of the archaeological evidence from Bath, Lincoln, and Caerleon, together with his meticulous knowledge of the ancient sources¹, informed Stukeley's discussion, who was keen to stress the healing effects of bathing

¹ Although Stukeley's claim (1761, 678) that Agrippa built 170 baths in Rome is based on a misreading of Pliny, *Nat. Hist.* 36.24.

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and to celebrate the “incomparable invention” of the hypocaust. Stukeley had already praised the ancient habit of “daily bathing and oyling” in his treaty *Of the Gout* (1734, 112-115), presenting it as a healthy routine popular also in Roman Britain, as testified by “the innumerable remains of hypocausts in our island”, but regrettably not reintroduced “among all the refin’d politeness of our age”. He then gives an extremely detailed account of the method used by the Romans to build a hypocaust—although according to his reconstruction the floor heating system was formed by *tubuli* jointed together (Stukeley 1734, 114, Plate 116; Figure 0-8). One wonders about the impact that this misleading, if ingenious reconstruction, had on subsequent scholarship and the 1761 paper suggests that it was still widely accepted at the time. This comes with some surprise since, in a letter published in the *Philosophical Transactions of the Royal Society of London* (1717), John Tabor of Lewis, a physician, in reporting the discovery in 1712 of a Roman bath-house at **Eastbourne** in East Sussex, rightly identified the function of some box flue-tiles from the site: “(...) they were placed in the Walls to distribute Heat throughout the Building, as was usual in the ancient Structures at Rome” (Tabor 1717, 558). In any case, the relationship between 18th-century British scholars and Roman antiquities was ambiguous. On the one hand, the latter was seen as tangible evidence of the glorious past of the country within the Roman Empire; on the other hand, their ‘lower’ quality in comparison with continental remains (especially Pompeii and Herculaneum) made them less appealing and worthy of investigation.

Roman Bath is emblematic in this sense, since the baths and hypocaust unearthed there in 1755 were barely commented upon by the antiquarian world (Sweet 2004, 184-185). Things started to change by the end of the century, when new finds from the site, such as the famous gorgon’s head, drew the attention of several scholars, including Sir Henry Englefield (1792), Samuel Lysons (1813–17, Vol. 1, Part II, 1-12) and Richard Warner, who in his *History of Bath* (1801) remarked at length on Roman bathing practices. Interestingly, he claims that the establishment at Bath was deliberately built by the Romans to corrupt the natives, “enervating their bodies, emasculating their mind, and fitting them for irreversible bondage” (Warner 1801, 18). Publications on the thermal site at Bath continued through the 19th century (e.g. Scarth 1852; Moore 1869; Davis 1884) and descriptions of urban (e.g. the Billingsgate baths in London–Chaffers 1849) and military baths (e.g. the Chesters Bath House near Hadrian’s Wall–Holmes 1887), as well as of facilities associated with villas, become

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more common and detailed (see Chapter 2). Nevertheless, none of these texts addresses directly the history and development of Roman baths in the country, usually taking for granted their function and role. Reading 19th century reports of excavations, it appears clear that baths were considered an essential and expected element of Roman villas, to the point that Granville Leveson-Gower (1869, 234), in his paper on the site at **Titsey** (Surrey), lamented that “[i]t has been a common mistake, I think, in describing Roman villas, to treat the greater part of the house as a bath”.

With discoveries of new facilities in many urban centres and military bases, scholars during the 20th and early 21st century have largely focused on these two aspects of the bathing culture in Britain, either in site monographs (e.g. Kenyon 1948; Cunliffe 1969; Zienkiewicz 1986; Blockley *et al.* 1995; Barker *et al.* 1997; Ellis 2000; Birley 2001), book sections and chapters (e.g. de la Bédoyère 1991, 107-111; Wachter 1995, 44-49; Bidwell 1997, 77-78; Allason-Jones 2005, 172-175; Rogers 2011, 83-89) or papers (e.g. MacDonald 1931; Marsden 1976; Henderson 1999; Rowsome 1999; Wilson 1999; Revell 2007). Some of these works are cornerstones in the recent history of Romano-British archaeology, such as the reassessment of the complex at Bath by Barry Cunliffe (1969) or the report of the excavations of the large military bath-house at Caerleon by David J. Zienkiewicz (1986). Civilian and military aqueducts have also been analysed (Stephens 1985; Burgers 1997; 2001), as well as other issues related to the bathing practice including the *instrumenta balnei* (Wardle 2008; Jackson 2010, 264-266) and the distribution and dating of box flue-tiles (Black 1985b; 1995b; 1996; Betts *et al.* 1994). However, as yet, an exhaustive synthesis of public and military baths in the country is lacking. Inge Nielsen (1990, vol. 1, 73-84, vol. 2, 19-20, 133-136) in her monumental *Thermae et Balnea* provides an overview of these two categories of buildings in the Northern provinces (including Britannia) and a compendium of site plans, but her theoretical frame is somewhat dated, with an over-emphasis on the role of the army in the process of urbanisation (Nielsen 1990, vol. 1, 73-74). The only other scholarly publication with a general approach to this topic is Tony Rook’s (1992) brief *Roman Baths in Britain*, inclusive of a partial, if useful, gazetteer of Romano-British sites “which are accessible and have Roman baths displayed in some way” (Rook 1992, 39).

Similarly, research on private baths in Roman Britain is scattered among a number of different publications (monographs, county journal articles) and unpublished

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reports. Indeed, many scholars who have dealt with specific bath contexts during excavations at Roman towns and villas have given very detailed records (e.g. Meates 1979; 1987; McWhirr *et al.* 1986, 30-36; Philp 1991; 1999; Wilkinson 2011), while others have analysed particular aspects linked to these structures, such as water supply (Burgers 1997; 2001) or the hypocaust heating system and its components (Rook 1978; Black 1995b; Lancaster 2012; 2015, 132-151).

Conversely, fewer have tried to look at the broader picture. Younge's (1960) study of 127 villa baths provides a first general assessment of these facilities, including plans and relative bibliography. Overall, this is a solid, if dated, piece of work, though the author's classification tends to rely too much on an alleged connection between plans of baths, house typologies and tribal territories. Furthermore, his research, an M.A. thesis submitted at the University of Leeds, has never been published, and has therefore had a very limited impact on subsequent scholarship. More recently, Olivia Reyes Hernando (2000) produced a concise overview of villa baths in Britain, although, as already noted above, some of her assumptions are based on a poor understanding of the sites' chronological phases.

On the other hand, far more significant contributions have been provided by Black (1987; 1994; 1996), Dominic Perring (2002, 173-178), Christopher B. Martins (2005, 84-90) and Nathalie De Haan (2011). In his *The Roman Villas of South-East England*, Black (1987, 51-54) discusses the possible implications of detached and duplicated baths, introducing the hypothesis, expanded in a later paper (1994, 104-106), that social bonds with the local communities had a strong influence on early owners in the construction of their baths in rural residences (see Section 6.1.3). His reassessment of several sites—included as appendices to his book (1987, 84-89, 98-116, 124-124)—has been extremely beneficial for my own study. Black has been also a key figure in the Relief-Patterned Tile Research Group (Betts *et al.* 1994; Black 1996), adding significantly to our understanding of the chronology of 1st- and 2nd-century baths. Perring's (2002) *The Roman House in Britain* has a brief but informative section about baths in urban and rural residences, in which he outlines a chronological development of these facilities in Britain and offers some illuminating thoughts about their possible users (173-178; see Chapter 6).

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Usefully, Christopher B. Martins (2005) tries to employ Consumer Behaviour theories to explain villa variability, with a focus on the East of England. Albeit the intriguing premises presented in the introductory chapters are not always adequately followed up in the second part of the book, the section dedicated to the baths themselves (84-90) is notable for its originality. His point is that “a bath-house was the real measure of household prestige” (86), in contrast with the traditional view that sees mosaics as the apex of cultural showcasing. He also sees baths as what a consumer behaviourist would define a “discontinuous innovation” (Solomon 2002, 502), in consideration of the major lifestyle change that they brought to those experiencing them for the first time. Other innovative observations, such as his criticism of the assumption that individualistic choices and materialistic tendencies were central in early Romano-British society (67), are integrated in the discussion in Chapter 6 of this thesis. Nathalie De Haan’s (2011) remarkable book on private baths in the Roman world includes a vast amount of information about the development, spread and architectonic characteristics of these facilities. Britannia is included in her case study area and she expertly deals with some of the regional variations typical of this province advancing some valuable hypotheses (e.g. about the function of detached baths: 123-125; see Section 6.2.1), albeit with some minor inaccuracies (e.g. 124, where she mentions **Angmering** (West Sussex) among the sites with an attached and a detached set of baths). Yet there are gaps: only 11 Romano-British villas equipped with baths are included in the catalogue at the end of her volume (275-293, K.45-60) and the list of bibliographical references associated with them is sometimes incomplete (e.g. Lullingstone, 287, K.55). Furthermore, De Haan’s theoretical frame is still heavily influenced by the Romanisation paradigm (see below) and this affects her analysis of the social significance of private baths (119-139, particularly 134-136).

The evaluation of bathing as a social phenomenon in the wider Roman world, especially in its public form, has received considerable attention since the 1990s (e.g.: Nielsen 1990, vol. 1, 149-151; Yegül 1992, 30-47; Delaine 1999; Fagan 1999; De Haan 2011, 119-139; Maréchal 2016) and the appearance of baths has been considered as a key element of change in a newly conquered province, especially in the western part of the Empire (Nielsen 1999, 35). Nevertheless, Janet DeLaine (1999, 7, fn. 6), in her analysis of the importance of bathing in Roman social life, correctly points out that “baths play a very minor role, if any, in most recent works on Romanization”. This is

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particularly true when we evaluate studies on Roman Britain, where baths are usually just superficially considered (cf. Mattingly 2006, 284, but see Gardner 2013, 12-14).

I will not go into detail about the debate fuelled by Martin Millett's (1990) ground-breaking *The Romanization of Britain*, summaries of which can be found in a number of recent publications (e.g. Gardner 2016; Revell 2016, 6-9). Instead, I will just take for granted that the generic concept of 'Romanisation' and the imperialistic framework in which it emerged (Romans acculturating the naïve and underdeveloped natives) have been critically evaluated in the contributions of prominent scholars such as Richard Hingley (1996; 2007; 2008a), David Mattingly (2004; 2006), Louise Revell (2009; 2016) and Jane Webster (1996; 2001).

The *pars construens* of this process aims now to gain a more precise understanding of interactions and cultural exchanges between the different components of Romano-British society, and this has been mainly attempted via two approaches, namely post-colonialism and globalisation theories (Gardner 2013). The latter was firstly introduced in the early 2000s in the works of Robert Witcher (2000) and Richard Hingley (2003; 2005) and is predominantly concerned with spatial connectivity, in an effort to build up a framework that takes into account empire-wide phenomena and local variations (Gardner 2013, 6-7). While the potential of this approach is still partially unexploited, post-colonialism has experienced great popularity within the field, primarily in the form of colonial identity and hybridity studies (e.g. Mattingly 2004; Gardner 2007; Revell 2009; 2016; cf. Mattingly 2011, 26-30), although not without attracting criticism (Pitts 2007). One of the major achievements of post-colonialists working on Roman Britain has been to shift attention from the elite to the lower levels of its provincial society (Webster 2001, 210), to propose a more holistic reading of the material culture (Hingley 1996, 35) and to highlight the power relationships that underpinned social inequality (Mattingly 2004, 6-7). As discussed below, this is the framework chosen for this study, in an attempt to bring into the spotlight the complex socio-cultural interactions triggered by the introduction and spread of rural baths in Roman Britain.

A new contribution—research aims and chapters scheme

Discussing the aspects so far neglected in post-colonial writings, Andrew Gardner (2013, 5) includes the "relationship between people and changing material culture". The

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‘relationship’ that will be investigated in this study is the impact that private, or rather rural baths (see Sections 6.2.1 and 6.2.2) had on the daily life of the communities living in the Romano-British countryside. Only a few and partial regional overviews about provincial development of private baths are currently available (e.g. García de Castro 1996; Bouet 1996; 2003; Balmelle 2001) and these tend to stress almost exclusively architectonic variability, barely touching upon social implications (e.g. Bouet 2003, 301-318). This is also the case for De Haan’s (2011) noted synthesis on Roman private baths, in which only 20 pages out of more than 400 are dedicated to their “Benutzung und sozialer Status”. In contrast, this doctoral research will not only provide a more precise understanding of this peculiar aspect of Roman culture in terms of chronological and regional variations as well as typological differentiation (Chapters 4 and 5), bringing together previously dispersed bibliographical sources (Appendix 1). It will also address issues of receptivity, social acceptance and cultural interaction (Chapter 6). Specifically, the main aims of this research are:

1. To contribute to and expand current understanding of the cultural and social changes taking place in Britain following Roman conquest and annexation and during the consolidation of Roman rule, by looking at one specific type of built material culture, namely rural bath-houses associated with villa sites;
2. To identify and explain regional differences in the chronology, typology and distribution of rural baths;
3. To evaluate the social and economic impact of bathing in the case study regions, considering not only the owners of these facilities, but also the broader rural communities that might have been directly or indirectly affected by their establishment.

A number of research questions will help in addressing these aims: When and how did private baths appear and develop in Roman Britain? When do they reach their peak? What typologies of private baths existed in the case study areas? Can we learn something more about their social role through an attentive comparison of their architectonic and structural characteristics?

The central approach to tackle these aims and research questions is through the analysis of two case study areas: South-East England (comprising the modern counties

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of Surrey, Sussex and Kent, roughly equating to the *civitates* of the Cantiaci and the Regni), and Gloucestershire (roughly the *civitas* territory of the Dobunni). In order to achieve these aims, a gazetteer of rural baths in the study areas, mostly associated with villas, has been collated, which includes detailed summaries of their different phases, decoration, and modes of water supply together with their redrawn plans (Appendix 1). This forms the core resource of my study, since it makes available a large amount of previously scattered data essential for my theoretical and synthetic analysis. In addition, a tabulated assessment of measurable criteria has been compiled (Appendix 2) to help to identify the development of rural baths in the case study regions (see Chapter 1). These assessments have been undertaken by century (1st–5th) and so provide a more precise idea of the types of baths found at rural sites, across the two areas and across time, in order to evaluate where these facilities were adopted early on, late or not at all (Chapter 4). Key is the exploration in Chapter 5 of differences within sites across time and the identification of changes in style, technology, decoration and/or owners' investment. As backdrop to this analysis, Chapter 2 offers a detailed assessment of the impact of 18th- and 19th-century excavations, and Chapter 3 gives an overview of the social, economic and political characteristics of the case study regions.

Finally, a fundamental aim of this work is to highlight the potential contribution of rural baths to the current theoretical debate concerning the adoption and adaptation of Roman forms and practices in Britain. Chapter 6 will therefore try to make sense of the variety of forms, functions and social repercussions associated with rural baths and bathing across the period of Roman occupation. In particular, the chapter will discuss the role that bathing practices had in constructing a 'middle ground' (Gosden 2004, 82, after White 1991) between the newcomers and the natives in South-East England and the reasons behind the early appearance of villa baths in this region, sometimes decades before the construction of their urban counterparts. The potential impact that rural establishments had in the process of 'colonisation of the senses' (cf. Howes 2005, 11) will be also explored, highlighting the effectiveness of this 'soft' coercion on the identities of baths users. Yet, this chapter also addresses the later fortunes of private bathing with a special emphasis on Gloucestershire, in the context of the exceptional prosperity experienced in and displayed by this region in terms of its villas during the 4th century and its role within the increased elite competition identified by Bowes (2010).

Chapter 1 Methodology

This chapter provides a brief overview of the methodological approach and issues related to this research. The choice of the case study area, the typologies of sites and the structure of the gazetteer and database will be outlined and justified.

1.1 Case study area

Two case study regions have been selected for the data collection: Kent, Surrey and Sussex in South-East England (broadly the *civitates* of the Cantiaci and the Regni; Figure 4-1), and Gloucestershire (broadly the *civitas* of the Dobunni; Figure 4-2). The modern administrative counties will be preferred here to the traditional *civitates* due to the uncertainty of the borders of the latter and to their disputable accordance to pre-conquest ethnic groups (for a region-by-region discussion, see Haselgrove & Moore (eds) 2007). The rapid development of towns, villas and other Roman settlements in the South East, together with a high level of intensive excavation in comparison to other parts of the country, make this area a valuable case study. In the South-West, Roman Gloucestershire has also been substantially explored and studied and, considering its flourishing in the late Roman period, it acts as a perfect counterpart to the early prosperity of the South-East counties. A comparative study of these two areas allows a scope to explore the different levels of receptivity of Roman culture and in particular of technical and artistic innovations linked to private bathing in two different regions.

1.2 Sites typologies

Four main categories of sites are under scrutiny here: villas, possible villas, ‘isolated’ bath-houses, and baths associated with other rural sites.

1.2.1 Villas

The term ‘villa’ is problematic and requires some discussion. As recently noted by Jeffrey Becker and Nicola Terrenato (2012, 1-2), this is an umbrella word that, very much like ‘state’ or ‘city’, can “allow a complete sidestepping of a complex terminological debate that seems exceedingly problematic to develop across disparate periods and regions”. One of the major issues with this term is its vagueness. Taking two examples from a county analysed in this study, namely West Sussex, what does the 70+ room complex at **Bignor** have in common with the 10 room farmstead at **Goring**?

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One seems opulent as a villa, and the other more functional, yet both are classified as villas in archaeological reports and related publications. Furthermore, the majority of current scholars would still identify them as ‘villas’, even if they are well aware of this inconsistency (see, for instance, Mulvin 2002, 3 and Roymans & Derks 2011, 1-3). As emphasised by Eleanor Scott in the introduction to her catalogue of Roman villas in Britain (1993, 6), “[t]he prestige value attached to villas may be why we see such a blurring of the picture, for this sort of building would have been copied at all levels”. On the other hand, this semantic ‘sharing’ has a positive aspect. David Mattingly (2006, 370) rightly stresses that “it will be apparent that the choice of a more Roman style of building over a more traditional form was in itself a significant one and that the discrimination has some validity”. In consideration of its flexibility and of its widespread use, discarding the term ‘villa’ would require the construction of a brand new theoretical frame, which is a task beyond the scope of this doctoral research. The only workable option is then to define this term as clearly as possible. The definition of villa adopted in this study is broad and includes civilian rural residences not part of a major settlement, as long as they present at least three of the key features commonly associated with Roman influence: i.e. “the use of stone or brick/tile, rectilinear plan, tessellated pavements or mosaics, bath facilities”, as well as plastered walls and hypocaust heating system (Mattingly 2006, 370). The sites that match this definition accordingly can range from the substantial high-status buildings that we usually associate with the word ‘villa’ to small and unpretentious farmhouses. This can be considered a ‘morphological’ definition of a villa, according to Roymans and Derks (2011, 2). On the other hand, these two authors also propose a ‘relational’ definition, based on the social and economic role of a site in the Roman landscape. This aspect will be explored in Chapter 3, where the case study regions and their rural landscapes are described in detail, and Section 6.2.1, where interactions between villas and their surroundings—a largely neglected area of study—are examined to better understand the function of their baths.

Note that sites that evolved into villas or changed their status from villa to a different function (e.g. industrial or agricultural complex) during their history are considered as villas only during their ‘villa’ phase(s) (e.g. the industrial site at **Six Bells, Farnham** (Surrey) which becomes a villa only at the beginning of the 4th century CE).

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1.2.2 Possible villas

The second category of ‘possible villas’ include sites that, due to a lack of currently available archaeological evidence, cannot be certainly classified as villas. These sites are usually partially excavated or poorly recorded due to their early discovery (i.e. before the 1950s) and require further investigation to be more clearly understood and defined (e.g. **Folkestone, Warren Road** (Kent), where five buildings excavated in the 19th century were seemingly associated with a yet undiscovered villa). For the purpose of this research, a site is considered as a possible villa if it presents at least one of the key features commonly associated with Roman influence.

1.2.3 ‘Isolated’ bath-houses

‘Isolated’ bath-houses are sites where, except for a bath complex, no other associated Roman masonry building has been identified or excavated. These apparently independent facilities occur all around Roman Britain but are particularly evident in the South East, especially during the late 1st–early 2nd centuries CE. The elusive nature of these baths has aroused interest among scholars, although most have simply attributed these complexes to as yet undiscovered villas. Philp (1973, 87), for instance, who excavated the bath-house at **Baston Manor, Hayes** (Kent), suggests that maybe “these detached bath-houses relate to developing farmsteads not yet evolved into the full villa-class” and were still wholly built in perishable materials. Alternatively, they have been interpreted as public baths for dispersed rural communities—“as a sort of rural public baths as well as meeting places” (Detsicas 1983, 140). Considering the ongoing debate, this problematic category is retained and will be discussed in greater detail in Sections 6.1.3 and 6.2.3.

1.2.4 Baths associated with other rural sites

In order to have a more complete picture of the typologies of rural baths in the case study areas, small settlements, industrial, and religious sites equipped with baths have also been taken into consideration. Their detailed analysis allowed me to identify differences and similarities between these facilities and those associated with villas. These sites include: the possible emporium at **Abbey Barns, Faversham** (Kent); the roadside settlement and *mansio* at **Alfoldean** (West Sussex); the ironmaking site and ‘*Classis Britannica*’ bath-house at **Beauport Park** (East Sussex); the sanctuaries at **Blacklands School Farm** (Kent) and **Lydney Park** (Gloucestershire); and the settlement and religious site at **Springhead** (Kent).

1.3 Data collection

All available information on relevant sites has been collected in the two areas of interest through a detailed examination of published archaeological publications (county and national publications, main archaeological journals as well as published material focused specifically on Roman baths in Britain) and in-depth research on unpublished excavations and finds (e.g. from Historic Environment Records and museums catalogues, from archaeological units' archives, and through web databases such as pastscape.org.uk, archaeologydataservice.ac.uk and heritagegateway.org.uk). The evidence gathered through this research has been then sorted into a Gazetteer (Appendix 1) and a database (Appendix 2). While the Gazetteer contains only sites with baths, the database also includes villa sites without evidence for baths in order to record and question the presence/absence of these facilities in different areas and time periods.

1.3.1 Gazetteer of sites with baths (Appendix 1)

This catalogue is organised by county² in alphabetical order and it covers 120 sites with baths in the two case study areas (45 sites in Kent³, 13 in Surrey, 7 in East Sussex, 20 in West Sussex⁴ and 35 in Gloucestershire). These consist of a current total of 90 villas and nine possible villas equipped with bath blocks, 14 'isolated' bath-buildings apparently not associated with villas, and six other rural sites with baths⁵. Each entry first provides general information about the sites and their excavation history; the bath-suites are detailed with a summary of their different phases, decoration and modes of water supply; material culture directly (e.g. perfume vessels, oil-flasks, toilet instruments) or indirectly (e.g. oyster shells, hair-pins, game counters, valuable objects recovered from drains) associated with bathing found at the site has been also recorded. A brief list of bibliographical references in alphabetical order comes at the end of each profile. Each entry is also followed by a re-drawn plan of the baths when such plans

² This examination is for convenience of data collection and for an easier consultation of the Gazetteer. Furthermore, as mentioned, our understanding of the size and form of the Roman *civitates* broadly corresponding to the modern counties is limited. The non-villa rural sites equipped with baths (small settlements, industrial, and religious sites) are grouped at the end of the catalogue.

³ This number comprises six sites that were part of Kent until 1965 but are now part of the London Borough of Bromley. Their relevance, together with their geographical proximity to the region, justifies their inclusion in the Gazetteer.

⁴ The distinction between the two parts of the county is given in both the Gazetteer and the database since this division is regularly applied in archaeological reports.

⁵ If a site discussed in the main text is included in the Gazetteer, it has been highlighted in bold whenever mentioned for the first time in a chapter's section.

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from excavations are available. Overall, the Gazetteer offers a detailed textual and visual tool that brings together much previously disparate material from excavation reports and publications.

The terminology used to identify the rooms of the baths in the Gazetteer requires some clarification. In her recent work on private baths, Nathalie de Haan (2011, 78) notes that, overall, these facilities tend to follow the structure of their public counterpart and so to take on the traditional sequence of *apodyterium* (changing room), *frigidarium* (cold room), *tepidarium* (warm room) and *calidarium* (hot room), with the possible addition of *laconicum* (hot, dry-steam sweat room) and *sudatorium* (hot, wet-steam sweat room; *contra* Nielsen 1990, vol. 1, 78, which considers *sudatoria* to be an evolution of the *laconica*). To label their rooms and features, de Haan therefore implicitly accepts the same Latin terminology traditionally used for public baths. Albeit aware of variations and simplifications to this scheme, she reckons that only in specific cases would the ‘normal’ Badevorgang (‘bathing process’) be altered. In the case study areas of this research, the differences in plans and size can be substantial, ranging from the single room facility at **Highstead, Chislet** (Kent) to the 20+ room complex at **Eccles** (Kent). While with smaller structures the use of traditional terminology to identify different rooms is reasonably effective, this classification seems to become clumsy and contrived when the number of rooms increases (cf. Section 4.3.3). Therefore, although this scheme can be used as a guideline, its dogmatic adoption can lead to an over-simplistic interpretation of the archaeology, with an over-imposition of functions and labels. As stressed by Janet DeLaine (1993, 352), terminology is “one of the continuing problems besetting baths studies (...)” and the use of Latin labels in scholarship (mainly derived from the fifth book of Vitruvius’ *De Architectura*) is particularly controversial (Rebuffat 1991, 6-7; DeLaine 1999, 10; see also Allison 2001, 183-184). Yet, the vast majority of recent publications on private baths tend to accept the Latin terminology uncritically (e.g. Reyes Hernando 2000; Bouet 2003; Janković 2012). Excavation reports on Romano-British private baths fluctuate between Latin (e.g. Wilson *et al.* 2014) and English terms (cold, warm or tepid, and hot rooms; e.g. Meates 1979), sometimes with a combination of the two (e.g. Perkins 2004). In my own study, the Latin terminology has been maintained in line with current scholarship (de Haan 2011, 78, except for the distinction of function between *laconica* and *sudatoria*,

both identifying steam sweat rooms⁶); however this will be re-evaluated on a case-by-case basis (cf. Section 6.2.1)

1.3.2 Database of sites with and without baths (Appendix 2)

A total of 219 sites have been sorted into the database, including 155 villas and 44 possible villas with or without baths, 14 ‘isolated’ baths, and six other rural sites equipped with baths. Every entry of the database has been indicated as a ‘record’, defined as “the smallest unit of analysis employed” (Van der Veen 2008, 87). A record can be both a distinct site and a chronological phase of the same site. Therefore, phase 1 and phase 2 of site A are dealt with as two distinct records. As indicated below, these phases might be simplified versions of those identified by the scholarship and have been created by the author. Where information about one of the fields listed below is not certain, a question mark has been added after the entry (e.g. y?). When information is not available or a category is not applicable to a site, a slash (/) has been inserted. There are 335 records and each of them has been detailed with:

1. **Site general information:** *Record Number*, *Individual Site Number* (used in maps and in the Gazetteer), *Site Name*, *Grid Reference Number* (as given on pastscape.org.uk) and *County*.
2. **Type of site:** *Villa* and *Other Structure*. The second category includes ‘isolated’ baths, other rural sites, as well as different forms of occupation identified at the site before or after the lifespan of a villa. In both these fields four options are given: ‘y’ (= yes) indicates a site certainly identified as villa or as other structure; ‘m’ (= maybe) designates a possible villa or other structure; ‘n’ (= no) shows that the site has not been interpreted as villa or as another type of structure; and n/y (= no/yes) is used when a site becomes a villa during a specific phase. To be classified as a definite villa, a site must present at least three of the key features commonly associated with Roman influence, as explained in Section 1.2. When a site presents at least one of these features, it has been labelled as a ‘possible villa’. All the other sites, including ‘isolated’ baths, are considered non-villas.

⁶ The alternation of *laconicum* and *sudatorium* in Appendix 1 reflects the terminological variability in the excavation reports.

3. **Chronology:** *Period* and *Site Chronology* and *Complete Chronology*. In the first column, five major periods of occupation are given (1, 2, 3, 4 and 5) corresponding to the 1st, 2nd, 3rd, 4th and 5th centuries CE⁷. If a site was built at the end of a century (i.e. in the last quarter of it), it has been considered as starting its period of occupation during the following century. An exception has been made for those sites built at the end of the 1st century, which have been acknowledged as 1st-century sites in consideration of the significance of their early date. If a site was abandoned at the start of a century (i.e. in the first quarter of it), it will not be considered in use during that century. As we will see at point 6 of this list, this does not apply to baths, the exact chronology of which has always been used for the data analysis as given in the gazetteer (e.g. a late 2nd-century baths is accounted as still part of the 2nd-century baths), in consideration of their importance for this research. The second column (*Site Chronology*) records the full chronology of the site (i.e. from its construction to its abandonment) in centuries as reconstructed by the scholarship. In this field, ‘E’ stands for early (e.g. 1–25 CE), ‘M’ for middle (e.g. 26–75 CE) and ‘L’ for late (e.g. 76–100 CE) within a century. The last column (*Complete Chronology*) indicates if the site has a complete (‘C’), partial (‘P’) or undetermined (‘U’) chronology. A ‘complete’ chronology is acknowledged when all the different phases of a site and at least the start and the end periods of its baths (if present) have been recorded. This does not imply that the given chronology is definitive or flawless, but that the archaeological evidence relative to a certain site has been considered sufficient by the scholarship to attempt a complete reconstruction of the chronological evolution of that site. Also, this category includes only sites excavated during or after the late 1940s/early 1950s as well as sites excavated prior to that period that have been recently re-assessed (i.e. in the last 40 years). This is because of the general lack of reliability of the dating proposed in earlier reports due to the unsystematic use of stratigraphy and lack of modern excavation methods (see Chapter 2).

⁷ A full discussion of the chronology of each site is included in the Gazetteer’s entries.

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The chronology of a site is considered ‘partial’ when at least the start and/or the end periods of occupation have been established based on the archaeological evidence. In all the other cases, the chronology is considered as ‘undetermined’.

4. **Phases:** *Phase, Number of Phases and Major Modifications.* The first column indicates the number corresponding to the particular phase of the site out of the total number of phases, given in the following column. These phases are simplified versions of those identified by the scholarship and their minimum time frame is one century (e.g. a site has phase 1 in the 2nd century and phase 2 in the 3rd century, giving a total of two phases). If during a given century major modifications occurred to the main building (i.e. the dwelling area) of a site that is already a villa or is transformed into one, these are indicated in the *Major Modifications* column. This column is filled in only for villas or sites transformed into villas where the main dwelling area of the complex can be identified. In this field, two options are given: ‘y’ (= yes) indicates that the main building has been rebuilt or its plan modified during a phase (e.g. a corridor house transformed into a winged corridor house or a small villa transformed into a medium size villa as well as a non-villa site transformed into a villa); ‘n’ (= no) indicates that major changes did not occur. The decision to simplify the original phases has been taken in order to make the database easier to consult and to avoid an inflation of the number of records for each site (e.g. the 10 phases of the villa at **Barnsley Park**, Gloucestershire). The complete phases as reconstructed by current scholars are reported in the relative entries of the Gazetteer.

5. **Characteristics of villa sites:** *Villa Typology, Material of Construction, Villa Size, Other Buildings.* These four fields are pertinent only to definite villa sites. The first column designates the typology of the villa. This follows the traditional division in five types, as summarised by Mattingly (2006, 371): 1) rectangular (‘R’); 2) corridor (‘C’) (“rectangular houses fronted by a corridor or portico”); 3) winged corridor (‘WC’) (“same as previous but with the addition of projecting rooms or ranges at the end of

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the corridor façade”); 4) aisled villa (‘A’) (a rectangular building with two rows of pillars dividing it into three sections, “perhaps a development from late Iron Age prototypes”); 5) courtyard (‘CY’) (“buildings arranged around at least three sides of an enclosed yard”). For the sake of simplicity, the sixth villa type described by Mattingly as “elaborated villas of large scale and architectural elaboration” will be listed according to one of the five types mentioned above. If the villa site does not fit in any of these categories, it has been recorded as ‘other type’ (‘O’). However, only one site is classified in this way, namely the complex at **Chiddingfold** (Surrey) otherwise interpreted as a religious site (Bird 2002b; 2004b, 86-87).

The second column (*Material of Construction*) shows the principal building material used for the main villa building during a particular phase: ‘T’ for timber and ‘S’ for stone. The *Villa Size* is indicated as small (‘S’), medium (‘M’) and large (‘L’). A villa is considered small if its main building, when fully excavated, has up to 15 rooms. If there are between 16 and 30 rooms, the villa is classified as a medium size. Villas with 31 rooms or more are considered large. This distinction based on the number of rooms is quite rough but keeps the classification relatively simple in comparison with other methods involving for instance the site size in square meters. Furthermore, this has been adopted consistently in recent scholarship (e.g. Henrich 2006, 25; Krause 2006, 273-277; Mattingly 2006, 371; Roymans & Derks 2011, 2-3). If any kind of structure detached from the main villa building (except for bathing facilities) has been identified at the site, this is recorded in the *Other Buildings* (yes/no).

6. **Baths general information:** *Baths, Number of Baths, Baths 1/2 Typology, Baths 1/2 Size, Baths 1/2 Number of Rooms Excavated, Baths 1/2 Total Number of Rooms if Known.* The first two columns indicate if the site was equipped or not with baths and, when present, their number (up to two working at the same time). Considering the importance of this information, five options are given for the first column: ‘y’ (= yes) indicates a site certainly equipped with baths during a particular phase; ‘y/m’ (= yes/maybe) is used when a bath complex was probably abandoned before the ending of a phase (i.e. before the end of a century); ‘n/y’ (= no/yes)

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shows that a site did not have baths at the beginning of a particular phase, but was equipped with them during that phase; ‘m’ (= maybe) designates a site where the presence of baths is uncertain and includes sites with hypocaust excavated before 1900 and poorly recorded, sites where building material usually associated with baths have been found (mainly box flue-tiles and hollow voussoirs), and sites where it is not clear if the baths were still in use during a particular phase; and ‘n’ (= no) shows that the site lacks of evidence of bathing facilities. The next six columns are duplicated in case the site had more than one bath complex working at the same time. The column called *Baths Typology* specifies if the baths were attached to (‘A’) or detached (‘D’) from the main villa building. If a bath complex was modified during a phase, this is indicated (only ‘D/A’ since there are no sites that moved from having attached to detached facilities during the same phase). In the column *Baths Size*, baths are classified according to their size: if the baths had between one and four rooms, they are considered small (‘S’); between five and seven are listed as medium size (‘M’); and baths with more than seven rooms are considered large (‘L’). When modifications of size occurred during the same phase, these are recorded (e.g. ‘S/M’ etc.). Finally, the last two columns indicate the number of rooms of baths identified during the excavations and their total number of rooms if this has been ascertained.

7. **Baths specifics:** *Baths 1/2 Painted Walls*, *Baths 1/2 Mosaics*, *Baths 1/2 Hypocaust*, *Baths 1/2 Water Supply*, *Baths 1/2 Degree of Modification*. For the first three columns, only the presence/absence (yes/no) of painted walls, mosaics and hypocaust heating system has been recorded (for more details about the decoration and hypocaust of a specific site see the relative entry of the Gazetteer). Six main sources of water supply are taken into account: rivers or any other watercourse (in the database abbreviated in ‘R’), springs (‘S’), wells (‘W’), ponds (‘P’), storage tank (‘T’), and aqueducts (‘A’). In case of an aqueduct, the aqueduct typology has been recorded if known: leats (‘A, L’), stone channels (‘A, SC’), wooden pipes (‘A, WP’), lead pipes (‘A, LP’), ceramic pipes (‘A, CP’), and stone pipes (‘A, SP’). The degree of modification of a bath complex indicates if this

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went through different phases of modification during a major site phase (i.e. a century). The degree of modification is high ('H') when the building was rebuilt or modified at least twice, medium ('M') if this occurred once, low ('L') if major modifications did not occur.

8. **Additional information:** *Excavation of Site* and *Comments*. The first column indicates if the site has been fully ('FE'), partially ('PE') or not excavated ('NE'). A site has been considered as fully excavated if at least the main building (the dwelling area for villa sites and the bath-building for 'isolated' baths) has been substantially explored; it is partially excavated if the main building has not been substantially explored; and not excavated if no archaeological exploration took place. Finally, all other relevant additional information about the site, its phases and baths has been listed in the *Comments* section.

The majority of the sites recorded in the spreadsheet have been partially excavated (155 sites out of 219) or not excavated (five sites) and therefore in these cases the archaeological evidence is limited. Furthermore, excavations carried out before the 1950s (especially during the 18th and 19th centuries) tend to present gaps in their results due to lack of consistency in excavation and recording methods. The substantial impact that antiquarian investigations had on the four counties examined for this study will be considered in the next chapter.

Chapter 2 The Impact of 18th- and 19th-Century Archaeology

This chapter discusses the impact that 18th- and 19th-century archaeology had on our understanding of the Roman period in the counties taken into examination for this study (Kent, Surrey, Sussex and Gloucestershire). I will identify the counties most affected by early excavations and their effects on the data relative to the Roman rural sites located there. I will also examine how the interests and priorities of Georgian and Victorian antiquarians may have influenced modern conceptions of Romano-British baths and their structure, focusing on their sometimes uncritical use of classical sources and on their labelling of rooms. Finally, I will highlight how these early studies paved the way for the subsequent, largely undertheorised approaches to rural baths and bathing in Roman Britain.

2.1 Changing perspectives

Discussing the different attitude that our ancestors had towards ancient sculptures, Marguerite Yourcenar (1992, 61) notes how “of all the changes caused by time, none affects statues more than the shifts of taste in their admirers”. Taste, social status, ideology and political agendas had indeed a great impact on the relationship that different time periods have established with the classical world (e.g. Liakos 2001; Ousterhout 2004; Fleming 2006). 18th- and 19th-century Britain is no exception. Since the official establishment of the Society of Antiquaries of London in 1718, a time when the study of British past was perceived as “a means of consolidating political stability” after the turbulence of the Hanoverian succession (Sweet 2007, 53), the study of Roman antiquities in Britain underwent several shifts in aims, focus and interests. The first part of this chapter briefly examines some of these trends throughout these formative centuries of British archaeology, with a view to setting the stage for early excavations in the area of interest.

During the 18th century, when Roman civic ideals were widely adopted by British aristocracy, the rediscovery of Roman Britain was somehow felt as a crucial step in the process of restoring Roman virtues (Ayres 1997, 84-85). Towns with Roman origins were celebrated for their glorious past and antiquarians across the country were keen to increase the prestige of their rural communities through the discovery of Roman

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antiquities (Sweet 2004, 172). Major foci of antiquarian investigation during this period were the road system created by Rome in Britain and the remains of her military presence (Hingley 2008b, 160-163). On the other hand, evidence of civilian activities was barely considered and usually misinterpreted, as for the case of domestic mosaic floors erroneously associated with military camps at Stonesfield (Oxfordshire) (Hearne, 1712) and Wellow (Somerset) (Carte n. d.; see Hingley 2008b, 164-169). Even if the understanding of Roman Britain was substantially increased at the turn of the century, antiquarian activity was still largely the product of the isolated initiatives of “leisured gentlemen” and this resulted in a lack of structured and comprehensive information (Sweet 2004, 185-186).

As exemplified by John Horsley’s *Britannia Romana*, published in 1732, the main scope of 18th-century descriptions of Romano-British remains was to corroborate and illustrate literary accounts, “rather than to generate new knowledge through excavation or landscape analysis” (Sweet 2004, 170). Classical sources started to be examined more critically during the 19th century and the limited amount of information about Roman Britain obtainable from them inspired a renewed interest in buildings and inscriptions in particular (Hoselitz 2007, 10-11). The increasing industrialisation of the country, the privatisation of common land through the Enclosure Acts, the intensification of agriculture and urban development made random archaeological discoveries more frequent at the juncture of the 18th and 19th centuries (Lewis 2007, 109), facilitating a more material-based approach. Furthermore, at the end of the 18th century, the publication of the first accounts of the excavations carried out in Pompeii and Herculaneum (Hamilton 1775; de Saint Non 1781–86; AEA 1796; see Dyson 2006, 15-18) shifted the focus of British antiquarians towards domestic buildings. The growing fascination for mosaics in the early 19th century is the most obvious sign of this new focus and encouraged the re-evaluation of Roman culture in Britain, creating a connection with Italy and the Mediterranean (Sweet 2004, 183). This in turn led to a slow modification of the perceptions of the interactions between Romans and natives, especially during the second half of the 19th century, with the re-introduction of ideas of acculturation and civilisation already emphasised by late 16th- and early 17th-century writers (Hingley 2008b, 13-14).

Philippa Levine (1986, 9) outlines an interesting profile of the members of antiquarian and archaeological communities in the Victorian period: male, graduates of

the universities of Oxford and Cambridge, Anglican, often associated with clergy or part of the professional sector of the middle class. Very few of those involved in the study of the past earned a living through activities associated with their interest since “there was still a general view that antiquarianism was the pursuit of gentlemen and was a virtue in itself” (Hoselitz 2007, 73). The delay in the development of professional archaeologists, in contrast to other scientific fields, slowed the process of constituting a commonly accepted methodology, especially regarding excavations. Collection and preservation of objects, usually extrapolated from their context, was still the priority for antiquarians until the mid-19th century. Although things started to change in the 1860s and excavation of sites was more and more valued as a source of information per se, the impact of these new approaches was limited among local antiquarian societies, which promoted the majority of small-scale excavations at this time (Hoselitz 2007, 179-183). These groups grew to 57 between 1834 and 1886 (Levine 1986, 182-183) and constitute another characteristic Victorian phenomenon, directly related to the meticulous local surveys carried out during the previous century. In consideration of their significance for this study, their formation and role will be analysed in more detail.

2.2 The local archaeological societies

The concern among early 19th-century antiquarians for the protection of ancient remains, frequently threatened by railway construction and house development, led to the creation of the British Archaeological Association in 1843 and played a central role in the constitution of a network of local societies, mostly affiliated to the new national body (Hoselitz 2007, 20-21). In his study on the origins of these associations, David Westherall (1998, 24) underlines the importance of printing clubs, described as “vital in sowing the seeds from which archaeological societies later blossomed”. The main function of these clubs that started to appear from the 1820s was originally to publish rare antiquarian works, such as medieval texts or erudite accounts, and several of them were locally oriented (Westherall 1998, 25).

While the involvement of members of printing clubs was limited to their subscription, at least some of the participants in local societies played a very active role in their development. These were usually committee members and authors of journal articles, as well as members of the local ruling groups (leading county families, clergymen, prominent businessmen, etc.). As mentioned in the previous section, at least during the first half of the century antiquarianism was still dominated by amateurs, a

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leisure activity that only the economic elites could afford. Being a member of a local society and taking part to its meetings and social events was therefore perceived as an explicit identification with these elites (Hoselitz 2007, 56-59). This tendency and the resulting exclusivity of many of these groups considerably slowed the professionalisation of archaeology at a county level, to the point that “it was not until the early 20th century that the activities of local groups became marginalised by the development of professions in the historical and archaeological sphere nationally” (Hoselitz 2007, 74).

The earliest of these organisations date to the 1830s (e.g. the Natural History and Antiquarian Societies for Shropshire and North Wales created in 1835), although the phenomenon became especially prevalent in the 1840s and 50s, with societies appearing all over the country. This period coincides with the foundation of several architectural societies, mostly boosted by the Ecclesiological movement, also deeply influential in the development of local antiquarian groups. This movement, associated with the so called Gothic Revival, was led by the Cambridge Camden Society, established in 1839 by John Mason Neale and Benjamin Webb and intended to promote “the study of Ecclesiastical Architecture and Antiquities” (Anonymous 1843, 1) as well as to restore dignity to Anglican worship and churches (Piggott, 1976, 178-181). The architectural societies that appeared in the wake of Neale and Webb’s ideas present some common traits, including the patronage of the local bishop or lord lieutenant and a substantial presence of clergymen in their ranks. Some of these groups kept their original Ecclesiological orientation, while other assimilated archaeological interests and seemed to be “influenced as much by the British Archaeological Association as by the Cambridge Camden Society” (Westherall 1998, 31). The presence of clergymen among the promoters of several archaeological societies (e.g. the Cambrian Archaeological Association and the Kent Archaeological Society) confirms the degree of “involvement of archaeology with religion” (Piggott, 1976, 182) typical of this period.

Local archaeological societies were structured organisations with a president, one or more vice-presidents, a standing committee, auditors, bankers, an honorary secretary and statutes with specific rules. Their annual meetings were occasions for discussing projects, results and the financial situation of the society, exchanging ideas

as well as visiting sites of interest, and soon became proper social events (Hoselitz 2007, 57-58). Members had to pay an annual fee (usually between 10 and 50 shillings⁸) which, together with private donations, was used to cover the publication of the society journal and the rent of the society headquarters, to support archaeological excavations and the restorations of ancient buildings in the county. These organisations are found in all four of the counties investigated in this study, namely the Kent Archaeological Society, the Surrey Archaeological Society, the Sussex Archaeological Society and the Bristol and Gloucestershire Archaeological Society. The next session will examine their background, structure, development and impact on local archaeology in order to identify priorities and biases in their agendas.

2.3 Kent

Modern interest in the Roman past of Kent can be traced back to the 16th century. John Leland in his *Itinerary* notebooks (Summit 2007), compiled c. 1538–43, describes the county with some rare hints to the Roman presence (e.g. Dover: Toulmin-Smith 1907 (ed.), vol. viii, 49). In 1576 William Lambarde published *Perambulation of Kent*, among the first English county histories (Warnicke 1973, 29-34), where he also briefly refers to Roman antiquities in different areas of Kent (e.g. about Richborow and Folkestone: Lambarde 1826, 102, 123). In the 17th century local antiquarians such as John Somner (1590–1669), Thomas Philipot (d. 1682) and John Harris (1666–1719) all discuss in some detail the Roman influence on the history of the county (Hardy 2013, 223). During the 18th and early 19th century the Kentish past was still the subject of erudite studies but was now also investigated through excavations, with John Thorpe (1715–1792), Edward Hasted (1732–1812), Bryan Faussett (1720–1776), James Douglas (1753–1819) and William Henry Ireland (1775–1835) among the most significant figures of this transitional phase.

John Thorpe was the son of an antiquarian with the same name (1682–1750), also interested in the antiquities of Kent. In 1769 Thorpe published his father's historical study of the diocese and cathedral church of Rochester, *Registrum Roffense*, and subsequently supplemented it with his own *Custumale Roffense* (1788). This book, together with his "Illustrations of several Antiquities in Kent which have hitherto

⁸This was a considerable sum of money for members of the working classes: the average salary of a skilled worker in London in the mid-1860s was 24 shilling a month (Porter 1998, 176).

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remained undescribed” in John Nichols’ *Bibliotheca Topographica Britannica* (1780-1790), provide descriptions of many Roman artefacts and sites in the county, including the Roman mosaic pavement found at Lullingstone Park in 1750 and part of the famous villa that was not excavated until the middle of the 20th century. The author identifies the site as a station or a military camp strategically located on the banks of the River Darent (Thorpe 1788, 128), in line with the contemporary militaristic interpretation of Roman antiquities.

Probably the most important contribution to the historiography of the county during this century is Edward Hasted’s monumental *The History and Topographical Survey of the County of Kent*, published between 1778 and 1800. Together with a minute account of the history, topography and natural history of Kent, Hasted gives detailed description of five parishes now part of metropolitan London (Charlton, Deptford, Greenwich, Lewisham and Woolwich), mentioning Roman finds such as two Roman ‘urns’ found in 1710 near Greenwich (Hasted 1778–1800, 373).

Bryan Faussett and James Douglas were “the two most influential barrow diggers of the eighteenth century” (Marsden & Nurse 2007, 95). Faussett investigated more than 700 Anglo-Saxon tumuli in Kent and elsewhere, initially interpreting them as Romano-British sites. His accounts (in form of field diaries) are detailed and richly illustrated and the quality of his recording constituted an influential precedent after their publication by Charles Roach Smith in 1856 as *Inventorium Sepulchrale*. Despite his focus on Saxon remains, Douglas’ impact on the antiquarian history of the county in general is substantial, especially considering that its *Nenia Britannica* (1793) was “the first publication in Britain in which artefacts discovered through excavation were systematically illustrated and given precedence over the narrative” (Marsden & Nurse 2007, 99, capture to Fig. 60).

William Henry Ireland is probably the most controversial figure of this group. He is mainly known for his forgeries of Shakespearean documents and plays (Grebanier 1965), but he also wrote an important historiographical work on Kent entitled *A New and Complete History of the County of Kent* (1829–31). Although more interested in medieval and early modern history, some of his topographical investigations led to important discoveries, such as the remains of the villa at **Abbey Farm, Minster-In-**

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Thanet, misinterpreted by Ireland as “a chapel or oratory” (Ireland 1829–31, vol. 1, 481).

As briefly mentioned in the previous section, during the first half of the 19th-century England experienced a quick urban and industrial development which significantly affected Kent, a county “well placed to produce building materials, cement and bricks to meet the insatiable demands of London” (Champion 2007a, 12). Despite the efforts of some antiquarians to document archaeological sites before their destruction, “much presumably went completely unrecorded” (ibid.). The partial dig of the Roman villa at **The Mount, Maidstone** carried out by Thomas Charles (1847), local doctor and antiquarian, the re-excavation of the villa at **Harlip** (Roach Smith 1848–80, vol. 2, 1-24) and, most significantly for this study, the total excavation of the bath-house at **Boughton Monchelsea** by Charles Smythe (1842) in 1841 are among the major achievements of this period. Smythe was “a local solicitor and Town Clerk of Maidstone” (Champion 2007a, 13) but his report is very detailed and contains a complete plan (Smythe 1842, 414, Plate XLIV) drawn by a certain John Jackson Bird, for which “the measurements have been most carefully taken (...)” (Smythe 1842, 415). The identification of the building as a bath-house is never expressly acknowledged in the account and the author might have assumed that the presence of hypocausts and flues would have been a good enough indication for the reader to guess the function of this structure.

Even if the contribution of 18th- and early 19th-century antiquarians to the study of Roman remains in Kent has been relevant, it was not until the creation of the Kent Archaeological Society in 1857 that archaeological investigations of the county were carried out and recorded more systematically. Its aim is poetically expressed in the introduction to the first volume of *Archaeologia Cantiana* (Anonymous 1858a, 5), the transactions published by the society:

From the memory of things decayed and forgotten, we propose to save and recover what we may, for the present and for posterity, of the wrecks still floating on the ocean of time, and preserve them with a religious and scrupulous diligence.

On 19th of September 1857 the viscount Falmouth and his wife “invited a few friends to Mereworth Castle, for the purpose of laying the foundation of an Archaeological Society for the county of Kent” (Anonymous 1858b, xxxiii). During the meeting the Marquess Camden was chosen as President and it was decided that “the

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Rules of the Sussex Society, having been already tested by experience, be adopted by this Society” (Anonymous 1858b, xxxiv). Only two months later, on November 24th, the Society already consisted of 367 members that rose to more than 500 by 14th of April 1857 when the inaugural meeting was held at the Charles Museum, Maidstone (Anonymous 1858b, xxxv; xxxviii). Significantly, on this occasion the President expresses his satisfaction for the large presence of women among the members that “will be very instrumental in promoting its welfare” and “will assist it by recording with their pencils the features of old buildings and other ancient objects of interest” (Anonymous 1858b, xxxvii).

One of the first Roman sites reported in *Archaeologia Cantiana* is the detached bath-house at **Allens Farm**, south-east of Plaxton, excavated in 1858 by Major Luard (1859) in an ash plantation. This represents a typical example of early reports, with an erudite introduction to the site, a background of the archaeology in the area, followed by the description of the remains of the bath-house (not identified as such) at Allens Farm and of a mound burial at Dux Field. Even if the account is quite cursory, subsequent excavations (Davies 2009, 262) proved Luard’s plan of the building (1859, 2a, Plate III) to be very accurate. The relevance of his intervention is also testified by a comment on the destruction of another possible Roman site located nearby before his arrival, the foundations of which “were lying in heaps by the side of the village road awaiting the hammer of the stone-breaker” (Luard 1859, 3). Other significant excavations of Romano-British sites in Kent published in the society’s transactions include cemeteries at Westborough near Maidstone (Poste 1859) and Canterbury (Brent 1861), the military base at Richborough (Dowker 1872) and Reculver (Dowker 1878), and the villas at **Folkestone, Warren Road** (Jenkins 1876b), **Loose Road, Maidstone** (excavated at the cost of the Society–Roach Smith 1876), **Wingham** (Dowker 1882; 1883) (Figure 2-1) and **Darenth** (Payne 1897).

This brief overview gives an idea of the impact that antiquarian investigations had on the Roman archaeology of the county, a phenomenon confirmed by the data collected for this study: of the 42 sites in Kent equipped with baths included in Appendix 1, five were located and 19 excavated before the end of the 19th century, with five sites known since the 18th century (**Folkestone, East Cliff**; Folkestone, Warren Road; Hartlip; **Keston** and **Sutton Baron Manor House, Borden**). Early excavations usually resulted in poor dating and the majority of the 20 sites unearthed before 1900

have uncertain (eight) or partial (six) chronology. Things did not change after the foundation of the Kent Archaeological Society: of the 11 sites excavated between 1857 and the end of the century, five have uncertain and four partial dating. Even so, the role of the society and its members in preserving and recording local archaeology should not be underestimated. Some of the sites mentioned above were destroyed immediately after their unearthing (e.g. Folkestone, Warren Road) or never re-excavated (e.g. Loose Road, Maidstone) and the accounts and plans published in *Archaeologia Cantiana* are all that remains. The understanding of baths' architectonic characteristics varied among Kentish antiquarians, with some authors apparently taking for granted their identification (Smythe 1842; Jenkins 1876b, 176) and others failing to recognise them (Luard 1859). References to ancient sources are unsurprisingly common (mainly Vitruvius, but also Columella, Statius and Cicero; e.g. Jenkins 1876b, 175-176; Roach Smith 1876, 168). In assessing Building I of the villa at Harlip, Charles Roach Smith (1848–80, vol. 2, 7) significantly criticises the widespread “custom to call all rooms in Roman villas which exhibited any vestiges of a hypocaust, baths (...)”, an issue he had already raised in a previous paper (1849). Even if the heated “dwelling rooms” that he identifies in this structure were actually part of a bath-house, his concerns are noteworthy since they reveal a general zeal among his contemporaries in recognising these facilities, seemingly seen as quintessential expressions of Roman culture.

2.4 Surrey

When the Surrey Archaeological Society was officially founded in 1854, a library was also constituted. The list of books donated to this new institution, published in the first issue of the *Surrey Archaeological Collections* (Anonymous 1958d), is a fascinating compendium of antiquarian scholarship. Together with town historical accounts and topographical works, among the volumes dealing specifically with the antiquities of Surrey we find three Histories of the county. The earliest one, *The Natural History and Antiquities of the County of Surrey* by the famous antiquarian John Aubrey, was published in five volumes by Richard Rawlinson in 1718–19. Aubrey worked at his survey of Surrey between 1673 and 1692, at first as a deputy of the royal cartographer John Ogilby. In this extremely detailed work, the author describes each village he visited during his tour of the county, sometimes giving erudite etymological explanations of their names together with brief accounts of their major monuments and

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natural features. Antiquarian notes are numerous and include references to Roman remains such as the ‘urns’ found in the Gallows east of Kingston (Aubrey 1718–19, 17).

The second county history mentioned in the list of contributions to the library is Thomas Allen’s *History of the Counties of Surrey and Sussex* (1829–30). This work covers the entire history of the two counties, with chapter III of Book 1 (76-101) dedicated to the Roman period. Allen gives an overview of the conquest and occupation of the country and then details the major Roman sites in Surrey and Sussex. He mentions discoveries of Roman coins and inscriptions as well as roads, buildings and mosaics, often quoting earlier antiquarian works such as Nathanael Salmon’s *Antiquities of Surrey* (1736) and Owen Manning and William Bray’s *The History and Antiquities of the County of Surrey* (1804–14). The latter is still considered as “an invaluable reference tool for scholars from a range of disciplines” (Pooley 2005, 91) and Bray was personally involved in a series of excavations, including the uncovering of a Roman hypocausted building, possibly a bath-house, at **Bletchingley** (reported in Manning & Bray 1804–14, vol. 3, cxxi and 657, plate 26).

The most recent of the three Histories of the county is Edward Wedlake Brayley and John Britton’s *A Topographical History of Surrey* (1850). References to Roman remains are frequent in this volume, including an account of antiquarian investigations at Albury (Brayley *et al.* 1850, 152-157), site of a Roman temple, and at Southwark (335-337), part of Surrey until 1855. Britton later became an honorary member of the Surrey Archaeological Society and during the second annual general meeting held at Guildford in 1855 was celebrated as the “Father of British Archaeology” (Webb 1958, xxiii), acknowledging his leading role in promoting the preservation of national monuments in Britain (see Jones 1846).

Mostly concerned with “brasses, church architecture and monuments, wall paintings, mediaeval documents, and similar subjects (...)” (Lowther 1954, 24), the *Surrey Archaeological Collections*, transactions of the Society, rarely published articles dedicated to Roman sites in the 19th century. The earliest paper of this kind is the fascinating report by the architect William Wilmer Pocock (1864) of the partial excavation of the villa at **Walton Heath**, a site known since the 18th century (Bray 1789). Although most of Pocock’s account (1864, 5-8; 10-11) focuses on the meticulous description of a mosaic unearthed during the digging, his brief introduction

(1-2) is particularly suggestive of the Victorian attitude towards the Roman occupation: “[w]e do not deny that these foreigners were the conquerors of our land (...)” and even if “we rather bust the length and obstinacy of the struggle our hardy forefathers maintained against the science and discipline of the legions; (...) we cannot but admit the superiority of the invaders in point of science and art”. This passage gives a revealing insight into the ambivalent attitude that many 19th-century scholars had towards the Romans and their occupation of Britain: while Pocock’s choice of the term ‘conquerors’ implies a negative connotation, he is also ready to accept the unquestionable technical and artistic ‘superiority’ of these invaders.

Another example of these reports is published in the 6th volume of the transactions (Leveson-Gower 1869). In 1864 and 1865, 10 years after its foundation, the Society for the first time directly took part in the excavation of a Roman site, the villa at **Titsey**. The digging was carried out under the direction of Granville Leveson-Gower, owner of the land, former Secretary of State for Foreign Affairs and at the time a Vice-President of the society, and Charles Spencer Perceval. The finds discovered during this investigation were lavishly illustrated by Herbert Smith (10 plates, two of which coloured), and almost half of Leveson-Gower’s paper (1869, 223-233) is dedicated to their detailed description. The most significant passage for this study (233-234) reports a *querelle* between the author and William Wilmer Pocock about the interpretation of the building. During the twelfth annual general meeting of the Society on 9th of August 1865, a visit of the recently excavated site at Titsey was arranged and in this occasion Pocock “gave a great account of the ruins, illustrating his remarks by ground plans” (Anonymous 1869, xiv). As reported by Leveson-Gower (1869, 234), Pocock thought “that the whole building, with the exception of perhaps one or two chambers, was a bath with its various accessories (...), being attached to a larger villa (...)”. In denying this hypothesis, Leveson-Gower significantly notes how “[i]t has been a common mistake, I think, in describing Roman villas, to treat the greater part of the house as a bath” (ibid.), implying some sort of urge among his colleagues to identify this peculiar element of Roman houses. As seen in the previous section, Charles Roach Smith (1849) had already raised similar complaints 20 years before, implying that the attitude of antiquarians did not change much in the course of the century.

The total number of Roman sites equipped with baths that have been excavated in Surrey before 1900 is six out of the 13 considered for this study, five of which have

partial and one undetermined chronology. The site at Beddington, part of Surrey until 1965⁹, was also first excavated in the 19th century: in 1871 John Addy (1874) superintended the excavation of a substantial structure, later identified as the detached baths of a villa (Adkins & Adkins 1982; 1983a; 1983b; 1986; Howell 2005 (ed.)).

2.5 Sussex

One of the earliest excavations of a Roman bath-house in the case study area occurred at **Eastbourne** in East Sussex in 1712. John Tabor of Lewis, a physician, communicated the discovery of a “Tessellated Pavement, Bath, and Other Roman Antiquities” in a letter to the Kentish antiquarian John Thorpe (1682–1750), later partially published in the *Philosophical Transactions of the Royal Society of London* (1717). Tabor (550) reports that in the summer of 1712 a workman repairing a fence, while “sinking a Hole to fix a Post in, was hinder’d by something Solid like a Rock”. The obstacle was part of the foundation of a Roman building. Under the supervision of the owner of the land, Mr Thomas Willard, and with the help of “one Purceglove, an ingenious Engineer” from Herstmonceux sent for by Willard, a tessellated floor and a plunge-bath were unearthed. Tabor describes in great detail these structures, giving a surprisingly accurate account of their construction layers (555; 557) and rightly identifying the function of some box flue-tiles found nearby: “(...) they were placed in the Walls to distribute Heat throughout the Building, as was usual in the ancient Structures at Rome” (although his first guess is that they were “Passages to convey Water” (558)). As I have already mentioned in the Introduction, the unexpectedly correct interpretation of an essential component of the hypocaust heating system by a country doctor, certainly a competent but minor figure in the contemporary antiquarian world, contrasts sharply with the inaccurate reconstruction published by the far more illustrious William Stukeley 20 years later (1734, 114, Plate 116; Figure 0-8).

Almost exactly a century after the publication of Tabor’s account, in 1811, the Roman villa at **Bignor** was discovered by George Tupper, owner of the land, and excavated during the following eight years under the supervision of John Hawkins and Samuel Lysons. Lysons (1763–1819), director of the Society of Antiquaries of London from 1798 to 1809 and Fellow of the Royal Society, played a key role in the

⁹ It was subsequently incorporated in the London Borough of Sutton and is therefore not included in Appendix 1.

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development of Roman archaeology in Britain and his splendid engravings of buildings and mosaics still constitute an invaluable source of information (Scott 2013a; 2014). Lysons and his associates illustrate the remains at Bignor in the third volume of *Reliquiae Britannico-Romanae* (1813–17) and some of the most significant of these coloured plates (XXVI–XXXII) are dedicated to the sumptuous South Wing bath-house of the villa. Together with the plans of the complex and two representations of the famous medusa mosaic in *apodyterium* 56 (Plates XXVII and XXVIII), the authors present four sections of the cold bath in room 55a (Plate XXIX), a section of the hypocaust of rooms 53 and 54 (Plate XXX; Figure 2-2), and of the one underneath *calidarium* 52 and its apses (Plate XXXI). Apart from their undeniable artistic value, these plates are among the most detailed and accurate archaeological illustrations of a Roman rural bath-house ever produced in the 19th century.

The resonance of the discovery of the villa at Bignor with its superb polychrome mosaics was tremendous: it quickly became a major tourist attraction as well as “a source of considerable profit” (Anonymous 1816, 17), inducing farmers of the neighbouring parishes to investigate their fields in search of similar vestiges. Sometimes these explorations were fruitful, leading to the recovery of Roman buildings such as the bath-house at **Duncton**, 3.5km north-west of Bignor. The enthusiasm for archaeological discoveries in Sussex was renewed a few decades later, when on June 18th 1846 a group of gentlemen from Lewes organised the first meeting of the Sussex Archaeological Society, “anxious to promote a reader acquaintance among persons attached to the same pursuits, and to combine their exertions in illustrations of the History and Antiquities of Sussex” (Anonymous 1853, vii). Their initiative was extremely successful: three weeks after its official foundation the society already numbered 90 members which rose to 218 at the end of the first year (Levine 1986, 65) and its influence on the constitutions of similar bodies in Kent and Surrey was significant (Salzman 1946, 7).

While a quantity of ‘research questions’ about Roman Sussex was listed in the opening paper offered by the honorary secretary William Henry Blaauw (1853, 4-5) during the second general meeting of the Society, the number of Roman sites reported in the *Sussex Archaeological Collections* during the first 50 years or so of this publication is quite limited. Only a few lines of the reports of the general meetings at New Shoreham on May 5th 1847 and at Chichester on July 1st 1847 are dedicated to the

villa at **Southwick** (Anonymous 1853, ix-x). Excavations took place there in about 1845 under the supervision of Nathaniel Hall, a local landowner, and Roman materials were presented at the previously mentioned meetings by the Rev. Charles Gaunt. While the committee hoped “to publish some details on a future occasion” (Anonymous 1853, ix), this was never achieved and the plan of the site drawn by Hall was only recently re-discovered (Rudling & Leigh 2013). Among the other few descriptions of Roman buildings unearthed, two are given in the second volume, published in 1849: a possible villa at Eastbourne (Lower 1849), probably associated with the bath-house excavated there in 1712, and a tile kiln, not recognised as such, at Wiston, West Sussex (Figg 1849). The latter is significant because William Figg (1849, 314), uncertain about the nature of the structure, polemically notes how “[i]t has generally been considered that the discovery of a hypocaust, or other means of heating rooms of Roman construction, necessarily indicate such remains to be those of baths (...)”, suggesting instead, on the basis of the already mentioned paper by Charles Roach Smith (1849), a wider use of hypocausts in Roman houses, “in consequence of the difference of temperature between the climate of England and that of Italy” (Figg 1849, 314). This is the third time we come across similar remarks from authors writing about three different counties (see previous sections), and even if in this case Figg was directly influenced by Roach Smith, we certainly get the impression of a special consideration for baths among 19th-century antiquarians.

The first extended excavations of a Roman site carried out in association with the Society, the Roman ‘camp’ and cemetery at Seaford (Price 1882), were reported in volume 33 of the *Collections*. The account of another Roman cemetery, near Chichester, discovered in 1895 was published in 1898 by Rev. Frederick Henry Arnold. In consideration of this paucity of major excavations after the discovery of Bignor, it is not surprising that only eight of the 25 sites with baths listed for Sussex were explored before 1900. Of these four have been reassessed and their complete chronology has been established, so that overall the negative effects of antiquarian excavations in this country are minimal.

2.6 Gloucestershire

In contrast to Sussex, the impact of 18th- and 19th-century excavations in Gloucestershire was substantial: almost half of the sites with baths in Appendix 1 (16 out of 34) have been excavated before 1900, eight of which have uncertain and six

partial chronology. Significantly, three sites (**Lechlade**; **Listercombe Bottom**, **Chedworth** and **Woodchester**) were discovered in the 18th century and three in the 17th century (**Badminton**; **Bibury** and **Rodmarton**). Rodmarton was the earliest site to be recorded, as testified by an entry in the local parish register transcribed by George Witts in his *Archaeological Handbook of Gloucestershire* (1882, 64-65). According to this document written in Latin, in 1636 “*tesselata pavimenta*”, tiles perforated with iron nails, and coins of Antoninus Pius and Valentinian were exposed by the plough in a field called Hocbery (now Hocberry). A possible bath-house was found at Lechlade in the first half of the 18th century, one of the earliest excavated in the case study area. In the fourth edition of his *Tour thro' the Whole Island of Great Britain* (1748, 276-277), Daniel Defoe describes a building recently dug there: “it is 50 Feet [c. 15.24m] long, 40 [c. 12.19m] broad, and four [c. 1.21m] high; supported with 100 Brick Pillars, curiously inlaid with Stones of divers Colours, of Tesseraic Work; and supposed to be a Roman Bath”.

The large villa at Woodchester was famously excavated between 1793 and 1796 by Samuel Lysons who published an accurate and richly illustrated account of his findings in 1797. Lysons’ father was the rector of Rodmarton and Cherrington and his fascination for archaeology “developed initially through discoveries made by agricultural labourers in the vicinity of the family home in Gloucestershire (...)” (Scott 2013a, 3). In 1789 he published his first contribution to *Archaeologia* (the Society of Antiquaries journal) on the villa at Comb End followed in 1792 by an “Account of Roman antiquities discovered in the county of Gloucestershire”. While working on the four volumes of his *Reliquiae Britannico-Romanae* (1813–17), in the early 1800s he explored three other villa sites in his own county at Rodmarton (1817a), **Withington Woods** (1817b) and **Great Witcombe** (1817d). Lysons was particularly concerned with the accuracy of his records and illustrations (Scott 2013a, 6-9) but his positive impact on the development of antiquarian research in Gloucestershire was limited by the high cost and small distribution of his books (Scott 2013b, 4.1). Also, the prestige and popularity of *Archaeologia*, the journal where most of his papers appeared, were in decline during the first half of the 19th century, further reducing the visibility of Lysons’ research (Roach Smith 1848–80, vol. 3, vii-viii).

In any case, many of the innovations introduced by Lysons such as the illustration of small finds were ignored even by antiquarians apparently acquainted with

his achievements. Thomas Baker, for instance, explored a Roman villa in a field of his property called Church piece at **Lillyhorn, Bournes Green** in 1841–46 and published his reports in *The Archaeological Journal* (1845) and the *Journal of the British Archaeological Association* (1847). These accounts are extremely concise and consist of lists of finds and brief descriptions of the rooms discovered, with some references to other Roman sites nearby. Baker certainly knew Lysons' works since he mentions the drawings made by Samuel of the antiquities preserved in the Manor House at Lyppiatt (Baker 1847, 45). And yet his reports, whilst showing general plans of the villa, present only one illustration of some hexagonal roof-tiles recovered from the site (Baker 1847, 44). On the other hand, Lysons' pioneering concern in preserving ancient structures after their excavation (Scott 2013a, 13-15) was taken on by Baker who mentions the construction, most likely at his own expense, of a building at Watercombe House (*c.* 1km north-east of the site) to house the remains unearthed. Remarkably, this building was not some sort of makeshift shelter, but was constructed of Roman materials found *in situ* including stone, bricks, and tiles and “covered with the hexagonal tiles, exactly as they were found, and in the form and manner in which the Romans, as it is conjectured, used them to form a covering for their buildings” (Baker 1847, 44). The walls of this structure still survive today (personal observation), testifying the effort put into its construction.

Protective structures to cover some of the rooms with mosaics, including the West Baths, and a small museum were erected also at **Chedworth** at the initiative of James Farrer (1812–79), legal guardian of his nephew John Scott, 3rd Lord Eldon (1845–1926) who owned the land where the villa was located and excavated in 1864 (Farrer 1865). Furthermore, Farrer decided to preserve from the weather the walls of the ancient building capping them with Roman roofing tiles and, less effectively, with slabs of limestone, an initiative that “marks him out as an innovator in the preservation and display of archaeological sites” (Esmonde Cleary 2013, 169).

In a brief article published in *The Gentleman's Magazine*, the architect John Clarke (1854, 248; reported in Hoselitz 2007, 104, fn. 44) denounces the general lack of public interest in Roman remains in Gloucestershire which, unlike many other counties, has so far failed to constitute “corporate bodies or local institutions” to record and preserve its glorious past. Hoselitz (2007, 104) suggests that the presence of the Cotteswold Naturalists' Field Club may have prevented the formation of a specifically

archaeological society in this area. This club was founded in 1846 and, although its statute claims an interest in local antiquities (Lloyd Baker 1853, 12), its members were primarily concerned with the natural sciences (Hoselitz 2007, 104-105). 30 years were to pass by before the constitution of a society exclusively devoted to the study of the past of Gloucestershire. The Bristol and Gloucestershire Archaeological Society came into being in 1876, spurred on by the visit of the British Archaeological Association to Bristol in 1874 (Reynolds-Moreton *et al.* 1876, 3). The members of the Provisional Committee were well aware of the large number of Roman remains in the county (Anonymous 1876, 8) and already in the first volume of the *Transactions of the Bristol and Gloucestershire Archaeological Society* we find a paper by John Bellows (1876) about the Roman walls of Gloucester. Only one villa, though, was excavated under the aegis of the society before the end of the 19th century: the site at **Tockington Park Farm**, with a project that required a “special subscription (...) which brought in the sum of £42” (Maclean 1887–88, 161). Despite this substantial investment and the direct involvement of the society, the site was only partially explored in 1887–88 and its baths cursorily recorded (Maclean 1888–89, 199-200).

2.7 Finding the baths

As I have highlighted in this chapter, while the attitude of 18th- and 19th-century British antiquarians towards the Roman past changed over time, it remained ambivalent in nature. For 18th-century scholars, Roman antiquities evoked the glorious past of the country within the Roman Empire, although their appeal was diminished by their ‘inferior’ quality if compared to continental examples (Sweet 2004, 184-185). Furthermore, ancient literary accounts were always given priority over the archaeological evidence, the latter being used only to confirm the information provided by these texts (Sweet 2004, 170). While a more critical approach towards ancient sources appeared in the 19th century, antiquarian interpretations were still deeply influenced by Greek and Latin authors. At the same time, a new ambiguity emerged: if the Romans were now sometimes seen as oppressive conquerors and corruptors of the free spirit of the natives (Warner 1801, 18), their technical and cultural ‘superiority’ was never questioned (Pocock 1864, 1-2).

Baths and their immediately recognisable hypocausts were considered among the most conspicuous signs of the Roman presence in Britain (Stukeley 1761). As we have seen, their heating system, described by Vitruvius and Pliny the Younger, drew the

attention of 18th-century British scholars, even though the precise functioning of some of its components such as the *tubuli* was still a matter of debate (Tabor 1717, 558; Stukeley 1734, 114, Plate 116; Figure 0-8). Especially at villa sites, a general readiness in identifying as a set of baths any building equipped with hypocausts continued during the 19th century, with some authors apparently taking for granted this axiom (Smythe 1842; Jenkins 1876b, 176). On the other hand, Charles Roach Smith (1849; 1848–80, vol. 2, 7), followed by others scholars (Figg 1849, 314; Leveson-Gower 1869, 234), recognises a wider use of hypocausts in Romano-British houses and criticises the widespread “custom to call all rooms in Roman villas which exhibited any vestiges of a hypocaust, baths (...)”.

Another significant aspect concerns the labelling of the different rooms composing the baths. Most of the authors tend to focus on the basic distinction between heated and unheated rooms (e.g. Lysons 1813–17, vol. 3, Plate XXVI; Smythe 1842), although the Latin nomenclature was certainly known and does occasionally appear (e.g. Stukeley 1761, 279; Warner 1801, 23, quoting Stukeley 1742, vol. 1, 9). Overall, however, these facilities were never seen as problematic or worthy of more specialist studies: Romans bathed and built baths in every province, no surprise then to find them in both urban and rural contexts all over the Empire. At most, antiquarians were keen to find literary references to explain the presence of these establishments in association with Romano-British villas, underlining the similarities between these sites and their continental counterparts, “for all seem designed on the same principle” (Roach Smith 1876, 168).

As already noted in the Introduction, this paradoxical approach to baths, from one side seen as Roman buildings par excellence and from the other unworthy of further investigation because of their apparently straightforward function, had a decisive influence on the direction of the subsequent scholarship in Britain. Baths continued to be perceived as symbols of Roman presence but at the same time the understanding of the nuances of their social function progressed very little, especially in rural contexts. A conclusive point should be made about the use of Latin labels for identifying baths’ rooms. Considering their reliance on ancient sources, one would expect antiquarians to use them profusely; however, they appear to become increasingly popular only at the end of the 19th century, when the sequence of *apodyterium*, *frigidarium*, *tepidarium* and *calidarium* became the norm in many archaeological reports (see Section 1.3.1).

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I will now look in more detail at the peculiar characteristics of each of the counties from the late Iron Age to the end of the Roman occupation, highlighting geographical variations as well as social, political and economic trends. Chapter 3 provides the contextual background necessary for a more nuanced study of bathing in these regions.

Chapter 3 Case Study Areas

This chapter provides a brief overview of my two study regions: Kent, Surrey and Sussex in South East England (broadly the *civitates* of the *Cantiaci* and the *Regni*), and Gloucestershire (broadly the *civitas* of the *Dobunni*). This summary will offer a background for the rural and urban contexts of these regions from the late Iron Age to the end of the Roman occupation, with a particular focus on the social, political and economic changes that occurred during this period. Recent studies on late Iron Age Britain often question the assumption that Roman *civitates* corresponded accurately to pre-conquest tribes and downscale the importance of ethnic groups' identities in this period, particularly among the client kingdoms in the South East (for a good summary of this debate with references see Mattingly 2006, 54-84; see also Haselgrove & Moore (eds) 2007). For this reason, the modern administrative counties will be preferred here to the traditional *civitates*, which will be used only as Roman nomenclature.

3.1 Kent

Changes in ceramic technology and burial rites occurred in Kent from the end of the 2nd century BCE, particularly in the eastern part of the county (Champion 2007b, 116). Traditionally, these innovations have been explained using the core-periphery model, which gives credit entirely to imported material culture as being responsible for social changes in local late Iron Age societies (e.g. Haselgrove 1982; Cunliffe 1988). In the last 25 years or so, this approach has been heavily criticised and it is now accepted that these imported goods should be understood as symptoms, rather than causes, of local socio-cultural developments that run parallel, but mostly independent, to similar phenomena on the continent (Hill 2007, with bibliography).

Our understanding of the nature of agricultural economy of Kent in the two centuries before the Roman conquest is limited, although the few sites extensively examined produced evidence of livestock farming, cultivation of wheat, barley, spelt and emmer (Champion 2007b, 116-118). The extraction of iron from the Weald region began in the middle and late Iron Age and the construction of hillforts in this area implies a growing interest in the exploitation of such resources. The major sites located so far are: Oldbury (the largest); Squerryes Camp, Westerham; High Rocks, Tunbridge

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Wells; and two small forts at Castel Hill, Tonbridge. None of these sites were densely populated and seemingly played the role of signposts to control the landscape (Champion 2007b, 118-119, with bibliography). The only certain hillfort in east Kent is Bigberry, near Canterbury (Jessup 1932; Jessup & Cook 1936; Thompson 1983), which was possibly occupied already in the 2nd century BCE and might have had a ritual function.

The most densely populated areas in the late Iron Age were the northern coastal strip and the Greensand zone and in this period the landscape of the county was reorganised, with divisions into fields and enclosures. Many of these rural sites persisted in the Roman period and some evolved into settlements (e.g. **Thurnham**, later occupied by a villa). Three major settlements, classified as *oppida*, have been identified in Kent: Canterbury; Rochester; and Quarry Wood Camp at Loose (Champion 2007b, 121-123, with bibliography). Quarry Wood Camp probably played a central role in the area around Maidstone, but was apparently abandoned before the Roman invasion. Archaeological evidence for the sites at Rochester and Canterbury is limited, the latter being the best understood. It was occupied at least from the 1st century BCE and was an important economic centre where new architectural styles and technologies were introduced (e.g. rectangular buildings and the use of plaster, see Frere & Anderson 1987, 47 and 81). During the 1st century BCE, other important sites developed on the coast (e.g. Folkestone, possibly involved in quern extraction) and some of them have been interpreted as ports (Parfitt 2004b).

The production of coins in Kent started in the 2nd century BCE, earlier than anywhere else in Britain (Holman 2000). Coins with inscriptions appeared here from *c.* 25 BC and they may reflect the political influence of rulers from different areas (possibly Essex and Sussex and, subsequently, the so-called eastern kingdom in the region north of the Thames). Other innovations of significance in this period were the appearance of cremation burials, new dressing fashions, and, more significantly for this study, a growing concern for personal grooming demonstrated by the adoption of toilet instruments already in the mid-1st century BCE (Hill 1997; Eckardt & Crummy 2008, 23-24, 73-107; see Section 6.1.1). These changes in different aspects of Iron Age society in south-east Britain occur in the context of an increasing trade with the continent, characterised by the import of wine amphorae (early 1st century BCE, from

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Italy and Spain) and fine tableware (end of the 1st century BCE from Gaul and Italy) (Champion 2007b, 130).

The first Roman military action against Britain notoriously occurred in the summer of 55 BCE, when Caesar's legions crossed the Channel and probably landed in the Deal area, Kent. This first campaign suffered from a general lack of planning and the results were overall inconclusive. Caesar's second expedition, with a larger fleet and a total force of *c.* 30,000 troops, was more successful. According to Caesar's *Commentarii* (Caes., *De bello Gallico*, 5.11), the leader of the British forces was Cassivellaunos, ruler of the Eastern Kingdom north of the Thames, supported among the others by the four *reges* of *Cantium*, Cingetorix, Carvilius, Taximagulus and Segovax (Caes., *De bello Gallico*, 5.22). After a series of military successes and negotiations, Cassivellaunos and other British leaders came to terms with Caesar, accepting at least one new ruler installed by the Romans (Mandubracius among the *Trinovantes*) and pledging to pay an annual tribute. Caesar left in 54 BCE, but his campaigns had a significant impact and established a strong Roman political influence in parts of southern Britain that laid the foundations for the Claudian invasion (for a detailed discussion on Caesar's campaigns, see Braund 1996, 41-66 and Grainge 2005, 83-109).

Annexation of Britain was considered and prepared both by Augustus (in 34, 27 and 25 BCE—see Cass. Dio, 49.38; 53.22; 53.25) and Caligula (in 40 CE—see Suet. *Calig.*, 44-46; Cass. Dio, 59.25). Claudius finally launched the invasion in 43 CE, using as a pretext the claims of Adminius, son of Cunobelin (a pretender to the throne of the eastern kingdom) and Verica (ousted king of the southern kingdom; see Section 3.3). A force of four legions and *c.* 20,000 auxiliary units under the command of Aulus Plautius sailed from Boulogne and seemingly landed, unopposed, at Richborough, Kent (although this hypothesis has been recently challenged, see Millett 2007, 141). The major objective of the campaign was to conquer Colchester, the capital of the Eastern kingdom, and after two major battles at two river crossings (including the Thames) the Romans successfully sieged the *oppidum*. The conquest was just at the beginning, but it was probably after the fall of Colchester that the southern kingdom surrendered and Togidubnus was installed as client king.

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Two military bases of the invasion period have been located in Kent at Richborough (Millett & Wilmott 2003) and Reculver (Philp 2005, 98-102; 192-193). According to Millett (2007, 150), this short-term military occupation is not surprising considering that “administrative control was soon passed to pro-Roman aristocrats who henceforth governed their tribal territories (*civitas*) on Rome’s behalf”. This does not imply that *Cantium* was already a territorial unit before the conquest, but that the population of this region was treated as a group by the Romans which established *Durovernum Cantiacorum* (Canterbury) as their administrative centre (ibid.). Mattingly (2006, 386), on the other hand, proposes that the administrative territory of the *Cantiaci* was limited to north-eastern Kent, “with the iron- and timber-rich Weald under some form of imperial control and the north-western sector leased or sold to private land-holders”.

Our understanding of the earlier phases of Roman Canterbury is biased by the scattered archaeological evidence, but it seems that its Iron Age structure did not change greatly until the late 1st century CE when a theatre was built beside an extremely richly decorated temple complex. The presence of this temple may indicate that the settlement had a strong religious connotation, possibly implying continuity with the previous Iron Age site (Millett 2007, 158). Public baths were built in *c.* 100–110 CE across the street from the theatre (under the Marlow car park, Blockley *et al.* 1995, 84-207). They were subsequently altered at the beginning of the 4th century and finally abandoned in around 350 CE. A set of baths attached to a private house dating to the early 4th century (Building R26) was located to the south-east of the public facilities (Blockley *et al.* 1995, 210-227). Another bath-house, possibly a privately-owned facility open to the public, was found in St. George’s Street. It was built in around *c.* 220 CE, modified and enlarged in *c.* 355-360 CE and soon after destroyed by fire and abandoned (Frere & Stow 1983, 26-40). Very little is known about *Durobrivae Cantiacorum* (Rochester), the second largest town in the *civitas* (although the later 2nd–early 3rd-century city walls enclosed an area of only *c.* 7.5 hectares). Considering its strategic position on the mouth of the River Medway and close to the Thames estuary, this centre may have played a central role in the distribution of Kentish Ragstone quarried in the Maidstone area (Detsicas 1983, 169). None of its public buildings have been identified so far, except for the probable public baths, partially excavated near Watling Street (Chaplin 1962; Wilson 1963, 158).

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Major settlements in Kent have been located at **Springhead** (see below); Syndale Bottom (possibly the lost town of *Durolevum*–Philp 2002a, 53-54); Bexley near Dartford; and West Wickham (both identified with *Noviomagus*–Tester & Caiger 1954; Philp 2002a, 32-34). Others originated as military bases such as Dover (*Dubris*; Philp 1981; 1989; Wilkinson 1994); *Portus Lemanis* (near Lympne–Cunliffe 1980; Hutchinson *et al.* 1985); Reculver (*Regulbium*–Philp 2005); and Richborough (*Rutupiae* or *Portus Ritupis*–Cunliffe 1968 (ed.); Millett & Wilmott 2003; Moore *et al.* 2003).

Springhead (*Vagniacae*), 13km west of Rochester, was a large religious centre and a settlement along Watling Street. A sanctuary developed in the Iron Age around a large pool formed by the springs at the head of the Ebbsfleet River and was then monumentalised in the Roman period (mid-2nd century CE) (Andrews *et al.* 2011, 60-83, 197-199). The settlement, which enclosed a substantial temple complex, was established in the mid-1st century and reached its peak in the 2nd century. A small bath-house (Building B.8, probably built in *c.* 150 CE and in ruin by *c.* 350 CE–Penn 1968, 171-176; Detsicas 1983, 64) was found at the end of a path leading east from Watling Street and another set of baths (2nd century?), possibly associated with a *mansio*, has been recently identified near the springs, in the north-western part of the settlement (Andrews *et al.* 2011, 89-93, 204). Other major religious sites in the region have been located at Boxted; Blue Bell Hill, Aylesford (close to the villa at **Eccles**); Worth; and possibly at Greenwich Park (Detsicas 1983, 144-147 with bibliography). A Roman sanctuary associated with springs (late 1st–5th centuries) has been recently discovered at Blacklands, School Farm near Faversham (Wilkinson 2013). 10 buildings were identified and three excavated: a rural theatre, exceptional in Britain (Building 3–Wilkinson 2013, 42-48), and two bath-houses (Buildings 1 and 2–Wilkinson 2013, 30-42).

Considering the early annexation of Kent, the low number of villa sites built in the 1st century is quite striking, possibly suggesting that their fashion took more than a generation to become established among the local elite. These early sites are clustered in the Medway and Darent valleys in west Kent and it has been proposed that “we should associate these two clusters with different valley-based Iron Age communities” (Millett 2007, 153). On the other hand, the region was densely inhabited and characterised by minor settlements and farmsteads involved in small-scale mixed farming (Williams, J. H. 2003, 235). The presence of Roman pottery and other artefacts

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in many of these sites denotes their involvement, albeit on a modest scale, in the economy of the province.

From the 2nd century, the *civitas* experienced a growing economic prosperity (e.g. the increase of pottery production (Detsicas 1983, 156-166)) and new trends appear in the rural landscape, with minor roadside settlements becoming more common. Some of them have been located relatively close to villa sites and their inhabitants may have been part of the villa owner's workforce, while others seem to have evolved from previous Iron Age settlements (Millett 2007, 166). The constant contacts with the continent allowed some of the ports along the coast to evolve into major harbour settlements such as Richborough and Dover and it is likely that many other minor trading sites existed (e.g. **Northfleet** and **Abbey Barns, Faversham**, where an exceptionally large 2nd-century bath-house (45 x 15m) has been recently excavated (Wilkinson 2016)). The number of villas increased too in the 2nd and, to a lesser extent, 3rd centuries, the main foci still being the Medway and Darent valleys with the addition of the area of the Swale (see Section 4.1.1). As during the 1st century, fewer villa sites are present in the east part of the region and none have been identified so far in the Weald. The area around Canterbury also lacks prestigious rural buildings, an anomaly which still requires a satisfactory explanation (Blagg 1982, 56; Andrews 2001, 25). Peculiar characteristics can be recognised among many of the villa sites in the region, such as a dearth of mosaic floors and of elaborate *triclinia* (Black 1987, 53, 73). According to Millett (2007, 170), this may imply that these residences did not host the aristocratic formal dinners typical of the later Empire and that they were mostly "built for show" in locations visible from a distance.

The strategic location of Kent as a bridge to the continent, and therefore its role in the provision of military supplies, explains the strong presence of the army in this area through the entire Roman occupation. Millett (2007, 177-178) suggests that Dover, with its military base, from the 2nd century replaced Richborough as the key junction between Gaul and Britain, where military and civilian goods were stored and officers and soldiers were housed. He also states that the fort was a secondary base for the men of the *Classis Britannica*, which probably had its main base in Boulogne, but overall he downplays the role of the fleet in the development of the region (Millett 2007, 179).

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As for much of Britain, in Kent the archaeological evidence for the late Roman to the early medieval transition is scant and the reducing coin circulation in this period prevents precise dating of archaeological layers. Canterbury seems to have suffered a slow decline from the middle of the 4th century (when the public baths probably fell out of use) but its role remained significant due to its position in the road network (Millett 2007, 183). Occupation in some of the villa sites such as **Bax Farm, Teynham, Lullingstone** and possibly **Eccles** continued into the early 5th century, while others (e.g. **Abbey Farm, Minster-In-Thamet** and **Thurnham**) were abandoned already during the 3rd century. It is worth noting that changes in the settlement patterns, farmed landscape and in the land use appear to be minimal between the 4th and 8th centuries (Welch 2007, 194-195).

3.2 Surrey

During the Iron Age, river valleys became the core areas for new farms and field systems in this region. Apart from the Thames valley, which was already intensively settled by the Middle Bronze Age, Iron Age farmsteads have been located in the Blackwater, Wey, Mole and Wadle valleys (Poulton 2004). Some of these sites were apparently abandoned before the Roman invasion (e.g. Tongham Nurseries–Hayman 1993), while others show evidence for continuity (e.g. Runfold, Farnham Quarry and Brooklands Central–Turner 2002, 12; Hanworth & Tomalin 1977). Overall, the landscape of the county was not extensively modified until the end of the 2nd century CE. After the conquest, this area probably fell under the administration of Togidubnus, the new client king of the southern kingdom, and was subsequently divided between the *civitates* of the *Cantiaci* and of the *Atrebates* (Bird 2004a, 66; *contra* Mattingly 2006, 386).

Larger Roman settlements in Surrey tended to cluster along major roads, such as Ewell (perhaps with a religious function–Abdy & Bierteron 1997; Orton 1997; Bird 2002a), Dorking (Ettlinger 1998; Hayman 1998; Jackson *et al.* 1999, 224) and possibly Broadstreet Common (see Bird 2004a, 67) on Stane Street (the road that linked London to Chichester). Staines (McKinley 2004; Jones & Poulton 2010) was located on the London–Silchester road and Godstone (Bird, J. 2001, 310-318) on the London–Lewes road. Considering that apparently these small towns were not previously occupied, their origin could be related to an increasing population or to the abandonment of some of the sites in the countryside (Bird 2004a, 67).

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As mentioned above, the organisation of the countryside did not change substantially until around 200 CE, when a more regular field system appears, “perhaps marking a change in land management and ownership also seen elsewhere in the western Empire” (Bird 2004a, 69). Although several minor rural sites have been recently identified and excavated (for a list and bibliography see Bird 2004a, 69; 73-74), our understanding of their distribution in the county is still not comparable to that of villa sites. As in the rest of South East England, villas tend to cluster near rivers, to an average distance of 7km from main roads and sometimes near to soil type boundaries (Sheldon *et al.* 1993, 42-43). The majority of the villa sites in the region were built in local materials (Bird 1987, 187), with the exception of **Ashtead Common** where there is evidence for imported stone (Petworth ‘marble’ and oolitic limestone—see Lowther 1930, 137-138 and Section 5.2). Following the trend noticed in Kent, to date only one possible villa site (Wyphurst Road, Cranleigh) have been identified in the Weald (Hayman 2008).

The economy of Roman Surrey is only partially understood, with a predominance of evidence for pottery and tile production. A large pottery centre using double flue kilns existed in the area around Farnham since the early Roman period (Lyne & Jefferies 1979; Millett 1979). It reached its peak during the 3rd and 4th century and had London as its major market (Bird 2004a, 71). Other pottery kilns have been excavated at Farley Heath (Lowther & Goodchild 1943, 38) and near Wisley (Gardner 1912, 131-132). The villa at Ashtead Common was one of the most significant centres for tile production, already operating from the beginning of the 2nd century CE. Alongside tiles for roofs and hypocaust *pilae*, special box flue-tiles (some of which were decorated with a ‘dog and stag’ motif; see Figure 5-5), small bricks for herringbone pattern floors, semi-circular tiles for columns and elaborate chimney pots were also produced here (for an overview of this site see Bird 1987, 184-186). Another tile industry has been recently located at Reigate and its products were traded in London as well as Canterbury and Faversham (Masefield & Williams 2003). Evidence of other typologies of industries has been found near some of the larger settlements (leather manufacturing at Staines and possibly woollen production at Ewell, for references see Bird 2004a, 68-69).

The religious landscape of Surrey has been recently reconsidered by David Bird (2004b). He significantly notes that, considering the distribution of temples in the

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region, the majority of the population would have not been able to easily access these structures for everyday worship and would have then visited them only on special occasions (thanksgiving for fulfilled prayers or religious festivals). Temples were certainly present in major settlements (some evidence comes from Staines and Ewell) and three rural temples are known at Farley Heath (Lowther & Goodchild 1943; Poulton 2007), Titsey (Graham 1936) and Wanborough (O' Connell & Bird 1994), all located in prominent sites in the landscape. Using comparable evidence from Gaul (Woolf 1998, 1-2; 231), Bird suggests that local landowners were involved in the construction and maintenance of rural and urban temples, with a probable example at **Titsey**, where the temple lies 1.2km to the north-east of a villa site. Much more difficult is to spot sacred sites without temples in the countryside, since elements of the landscapes now hard to identify (trees, springs, etc.) may have played a central role in rural religious practices.

The temples at Farley Heath and Wanborough are among the few sites in the county that show evidence of occupation into the late 4th century, when most of the villa sites have been already abandoned. Early Anglo-Saxon burial sites have been found at Mitcham, Croydon and Orpington. They lie in strategic locations near rivers and major roads and were seemingly important sites in the late Roman period (Hines 2004, 93 with references). The size of these Anglo-Saxon communities is difficult to identify, but it is clear that these groups were “associated with power and authority” and that “they unquestionably represent (...) social and territorial dominance at key nodes within the area” (ibid.). Yet, the surviving British Celtic and Latin elements in place names (Bird 2000, 165-166) and evidence of Roman influences in early Anglo-Saxon material culture (e.g. the quoit-brooch-style metalwork, see Inker 2000; Suzuki 2000) may imply an “interaction and gradual transition between one period and population and its successor” (Hines 2004, 98).

3.3 Sussex

Cross-channel links and trading between the continent and South East Britain intensified during the late Iron Age. In particular, an important commercial route connected the River Seine to the Solent with its sheltered harbour (McGrail 1987). Wine amphorae were already imported in the 2nd century BC and during the first half of the 1st century fine wares from Italy and Spanish olive oil were introduced in the area of

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the West Sussex coastal plain (see Davenport 2003, 103 for a summary of their distribution).

Coinage evidence proves exchanges with Northern France as well as direct contacts with Rome especially during the time of Augustus, mediated by a net of client kings set up by Caesar (Creighton 2000). By about 30 BCE, Commios, reconciled with the Romans after a series of volte-faces (Hirtius, *De bello Gallico* 8.6-7, 10, 21, 23, 47-48), was seemingly the first client ruler of the southern kingdom that extended between the Thames and the Solent (Creighton 2000 59-74). Although a reconstruction of successive rulers of this kingdom is problematic, Tincomarus (c. 30-10 BCE) and Verica (early 1st century CE) seem to have succeeded Commios, introducing new Roman imagery linked to power in their coinage. Verica was ousted just before 43 CE and his pleas for a Roman intervention used as a justification for the invasion. The southern kingdom was apparently the second major people to surrender to Rome, perhaps after a period of military take-over testified by military presence at **Fishbourne** and Chichester (Mattingly 2006, 99-100, 139). Nevertheless, when the southern kingdom was re-installed as a client kingdom, Togidubnus, a new ruler, was chosen by the Romans to substitute Verica (possibly dead by this time). Togidubnus seems to have remained loyal to Rome during the Boudican revolt and this may explain the lack of later forts in this area. His reign lasted probably until the 80s CE, when the kingdom was incorporated into the province and split into the three *civitates* of the Cantiaci, Atrebatas and Regni (the latter roughly overlapping modern Sussex).

Chichester (*Noviomagus Reginorum*), the major town in the *civitas* of the Regni, was built over an *oppidum* dating to the mid-1st century BCE, although our understanding of this phase is fragmentary (Davenport 2003, 105-106 with bibliography). A Roman military base was built here during the conquest as a ‘spring-board’ for the campaign in Western Britain (Down 1988, 6). Since the street grid of the town was seemingly laid down only in the 70s CE, Mattingly (2006, 267-269) suggests that two dedicatory inscriptions from Chichester dating to the third quarter of the 1st century (*RIB* 91; 92) may imply “a temple complex at a site that still lacked key characteristics of a town, even if it was a centre of the court of Togidubnus”. At any rate, when the town became a *civitas* capital after the death of the client king, it was equipped with a forum, a basilica, an amphitheatre and public baths. The latter have been partially excavated and lie below the Telephone Exchange in Chapel Street and

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the Army and Navy Stores in West Street. The chronology of this building is not completely clear, but it was most likely built in the early Flavian period (Black 2008, 299-300). It underwent several phases of alteration and probably lasted till the end of the 4th century (Down 1978, 108-113, 139-157; 1988, 42).

Minor Roman settlements and *mansiones* associated with Roman roads have been identified at Hardham (Winbolt 1927); **Alfoldean** (Winbolt 1923; 1924; Luke & Wells 2000); Iping (Margary 1953, 1-4, 7); and possibly Hassocks (Lyne 1994). At Alfoldean, a small structure north to the *mansio* has been interpreted as a bath-house dating to the late 1st century (Winbolt 1924, 119; Black 1987, 122; Luke & Wells 2000, 77, 95).

As in other parts of South East England, villa sites in Sussex cluster along the banks of rivers (Arun, Ouse and Cuckmere) and were also influenced by the productivity of the soil. They are particularly numerous in three zones: the coastal plain; the southern fringes of the Downs; and the Upper Greensand ridge north of the Downs (Rudling 2003b, 115). The ‘early villas’ consist of seven sites dating to the 1st century CE: Fishbourne; Borough Farm, Pulborough (Praetorius 1911); **Arundel Park** (Hearne 1936); **Arundel Tarrant Street** (Rudling 1984b); **Angmering**; **Southwick**; **Eastbourne**; plus three possible sites at Newhaven 2 (Bell 1976) and Springfield Road, Brighton (Dudely 1981). These are extremely luxurious and large buildings, with Fishbourne, Borough Farm and Southwick showing Mediterranean architectural influences, and their role in the complex frame of interactions between Rome and Togidubnus’ client kingdom is still debated.

On the other hand, the general trend for villa sites in the county consists of gradual development from native farms, usually with the construction of rectangular timber buildings followed by masonry ones. Significantly, two sites (**Beddingham** and **Barcombe, Dunstall’s Field**) present evidence of circular structures (houses or shrines) dating to the early 1st century. At Beddingham the memory of a round structure tentatively interpreted as a shrine lasted until the final building phase of the villa, possibly implying continuity of ownership.

The vast majority of rural settlement in the county was constituted by simple farmsteads (many of which were located on the coastal plain and on the Downs and already occupied in the late Iron Age or earlier) that maintained their native nature into

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the Roman period, with cases of continuity into the 5th century (see Rudling 2003b, 115-117 with case studies and bibliography). These sites show different levels of receptivity of Roman material culture. One of the five rectangular ‘huts’ found at Park Brow (Wolseley *et al.* 1927) is particularly significant since it presents clay roofing tiles, window glass and red painted plaster applied to its timber structure.

Agriculture and livestock farming were the main activities in rural settlements, although a detailed study of their development in Sussex is lacking. Iron industry also played a central role in this area and production was on a very large scale, with the main foci in the Ashdown forest and near Hastings (Cunliffe 1973, 122-124). Some of the centres for salt extraction located along the coastal plain originated in the Iron Age and this activity remained important during the Roman period (Bradley 1992).

The Arun valley was the main centre of pottery production, with its focus at Hardham/Wiggonholt (located on the junction of the London-Chichester road) and the Greensand Way (connecting Pulborough with the London-Hassocks-Brighton and the London-Lewes roads). Whilst pottery produced west of the River Adur was influenced by Roman models, production east of the Adur maintained its Iron Age character until the late Roman period, when new local industries appeared (Lyne 2003). Tile manufacturing has been identified at Hartfield (Rudling 1986) and Lancaster (2012; 2015, 132-151) recently suggested that a tilery existed on the coast of West Sussex, possibly near Chichester, where a new vaulting technique for hypocaust heating systems was invented in the last quarter of the 1st century CE. This system is based on the use of double flue box-tiles combined with Westhampnett voussoirs that have been found at London and Chichester, and in the baths of a number of villa sites (e.g. Angmering, Arundel Park, Fishbourne, **Lickfold**; see Section 5.2.2).

As noted for Surrey, possible Iron Age and Roman religious sites linked to natural features are now difficult to detect. Significantly, in at least two sites in Sussex (Slonk Hill, Shoreham and Money Mound, Lower Beeding), Bronze Age burial mounds show evidence of probable re-use as shrines. Masonry temples have been excavated at Chanctonbury Ring, Lancing Down, and Ratham (Rudling 2003b, 122-124 with bibliography).

Many of the villa sites in the coastal area (e.g. **Arundel**, **Tarrant Street**; Fishbourne; **Goring**; Littlehampton) were abandoned in the late 3rd century. The reason

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for this is still unclear, but the traditional claims of a rise of pirate attacks seem unconvincing (Cotterill 1993, 235-236; Millett 2007, 180-181; *contra* Rudling 2003b, 124). On the other hand, some inland sites (e.g. **Batten Hanger**; **Chilgrove 1** and **2**; and especially **Bignor**; see Section 6.3.1) show signs of prosperity in the late Roman period and were still occupied during the late 4th–early 5th centuries. Coins became extremely rare in Britain at this time and it is likely that the country ceased to be a coin-using economy by *c.* 420 CE (Esmonde Cleary 1989, 139-141). In Sussex, trade declined to a local scale although a few imported wares dating to the 5th century have been found (Lyne 2003, 249). Population seemingly dropped substantially in this period and intense arable cultivation ceased, with many fields gradually reverting to pasture (Gardiner 2003, 152).

3.4 Gloucestershire

This region was densely settled and intensively farmed at least since the 4th century BCE. In the 1st century BCE, changes in the settlement pattern of the area occur, with the general abandonment of hillforts and the appearance of new structures, the so-called *oppida*. Salmonsbury, in the north-west of the county, seems to have been the earlier of these new sites and was possibly already occupied in the 1st century BCE. It was a large enclosure of some 23ha and was intensively inhabited (Dunning 1976). Bagendon is the largest *oppidum* discovered so far in the region (between 80 and 200ha) and is located *c.* 20km south of Salmonsbury. The site dates broadly to the early 1st century BCE but the nearby enclosure at Ditches (apparently part of the same large complex) was probably already in use in the 2nd or 1st centuries BCE (Trow 1988). Both these *oppida* were located on route nodes and may have been two important commercial centres connecting the South-East area and the west (Moore 2006, 76-77).

Some of the banjo-shaped enclosures found in the eastern Cotswolds such as Ashton Keynes, Eastleach Turville, Barnsley and Northleach-Broadfield may have shared some of the characteristics of the major sites mentioned above. As identified by Moore (2006, 78), it is significant that some of these late Iron Age enclosures were subsequently occupied by early Roman villas, with examples at Ditches (Trow 1988; Trow *et al.* 2008), Waltham near Whittington (Hirst n.d.) and Rodmarton near the villa at Hocberry (Darvill & Locke 1988).

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The appearance of coinage in this region dates to the late Iron Age, possibly linked to new centres of power such as Bagendon (Van Arsdell 1994, 25-26). This site in particular lies in a part of the county where previous settlement density was low and this “may represent the emergence of new groups in areas away from existing social groups” (Moore 2006, 79), a new power centre for a new elite. This interpretation challenges the existence of a unified tribal entity in the region at this stage as well as the idea of a unified ‘Dobunnic’ coinage, implying a level of social complexity confirmed, for instance, by the varied burial rites identified so far in this area (for a summary of recent discoveries and interpretations of burials see Moore 2006, 84-87).

Starting from this analysis, Moore (2007, 56) proposes that communities ‘on the edge’ such as those living in the Bagendon complex or in the banjo enclosures may have been more receptive to the new Roman lifestyles than communities “economically and socially bound into existing exchange systems”, as seems to be confirmed by the early appearance of villas in many of these sites. Nevertheless, he stresses that this opposition needs to be taken cautiously since “the nature, meanings and reasons for the adoption of Roman-style buildings could be very different, even at two sites as close as Ditches and Frocester” (Moore 2007, 56-7).

Moore’s recent studies defy the idea of a uniform set of lifestyles in this region at the time of the Roman conquest. Unfortunately, our understanding of the interactions between natives and Romans during this crucial period is limited. Only three major military sites (Cirencester; Kingsholm; and Gloucester, see McWhirr 1981, 5-19) have been identified so far in Gloucestershire and this suggests that the military presence in this territory in the aftermath of the Roman invasion was comparably low. In his recent reassessment of Roman archaeology in the county, Holbrook (2006, 97) concurs with Moore’s hypothesis and sees the fort at Cirencester “as a demonstration of support for a pro-Roman Dobunnic leader based at Bagendon during the unsettled period of the early Welsh campaigns (...)”.

The military bases at Cirencester and Gloucester (the latter built while the nearby previous site at Kingsholm was still in use—see Hurst 1985, 113) evolved into towns at least 25 years later than their counterparts in eastern England (McWhirr 1981, 20). The early occupation at Cirencester (*Corinium*), the *civitas* capital, ranges between 50/55 to 65/70 CE (Holbrook 2008, 311). The *colonia* of Gloucester (*Glevum*) was

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founded during the reign of Nerva (96-98 CE), although this traditional date based upon epigraphic evidence has been recently questioned and tentatively antedated to the Domitian period (Hassall 1999, 183-4).

The structure and development of these towns has been the subject of several studies and publications (see McWhirr 1981, 21-58; 1984, 212-217 for a general overview and Holbrook 2006, 99-100 for an up-to-date bibliography) and will not be analysed here. For the scope of this research, it is important to note that military baths have not yet been identified in any of these sites. The location of the public baths of Cirencester is also unknown, while a number of private baths have been discovered there (Building XII.1, The Beeches Houses—McWhirr *et al.* 1986, 30-36; Building XXb.1—Haverfield 1902, 377; 1920, table of mosaics, no. 20; Cosh & Neal 2010, 115; and *insula* IX, Bingham Hall Garden—Rennie 1986—see Sections 6.3.1 and 6.3.2). The baths of Gloucester were probably situated to the north-west of the forum where “large columns, hypocaust and lead piping” have been found (McWhirr 1981, 23-24).

Major settlements in the county existed at Dorn (Joseph 1961, 132-133; Taylor 1962; Oswald 1963); Bourton-on-the-Water (Donovan 1935; O’Neil 1968; Timby 1998, 353-383); Lower Slaughter (Timby 1998, 384-389); Wycomb (Timby 1998, 295-304, 337-352); Kingscote (Timby 1998, 277-294); and Hall End, Wickwar, recently excavated and not yet fully published (Young 2003). None of these sites have so far produced evidence of baths.

Five major religious sites are known from this region. A temple near the villa at **Chedworth** (Collingwood & Taylor 1924, 231; Baddeley 1931; Lewis 1966, 17-18; the villa itself has been interpreted as a sanctuary—see Webster 1983; Walters 2000), and one at Wycomb (Timby 1998, 348-349), the large sanctuary at **Lydney Park** (Wheeler & Wheeler 1932; Casey & Hoffman 1999), a religious complex at Uley (Woodward & Leach 1993) and an unexcavated probable temple at Sapperton (McWhirr 1981, 158-159). A large bath-house (40m long, second half of the 3rd–late 4th centuries) was part of the compound at Lydney (Wheeler & Wheeler 1932, 52-57; Casey & Hoffman 1999, 87-88, 114). It was located north of the main temple and was probably used by the visitors to the shrine housed in the so-called guesthouse.

Studies on the Roman countryside in Gloucestershire tend to divide the county into four main regions: the Upper Thames Valley, the Cotswolds, the Severn Vale and

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the Forest of Dean (e.g. Holbrook 2006, 101-116, which has influenced my writing of this section and provides specific bibliography for each site). I will here provide a concise summary of their specific characteristics.

The Upper Thames Valley was intensively cultivated and already densely populated in the late Iron Age and the impact of the Roman occupation during the 1st century CE appears to have been minimal (Miles 1984, 205-206). A reorganisation of the agricultural landscape only occurred in the 2nd century, with the creation of extensive field systems. Considering the small presence of villa sites in this area, it has been suggested that a large amount of this agricultural land was now controlled by the villa owners in the Cotswolds (Salway 1993, 420). Nevertheless, Holbrook (2006, 102) points out that “these agricultural developments in the valley pre-date the heyday of Cotswold villas by at least a century” and that it is likewise possible that the wealth produced in this area funded the construction of the Cotswold villas.

The agricultural economy of the Upper Thames Valley changed during the Roman period, with indication of haymaking, livestock farming and flax production (Holbrook 2006, 102). In the late Roman period some settlements of this region were abandoned (e.g. Whelford Bowmoor; Kempsford), while at other sites occupation continued into the 5th century CE or later (e.g. Cleveland Farm; Ashton Keynes) and the complex system of fields and track left its print on the landscape long after the end of the Roman occupation.

The landscape of the Cotswolds was dominated by villas during the late 3rd–early 4th centuries, with very few sites certainly dating to the 1st century (e.g. Ditches; Holbrook 2008, 315-318). Some of the villas flourishing in the late Roman period evolved from small farmsteads and settlements (e.g. **Barnsley Park**), while others were built in previously unoccupied locations (e.g. **Turkdean**; see Section 4.1.4). To explain this increased wealth, various hypotheses have been formulated, including an unconvincing ‘flight of capital’ from Gaul and Germany (Branigan 1973; *contra* Smith 1983). A remarkable element that could shed some light on this phenomenon is the emergence of specialised economies, such as wool production (**Barnsley Park**) and cattle and sheep farming (Birdlip Quarry), which may have underpinned the late economic vitality of this area (Holbrook 2006, 108).

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The Severn Vale contains several Iron Age farmsteads which continued with slight modifications during the Roman period, while others (fewer in number in comparison with the Cotswolds) were substituted by masonry villas in the 3rd or 4th centuries (e.g. **Frocester Court**). These villas “tend to cluster on [the] intermittent islands of sand and gravel in the Vale (...)” (Holbrook 2006, 109). Exploitation of iron-ore deposits and iron production are attested, particularly in the Vale of Berkeley and the area around Bristol (e.g. **Lower Woods, Hawkesbury**).

Iron production played a central role also in the Forest of Dean, with evidence dating to the late Iron Age. Iron making remained on a small scale until the late 1st and 2nd centuries CE when production increased. This trend continued through the 3rd century and some of the villas now combined iron making and agriculture (e.g. **Chesters, Woolaston**). The distribution of these villas close to the banks of the Severn and Wye seems to indicate that these rivers were employed to convey the final products of iron making (Holbrook 2006, 114-115). Production decreased in the 4th century and seemingly ceased by the middle of the century. Coal also played a central role in this region and was transported as far as Llantwit Major (South Wales) to the west and **Chedworth** to the east. Other products of this area have been found even further afield, such as Old Red Sandstone roofing slates, flagstones and quern-stones (Holbrook 2006, 119).

Holbrook (2006, 116-119) emphasises the importance of the wetland reclamation in the inner estuary north of Bristol in the Roman period, which mainly occurred in the 3rd and 4th century. This area was apparently only populated by farmsteads, some of which perhaps engaged in iron making. This process of reclamation “seems unique in Roman Britain, and is testimony to the economic vitality of this part of Gloucestershire in the later Roman period” (Holbrook 2006, 119).

As for the South-Eastern counties, a general lack of evidence prevents a full understanding of how the Roman period in Gloucestershire came to an end. Only three rural sites in the county present definite indications of some sort of continuity after the end of the 4th century: the villa at Frocester Court (occupation within the former courtyard and house—Prince 2000, 111-118), the religious complex at Uley (possible Christian churches on the site of a previous temple—Woodward & Leach 1993, 66-79) and the Iron Age hillfort at Crickley Hill (apparently re-used in the early post-Roman

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period—Salway 1993, 330). Towns probably maintained their importance as central places until the 6th century (e.g. 5th- and 6th-century occupation within the amphitheatre at Cirencester), perhaps “within a settlement framework of re-used hillforts” (Reynolds 2006, 138).

3.5 Regional trends

The evidence collected for this chapter demonstrates that while each of the four counties presents specific characteristics, major variations can be recognised between the South East and Gloucestershire. The former area shares similar trends such as a high degree of receptivity towards continental goods in the late Iron Age and a concentration of sites in the coastal area during the 1st and the 2nd centuries CE, most of which were abandoned by the late 3rd–early 4th centuries. The general decline of the region at this time contrasts sharply with the prosperity experienced by both urban and rural sites in Gloucestershire, as demonstrated by the boost of villas in the Cotswolds, the construction of new and richly decorated houses at Cirencester and the wetland reclamation in the inner estuary north of Bristol. While agriculture was dominant in both the regions of interest, local specialised economies played a significant role; such as pottery and tiles manufactory in the South East, salt extraction along the coastal plain of Sussex and iron production in the Severn Vale and the Forest of Dean. The Weald was also rich in iron and timber, however the almost complete absence of villa sites there could be suggestive of some form of imperial control (Mattingly 2006, 386).

Villas in the two regions tend to cluster along rivers and main roads, sometimes in proximity of soil type boundaries (Sheldon *et al.* 1993, 42-43). The general trend for these sites sees a gradual development from native farms or settlements, although there are several examples of early (e.g. the ‘early villas’ in Sussex and the residences associated with the ‘community on the edge’ at Bagendon in Gloucestershire) or sudden architectonic elaboration (e.g. **Bignor** (West Sussex) and **Chedworth** (Glos.) in the late 3rd century). However, our understanding of rural areas is far from homogeneous and has been shaped to a certain degree by early archaeological interests (see Chapter 2), with an emphasis on villas over minor rural sites (e.g. in Surrey), as well as a lack of chronological detail and precise information about the crucial phase of transition from late Iron Age to early Roman settlements (e.g. Gloucestershire).

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These variations and gaps will be discussed in detail in the next chapter using the data collected for this study. The distribution and development of baths will be introduced and evaluated in the context of this complex geographical and social picture, stressing the role that these facilities had in some of the regional variations highlighted in this overview.

Chapter 4 Villas and their Baths in the Case Study Areas

This section provides a description of the data collected in the database and gazetteer. As explained in Chapter 1, four main categories of sites have been taken into consideration in the case study area: villas, possible villas, 'isolated' bath-houses, and baths associated with other rural sites. A villa is defined as a civilian rural residence, independent of major settlements, presenting at least three of the key features commonly associated with Roman influence. A possible villa is a site that presents at least one of these key features. An 'isolated' bath-house is a site where, except for a bath complex, no other Roman masonry building has been identified or excavated. Other rural sites include small settlements, industrial or religious sites.

Some 219 sites (151 certain villas, 48 possible villas, 14 'isolated' baths, and six other sites) have been identified in the case study areas and have been sorted into the database. We have 85 sites in Kent¹⁰, 18 in Surrey, 50 in Sussex¹¹, 66 in Gloucestershire (Figures 4-1; 4-2). Of these, 120 (55%) were equipped with baths during the Roman occupation (97 certain and 23 possible) and are therefore included in the gazetteer (Figure 4-3, A). This percentage increases drastically (95%) if we consider only fully excavated sites (59), since in this case bathing facilities were identified in 56 sites (55 certain and 1 possible) (Figure 4-3, B). Analysing only the sites certainly identified as villas¹² (151), we have 91 sites (73 certain and 18 possible) with baths (60%) (Figure 4-4, A). Also in this case, if we consider only fully excavated sites certainly identified as villas (43) we have a much higher percentage (98%), with 42 sites (41 certain and one possible) equipped with baths (Figure 4-4, B). These numbers could increase further considering that, as explained in Chapter 1, villa sites are considered fully excavated when at least the main house has been fully explored and so a number of them may have had detached baths not yet located.

¹⁰ This number includes six sites which were part of Kent until 1965 and are now part of the London Borough of Bromley (from now on LBB).

¹¹ 12 sites in East Sussex and 38 in West Sussex. Unlike the gazetteer and database, the county will be considered as a single entity in this chapter since the number of sites in East Sussex is very small and would result in being statistically irrelevant.

¹² Possible villa sites, 'isolated' bath-houses, and other rural sites are excluded from this group. Sites which evolved into villas or changed their status from villa to a different site type during their history are considered villas only during their 'villa' phase(s).

4.1 Chronological and regional variations

Before presenting the chronological variations in the case study areas, it is important to note that only 72 of the 219 sites (33%) present a complete chronology, while 71 (32%) present partial chronology and for 75 sites (34%) the chronology is undetermined. As stated in Chapter 1, the chronology of a site is considered ‘complete’ when all the different phases of a site and at least the starting and the ending periods of its baths (if present) have been recorded, ‘partial’ when at least the starting and/or the ending periods of occupation have been established based on the archaeological evidence, ‘undetermined’ in all the other cases. If we consider the 143 sites included in the first two groups (65% of the total), we notice that the highest number of them occur during the 2nd (115) and 3rd centuries (117) CE, with a slight decrease during the 4th century (100) (Figure 4-5). This tendency does not change if we include sites with complete or partial chronology certainly identified as villas during at least one of their phases (111 out of 143) (Figure 4-6).

Looking in more detail at the sites constructed during the 1st and the 2nd centuries, we have 64 of them out of 120 (53%) that present a more precise construction chronology: middle and late 1st century (26–75 and 76–100 CE); early, middle and late 2nd century (101–125; 126–175 and 176–200 CE). Of these the vast majority (50%) was constructed in the late 1st century. Twelve sites (six in Kent, one in the London Borough of Bromley, four in West Sussex and one in Gloucestershire) have a very early date, mostly a few years after the Boudican revolt (Figure 4-7 and 4-8).

The sites that continued in use through the 4th century similarly require a closer examination. Some 41 sites out of 102 (40%) present a more precise abandonment chronology: early, middle and late 4th century (301–325; 326–375 and 376–400 CE); early and middle 5th century (401–425; 426–475). Of these, the majority was abandoned in the late 4th century (41%), followed by early 5th century (22%) and early 4th century (20%) (Figure 4-9 and 4-10).

If we distribute the 143 sites analysed into the four counties, we have 53 sites out of 85 with complete or partial chronology in Kent¹³ (62%), 14 out of 18 in Surrey (78%), 35 out of 50 in Sussex (70%), 41 out of 66 in Gloucestershire (62%). Of these,

¹³ This number includes six sites which were part of Kent until 1965 and are now part of the LBB.

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the number of sites identified as villas at least during one of their phases is 38 in Kent¹⁴, 12 in Surrey, 27 in Sussex and 34 in Gloucestershire. As can be seen from Figures 4-11 and 4-12, Kent is the county with the majority of sites during the 1st, 2nd and 3rd centuries, with its peak during the 2nd century and a decline during the 4th century. Sussex and Surrey follow broadly the same trend, with Surrey showing its peak during the 3rd instead of the 2nd century. Significantly, Gloucestershire presents an opposite pattern, with an increase in the number of sites during 2nd, 3rd and 4th century when it reaches its peak.

Of the 64 sites with a more precise chronology constructed during the 1st and the 2nd centuries, we have 32 sites in Kent¹⁵ (23 of which certainly villas), five in Surrey (all of which certainly villas), 18 in Sussex (11 of which certainly villas) and nine in Gloucestershire (seven of which certainly villas). Figures 4-13 and 4-14 clearly show that of the 33 sites built during the late 1st century, the vast majority was constructed in the South East area (94%), with Kent standing out with a 52% of the total.

Among the sites still in use during the 4th century that present a more precise abandonment chronology, we have 14 sites in Kent (all villas), four in Surrey (all villas), nine in Sussex (six of which are certainly identified as villas) and 14 in Gloucestershire (12 of which are certainly villas). In Kent the majority of sites was abandoned during the late 4th century with another significant peak during the early 4th century. Sussex follows a similar trend, while the number of sites in Surrey is too limited to identify any pattern. Also in this case Gloucestershire presents a different trend, as we note two peaks in the late 4th and early 5th century (Figures 4-15 and 4-16).

Other remarkable trends can be identified in the continuity of use of sites in the case study regions. Those built during the 1st century (67) constitute the majority of active sites across the entire Roman period, even if they experienced a decrease especially during the 4th century, when 40 of them were still in use (60%). Sites built during the 2nd century follow a similar pattern and it is significant that among the 117 total sites in use during the 3rd century, only ten were built during this period (Figure 4-17). The first century presents also the highest number of new-built sites (67), followed by the 2nd century (49). Once again, the results are very similar if we consider only

¹⁴ This number includes three sites, which were part of Kent until 1965 and are now part of the LBB.

¹⁵ This number includes four sites, which were part of Kent until 1965 and are now part of the LBB.

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those sites certainly or almost certainly identified as villas during at least one of their phases (111) (Figure 4-18). The discrepancies between the two charts are due to the fact that some sites evolved into villas at a later stage and these villas are therefore considered as built during a different century than the site itself.

Looking now at sites equipped with baths in the case study regions, I am forced to consider only those that have a complete chronology, since those with partial chronology do not present enough evidence to precisely date the construction of their facilities. The number of sites with complete chronology is 72 out of 219 (33%) and those equipped with baths are 58 out of 72 (81%). If we include only the sites certainly identified as villas, then the ratios are 51 out of 149 (34%) and 39 out of 51 (76%) respectively. Except for the 1st century, the sites equipped with baths are more numerous than those without baths, with the highest percentage during the 3rd (66%) and 4th centuries (67%) (Figure 4-19). The chart including only certain villas shows similar chronological variations, although the percentage of sites with baths is lower, especially during the 2nd and the 3rd centuries CE (Figure 4-20). 39 out of 71 (55%) of the sites which present partial chronology had baths during their history, with 29 certain and 10 possible bath complexes. The number of sites with baths is lower among those with undetermined chronology, partially because of incomplete excavation: 22 out of 75 (29%) with 11 certain and 11 possible facilities.

In order to analyse the continuity of use of baths in the case study regions, we need to consider all the facilities built in each period out of a grand total of 75 newly built baths. The vast majority of them (49%) were built during the 2nd century. It is significant that many of the facilities built during the 1st century made it through the 2nd (79%) and even 3rd centuries (57%). In addition, a good percentage (46%) of the 2nd-century baths was still in use during the 4th century. Another remarkable feature is the construction of 14 new facilities during the 4th century, in contrast with the 11 new baths built in the 3rd century (Figure 4-21).

Of the 58 sites with a complete chronology equipped with baths in the case study area, we have 25 sites in Kent out of 30 (83%), 14 of which were certainly villas; five in Surrey out of six (83%), with four certain villas; 15 in Sussex out of 20 (75%), with 10 certain villas; and 13 in Gloucestershire out of 16 (81%), with 11 certain villas. If we exclude Surrey that has a very small number of sites and therefore presents high

variations in percentages, Sussex is the county with the highest proportion of sites with baths during the 1st century (50%), Kent during the 2nd and 3rd centuries (52% and 46%), and Gloucestershire during the 4th century (37%). Here, a pattern similar to the one I have identified for the chronological variations of sites can be seen. In Kent, Surrey and partly in Sussex the sites with baths reach their peaks during the 2nd and 3rd centuries with a later decline, while in Gloucestershire the number of sites increases constantly during the 2nd and 3rd centuries and reaches its peak in the 4th century (Figure 4-22). This trend is equally clear in the chart that includes only villa sites (Figure 4-23).

I will now examine the sites with baths which present a construction and/or abandonment periods of their facilities (i.e. the construction of the first built baths and the abandonment of the last abandoned baths at the site) that can be specified further into early, middle or late part of a century (56 out of 58¹⁶). Of the 48 sites with baths that present a more precise construction period of their facilities, we can see how the earliest complexes are found in Kent (**Eccles; Snodland**), Sussex (**Fishbourne**) and Gloucestershire (**Wortley, Wotton-Under-Edge**) in the middle of the 1st century. Their major periods of construction are the late 1st (10 sites) and the early (six sites) and mid-2nd centuries (six sites) (Figure 4-24). Gloucestershire is the only county where sites were equipped with newly built baths in the middle of the 4th century. Of the 43 facilities that present a more precise abandonment period, the vast majority went out of use in the late 4th century, with two further peaks in the late 3rd and early 5th centuries (Figure 4-25).

4.1.1 Kent

Moving now to the single counties, I will analyse in more detail the chronological patterns that emerged from the dataset, starting with Kent and the six sites which were part of Kent until 1965 and are now part of the London Borough of Bromley.

As seen in the general section, Kent (Figure 4-26) presents a high number of sites constructed during the 1st century (27, six of which date to the middle of the century) with a substantial increase during the 2nd century (44) and a slow decline during the 3rd century (41) that accelerated during the 4th century (32). Most of the sites

¹⁶ The only bath complexes that do not present enough dating evidence are **Barcombe, Dunstall's Field** in East Sussex and **Abbey Barns, Faversham** in Kent.

in the county were abandoned at the end of this century, with only four still active at the turn of the 5th century.

If we locate the earliest sites on a map, the presence of clusters in the Medway and Darent valleys stressed by Millett (2007, 153) emerges clearly (Figure 4-27). Although we know that many of them had baths during their history, the chronology of most of these facilities is partial and therefore we cannot assess with certainty their percentage at this time. Figure 4-28 shows a map of Kent during the 1st century with five sites out of 18 equipped with baths. These were three villa sites (**Eccles; Folkestone, East Cliff and Snodland**) and two of the so called ‘isolated’ bath-houses (**Bedens Field, Foot’s Cray and Kemsing**). A sixth site, **Darenth**, was equipped with a detached bath-house in use from about 70 CE to 140 CE (Philp 1973, 86), but unfortunately the overall chronology of the site is partial and therefore has not been included. Eccles and Snodland, both extensively excavated, constitute two significant case study sites during this period since they are located only *c.* 2km from each other, on the eastern and western banks of the River Medway, and emulation may have played an important role here (see Section 6.1.3). Both are among the few villa sites where half box tiles have been found and their first set of baths may have been built as early as the middle of the 1st century (see Section 6.1.2).

During the 2nd and 3rd centuries the number of sites increased substantially (Figure 4-29 and 4-31) and the presence of villas and ‘isolated’ baths appeared widespread across the entire county. The sites with complete chronology are more numerous: 28 (21 of which equipped with baths) in the 2nd century and 26 (19 of which equipped with baths) in the 3rd century (Figure 4-30 and 4-32). During this period two of the major sites along the Medway River (**Farningham 2, Manor House and Lullingstone**) and two of those along the Darent (Eccles and **The Mount, Maidstone**) had bathing facilities. Most of baths active during this period were in fact associated with sites close to water courses, with the exception of **Baston Manor, Hayes; Chalk, Gravesend; Keston and Thurnham**. Another important factor in the choice of a site appears to be the proximity to the road network, with 15 sites located at less than 1km from a road during the 3rd century (Figure 4-31), six of which were equipped with baths (Figure 4-32). These include the roadside settlement and religious complex at **Springhead**, the sanctuary at **Blacklands School Farm**, and the possible emporium at **Abbey Barns, Faversham**. The two major urban centres of *Durovernum Cantiacorum*

and *Durobrivae* lacked prestigious sites in their surroundings (see Section 3.1). Furthermore, villas were less frequent in the south-east part of the region and none of them have been identified so far in the Weald. The villa at **Abbey Farm, Minster-In-Thanet** is particularly relevant in consideration of its recent and accurate excavation and for the presence of two separate facilities active at the same time during the 2nd century, possibly for different users (see Section 6.2.2). Lullingstone is another well excavated site that will be analysed for the significance of the decoration of its baths (see Section 5.4).

The decrease in sites during the 4th century (Figure 4-33) corresponds to a decrease in the number of bathing facilities and the baths of several villa sites were already out of use at this stage (e.g. The Mount, Maidstone and **Allens Farm**), with only 12 facilities still in operation out of 19 still active sites with complete chronology (Figure 4-34). A significant site that will be examined in detail is **Bax Farm, Teynham**, the only privately owned rural bath-house in this county certainly built at this stage (see Sections 6.2.2 and 6.3.1).

4.1.2 Surrey

The chronological development of sites in Surrey presents similarities with Kent, although the limited number of sites with complete and partial chronology (14 out of 18) makes the results statistically less relevant (Figure 4-35). Of these, six were built during the 1st century, six during the 2nd century, and only one site was built during the 3rd and 4th centuries respectively.

Looking at Figure 4-36, the villa sites dating to the 1st century appear quite scattered, with one possible cluster north-east of the River Mole and another one on the west shore of the River Wey. Significantly, these areas were intensively settled during the Iron Age, together with the Blackwater and Wadle valleys (Poulton 2004). Only one site, **Ashtead Common**, was equipped with private baths during this period (Figure 4-37). This is a remarkable site for many reasons, including the presence of imported building material (Petworth ‘marble’ and oolitic limestone, see Lowther 1930, 137-138) and its prominent role as a centre for tile production, already operating from the beginning of the 2nd century CE (see Section 6.2.1 and 6.2.2).

During the 2nd century the number of sites doubled (Figure 4-38), with a new small cluster of villas north of the River Eden. At this time, two sites were equipped

with baths: the villas at Ashtead Common and at **Sandilands Road, Walton-On-The-Hill** (Figure 4-39). Only minor modifications to this picture occurred during the 3rd and 4th centuries (Figure 4-40 and 4-42), with the villa at **Rapsley, Ewhurst** equipped with baths during the 3rd century and an ‘isolated’ bath-house built at **Chatley Farm, Cobham** during the 4th century (Figure 4-41 and 4-43). The site of a pottery works at **Six Bells, Farnham** is particularly fascinating since its bath-house, dating to the middle of the 3rd century, was apparently built for those working in the pottery manufacturing, before the construction of a residential building also equipped with baths at the beginning of the 4th century (see Section 6.2.3).

4.1.3 Sussex

Sussex also presents similar trends to those seen in Kent and Surrey, such as a concentration of sites near roads and rivers (Arun and Ouse) and their absence in the Weald (with the exception of the large ironmaking site at **Beauport Park**). As can be seen in Figure 4-44, few sites have been located in the northern part of the region, while, as confirmed by Rudling (2003b, 115), they are particularly numerous in three zones: the coastal plain, the southern fringes of the Downs and the Upper Greensand ridge north of the Downs. Clusters can also be identified near *Noviomagus Reginorum*, the *civitas* capital, and other major settlements such as Pulborough and Hassocks.

A conspicuous number of sites (26) date to the 1st century (Figure 4-45). As mentioned in Section 3.3, at this stage a small group of extremely luxurious and large buildings was constructed, the so called ‘early villas’: **Angmering; Arundel Park; Arundel Tarrant Street; Borough Farm, Pulborough; Eastbourne; Fishbourne** (although this was almost certainly not a villa site at its earlier stage); **Southwick**, plus two possible sites at Newhaven 2 and Springfield Road, Brighton, slightly later in date. Other early sites were grouped in the South Downs close to the Chichester-Brighton Roman road and in the coastal plain. Overall, seven sites were equipped with baths at this stage, only three of which can be certainly identified as villas: **Angmering; Beddingham** and **Southwick** (Figure 4-46). Half-box tiles were found at Arundel Park and Borough Farm, Pulborough (both with partial chronology) and may indicate that very early baths (middle of the 1st century?) existed there (Black 1987, 12), contemporary with the first set of baths at **Snodland** (Kent). Fishbourne and Angmering will be examined in detail in consideration of the exceptional size and similarities between their bathing facilities (Cunliffe 1973, 76-78), as well as for the use

at both sites of a new, typically Romano-British vaulting technique (Lancaster 2012; 2015, 132-151; see Section 5.2.2).

During the 2nd century, nine new sites were built (for a total of 34, Figure 4-47), with an intensification of buildings in the area between the Rivers Arun and Adur. At this time, three sites were equipped with newly built baths: the villa at **Barcombe**, **Dunstall's Field**; the nearby site at **Barcombe, Church Field** (likely connected to the villa) and the small villa at **Garden Hill, Hartfield** (Figure 4-48).

Only minor modifications to this picture occurred during the 3rd century, although there was a slight decline with four sites being abandoned and no new sites built (Figure 4-49). Also, the number of sites with baths was now eight instead of nine as during the previous century (Figure 4-50).

In the 4th century the number of sites dropped from 30 to 18 with the area between the Rivers Arun and Adur almost completely abandoned and a general reduction of coastal sites (Figure 4-51 and 4-52). Apart from Newhaven 2, Southwick and possibly Arundel Park, the 'early villas' were all out of use at this stage. **Bignor** is the only complex of the county that underwent a substantial upgrade in the late 3rd–early 4th centuries and the social implications of its two new sets of baths will be discussed in detail (see Sections 6.2.2, 6.3.1 and 6.3.2). Furthermore, three sites relatively close to each other and near the Chichester-Brighton Roman road were now equipped with newly built baths: **Batten Hanger**; **Chilgrove 1** and **Chilgrove 2** (see Section 6.3.2).

4.1.4 Gloucestershire

The distribution of sites in this county is influenced by the presence of rivers and road as seen for the South-East region. Figure 4-53, in line with Holbrook's overview of Roman Gloucestershire (2006, 101-116), shows a concentration of villas in the Cotswolds, a lower number of them in the Forest of Dean and the Severn Vale and very few sites in the Upper Thames Valley. Unfortunately, only 16 sites of those shown on this map have a complete chronology as a result of their early excavations (see Section 2.6) and this limits our understanding of the development of private baths in this county.

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As seen in the general section, Gloucestershire presents a contrast in pattern to the other three counties analysed, with an increase in the number of sites during the 2nd, 3rd and 4th century when it reached its peak. During the 1st century only eight sites are recorded (Figure 4-54), one of which is equipped with private baths (**Wortley, Wotton-Under-Edge**) (Figure 4-55). This villa has been recently excavated and is of particular significance in consideration of the size of its bathing facilities and the presence of a *natatio*, a rare feature in Romano-British rural sites (see Section 6.1.2).

During the 2nd century the number of sites rised to 25 (Figure 4-56), with clusters on the banks of the River Coln and on the road connecting *Glevum* with *Isca Augusta*. Of the 12 sites with complete chronology in use at this time, six were equipped with baths (Figure 4-57). The villa at **Chedworth** was built during this period and, considering its relevance, it will be examined in detail (see Section 6.3.2).

Eight new sites were built in the 3rd century (Figure 4-58), increasing the presence of villas on Ermin Street, the road linking *Glevum* to *Corinium Dobunorum*, and in the area east of the road linking *Glevum* with *Aquae Sulis*. The construction of the villa at **Great Witcombe**, the only new villa site with baths (Figure 4-59), probably belongs to this period, although the mosaics found in the west wing of this building has been alternatively dated to the 2nd century (Cosh & Neal 2010, 157). This site was equipped with two bath-suites in use at the same time and the possible meaning of this duplication will be thoroughly considered (see Section 6.2.2). A large bath-house was also built at the religious complex at **Lydney Park** in the second half of the century.

All of the sites built during the previous century were still in use during the 4th century and six new sites appeared for a total of 39 sites (Figure 4-60), of which 13 were equipped with baths (Figure 4-61). New facilities appeared at five sites, making Gloucestershire the county that, among those taken into consideration, shows the highest number of rural bathing facilities built during this century. The villa at **Barnsley Park** is particularly important since it raises questions about the users of its baths, accessible via two distinct entrances and possibly open to the estate workers (see Section 6.2.2).

4.2 Size and typology of villa sites and their relationship with baths

To assess if there is a relationship between the size and typology of villa sites and their baths, I will take into consideration 29 villas (nine in Kent¹⁷, two in Surrey, seven in Sussex and 10 in Gloucestershire) with a total of 37 private facilities (eight sites have two baths), with complete dating evidence and with enough data to establish the two characteristics mentioned above (size and typology). Even if the sites are distributed quite evenly among the four counties, this is a small sample and the results are therefore to be taken cautiously. As mentioned in Chapter 1, the size of villas and baths has been established according to the number of their rooms¹⁸. This distinction is possibly less effective than calculating their footprint, but keeps the classification relatively simple. Furthermore, the addition of extra rooms to the standard sequence of *apodyterium*, *frigidarium*, *tepidarium*, and *calidarium* was typically associated with larger structures such as military or public facilities and their presence at rural sites certainly contributed to enhance the size of these structures in the minds of their users.

Based on this sample, attached baths dominate through all the Roman period except for the 1st century, when three sites out of five have detached facilities (Figure 4-62). All of these early detached baths are in the South East, with two sites in Kent (**Eccles** and **Folkestone, East Cliff**) and one in Surrey (**Ashtead Common**). Interestingly, all these sites were small villas of less than 16 rooms at the time their baths were constructed and two of these facilities are large in size (Eccles, with an impressive 18 room structure, and Folkestone, East Cliff). The social significance of these small residences with large detached baths will be analysed in Sections 6.1.3 and 6.2.1.

During the 2nd century, we have 19 baths in 15 sites (eight in Kent, one in Surrey, three in Sussex and three in Gloucestershire). Of these facilities, 13 are attached and six detached. Kent is the county with the higher number of detached baths (four out of 12) while Gloucestershire presents only attached examples. Large baths tend to be detached (four out of five) and at this time are only found in the South-East region (four in Kent, one in Surrey and one in Sussex). On the other hand, medium size (seven out

¹⁷ This number includes two sites now part of the LBB.

¹⁸ A villa is considered small if its main building had up to 15 rooms; medium if it had between 16 and 30 rooms; and large if it had 31 rooms or more. A bath-house is considered small if it had between one and four rooms; medium between five and seven; and large if it had more than seven rooms.

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of eight) and small baths (five out of six) are predominantly attached (see Section 6.2.2). The majority of villas is or becomes a winged corridor structure during this century (seven out of 16), followed by corridor houses (four). Of the nine facilities associated with winged corridor villas (seven in Kent and two in Gloucestershire), four are medium size attached baths.

In the 3rd century the number of sites rises to 16 (eight in Kent¹⁹, one in Surrey, three in Sussex and four in Gloucestershire) with 19 baths, 15 attached and four detached. Gloucestershire is still lacking large facilities, while in the South East these are now more commonly attached to the main building (three out of four). As for the previous century, winged corridor villas are the most common in the case study area with nine sites and 12 baths, the majority of which are again medium size attached facilities (seven). Three sites are courtyard villas, all of which are large buildings with medium size (**Chedworth** in Gloucestershire) or large attached baths (**Eccles** in Kent and **Fishbourne** in West Sussex).

The 17 sites active during the 4th century (four in Kent²⁰, one in Surrey, four in Sussex and eight in Gloucestershire) present 20 baths, 18 attached and only two detached. This century sees a substantial increase in the number of courtyard villas (five out of 17 sites). Although winged corridor houses are still dominant (eight), the number of baths associated with courtyard villas is only slightly lower (seven) than those associated with winged corridor buildings (eight) (Figure 4-63). Gloucestershire is now the county with the majority of facilities (10) and has three (**Chedworth**; **Chesters**, **Woolaston**; and **Great Witcombe**) of the six large baths in use at this time, all of which are attached (see Sections 6.3.1 and 6.3.2).

Except for the 1st century, medium size baths are the majority during the Roman period with a peak of large baths during the 4th century (Figure 4-64). Overall the size of baths tends to broadly correspond to the size of the villa they are part of, with some significant exceptions (Figure 4-65). As mentioned above, Eccles and Folkestone, East Cliff in Kent are small villas with large baths during the 1st century. **Abbey Farm**, **Minster-In-Thanel**, also in Kent, has two baths, one of which large, built at the beginning of the 2nd century when the main building is still a small house

¹⁹ This number includes two sites now part of the LBB.

²⁰ This number includes one site now part of the LBB.

(see Section 6.2.1). Another noteworthy site dating to this period is the unpretentious small rectangular villa at **Allens Farm** in Kent, equipped with a large bath-house of 11 rooms. In the 4th century we have a similar site at **Six Bells, Farnham** (Surrey), where a small dwelling, possibly inhabited by the manager of the pottery works installed here (Lowther 1955, 56), was equipped with a large attached bath-suite. However, the size of the latter, which occupied more than half of the entire building, is problematic and Bird (2004c, 97-98) suggests that the house was probably part of a larger villa.

4.3 Specifics of baths

This section will look at the characteristics of the baths built in the case study area during the Roman period. All the sites equipped with baths with a complete chronology will be taken into consideration (58) with a focus on their typology, size and decoration.

4.3.1 1st century

As seen in the previous section, the majority of baths dating to the 1st century are detached buildings (10 out of 14 if we include ‘isolated’ facilities and those associated with a *mansio* at **Alfoldean**, West Sussex). Their size and shape vary substantially, ranging from the massive 18 room bath-house at **Eccles** (Kent) to the modest facilities at **Bedens Field, Foot’s Cray** (LBB). The 12 facilities with complete or almost complete plans²¹ are shown in Figures 4-66, 4-67 and 4-68. Most of the baths, both detached and attached, are simple, narrow rectangular structures with the traditional row of rooms (*frigidarium*, *tepidarium* and *calidarium*), usually with the addition of a lateral section at one corner (**Beddingham** (East Sussex); **Bedens Field, Foot’s Cray**; **Folkestone, East Cliff** (Kent); **Kemsing** (Kent); **Lickfold, Wiggonholt** (West Sussex); **Sidlesham** (West Sussex); **Wortley, Wotton-Under-Edge** (Glos.)). The largest structures present more compact and complex plans, with a significant number of rooms, large draining systems and multiple heated spaces. The facilities at **Angmering** and **Fishbourne** (West Sussex) are similar in plan, construction material and decoration (black and white mosaic pavements, *opus sectile* and marble wall-inlay) and Cunliffe (1973, 76-78) suggests that “they may have been built by the same architect” (see Section 5.4.1). An architect with military background has been suggested at **Eccles** (Detscicas 1965, 89), since the bath-house presents a circular *laconicum* (or *sudatorium*,

²¹ Only building material of the 1st-century baths of the villa at **Snodland** (Kent) and of the late 1st century facilities at **Alfoldean** have been recovered and their plans is not known.

cf. Nielsen 1990, vol. 1, 78), a feature usually associated with military establishments (Fair 1927; Nielsen 1990, vol. 1, 78-79) and very rarely found in villa sites (the only other example, probably dating to the 2nd century, comes from **Ashtead Common** (Surrey)) (see Section 6.1.2).

Eccles presents another distinct element, although not directly connected with the bath-house: an ornamental pool or *natatio* (c. 24.9 x 3.45m) built in front of the 1st-century villa (Appendix 1, 63, Figure 22). Again, these structures, often referred to as *piscinae* in the literature, are sometimes part of Romano-British military sites (e.g. the contemporary pools associated with the large Fortress Baths and the extramural baths at Caerleon in Wales (Zienkiewicz 1986, vol. 1, 130-137; 145; Boon 1972, 102-103)) and public baths (Canterbury, dating to the early 2nd century (Blockley *et al.* 1995, 88-93, 96), Wroxeter (Ellis 2000, 38-41, 81), Exeter (Bidwell 1979, 121-123) and Bath (Cunliffe 1969, 101)) but are not common in villas. Other examples are found at **Darenth** (Kent), with a decorative function but unfortunately uncertain chronology, Gadebridge Park (early 4th century, c. 20 x 12m) (Herts.; Neal 1974, 73-76), High Wycombe (early 4th century, c. 7 x 4.8m) (Bucks; Hartley 1953-60, 240), Well (2nd century, c. 12.2 x 4.6m) (Yorks; Greene 1947, 466) and at Wortley, Wotton-Under-Edge (c. 13.70 x 2.25m) (Glos.; Figure 4-68, D), where a *natatio*, probably with a functional purpose like the previous three sites, was part of the 1st-century bath-suite. Broadly contemporary examples in other northern provinces can be found at Mersch in Luxemburg (Thill 1967, fig. 2) (Figure 0-7) and at Reinheim in Germany (Sărățeanu-Müller 2000; 2011; for a list of continental sites see Detsicas 1989, 85-86, fns 14; 16).

An essential component of any bath-house is its hypocaust heating system and all these early buildings present at least fragmentary evidence of it. In particular, we have significant examples at Angmering, Ashtead Common and Lickfold, Wiggonholt of an innovative, possibly locally developed vaulting technique based on the use of double flue box-tiles combined with Westhampnett voussoirs (Lancaster 2012; 2015, 132-151; see Section 5.2.2). The largest baths present elaborate decoration, such as mosaics and wall paintings at Eccles, **Southwick** (West Sussex) and Wortley, Wotton-Under-Edge. Mosaics, marble wall-inlay and *opus sectile* were used for floor or wall decoration at Angmering, Fishbourne and Folkestone, East Cliff. Nevertheless, some of the less pretentious structures also show traces of wall painting (Kemsing), often associated with tessellated floors (Lickfold, Wiggonholt and Sidlesham). This may

indicate that, at least in some cases, undecorated buildings should be attributed to a poor state of preservation rather than to an actual lack of decoration (see Section 5.4). Finally, the baths at Eccles and possibly Angmering and Kemsing present a high level of modifications from the 1st century, implying a continuous investment in renovating and repairing these facilities.

Unfortunately, the consideration of water supply was ignored in most excavations of baths during the 19th and the first half of the 20th centuries, resulting often in a lack of records. Another factor that limits our information is the perishable material (mostly wood) used in the construction of pipes for aqueducts, which could have been completely removed in later construction phases and is in any case difficult to trace archaeologically (Burgers 1997, 230-231). During the 1st century, only two sites, Eccles and Fishbourne, present evidence of aqueducts for their baths, both with wooden pipes. The foundation of a possible storage tank for rainwater was found at Sidlesham and a well supplied the baths at Beddingham. For a few other sites, only the source of water has been hypothesised: the River Cray for Bedens Field, Foot's Cray and nearby springs for Kemsing and Wortley, Wotton-Under-Edge (see Section 5.2.3).

4.3.2 2nd century

The majority of baths in the case study regions was constructed during the 2nd century (37) and many 1st-century structures (4) were significantly modified (i.e. more than one room has been added to the original building). The 38 new built or modified facilities with complete or almost complete plans²² are shown in Figures 4-69, 4-70, 4-71, 4-72, 4-73, 4-74 and 4-75. Apart from some small two room structures (**Barcombe**, **Dunstall's Field** (East Sussex) and **Highstead, Chislet** (Kent)), most of these baths, both detached and attached, can be classified in the two broad typologies mentioned above, i.e. (1) narrow rectangular structures versus (2) more compact buildings. Both these groups present simple and small examples, such as **Baston Manor, Hayes** (LBB, typ. 1) and building 3 at **Abbey Farm, Minster-In-Thamet** (Kent, typ. 2), as well as large and elaborate structures, such as **Northfleet** (Kent, typ. 1) and the east wing baths at **Fishbourne** (West Sussex, typ. 2).

²² Four sites are not shown: the baths of the villa at **Cobham Park** (Kent) were badly damaged in the 17th or 18th century and only the *praefurnium* survived; the plan of those at **Farningham 2, Manor House** (Kent) and at **Abbey Barns, Faversham** have not been published; and the baths at **Withington Manor Court Field** (Glos.) have been only partially excavated.

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Although the traditional use of *pilae* was still the most common solution (sometimes substituted by tile piers such as in Room 21 at **Lullingstone** (Kent) and Room 5 at **Little Chart** (Kent)), a new typology of hypocaust usually referred to as ‘channelled’ started to appear at this time in the case study area (see Section 5.2.2). This consisted of one or more channels inserted underneath the floor through which the hot air was conducted. Black (1985a, 84) suggests that this technique “may have been inspired by the idea of blocking the gaps in one direction between successive rows of *pilae*”, as can be seen in Room 9, Block C at **Darenth** (Kent). Furthermore, he recognises a second stage of this system in military bath-houses at Rough Castle (MacDonald 1933, 245) and Balmuildy (Miller 1922, 49) on the Antonine Wall, where close settings of *pilae* or larger versions of them are used to limit the space for the circulation of hot air. Channelled hypocausts were less costly and more efficient than their traditional counterpart, since “it was the wall jacketing which contributed most to heating the room” (Black 1985a, 84). Six variations of this system can be found among the baths built or enlarged during the 2nd century in the area of interest. The earliest examples are two ‘isolated’ baths at **Kemsing** (Kent; Figure 4-70, D) and **Chalk, Gravesend** (Kent; Figure 4-70, E). The North Room at Kemsing was added to the previous structure probably at the beginning of the 2nd century and contained the most elaborate hypocaust of the group, with at least seven channels forming a “radiating system (...) aimed at distributing heat evenly throughout the room” (Philp 2002b, 9). The bath-house at Chalk, Gravesend also dates to the beginning of the 2nd century and presents a channelled hypocaust with cruciform plan underneath the *apodyterium* in Room 1. This shape was used to obtain a moderate heating since its channels covered only a limited area of the room (Black 1985a, 84-85). The floor of the *tepidarium* in Room VII at **Whittington Court** (Glos.; Figure 4-74, D) was supported by masonry piers to form a channelled structure. Room G (another *tepidarium*) of the East Wing baths at Fishbourne (c. 130-160 CE, West Sussex; Figure 4-73, E) was equipped with a channelled hypocaust formed of three channels roofed with tiles and perforated by through-ducts made of hollow box-tiles, “so that the hot air in the main channels (...) could pass into the two subsidiary channels beneath the centre of the floor” (Cunliffe 1971b, vol. 1, 175). Two rooms of Building 1, one of the two sets of 2nd century baths associated with the sanctuary at **Blacklands School Farm** (Kent; Figure 4-75, B), had channelled hypocausts. Finally, a simple hypocaust with a single flue was used to heat

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Room 2 of the small villa at **Sedgebrook, Plaxtol** (Kent; Figure 4-71, C), dating to the second half of the 2nd century.

As for the previous period, most of the baths had some form of decoration, including the smaller structures such as Highstead, Chislet, where traces of painted wall plaster have been recovered (see Section 5.4). Of the 37 new built baths, ten had mosaic floors and 22 present evidence of wall paintings, with a predominance of white and red fragments. Floral and pattern-motives are the most common ones, but in two cases figurative elements can be reconstructed. One of the fragments associated with the facilities of the villas at **Cobham Park** (Kent) bears a palm tree trunk painted in yellow and black, while another one has crimson and pink flowers and foliage (Tester 1961, 91). Building 1 at Blacklands School Farm produced pieces of wall-plaster “showing exquisite paintings of birds darting through foliage” (Wilkinson 2013, 12). The cold plunge-bath of the villa at Lullingstone was probably decorated with a marine scene, since a fragment was recovered “showing a fish, possibly a trout, rendered in pink, red and dark blue, swimming in light blue water” (Liversidge 1987, 5; see Meates 1987, Plate I and Meates 1955, 97).

In his study of the water supplies of Roman Britain, Burgers (1997, 229) indicates wells as the primary source of water at villa sites. In line with this general trend, wells dating to the 2nd century are quite common in the case study area, with three of them certainly (Abbey Farm, Minster-In-Thanet; Lullingstone; Sedgebrook, Plaxtol) and two possibly (Barcombe Dunstall’s Field; Little Chart) associated with new bath complexes. The new facilities built at **Eccles** (Kent) and Fishbourne were supplied by a system of wooden pipes as during the previous phase. At other 14 sites, watercourses (5/6), springs (7/8) or ponds (1) have been identified as probable sources of water, although no trace of pipes linking them with the baths has been found (see Section 5.2.3).

4.3.3 3rd century

While the overall number of baths reached its peak in the 3rd century (51), only 11 were actually built at this time, less than during any other century. These, together with three 2nd-century structures significantly modified during this period, are shown in Figures 4-76, 4-77, 4-78 and 4-79. Again, most of the baths fit into one of the two typologies identified with a few exceptions. Three of the four rooms of the Upper Bath Suite at

Great Witcombe (Glos.; Figure 4-78, A) were inserted as a sort of partition inside a larger room. Another anomaly is Room 14A at **Orpington** (LBB; Figure 4-76, C), later superseded by a smaller room (Room 14B), which “was designed to hold water” (Philp 1996a, 22), and may have been a tank or a bath. The sanctuary at **Lydney Park** (Glos.; Figure 4-79, A) was equipped with an impressive 15-room bath-house in the second half of the century, one of the largest rural facilities in the case study areas. Finally, the baths at **Eccles** (Kent; Figure 4-76, A) were radically transformed at the end of the 2nd century and their compact structure (typ. 2) was connected to the main house through an unusually long, u-turning corridor. Furthermore, a pool (Room 17, *c.* 13.41 x 3.35m), this time with functional purpose, was added to the building.

The re-built facilities at Eccles are again exceptional in having an impressive number of hypocausted rooms: seven new heated rooms plus three that kept their heating system from the previous phase (with or without modifications) for a total of 10 rooms out of 15 (106.57m²). It is clear in this case that any attempt to classify these spaces with the traditional distinction between *tepidaria* and *calidaria* would be misleading. A similar case can be made for the baths at Lydney Park, where six rooms out of 10 were heated.

The decoration of nine baths out of 13 partially survived: six had wall paintings, two mosaic floors and two had both (Great Witcombe and Lydney Park) (see Section 5.4). Some of the wall paintings were particularly elaborate and garishly coloured, such as the South Wing Bath-house at **Bignor** (West Sussex) and the baths at Eccles, where the south-east external wall of corridor 15 was decorated “to give an impression of marbling” (Detsicas 1968, 45). A similar effect was sought for the narrow corridor north-west of Room 19 in the 2nd-century baths at **Lullingstone** (Kent) (Meates 1979, 92; Liversidge 1987, 5).

Three of the baths built during the 3rd century were certainly supplied through aqueducts. A V-shaped ditch or ‘leat’ has been found at **Six Bells, Farnham** (Surrey) (Lowther 1955, 48) and wooden pipes were used at Keston, probably in association with water-storage tanks (Philp 1999, 194). A square tank in stone (*c.* 5.84m²) was found some 32m to the north-east of the baths at Lydney Park and was linked to these facilities via a conduit that contained wooden pipes with iron pipe-junctions. A new aqueduct, although not traced archaeologically, was likely to be in use at Eccles during

the third phase of its baths and a system of wooden pipes has also been suggested at **Rapsley, Ewhurst** (Surrey) (Hanworth 1968, 13) (see Section 5.2.3).

A brief mention should be made of the two unfinished baths at Bignor (the West Wing Bath-house, Figure 4-77, D) and, possibly, at **Fordcroft, Orpington, Poverest Road** (LBB; Figure 4-76, D) (Detsicas 1985, 279), suggestive of the investment of resources that these facilities required (see Section 5.5).

4.3.4 4th century

The number of newly built baths increases again to 14 during the 4th century, with a concentration in Gloucestershire (seven). 13 of the new facilities plus six modified baths (three first built during the 2nd and three during the 3rd centuries) with complete or almost complete plans²³ are shown in Figures 4-80, 4-81, 4-82 and 4-83. Some of these can still be identified as narrow/rectangular (e.g. the baths at **Chilgrove 1** (West Sussex)) or compact structures (e.g. the facilities of Building 1 at **Six Bells, Farnham** (Surrey)), but there is a number of new, elaborate plans which elude such classification. The bath-house at **Bax Farm, Teynham** (Kent; Figure 4-80, A) has a peculiar octagonal shape that finds parallels at Holcombe (Devon, mid-4th century), Lufton (Somerset, early 4th century) and **Loose Road, Maidstone** (Kent) (Wilkinson 2011, 419-420), as well as at Bingham Hall Garden, *insula IX*, Cirencester (4th century; Rennie 1986; see Section 6.3.1). These structures have been alternatively interpreted as baths, baptisteries (Todd 2005) or grand reception rooms (Henig 2006), but the building at Bax Farm certainly worked as a bath-house—though a possible later conversion to Christian use cannot be excluded (Wilkinson 2011, 421-422; 2012, 9-16; see Section 6.2.2). Significantly, an octagonal room is part of the new section of the baths at **Chesters, Woolaston** (Glos.) and also the possible dining room (Room 15) at **Great Witcombe** (Glos.) is now re-shaped in this fashion (Appendix 1, 260, Figure 108), proving the growing popularity of this plan (Henig 2006, 105). The latter site presents also very elaborate facilities at this time (Lower Bath Suite, Figure 4-83, D), matching the complexity of the South Wing Baths at **Bignor** (West Sussex; Figure 4-81, B) and the North Baths at **Chedworth** (Glos.; Figure 4-82, B). Finally, the baths at **Batten Hanger** (West Sussex; Figure 4-81, A) and **Clearcupboard, Farmington** (Glos.;

²³ The plan of the 4th-century baths built at **Northfleet** (Kent) is extremely fragmentary.

Figure 4-83, A) are both inserted into a larger room as seen at Great Witcombe (Section 4.3.3), albeit the former were part of an aisled building.

Most of the newly built hypocausts are of the traditional type, except for the *tepidarium* 13 at **Frocester Court** (Glos.; Figures 3-83 B), originally heated by a pillared hypocaust and later substituted by a cruciform channelled system. The site with more hypocausted rooms (six out of 10) is Bax Farm, Teynham and this costly arrangement is in line with its rich decoration (including a basin of white Carrara marble, Wilkinson 2012, 37) and elaborate plan. The baths at Bignor, Chedworth and Great Witcombe were also heavily decorated with spectacular mosaics, and overall 12 (seven of which in Gloucestershire) out of 19 facilities present evidence of decoration dating to this period (four with wall paintings, four with mosaics and four with both; see Section 5.4).

The water supply of four baths dating to the 4th century was provided through wells (**Barnsley Park** (Glos.); Batten Hanger; **Chilgrove 2** (West Sussex); and very likely **Ironmongers Piece** (Glos.)). An aqueduct with wooden pipes was now constructed at Great Witcombe. A leat was found at Bax Farm, Teynham but was apparently left unfinished (Wilkinson 2011, 416) (see Section 5.2.3).

4.4 Summary of Results

The data analysed in this chapter provide an overview of the chronological, regional and typological variations of Romano-British villa sites and their baths in the case study area, as well as of other rural sites equipped with baths. A different pace in the development of villas and the construction of bathing facilities in South East England and Gloucestershire has been established, with a concentration of early sites in the South East and a flourishing of the Western county in the later Roman period. The late 1st and the 2nd centuries see the higher percentage of newly built sites and baths in the counties of interest and the importance of this period at a national scale has been confirmed by the preliminary results of *The Rural Settlement of Roman Britain* project, showing a peak in the number of villas and farms between 100 and 200 CE (Fulford 2015).

The relationship between size and typologies of villas and their baths in the area under scrutiny has also been investigated. Attached baths and winged corridor villas dominate through all the Roman period except for the 1st century, when we have

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more detached structures and corridor buildings. Furthermore, this early phase shows some examples of large facilities associated with small houses, while during the following centuries the size of baths tends to broadly correspond to the size of the villa they are part of (see Sections 6.1.3 and 6.2.1). A concentration of large and elaborate courtyard buildings associated with large baths in Gloucestershire during the 4th century confirms the wealth of this region in the late Roman period (see Sections 6.3.1 and 6.3.2).

Finally, three types of bath plans have been identified: (1) narrow rectangular structures, often with the addition of a lateral section at one corner; (2) compact buildings; and (3) baths inserted as partitions inside a larger room. These groups present small and large examples, detached as well as attached. During the 4th century new, complex plans are introduced, including octagonal shapes.

Starting from these results, the next two chapters will analyse specific aspects of rural baths and bathing to better understand their role and development. In particular, technological, socio-economic, and cultural issues associated with these facilities will be discussed in the broader context of the Romano-British regional landscape, using case study sites of particular relevance to highlight trends and peculiarities within each county.

Chapter 5 A Costly Showcase: Building, Decorating, and Maintaining a Set of Baths in the Romano-British Countryside

In her ground-breaking study on the Baths of Caracalla, Janet DeLaine (1997, 211-220) established that of a total cost of approximately 14 million *kastrenses modii* of wheat (c. 140 million sesterces) for the building and its precinct, it was the materials and transport (32%) together with decoration (29%), which constituted the greatest investment. A similar ratio can be assumed for other imperial *thermae* and large structures such as the Baths of Neptune at Ostia, for the construction of which the emperors Hadrian and Antoninus Pius donated more than two million sesterces (*CIL* 14.98). But is it possible to estimate building material, time, and manpower for smaller baths and private facilities? Starting with a comparative analysis of the literary and epigraphic material related to other areas of the empire (i.e. Italy and North Africa), this chapter evaluates the scale of the investment that Romano-British villa owners made in their baths, breaking it down into building materials, technology, water supply, fuel, maintenance, and decoration.

5.1 Literary and epigraphic references

A significant literary reference to the cost of a probably private bath complex can be found in a passage of Aulus Gellius' *Noctes Atticae* (19.10.1-4), written between 140 and 180 CE, where the author recalls a visit to his friend Marcus Cornelius Fronto, famous grammarian and rhetorician. When Gellius arrives, Fronto is discussing the construction of a new set of baths with some builders, choosing between different plans drawn on sheets of parchment ("depictas in membranulis"). He finally decides on a plan and type ("unam formam speciemque operis") and asks for its price. The architect gives him an approximate estimate of 300,000 sesterces, increased to 350,000 by one of Fronto's friends. It has been argued that here Fronto was attending to the construction of public baths since the given price roughly corresponds to the cost of contemporary public facilities recorded in the epigraphic evidence (e.g. 350,000 sesterces donated for the erection of baths at Tarquinii in the middle of the 2nd century CE: *CIL* 11.3366–Thomas 2007, 76; 293, fns 72 and 73). Nevertheless, a private set of baths cannot be

excluded: as noted by Fagan (1999, 174), “these must have been modest establishments, since Pliny the Younger [*CIL* 5.5262] spent 300,000 alone in decorating the baths at Comum”. An inscription from Castellum Tingitanum in *Mauretania Caesariensis* (modern Algeria; *AE* 1908, 244-245; Thébert 2003, 504, n. 98) mentions a *balineum* constructed between the 10th of December 228 and the 26th of May of 230 (17 months and 15 days). This structure, evidently small in size, cost 100,000 sesterces, a price that matches a testamentary outlay of 150,000 sesterces for the construction of a bath at *Tifernum Tiberinum* (modern Città di Castello, Italy) dating to *c.* 170 CE (*ILS* 5678). These are among the lowest costs recorded for the building of baths; even so they constitute a major investment if we consider that the annual pay for a 2nd-century legionary was around 300 *denarii*, corresponding to 1,200 sesterces (Goldsworthy 2003, 94; Duncan-Jones 1994, 33-35).

To sum up, according to these limited literary and epigraphic references the costs of smaller baths in Italy and North Africa during the 2nd and 3rd centuries ranged between 350,000 and 100,000 sesterces. As for the imperial *thermae*, the expenses for the decoration had a considerable impact on the final investment for these buildings and this was probably the case also for many private facilities, although we have seen how in the area of interest only few sites present elaborate embellishments (see Section 5.4). Furthermore, Gellius’ account informs us about the active role of the owner or donator in choosing the plan and type of the baths they are paying for, selecting from a range of models. Finally, there are some tantalising scraps of information hinting at the time required for their completion, i.e. one year and half for the mid-3rd-century facilities at Castellum Tingitanum. Bearing in mind the scattered nature of these data, the next sections will consider the material evidence from the case study area to investigate the economic impact of the construction and maintenance of private baths in Roman Britain, discussing possible correspondences between written and archaeological sources.

5.2 Building materials and technologies

5.2.1 Raw materials

Among the four counties examined for this study, Romano-British rural stone buildings show an almost exclusive use of local materials (Williams 1971a; 1971b; Blagg 1990). Flint dominates in the South East and was usually chosen for bath-houses (e.g. **Baston**

Manor, Hayes (L.B.B.); **Highstead, Chislet** (Kent); **Chatley Farm, Cobham** (Surrey)), sometimes associated with chalk (e.g. Building A at **Angmering** (West Sussex)) or other less common local stones such as the Mixen Rock, “a hard, grey to pale brownish yellow sandy limestone, of Tertiary age (...)” (Tatton-Brown 2006, 153) employed to build the foundations of the first phase bath-house at **Sidlesham** (West Sussex). The so-called Kentish Ragstone, “a medium-grey limestone” (Blows 2011, 7), was extensively used in Kent (e.g. the walls of the bath-houses at **Bax Farm, Teynham; Boughton Monchelsea; Little Chart** and **Eccles**) and exported to London (Worssam & Tatton-Brown 1993, 101, 104). Other local types of limestone, part of the Lower Greensand Group such as the Kentish Ragstone, were chosen where readily available (e.g. **Bignor** (West Sussex)). Barrel vaults set in concrete over a timber frame was probably the preferred solution for hot rooms (Perring 2002, 121), but we have examples of vaults made of blocks of tufa as in the 2nd-century facilities at **Abbey Farm, Minster-In-Thamet** (Kent; Jones 2014, 202), **Fishbourne** (West Sussex; Cunliffe 1971b, vol. 2, 2) and **Lullingstone** (Kent), where *calidarium* 21 “may have been roofed with a long arched roof of tufa blocks” (Meates 1979, 97). Tiles were predominant as roofing material although at Bignor a covering of Horsham stone slates was used during the 4th century, at least in its west wing (Frere *et al.* 1982, 150). As for the flooring materials, the South East “is notable for its lack of flagstone flooring (...)” while “clay, earth and *opus signinum* are extremely common” (Williams 1971a, 179). Exceptions are the *frigidarium* of the baths at Boughton Monchelsea, “formed of roughly hammered Kentish rag-stone slabs of irregular shapes” (Smythe 1842, 417), and *frigidarium* II and *tepidarium* V of the ‘*Classis Britannica*’ bath-house at **Beauport Park** (East Sussex), paved with *bessales* and *tegulae* lying face downwards respectively (Brodribb & Cleere 1988, 223, 227). Room 2 of the bath-house at **Lickfold, Wiggonholt** (West Sussex) is peculiar in having a fine herring-bone floor (*opus spicatum*) during Phase 2b (c. 140-180 CE).

The Cleeve Cloud Member (part of the Inferior Oolite Group and also known as the Lower Freestone) is “a thick succession of massive, uniform oolite” (Owen 2011, 10) and thanks to its versatility was widely adopted for the construction of Roman buildings in Gloucestershire, including villa baths (e.g. **Chesters, Woolaston; Ebrington; Hucclecote, Trevor Road**). Other local oolites, part of the Great Oolite Group, were used for instance at **Barnsley Park, Chedwoth, Frocester Court,**

Hucclecote and **Whittington Court**. Vaults of tufa have also been found in this area at **Barnsley Park** (Webster & Smith 1982, 73, fn. 28) and **Clearcupboard, Farmington** (Gascoigne 1969, 46). Williams (1971b, 105-106) notes how at certain sites tiles were substituted with stone roofing during the 2nd century and we have examples of stone slates employed to cover bath buildings dating to this period (e.g. Stonesfield Slate at Whittington Court and Old Red Sandstone and oolitic limestone at Hucclecote, Trevor Road). Although mortar floors were predominant, flagstone floorings were more common than in the South East (e.g. Rooms 11 and 12 of the baths at **Ironmongers Piece**, Room XXXIII and XXXII at **Lydney Park**, and the cold plunge-bath at **Turkdean**).

Flint was most likely surface-gathered (Williams 1971a, 170) and practical evidence from a recent experimental reconstruction of the Sparsholt villa (Hants) suggests that its acquisition would have been relatively easy “as flint nodules still lie all over the fields, turned up by cultivation” (Morgan Evans *et al.* 2003, 57). All the other raw materials were extracted and although the number of quarries of certain Roman origin is low (Blagg 1990, 40-41), some specifically associated with Roman rural buildings have been located in the case study area. Among these, we have the Kentish Ragstone quarry at Loose, Allington, and near the bath-house at Boughton Monchelsea (Detsicas 1983, 169; Howell 2014, 41), a possible ancient Great Oolite quarry close to the villa at Chedworth (Williams 1971b, 101-102) and a tufa quarry at Dursley (Price 2002, 28).

Imported materials such as marble were rarely used in Britain and tended to be connected with early sites of particular grandeur (Blagg 1990, 47-48). The Neronian baths at Fishbourne (Building M2) were decorated with *opus sectile* floors made of multi-coloured stones: “blue (Purbeck marble), white (rock chalk), grey (Wealden shale), red and yellow (both siltstone of Mediterranean origin)” (Cosh & Neal 2009, 532). The same technique was used to embellish the floors (or more likely the walls, see Cosh & Neal 2009, 486) of the broadly contemporary bath-house at Angmering, where inlays of “pink, yellow, and dark grey stones from the Wealden series, white limestone from northern Italy, together with Sussex marble” (Scott 1938, 15; Figure 5-1) have been recovered. Marble slabs and triangular pieces of white marble with blue veins (Winbolt, 1925, 51) come from Rooms 7 and 8 of the late 1st-century baths (Block C) at **Folkestone, East Cliff** (Kent). Fragments of *opus sectile* were also found at

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Woodchester (Glos.), possibly relating to an early and well decorated structure. Since they show traces of *opus signinum*, they may have been used to line the walls of a bath-house or some other ‘aquatic feature’ (Clarke 1982, 209-211).

This brief overview shows a clear preference for local material in the construction of private baths, both in the South East and in Gloucestershire, and their predominance makes the use of imported marble at some major sites even more striking and in line with the evidence from public and military baths (e.g. the baths at Chichester were built in local limestone, Upper Greensand and flint but were decorated with *opus sectile* including fragments of Purbeck marble (Down 1978, 157) as were the legionary baths at Exeter (Bidwell 1979, 143)). Variations in the choice of building stones seem to have been mainly influenced by their ready availability, and consequent low cost, rather than by functional or aesthetic concerns. In other words, the structural frame of a bath complex had to be in stone, but the impact of the quality of stone on the final result was not considered significant enough to spend extra money for imported material. This is confirmed by the fact that baths were generally constructed in the same stone employed for the houses of which they were part.

Tufa, a variety of limestone used for vaulting ceilings in some of the structures examined, was apparently the only raw material associated with baths to be specifically chosen for its characteristics. This stone is very light, has a lower thermal conductivity than brick and limestone, and good insulating properties. Lancaster (2015, 32-33) notes that the apses of the baths of the villa at Newport (Isle of Wight) were built of tufa imported from the mainland, and wonders if this choice “was based more on its thermal properties than any structural advantages”. In urban contexts, blocks of this stone have been found among layers of foundation for a tiled floor in Room 7 of the second phase bath-house at St. George’s Street, Canterbury, perhaps part of the vaulting of the first phase structure (dating to c. 220 CE—Frere & Stow 1983, 32). Their use is recorded in public and military facilities outside the case study area (e.g. in the *calidarium* of the 2nd-century public baths at Wroxeter (Ellis 2000, 20) and in the *calidarium* of the military bath-house at Chesters (MacDonald 1931, 280-284)) and in other parts of the empire (e.g. in the baths at Labitolosa, Spain (Magallón *et al.* 1995, 173) and in the Agora Baths at Elaeussa Sebaste, Turkey (Lancaster *et al.* 2010)—see Lancaster 2015, 33).

5.2.2 Heating systems

The construction of hypocaust heating systems required a set of specific building materials and components that will be briefly discussed starting from the furnaces. In the case study area we can identify three types of furnace chambers (*praefurnia*): i) enclosed rooms (e.g. Room 46 of the bath-house at Eccles, Phase 1, Sub-phase A); ii) partially enclosed rooms (e.g. Room 4 of the bath-suite at **Chilgrove I** (West Sussex), Period 4, Phase A); and iii) stoke-pits (e.g. the one connected with the small baths at Highstead, Chislet (Kent)). From few surviving examples in other provinces of the empire, we know that furnaces were equipped with bronze boilers (Yegül 1992, 368-373), but none of them have been recovered so far in Britain. Based on the shape of the preserved projection walls that supported it, a cylindrical boiler about 1.09m in diameter is suggested by Detsicas (1966, 47) for Room 46 at Eccles. The location of boilers has also been hypothesised in the baths at Chatley Farm, Cobham (Surrey); Fishbourne (North Wing Baths); **Garden Hill, Hartfield** (East Sussex); and Barnsley Park. Traces of the emplacement of a *testudo*, a semi-cylindrical metal container used to maintain a constant temperature in plunge-baths (Ward-Perkins & Toynbee 1949, 176-177; Yegül 1992, 374-375; Figure 5-2), were found in the arch connecting Room 58 with the already mentioned *praefurnium* 46 at Eccles (Detsicas 1965, 76-77; Plate IIIA). Considering the distance between the top of the flue arch and the bottom of the aperture for the bath drain, Detsicas calculated that the radius of this device was *c.* 0.60m. At **Six Bells, Farnham** (Surrey), Lowther (1955, 49) suggests that the plunge-bath in Room 7 of Building 1 could have been filled with hot water from a *testudo* “situated on top of the brick furnace tunnel at the western end of the bath”. A stone arch in the north wall of Room X (a hot bath) of the bath-house at Beauport Park (East Sussex) might have also hosted a *testudo*, which was later entirely removed when the building was dismantled (Brodribb & Cleere 1988, 232).

Tile *pilae* are predominant in the two study areas and are usually made of *bessales* (*c.* 20cm square tiles). In the South East we find examples of box-tiles filled with mortar (**Ashtead Common** (Surrey) and **Blacklands School Farm** (Kent)) or clay (Fishbourne), and of stone *pilae* at Bignor and Folkestone, East Cliff (Williams 1971a, 181-183). The *calidaria* at Lullingstone and Little Chart (Kent) were “built like a tile kiln, the floor being supported on tile piers” (Rook 1992, 30). The hypocausts underneath these two rooms, together with the one in Room 33 at **Darenth** (Kent) and

Room I at **Bax Farm, Teynham** (Kent), were also equipped with ramps sloping toward the sides of a solid centre made of concrete (Little Chart; Bax Farm, Teynham), clay (Lullingstone) or chalk (Darent). This reduced heat dissipation by blocking the part of the system where relatively cold air may have stagnated (Eames 1957, 136). At Little Chart these ramps occupy the full length of the *calidarium* and Eames (ibid.) is rightly surprised that this effective solution was not more widely adopted. The hypocaust of the 2nd-century baths at Garden Hill, Hartfield had a mixed hypocaust, with some of the *pilae* of the *tepidarium* made of local sandstone “rather than the more expensive tiles” (Money 1977, 346). Similarly, when *calidarium* I of the bath-house at Beauport Park was re-floored in the late 2nd–early 3rd century, the *pilae* under the eastern part of this room “were replaced in places by stacks of irregular fragments of *tegula* or pieces of stone” (Brodrigg & Cleere 1988, 220-221). Gloucestershire also offers some significant variations. Box-tiles of *tegulae* filled with mortar come from Room 3 at **Wortley, Wotton-Under-Edge**. The hypocaust in Room 5 of the late 3rd–early 4th centuries Lower Bath Suite at **Great Witcombe** had mainly tile *pilae* but in the north-east corner these are substituted with capitals, bases of stone column and a mortar filled flue-tile (Thompson 1955, 172). A small apsidal room (XLI, possibly a *sudatorium*) of the 3rd century baths at Lydney Park had a brick-pillared hypocaust (Wheeler & Wheeler 1932, 53-54). A mixed hypocaust was found in this county too: Room IX at Whittington Court has tile *pilae* (with greater heat resistance) near the furnace flue and stone piers in the rest of the room. The stone piers were made of oolitic limestone (also used for the hypocaust in Room 26 at Chedworth) and this is quite surprising since this material “is often burnt for lime and one would think that it would rapidly deteriorate in the hot conditions of a hypocaust” (Williams 1971b, 113-114).

The *tubuli*, or box flue-tiles, were another essential component of the hypocausts. Early versions of them, including ‘thin-walled box-tiles’ together with half box tiles (also known as *tegulae hamatae*; Figure 5-3A) have been found at Colchester, Canterbury and London in pre-Boudican contexts (Black 1992; Black 1995b, 1268-1269; Pringle 2006; 2007). The ‘proto-palace’ at Fishbourne produced thin-walled box tiles (Cunliffe 1971b, vol. 2, 45 n. 23), but it is not entirely clear if their use in association with ceramic spacers (Cunliffe 1971b, vol. 2, 47 n. 34) was contemporary or succeeded the type of wall-jacketing employing half box tiles (Black 1987, 12; Black 1993, 237; Black 2008, 294-295; see Section 6.1.2). Half box tiles have been recovered

at another five sites in the case study area: at the villas at **Snodland** (Kent), **Eccles** (Kent; context unknown), **Arundel Park** and **Arundel Tarrant Street** (West Sussex), **Borough Farm, Pulborough** (West Sussex) and re-used in the church at Westhampnett (Hills 1868, 212; Black 1987, 12; Dawkes 2015, 9)²⁴. Their discovery implies the presence of very early baths (c. mid of the 1st century CE) at these sites. The recent excavations at Snodland revealed that this building was “constructed using tiles in fabric 7 (MOL 2454) produced at the Eccles villa [about 2km to the south-west], and incorporating a room heated by a pillared hypocaust with a cavity wall” (Dawkes 2015, 9).

The adoption of complete wall-jacketing of box-tiles in Britain dates to the Neronian period and “it largely superseded the use of *tegulae mammatae* and *tegulae hamatae* in the course of the Flavian period” (Black 1996, 62). Using the hypocausts in *calidarium* G and *tepidarium* C of the detached bath-house at Angmering as a case study, Lynne C. Lancaster (2012; 2015, 132-151; Figure 5-4) recently suggested that a specific type of *tubuli*, called double flue box-tiles, together with the Westhampnett hollow voussoirs formed the components of a new, typically Romano-British vaulting technique. This was probably invented at a tiliary located around Chichester in the last quarter of the 1st century CE, possibly by a “mix of local Britons and Gallic immigrants (...)” (Lancaster 2012, 436). The hypocausts at Angmering presents the traditional double box-tiles associated with an unusual hour-glass shape variant. The latter were set perpendicularly into the wall while the traditional ones were set parallel to it. These tiles were put in place when the wall was constructed and therefore did not require the traditional iron cramps to hook them to it. Furthermore, “the box-tiles extend all the way down to the wall foundations”, in contrast with the more common practice of attaching them “to the wall at the height of the suspended floor level, so that the hypocaust gas could enter them from below” (Lancaster 2012, 427). The arched openings typical of these tiles were cut to allow the hot air to enter directly from the foundation level. On top of each line of double box-tiles the hollow voussoirs were attached to form contiguous arches (Lancaster 2012, 427-428). This system produced more heat and was particularly appropriate for the cold climate of Britain. It is also

²⁴ Two other possible specimens of these tiles were found at Newhaven in the 19th century, but their identification is uncertain (Spurrell 1852, Nos. 4 and 5, plate opposite to page 263; Black 1987, 12).

most likely to have reduced the fuel consumption in comparison with complexes where box-tiles were added only to the walls (Lancaster 2012, 431). Other sites where double flue box-tiles have been found in association with Westhampnett hollow voussoirs are Arundel Park; **Eastbourne** (East Sussex); Fishbourne; **Lickfold** (West Sussex); and **Wiggonholt** (West Sussex)²⁵.

This technique was subsequently improved with the substitution of the Westhampnett voussoirs with the voussoirs of the more common type, lacking the semicircular cut-outs on the side. These had thinner walls and often a vent at the centre of their faces. In contrast with box-tiles which could have been mass produced, hollow voussoirs “were a made-to-order item: they had to be constructed to fit a particular vault (...)” (Lancaster 2015, 147). These tiles are almost exclusively found in Britain, with only two examples from Xanten (Germany) and Bliesbruck (France) (Lancaster 2015, 148). Based on the Celtic origin of the name carved on three Westhampnett voussoirs (BIIL=Bel) reused in the baths of the 4th-century villa at **Batten Hanger** (West Sussex), Lancaster (2015, 150) suggests that the maker was either of local or Gallic origin. Furthermore, she explains the very limited spread of this efficient invention in other cold provinces such as northern Gaul and Germany with the peculiar socio-economic conditions of Britain in the 1st century. The province, with a very recently established ceramic tradition, was a new market for immigrant craftsmen, in contrast with the long-established manufacturing practices on the continent which was “moving towards mass production of pottery” and where “a production model that included handcrafted items for a particular building was perhaps not appealing or practical as a long-term investment” (Lancaster 2015, 151).

Double flue box-tiles and Westhampnett hollow voussoirs are part of the London-Sussex group of relief-patterned box-tiles (Betts *et al.* 1994, 19). These tiles, typical of South East England and classified by the Relief-Patterned Tiles Research Group I in more than 124 dies (Betts *et al.* 1994; Figure 5-5), were branded using a wooden roller with a design cut into it, in contrast with the majority of tiles that are simply combed or scored (Brodribb 1987, 105; 149). The reasons for this keying were

²⁵ Lancaster (2012, 422, Fig. 4) includes also the agricultural site at Ranscombe Hill, South Malling (East Sussex) where a relief-patterned tile was found, but according to the report of excavation this was not hollow but “solid” (Bedwin 1978, 253). No fragments of double flue box-tiles are mentioned either.

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both functional (to roughen the surface of the tile that was then plastered over) and promotional: they were probably “an advertisement and a sort of guarantee of standard” (Black 1996, 64). After Hadrian’s visit in 122 CE we see what Black (1996, 67) has defined a ‘boom’ in the construction of baths in Britain and at this time new relief-patterned box-tiles appeared showing more elaborate designs and sometimes initials (e.g. G.I.S. and I.V.F.E. in die 6 found at Ashted Common (Lowther 1927, 152; Betts *et al.* 1994, 44-45)). A small group of hollow voussoirs coming from three different sites in Kent (**Allens Farm**; Darenth; and **Sedgebrook, Plaxtol**) and from London is unique in having been keyed with a Latin inscription: PARIETALEM CABRIABANU FARBICAVI [sic], “Cabriabanus made this wall tile” (Davies 2004; Figure 5-6). Due to the demand-growth, in the first half of the 2nd century the number of tileries increase and the fact that tiles keyed with the same die were produced at different sites may indicate a certain mobility of craftsmen (Black 1996, 67). The villa at **Beddingham** (East Sussex) was supplied from more than one tilerie (die 5A appears on two different fabrics) and examples of both imported and locally made tiles have been discovered at Eccles. Among the locally produced tiles, there are the only specimens of dies 12 and 16 keyed in an Eccles fabric, suggesting that “the two dies must have been brought to the villa to be used for this one job (...)” (*ibid.*; Betts *et al.* 1994, 81-82; 87; 89). However, by the second half of the 2nd century, with a sharp decline in the demand for public baths, this product seems to have reached market saturation point and “after *c.* 150 box-tiles remained the same standard shape with no experimentation or innovations” (Black 1996, 70). After this date, the complex designs and initials give way to a limited range of combed and scored keying. Early tiles start to be reused and this phenomenon becomes more apparent during the early 4th century, with examples from Canterbury, **Lullingstone** (Kent), **Chatley Farm, Cobham** (Surrey) and **Batten Hanger** (West Sussex) (Black 1996, 72).

Another technique adopted to create space behind the walls for the hot air to circulate consisted of baked-clay spacer bobbins located “between the wall and a vertically mounted wall tile (...) held in position by a T-shaped skewer or cramp running through the bobbin” (Brodribb 1987, 67; Figures 5-3B and 5-3C). This method was firstly recorded in the *calidarium* of the 2nd-century baths at Garden Hill, Hartfield (Money 1974b; 1977, 346, 347, Fig. 6). Another example in the case study area comes from *calidarium* 1 of the early 4th-century bath-suite attached to a private house in

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Canterbury (Building R26, Blockley *et al.* 1995, 210-227). Similar devices have been found at seven other sites in Britain (Brodrribb 1987, 68-69).

In Section 4.3.2 I have already discussed in detail the origins and operation of channelled hypocausts. In these structures the hot air coming from the furnace was conveyed through channels inserted underneath the floor. Since this system did not require *pilae*, it was less costly than the traditional one. However, its heat capacity was lower and was therefore preferred for rooms that required warm temperatures such as *apodyteria* and *tepidaria*. In the case study area, the earliest hypocausts of this kind used to heat baths come from two 2nd-century sites in Kent (**Kemsing** and **Chalk, Gravesend**) and this century sees their peak with other examples at Fishbourne, Whittington Court and **Sedgebrook, Plaxtol** (Kent). The *tepidarium* of the attached bath-suite at Compton (Surrey) was heated through a V-shaped flue and this may hint at its construction during the 2nd century. Room XXXVII of the 3rd-century large bath-house associated with the religious complex at Lydney Park (Glos.) had a herring-bone channelled hypocaust (Wheeler & Wheeler 1932, 54). In the 4th century, one of these devices was installed under the central room of a possible octagonal bath building at Cirencester (*insula* IX, Bingham Hall Garden; Rennie 1986, 196) and a cruciform channelled system substituted the pillared hypocaust under *tepidarium* 13 at **Frocester Court** (Glos.). Room 39 of the small lower bath-suite of the villa at **Woodchester** (Glos.) had a “channelled hypocaust, consisting of one longitudinal and four transverse channels” (Clarke 1982, 203), but its chronology is uncertain (late 2nd–early 3rd century?).

The structural solutions adopted to disperse the hypocaust gasses after their passage through the floors and the walls of the baths are not precisely understood, but some chimneys have been recovered from Romano-British sites (Lowther 1976; Brodrribb 1987, 31-33), including particularly elaborate examples from Ashted Common (Lowther 1934) and the ‘*Classis Britannica*’ bath-house at Beauport Park in East Sussex (Brodrribb & Cleere 1988, 270; Figure 5-7). To explain the absence of soot or blackening on the interior of these features, Lowther (1976, 39) has suggested that “they were not directly linked by flues to the furnace below”, and rather functioned as ventilators of the air accumulated in an isolated roof-space created over the heated room. Other fragments come from a few sites in the South East (**Bedens Field, Foot’s**

Cray (LBB); **Chalk, Gravesend** (Kent); **Cobham Park** (Kent) and Lullingstone), although they may also have acted as ornamental roof-finials.

As seen in this section, the heating system of baths was particularly complex. Their construction required specific materials and expertise. Some of the villa baths in the case study area were built at a very early stage, possibly already in the mid of the 1st century CE, as testified by the recovery of half box tiles, early versions of *tubuli*, at Snodland (Kent), Arundel Park (West Sussex) and Borough Farm, Pulborough (West Sussex). Only Colchester, Canterbury, London and the ‘proto-palace’ at Fishbourne produced similar evidence of bath-buildings in pre-Boudican contexts and the builders of these structures were almost certainly non-locals, either associated with the army or immigrants from Gaul. The substitution of partial wall-jacketing of thin-walled box tiles and half box tiles with a complete wall-jacketing (combining half box tiles and box tiles) dates to *c.* 60 CE and is testified by the military baths at Exeter and Caerleon (Black 1996, 61-62). A similar arrangement was probably employed in the Phase I bath-house at Eccles (*c.* 65 CE), although no mention of *tubuli* from the hot rooms is made in the reports of excavation and Detsicas (1964, 122), discussing the hypocaust in *laconicum* 32, explicitly states that in the room “no traces remained of any box-tiles”. A few years after the construction of these baths, a tiling in the Chichester area introduced to several sites in Sussex the new vaulting technique with double flue box-tiles and Westhampnett hollow voussoirs discussed by Lancaster (2012; 2015, 132-151). Westhampnett hollow voussoirs were subsequently substituted by the voussoirs of the more common type that would improve this Romano-British innovation. Immigrants from Gaul seem to have been playing a major role in the invention, but its development was certainly carried on by local craftsmen who branded the hollow voussoirs and box-tiles part of the heating systems of baths with designs and inscriptions.

During the 1st and 2nd centuries, the bath-construction ‘industry’ in the South East enjoyed a period of cultural and technical innovation and development, triggered by external stimuli but evolving according to a local agenda. The introduction of channelled hypocausts during the early 2nd century and the use of sloping ramps in traditional heating systems, even if confined to a limited number of sites, confirm this trend and underline a commitment towards more cost-efficient heating systems.

5.2.3 *Water supply and drainage*

As noted in Section 4.3, our understanding of the water supply of private baths in the area of interest is limited by the scarce information recorded in 19th- and early 20th-century reports and by the perishable materials usually used in the construction of pipes for aqueducts. These are frequently found at large complexes (wooden pipes bound together with iron collars at Eccles, Fishbourne, Lydney Park and Great Witcombe, and a stone channel at Woodchester), occasionally in association with water-storage tanks (Lydney Park (Wheeler & Wheeler 1932, 54-55) and **Keston** (Kent–Philp 1999, 194)). V-shaped ditches or ‘leats’ have been found at Six Bells, Farnham (1.52-1.82m wide by 1.21-1.52m deep; Lowther 1955, 48) and Bax Farm, Teynham, even if the latter was apparently left unfinished (Wilkinson 2011, 416). Aqueducts required regular maintenance, with wooden pipes being particularly fragile: “they could crack if allowed to dry out and burst if under high internal pressure” (Burgers 1997, 66). Wells were less demanding and represent therefore the most common solution for medium size and small facilities (Burgers 1997, 229).

Drains made of re-used tiles (*imbrices* at Hucclecote, Trevor Road; roof tiles at Little Chart; cylindrical hollow tiles, *tegulae* covered with *sesquipedales*, and mortared *pilae* at Beauport Park; and reused gutter blocks in the North Wing Baths at Fishbourne), stones (e.g. at Clearcupboard, Farmington and **Rapsley, Ewhurst** (Surrey)) or ceramic pipes (e.g. at Bax Farm, Teynham) were widely used, while some of the largest baths were equipped with complex masonry drain systems (e.g. the East Wing Baths at Fishbourne; Building A at Angmering (Figure 5-8) and the facilities at Ebrington (Glos.)). The bath-house at Ebrington is particularly significant because in the construction of its drain “great care had been taken that the used bath water which also sluiced the latrine could not contaminate the brook” nearby, possibly considered sacred (O’Neil 1971-72, 88). Three sites present drains inserted under hypocaust floors (Sidlesham; Rapsley, Ewhurst and Hucclecote) and their function was probably to collect condensation and rising damp from the hypocaust itself (Younge 1960, 71-75). Finally, lead pipes were usually employed to drain plunge-baths (e.g. **Farningham 1** (Kent); Garden Hill, Hartfield; Ironmongers Piece; Ebrington and **Northfleet** (Kent)).

5.2.4 *Windows and illumination*

Window glass is a common find from Romano-British rural buildings. Earlier panes, especially during the 1st and 2nd centuries, tend to be of the matt/glossy type and were

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made of cast glass (Taylor & Hill 2002; Foy & Fontaine 2008, 409), while the double-glossy type, “made from sheets produced by blowing a cylinder of glass, slitting it longitudinally, and opening it out flat in an oven” (Harden 1974, 280), became more common during the late 3rd and 4th centuries (Foy & Fontaine 2008, 410). Fragments of panes of both types have been recovered from many of the sites included in the gazetteer (e.g. at **Barnsley Park** (Price 1982)), although they are often very briefly recorded in reports (cf. Martins 2005, 96-97). Some of them certainly came from baths’ windows, such as three pieces of pale-green glass found during the excavation of the early 2nd-century bath-house at Baston Manor, Hayes. Two of them had “bevelled edges to fit a wooden frame” (Philp 1973, 90). Fragments of glass are also reported from the hypocaust of the baths at **Lillyhorn, Bournes Green** (Glos.) and from Room C (a steam sweat room?) of the bath-house at **Boughton Monchelsea** (Kent; 2nd century?), equipped with a seemingly west-facing window of cast glass. A great quantity of window glass (121 fragments), mostly of the matt/glossy type, have been found at the mid-2nd-century ‘*Classis Britannica*’ bath-house at **Beauport Park** (Shepherd 1988, 255): there was almost certainly a clerestory above the bath in Room III and windows have been identified between Rooms I and II (most likely glazed), and in Rooms IV and V. The interior-splayed window in the centre of the south wall of Room V is particularly significant because its sill survived in place, 1.27m above the floor level (Brodribb & Cleere 1988, 228). An almost complete pane of matt/glossy glass (23.5 x 25.5) was discovered beside the cold plunge-bath (Room 2) of the 2nd-century facilities at Garden Hill, Hartfield (Harden 1974; Money 1977, 346-347). Considering the rough construction of this building, the presence of window glass is suggestive of its diffuse availability during this period, or, alternatively, it may be seen as an ostentatious element of luxury to ennoble a poorly-built structure (A. Velo Gala, pers. comm.). Several fragments of glass were found in the cold plunge-bath 10 at Rapsley, Ewhurst (early 3rd century) and Hanworth (1968, 15) proposed a west-facing window there. Similarly, a window with glazed glass (Clifford 1954, 19) was probably located in the north wall over the hot plunge-bath in Room 11 of the lower bath-suite at Great Witcombe during Phase 1a (early 3rd century?). More than 300 pieces of 4th-century blown glass have been found at **Frocester Court**, 40% of which came from a ditch close to the bath-suite (Price, J. 2000, 122; Fig. 7.6:4). Finally, at **Bax Farm, Teynham** (Kent; first half of the 4th century) a “large window” facing south-west is suggested by

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Wilkinson (2011, 415) for an apsidal room with the foundations of a *labrum* connected to the richly decorated Room V.

Except for the internal window between Room I and II at Beauport Park, all the rooms where the position of a glazed window has been hypothesised were small projecting spaces (apsidal or rectangular) linked to larger rooms and mainly featured plunge-baths or *labra*. Three of them (Bax Farm, Teynham, Boughton Monchelsea and Rapsley, Ewhurst) faced west or south-west to introduce solar heat in the afternoon. Looking at the villa baths in the case study area, we notice that projecting apsidal or rectangular rooms tended to face these two directions, with examples at 29 sites out of 51. If at least some of them were equipped with windows as the examples examined seem to suggest, this may indicate that these rooms were used predominantly in the afternoon and that solar radiation contributed to their heating (cf. de Haan 2011, 82). Columella in his *De re rustica* (1.6.2) recommends that villa baths should be lighted from midday up to evening and on a sample of 53 baths attached to villas in Britain examined by Rook (1978, 272), “31 (58.5%) were on the side of the building between south and west, and only 7 (13%) between north and east”. This is roughly confirmed by an examination of the sites in the case study area, where 25 (47%) attached baths out of 53 were built on the side of the villa between south and west. Rook (ibid.) proposes therefore that these complexes may have had large windows to absorb as much heat and light as possible, at least in unheated rooms. On the other hand, he notes that small windows in hot rooms would have been more efficient in preventing heat loss, as demonstrated by his study of the operation of the hypocaust of a small bath-house at Welwyn (Herts.). Unfortunately, the archaeological evidence concerning the size of private baths’ windows in the area of interest is limited and we shall therefore be forced to discuss it within a broader British and continental context.

A pane of window glass from the Flavian bath-house at Corbridge (Northd) is among the largest found in Britain, measuring approximately 60 x 60cm (Daniels *et al.* 1959, 166) and the almost complete pane from the smaller facilities at Garden Hill, Hartfield (23.5 x 25.5 cm) “may originally have come from a sheet of similar dimensions” since “it has been cut from the corner of a larger pane” (Baxter & Cool 1991, 127). This could have been done to fit it into a small opening or to use it in a framed window. If we estimate that four of these panes were assembled to form a

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window, this would have been about 47 x 51cm, a reasonable guess for facilities of this size (A. Velo Gala, pers. comm.).

The building depicted inside the famous sarcophagus from Simpelveld in the Netherlands (175–250 CE; Holwerda 1933; Bastet 1979, 39-40; Galestin 2001; Crowley 2011, 202-203), now in the Dutch National Museum of Antiquities in Leiden, may be tentatively used as a comparison (Figure 5-9). The structure, possibly identifiable as a bath-house (Toynbee 1971, 281; von Hesberg 1992, 221, Rook 1992, 32-33), is formed by a main block with a door on the right and what appears to be a projecting apsidal or rectangular room on the left. Three windows are visible, two in the main block and one in the apsidal room. If we assume a 1.90m-high door (see, for instance, the reconstructed small baths at Sardis: Yegül & Couch 2003, 157, Fig. 4), using these proportions the main block window would be set around 1.80m above the ground (matching the window set *c.* 1.82m above the floor of an hypocausted room of the baths at the fort of Chesters (Macdonald 1931, 274-276; Pl. lii)) and would be 45 x 50cm in size, with the apsidal room window slightly broader and taller. These windows are equipped with shutters and their frames are clearly marked, especially the one in the apsidal room (Figure 5-10). This would have required 16 small panes of glass, while the window of the main block seems to be constituted of nine panes. Although less likely, the artist may have alluded here to iron window grills, similar to those found at various British sites, including villas (Webster 1959; Manning & Painter 1967). According to Perring (2002, 118), “the windows that they had protected were rectangular, almost square, and measured 500–700 mm across”. The almost complete grill from the villa at Hinton St. Mary (Dorset; Manning & Painter 1967) measures 53.34 x 60.96 and while there is little evidence that these features were associated with glazed windows (an example comes from Zeugma, modern Turkey; Foy & Fontaine 2008, 428), this is another useful indicator of the scale of private buildings’ windows in Britain.

Roman window frames were usually made of wood or metal (Yegül 1992, 469, n. 85) and the panes of glass were fixed to the frame with cement, traces of which are visible on fragments from several Romano-British sites (Harden 1961, 52). In the case study area, fragments of window glass and their lead comes have been found at Wortley, Wotton-Under-Edge in Gloucestershire (Wilson *et al.* 2014, 6). Papyrological evidence from 3rd-century Egypt suggests that skilled craftsmen were employed for the construction and placing of frames (Husson 1972, 279). Specialists must have been

required particularly for glazed oculi, sometimes employed in Roman baths. These were made of a single circular, rounded pane of glass or by smaller rectangular panes fitting a metal or wooden grill (Vipard 2009, 4; Plate I, Fig. 3; Foy & Fontaine 2008, 417-426). The only two fragments known from Britain come from Caerwent (Allen, 2002, Fig. 8-8). No evidence for their use in rural sites has emerged so far, although “a roof opening or light well (...)” has been suggested by Gascoigne (1969, 53) to illuminate Rooms XII and XIII of the small bath-suite at Clearcupboard, Farmington, which must have been otherwise in near total darkness. Gascoigne speculates a tank “situated below the roof opening to catch precipitation which would then have been available for filling the cold plunge in Room XIV” (ibid.), but a glazed oculus could have been used instead.

The partial archaeological evidence limits our understanding of the use of window glasses in Romano-British private baths. In the area of interest, the position of windows has been hypothesised at only six sites, where fragments of glass have been mainly found in small projecting spaces hosting plunge-baths or *labra*. In the baths taken into examination, these apsidal or rectangular rooms tended to face west or south-west to introduce solar heat in the afternoon and the side of villas between south and west was the preferred one for attached baths, implying the contribution of solar radiation to their heating. Rook (1978, 272) suggests that unheated rooms had large windows to maximise these effects, while hot rooms were more likely to be equipped with small windows to prevent heat lost, but these assumptions have not yet been confirmed archaeologically. The size of private baths’ windows in Britain is in fact impossible to reconstruct with certainty, although an average size of *c.* 50 x 50cm is reasonable for small to medium facilities, as suggested by the few semi-complete panes found in Britain and by the tentative comparison with the bath-house depicted on the Simpelveld sarcophagus.

5.3 Fuel and maintenance

Raw wood and charcoal were the most common sources of fuel in the Roman world (Veal 2012, 19), but it is difficult to establish in what proportion they were used in rural Britain. Williams (1971, 112) suggests that charcoal, which does not produce soot, was probably preferred for channelled hypocausts, more difficult to clean than traditional systems with *pilae*. However, to a certain degree hardwood guarantees the same advantage (Blyth 1999, 88, fn. 6) and may have been suitable for both types of hypocausts. A recent petrographic study of late 2nd–early 3rd-century samples of

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charcoals recovered from the hypocaust furnace of the baths of the villa at Groundwell Ridge (Wilts) has revealed that raw oak wood was the dominant fuel. This wood is particularly apt for sustained heat and may have been specifically selected for systems in operation for long periods of time such as hypocausts (McParland *et al.* 2009, 182). The preference for *Quercus* over other types of wood to fuel furnaces of private baths is attested also in Italy (Caracuta & Fiorentino 2012, 205), and its use in the case study area seems likely in consideration of the large presence of this genus in Britain, where two species (*Quercus robur* and *Quercus petraea*) are indigenous (Jones 1959). The use of coal is also attested in Britain, with its peak during the 2nd and 4th centuries (Dearne & Branigan 1995, 75-77). While rare in the South East, coal was employed quite extensively in the Severn Estuary area thanks to its availability from outcrops, especially near Bristol and in the Forest of Dean (Leach 1998, 107). Dearne and Branigan (1995, 79) suggest that “the main impetus for [its] use doubtless came with the founding or elaboration of numerous south-western villas” in the late Roman period. In Gloucestershire, evidence of coal has been identified at nine out of 34 villa sites, although in only two cases it was directly associated with the hypocausts of these facilities. At **Chesters, Woolaston** a layer of unburnt coal was found “at the side of the furnace [Room XVIII] passage, outside the south wall” (Scott-Garrett & Harris 1938, 103) and remains of coal and coal dust were recovered from a large layer east of the hypocausts in Building III at **Lechlade, Roughground Farm**, tentatively identified as a bath building (Allen *et al.* 1993, 176-177). Furthermore, a hole between Rooms XLIIa and XLIII of the sanctuary at **Lydney Park** produced flues “containing an amount of feathery carbon flakes”, perhaps from coal combustion (Scott-Garrett 1959, 87). In Kent, only the large detached bath-house at **Northfleet** produced deposits of coal, three of which were located close to its furnace (Ansell 1985). Chemical analysis suggests the Durham coalfield to be its probable provenience (Smith 1985, 222).

Either in the form of raw wood, charcoal or coal, fuel must have been somehow stored near the baths and fuel rooms have been tentatively identified at **Abbey Farm, Minster-In-Thamet** (the south end of Room 32 of building 6A), **Angmering** (Room J of Building A), **Bedens Field, Foot’s Cray** (Room 6), **Eccles** (Room 69 of the 1st-century baths and Room 44 of the late 2nd-century facilities), **Hucclecote** (Room XX), and **Lullingstone** (an extensive levelled area on the west side of the furnace).

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Several scholars have attempted to establish the fuel consumption and operating conditions of small baths' hypocausts (e.g. Kretzschmer 1953; Rook 1978; Hüser 1979; Basaran & Ilken 1998; Yegül & Couch 2003, 169-177; Oetelaar & Johnston 2012; Oetelaar *et al.* 2013; Oetelaar *et al.* 2014). Kretzschmer (1953) estimated that a reconstructed hypocaust under a 20m² room, with only part of its wall tabulation in operation, required 24 hours and 72kg of charcoal to reach the temperature of 20°C and 1kg per hour to maintain it. As briefly mentioned in the previous section, Rook (1978) tried to evaluate the efficiency and fuel consumption of the hypocaust of the 3rd-century bath-house at Welwyn (Herts.). This structure is formed of six rooms (a *frigidarium* with a cold plunge-bath, a *tepidarium*, a *calidarium* with a hot plunge-bath and a *praefurnium*) and covers approximately 46m² with *c.* 18.5m² of hypocausted floor. The walls of the *tepidarium* and *calidarium* were equipped with box flue-tiles. Calculating 220°C as the average temperature of the gas under the *calidarium* and 89°C under the *tepidarium*, he gives a figure of 13kg of wood per hour or 114 tonnes per year, the annual output of 23ha of coppice, with an efficiency of 41.5%. A similar amount of coppice would require the annual labour of one man (Rook 1978, 281).

Analogous calculations have been made by Meates (1979, 97) for the late 2nd-century baths of the villa at Lullingstone in Kent, if we consider a roof of wood and tiles:

On an estimate tepid room temperature of 80° F. [26.66°C], and hot room temperature of 120° F. [48.88°C], with an exterior temperature of 40° F. [4.44°C], the fuel consumption, based on dry fuel, worked out at approximately 117 lb. [53.07kg] per hour.

Even considering that larger area occupied by the hypocaust at Lullingstone (*c.* 29m²), the discrepancy between the two hypotheses is quite substantial. A more recent experiment was conducted with a reconstructed five room bath-house (*c.* 18.5m² of hypocausted floor and with box flue-tile in the *tepidarium* and *calidarium*) at Sardis in Turkey (Yegül & Couch 2003). After the lighting of the furnace, it was kept at the rate of 15kg of oak firewood per hour²⁶ for nine days. With an external temperature of 15.6°C, this guaranteed a mean temperature of 35.0°C in the *calidarium* and 26.5°C in the *tepidarium*. The fuel rate was kept high for practical purposes (Yegül & Couch

²⁶ This is the rate given in the technical report (Yegül & Couch 2003, 171). In the main text of the paper (167) the authors give a rate of 15kg every two hours.

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2003, 167), since the presence of the box flue-tiles would have allowed a rate of 6kg per hour, in contrast to the 18.2kg of a system only based on the hypocaust. This means an overall ~20% reduction in the fuel consumption (Yegül & Couch 2003, 175), a percentage that may have been further reduced by the use of the typically Romano-British vaults made of hollow voussoir described in Section 5.2.2.

The size of the hypocausts in the case study area ranges between the 8.07m² of the small baths at **Highstead, Chislet** (Kent) to the impressive 106.57m² of the Phase III facilities at Eccles (Kent). The heating costs therefore varied substantially and the ability to maintain large heating systems was undoubtedly perceived as a powerful display of wealth. Even at the low rate suggested by Yegül and Couch (2003) of 6kg of fuel per hour to heat 18.5m² of hypocausted floor on a relatively mild day (15.6°C), the heated rooms at Eccles would have required a minimum of 34.56kg of fuel per hour, making it a considerable investment over the long term.

Furnaces and hypocausts needed frequent maintenance (Fabbricotti 1976, 30) and many of the examples in the area of interest show signs of heavy use and, in some cases, repair. During sub-phase D, a new *praefurnium* was built in Room 68 of the 1st-century bath-house at Eccles. The floor of this room was originally made of tiles, but it soon became damaged by the heat and was therefore substituted with an *opus signinum* floor (Detsicas 1965, 73). The channel of the furnace of the early 2nd-century bath-house at Abbey Farm, Minster-In-Thanet (Building 3) presented “a shallow depression with heavily burnt sides (...)” (Parfitt 2004a, 43), probably indicating the place where the actual fire was, and this hollow was at some point repaired with clay. The *praefurnium* of the ‘isolated’ bath-house at **Little Chart** was repaired during its Phase Ia (2nd century? *contra* Detsicas 1983, 143, who suggests a mid-3rd-century date for its construction) and the archway of the furnace “was renewed in dressed rag” (Eames 1957, 137). Further modifications occurred in Phase 2 (4th century) and on this occasion the hypocaust was refurbished too. The flue area of the furnace of the late 2nd-century baths at Lullingstone “was reddened by burning” and a small structure, apparently added to improve the original draught of the furnace, “was found to be heavily vitrified by intense heat (...)” (Meates 1979, 97). Sometime after its construction in the 2nd century, the *praefurnium* of the bath-suite of the villa at **Compton** (Surrey) was partially reconstructed “in a much rougher manner than the work elsewhere” (Stephenson 1915, 46). Finally, the *pilae* of the *tepidarium* of the late 2nd-century bath-

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suite of the villa at **Sandilands Road, Walton-on-the-Hill** (Surrey) were partially substituted during the 3rd century (Lowther 1950, 70).

As seen in Section 5.2.3, aqueducts made of wooden pipes were fragile and their components were probably substituted quite often. Baths' floors and walls also required upkeep and their restoration is indicative of continuous use of these facilities. Some surfaces show evidence of heavy wear, such as the mid-2nd-century herring-bone floor in Room 2 at **Lickfold, Wiggonholt** (Winbolt & Goodchild 1940, 57). At Eccles the floor of corridor 59 of the 1st-century bath-house had to be repaired during its final sub-phase (Detsicas 1965, 82). The floors of the bath-house at **Sidlesham** (West Sussex) were raised at the end of the 2nd century in consideration of a higher water level (Collins *et al.* 1973, 6). When after a period of disuse the baths of the villa at Lullingstone were refurbished in the late 3rd century, *frigidarium* 19 and its cold plunge-bath were re-floored and the floor of *tepidarium* 20 was raised. At certain sites the walls of the baths had to be buttressed and reinforced, such as Building 2 at **Six Bells, Farnham** in Phase 2 (early 4th century; Lowther 1955, 54) and the Lower Bath Suite at **Great Witcombe** in Phase 2 (late 3rd–early 4th centuries), where two large buttresses supported Room 8a probably to prevent subsidence (Leach *et al.* 1998, 6).

As demonstrated within this section, the costs for fuel and maintenance must have required a significant financial investment over the long term. If we think of the quantity of fuel they consumed, the large heating systems themselves must have represented status symbols and one that was visible from a distance, when one considers the amount of smoke that combustion of large quantity of fuel produces. While many of the facilities analysed in this study show signs of heavy wear, especially in the area of the furnaces, we do not have any precise indication as to how often the heating systems of rural baths were in operation. This certainly depended on the frequency with which the owners visited their residences, even though we cannot exclude the use of baths by other people living in the estate such as bailiffs or even workers, as hypothesised by Webster (1981, 37) for the baths at Barnsley Park (Glos.) (see Chapter 6).

5.4 Decoration

5.4.1 Mosaics

As seen in Section 4.3, most of the baths in the area of interest included some form of decoration. Traces of mosaics associated with baths have been found at 33 sites out of 120. The earliest come from the so-called ‘early villas’ in Sussex, with black and white tesserae from the baths at **Angmering** (third quarter of the 1st century) and **Fishbourne** (Period 1C, Neronian date), both also decorated with *opus sectile* (see Section 5.2.1), and possibly at **Southwick** (Cosh & Neal 2009, 556-557). Fragments of late 1st-century black and white mosaics have been recovered as well in the *frigidarium* and *calidarium* (Rooms 1 and 4) of the ‘isolated’ bath-house at **Sidlesham** (West Sussex). In Kent, fragments of marble, possibly from an *opus signinum* floor (Cosh & Neal 2009, 377), were found in Room 8 of the detached bath-house (Block C) at **Folkestone, East Cliff** and may have been part of the 1st-century decoration of these facilities together with the mosaic floors in Rooms 3 and 4 (Winbolt 1925, 50). The mosaic floors of the *frigidarium* (Room 2) of the baths at Little Chart (late 1st–early 2nd centuries) and of the *apodyterium* and *frigidarium* (Rooms 3 and 2) of the facilities at **Wingham** (late 1st–early 2nd centuries; Figure 2-1) show black and white patterns similar to those in the dwelling area of the complex at Fishbourne (Period 2, late 1st century; Cosh & Neal 2009, 532-544). Gallic influences have been suggested for the mosaics at Fishbourne (Cosh & Neal 2009, 530) and the scheme of the floor in Room 2 at Wingham significantly finds two parallels in France, although dating to the late 2nd–early 3rd centuries (Cosh & Neal 2009, 392). At **Eccles**, *frigidarium* 30 was embellished with a polychrome mosaic probably depicting a pair of gladiators similar to a mosaic from Reims (Stern 1957, pls XII, 9 and XIII, 15). Detsicas (1965, 74) seems to consider this mosaic as contemporary to the construction of the bath-house (*c.* 65 CE) while Smith (1975, 271) indicates a later date (*c.* 120 CE) and its polychromy is suggestive in this sense (Cosh & Neal 2009, 371). Also the cold plunge-bath in Room 31 revealed fragments of mosaics. Some presented curved profiles, similar to a fragment found at the villa site at East Malling (4km south-west of Eccles; Cosh & Neal 2009, 369), and they were perhaps “originally lining the plunge-bath seat or steps (...)” (Cosh & Neal 2009, 371). A marine scene has been hypothesised for the bath itself and its walls may have been tessellated too. This peculiar solution, rare outside Kent, would match the

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wall of the cold plunge-bath at Wingham lined with black and white bands of tesserae (Cosh & Neal 2009, 392).

The only partially-investigated detached bath-house at **Farningham 2, Manor House** (Kent) was constructed probably at the beginning of the 2nd century. According to the excavator, its plunge-bath “originally had been lined on floor and walls with a layer of white tesserae (...)” (Philp 2002a, 146), in the same way seen at Eccles and Wingham. Furthermore, the room of uncertain function found on the west side of the plunge-bath was originally decorated with “a neat rectangular mosaic panel at its centre” (ibid.). During the 2nd century, a mosaic pavement was laid in the *frigidarium* (Room 19) of the bath-suite at **Lullingstone** (Kent) and more than 1,000 tesserae (mostly grey and white) have been recovered below the floor of the late 3rd-century granary of the villa, probably after their removal from Room 19 (Meates 1979, 115). Among these *c.* 200 were limestone tesserae, many of which were elongated, “a type often associated with early bath-houses” (Cosh & Neal 2009, 386) and found also at Angmering (Cosh & Neal 2009, 486) and Southwick (Cosh & Neal 2009, 557). Loose tesserae were found under the hypocaust floor in Room B of the attached bath-suite at **Ashstead Common** (Surrey; 2nd century?), although they may also have been taken up from the central dining-room of the villa and stored there (Black 1987, 114). Building 1, one of the two sets of baths at the sanctuary of **Blacklands School Farm** (Kent; second half of the 2nd century), produced “small marble multi-coloured tesserae” and “larger, tile-cut tessellated floor cubes” (Wilkinson 2013, 12). Scott-Garrett and Harris (1938, 103) report that Rooms X, XII and XIII of the bath-suite of the villa at **Chesters, Woolaston** in Gloucestershire (2nd century?) had “fine tessellated floors which, however, as found, were completely destroyed”.

3rd-century mosaics are rare and we have only one certain example from the South East: a simple white grid on a red ground design paved the *frigidarium* (Room 9) of the bath-house at **Rapsley, Ewhurst** in Surrey, dating to *c.* 200 CE. In Gloucestershire, Rooms 5, 6 and 10 of the Lower Bath Suite at **Great Witcombe** had mosaic floors, the one in Room 6 showing a marine scene (Figure 5-11). Cosh and Neal (2010, 160) date these mosaics to the 2nd century, in contrast with the early 3rd-century dating of the masonry building established by Leach (1998). Rooms 22a and 22b of the North Baths at **Chedworth** (Glos.) were decorated with mosaics at the turn of the 4th century (Phase 3; Cosh and Neal 2010, 65-66).

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Villas in Gloucestershire flourished during the 4th century and many of them were embellished with elaborate mosaics. Two major groups of mosaicists active in this period have been identified: the Corinian Orpheus Group and the Saltire Group (Cosh and Neal 2010, 16-21). The mosaic in the *apodyterium* (Room 10) of the West Baths at Chedworth is included in the Scheme A (simple saltires) of the Saltire Group by Cosh and Neal (2010, 21). Both the West and the North Baths at this site were richly decorated in the 4th century and produced seven mosaic floors. In the early 4th century the *calidarium* of the baths of the villa at **Withington Manor Court Field** was repaved with a polychrome mosaic, possibly belonging to the Corinian Orpheus Group (Wessex Archaeology 2006a, 23). Fragments of a 4th-century mosaic were found in the cold plunge-bath south of Room XI at Chesters, Woolaston (Scott-Garrett & Harris 1938, 106). During this period *tepidarium* 13 at **Frocester Court** was rebuilt and paved with a mosaic floor, although very little remains (Cosh & Neal 2010, 138). When the large-bath-house of the sanctuary at **Lydney Park** was refurbished in the mid-4th century, mosaic floors were laid in several rooms, fragments of which survived in Rooms XXXV, XXXVII, XXXVIII, XLI, and XLIII. In the South East, grand scale 4th-century mosaics survived only from the South Wing bath-house at **Bignor** (West Sussex), where at least four rooms were decorated, including the famous Medusa mosaic from *apodyterium* 56. The group of mosaicists that operated here was different to the one that produced the mosaics in the north wing of the villa and presents only one closely comparable parallel at Bramdean (Hants) (Cosh & Neal 2009, 513). At **Bax Farm, Teynham** (Kent, first half of the 4th century) “small cubes (1 cm) of coloured mosaic” (Wilkinson 2011, 411-412) were found still embedded in the *opus signinum* that coated the vertical surface of the first pool in Room IV, and Room X had a tessellated floor made of black, red, white and yellow stone or tile (Wilkinson 2011, 415). Finally, during the early 4th century (Phase 2a) Room 16 (an *apodyterium/frigidarium*) of the small bath-suite at **Batten Hanger** (West Sussex) had a simple mosaic floor with a coarse red border surrounding a central panel now lost (Cosh & Neal 2009, 487-488).

The evidence of bath mosaics from sites with partial (5) or uncertain chronology (3) is mostly limited to loose tesserae or small fragments. Together with the already-described floors from Wingham, mosaics partially survived at three others sites. In the 18th century, a simple white mosaic floor with red bands was found to the south of a plunge-bath at Eastbourne, East Sussex (Cosh & Neal 2009, 526). A mosaic with a

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blue-grey grid on a white ground comes from the *apodyterium* of the large bath-house at **Ebrington** (Glos.) and at least two other rooms of the building had tessellated floors (Rooms 2 and 3) (Cosh & Neal 2010, 136). The 4th-century mosaic in *tepidarium* 7 at **Spoonley Wood, Sudeley** (Glos.) is among the few datable materials from the site and was possibly the work of the Corinthian Orpheus Group (Cosh & Neal 2010, 185). Two other mosaics paved *calidarium* 5 and *apodyterium* 8. The former was almost completely destroyed except for a panel showing a bust of a probably male figure with a rake, interpreted as Autumn. The authenticity of this fragment has been challenged by Witts (2005, 79), while Cosh and Neal (2010, 185) note that it may have come from another room considering that this is an unusual subject for a bath-suite.

Including this controversial case, only five baths produced figurative mosaics. The earliest ones, dating to late 1st–early 2nd centuries, are the gladiators' mosaic and the marine scene from Eccles. Another marine scene, clearly appropriate for baths (e.g. the mosaics of the *frigidarium* of the villa at Llanfrynach (Wales; Cosh & Neal 2010, 384) and of the legionary baths at Chester (Cosh & Neal 2010, 290)), come from Room 6 of the villa at Great Witcombe (Glos.), possibly 2nd century in date (Figure 5-11). Many sea-creatures, including a sea-cow, a sea-gryphon, a capricorn and probably an electric ray, are represented in dark blue-grey on a white ground with red details. The threshold on the west side of the room was decorated with a small panel tentatively interpreted as the stylised depiction of a monumental gateway (Cosh & Neal 2010, 160). The central compartment of the *apodyterium* (Room 56) of the 4th-century bath-suite at Bignor presents the apotropaic head of Medusa, with “curled hair and fourteen serpents formed by sinuous black double fillets” (Cosh & Neal 2009, 513). A dove is depicted in one of the triangular elements of the 4th-century mosaic in the *apodyterium* (Room 10) of the West Baths at Chedworth and it “represents the only example of figured work in the basic saltire scheme” (Cosh & Neal 2010, 63).

The floor in Room 10 is also the only baths' mosaic in the case study area that had been repeatedly repaired in antiquity, probably due to its subsidence into the hypocaust (Cosh & Neal 2010, 61). Although differences are visible, these restorations were mostly of good quality and did not affect the lavish aspect of the room. On the other hand, when at the same site the mosaic in Room 22b of the North Baths was damaged during the 4th century, *opus signinum* was used to repair its centre, showing a lack of interest in maintaining its décor (Cosh & Neal 2010, 65). Furthermore, in the

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latest phase of occupation of the villa (late 4th century?), the mosaic in *frigidarium* 14 of the West Baths was covered by Pennant sandstone flags (Richmond 1959, 12). In other cases mosaics were partially or completely removed and substituted with new floorings, as seen in Rooms 1 and 4 of the bath-house at Sidlesham (West Sussex) at the end of the 2nd century (Collins *et al.* 1973, 6). When the early 3rd-century bath-house at Rapsley, Ewhurst (Surrey) was converted into a residence in around 220 CE, the western part of the mosaic in Room 9, now reduced in size, was removed (Cosh & Neal 2009, 472). The mosaic in Room 19 at Lullingstone (Kent) was substituted in the late 3rd century with successive floors of plain red tesserae (Meates 1979, 92-93). During the renovation of the 4th-century small bath-suite at Batten Hanger (West Sussex), a cold douche-bath was inserted in Room 16 and part of the floor was waterproofed with *opus signinum*, damaging the mosaic there (Magilton 1991, 27). At some point during the second half of the 4th century, the eastern two-thirds of the mosaic floor in Room XXXV of the baths at Lydney Park were repaired with flagstones (Wheeler & Wheeler 1932, 56).

Although generally mosaics present only a very thin layer of bedding mortar and no sub-base, in bath-houses and hypocausted rooms “a substrate of lime-mortared tile rubble was spread over tiles (*bipedales*) supported on the *pilae*” (Cosh & Neal 2002, 16). However, channelled hypocausts generally did not have this support and this may account for the limited number of surviving mosaics from rooms heated with this system (*ibid.*). Tesserae were usually made of local materials, including white oolitic or lias limestone, blue-grey lias and other local stones. Red tesserae were obtained from tiles or less commonly from samian ware, while pieces of amphorae were sometimes used as yellow tesserae (Cosh & Neal 2002, 20). During the 1st century we have examples of imported stone at Angmering and Fishbourne in West Sussex and Eccles in Kent. As mentioned in Section 5.2.1, the *opus sectile* from the bath-house at Angmering allegedly included “white limestone from northern Italy” (Scott 1938, 15) and among the fragments from Fishbourne we find Purbeck marble, and red and yellow siltstone of Mediterranean origin, although the latter has been recently reinterpreted as burnt Kimmeridge mudstone from Purbeck (Williams 2002, 129). Marble from the isle of Purbeck was quarried locally (Williams 2002, 126-129) and tesserae produced from this area were used in the cold plunge-bath of the 1st-century bath-house at Eccles in Kent (Cosh & Neal 2009, 370). As mentioned above, the “triangular-shaped pieces” of

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marble (Winbolt, 1925, 109) from Room 8 of the 1st-century baths at Folkestone, East Cliff (Kent) were probably part of an *opus sectile* decoration and may also have been imported.

In the introduction to their first volume on mosaics in Roman Britain, Cosh and Neal (2002, 13-19) give a general overview of the major issues related to their production. Mosaics seem to have been laid directly at the site, probably using guide lines drawn on the lower bedding mortar as seen in the *apodyterium* of the bath-suite of Building 1, *insula* XII at Cirencester (Cosh & Neal 2010, 91). Copy books may have been employed as references, especially for figured scenes. Mosaicists are likely to have been working mainly during the spring and summer and it has been calculated that an average of one square metre of pavement per worker could be laid in a day. Specialists were certainly required for figurative and complex mosaics, but for simple decorations “the best efforts of a jobbing builder” (Cosh & Neal 2002, 9) might have been sufficient. According to the edict of Diocletian (VII), in the early 4th century a *musaearius* (either a wall mosaicist or a specialist in fine mosaics) was paid 60 sesterces per day with maintenance while a *tessellarius* (either a floor mosaicist or a less skilled craftsman) 50 sesterces. The distinction between these two figures is not completely clear (Dunbabin 1999, 275-276), but it is significant that their work was valued less than that of painters, since a *pictor parietarius* (a wall-painter) and a *pictor imaginarius* (a figure painter) were paid 75 and 150 sesterces per day respectively.

Some significant patterns can now be highlighted in the development and distribution of bath mosaics in the case study area. In the South East we have seen how special elongated tesserae, usually of white limestone, were used in early baths, with examples at Angmering, Southwick, Lullingstone, and, outside the area of interest, at Gadebridge Park (Herts.). Possible Gallic influence on 1st-century mosaics at Wingham, Fishbourne and Eccles may point to the presence of Gallic immigrants. In Kent, the walls of the cold plunge-baths of the baths at Eccles, Wingham, and Farningham 2, Manor House were lined with tesserae in the late 1st-early 2nd century, a practice apparently peculiar to this area and subsequently adopted also in the 4th-century pool at Bax Farm, Teynham. Moving to Gloucestershire, we have complex mosaics in baths probably already during the 2nd century (Great Witcombe), but their splendour reaches its acme during the 4th century (e.g. Chedworth and Spoonley Wood, Sudeley), confirming the general prosperity of the county. This is not the case in the South East,

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where mosaics of similar quality are found only at Bignor. Marine scenes are not as common as one could expect, with only two examples at Eccles and Great Witcombe, but their presence is still significant when one considers the overall paucity of figurative baths' mosaics in the area of interest. Except for a single case of good quality restoration at Chedworth, at several sites mosaics were destroyed, covered or damaged in antiquity, possibly hinting to a change of taste (Lullingstone) or as a result of practical choices (Batten Hanger and Rapsley, Ewhurst). Finally, as seen for other building materials, local tesserae are generally preferred, with some relevant exceptions at prestigious sites such as Angmering and Fishbourne.

5.4.2 *Wall paintings*

Fragments of wall paintings from baths have been found at 50 sites out of 120 and at an other five sites their association with baths is possible, indicating that this form of decoration was widely adopted and common even in unpretentious facilities. Unfortunately, only a few baths produced enough evidence to reconstruct decorative schemes and, before the 1950s, reports of excavations tend to give extremely concise descriptions of wall paintings (see Davey & Ling 1982, 27). During the 1st century we have fragments from the baths at Folkestone, East Cliff and **Kemsing** in Kent, Angmering, Fishbourne, **Lickfold**, **Wiggonholt**, Sidlesham and Southwick in West Sussex, and **Wortley**, **Wotton-Under-Edge** in Gloucestershire. At Folkestone, several pieces were found in the hypocausts under Rooms 3 and 4 of Block C and two of them are described by the excavator: “an angle of a cream pilaster, with Pompeian red, vertical bands on either side; and a chamfered edge of the same colour” (Winbolt, 1925, 106). Another 18 fragments, mostly bands and plain surfaces of different colours, are also detailed but their provenience is not explicitly stated (Winbolt, 1925, 107). The dado of Room H at Angmering “had a border of red stripes running round it” and the decoration “was then carried up to the top in plain red” (Scott 1938, 26). Many other coloured fragments (“green and blue, red and yellow, red on buff, and red on white” (ibid.)) were recovered in this room. Cunliffe (1971b, vol. 2, 55) states that the walls of Building M2 at Fishbourne mostly had a green dado with blue floral elements and a green middle zone with red, yellow and blue panels superimposed. “[M]uch unusual wall-plaster, impressed with patterns of circles and scrolls, and painted white (...)” (Winbolt & Goodchild 1937, 38) has been recovered from the bath-house at Lickfold, Wiggonholt together with other buff, cream, red and green pieces. The walls and ceiling

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of the bath-suite at Wortley, Wotton-Under-Edge were decorated with painted plaster. Five groups of dadoes ranging from dark grey to dark red to pink have been identified. The middle zones show simple panel-schemes classified in six groups. The largest of these is constituted by the fragments from *calidarium* 1, some of which feature the impressions of combing from box flue-tiles (Wilson *et al.* 2014, 140, 145, Plate 21b). The decorative scheme in this room was “based on a monochrome framework of octagons, squares and triangles fitted within bordered panels above a dark grey dado” (Wilson *et al.* 2014, 140), the grey stripes of the framework having darker spots superimposed upon it (Figure 5-12). The latter element is rare in Britain and has been found at only four other sites in the Severn valley, including Frocester Court (*ibid.*; Davey & Ling 1982, 50-51).

During the 2nd century, 22 of the 37 newly-built baths were decorated with wall paintings. Some of the most significant figurative examples come from Kent. The baths of the villa at **Cobham Park** (Kent) were almost completely destroyed during the 17th and 18th century, but pieces of wall plaster survived. These include fragments with pink background and red splashes, bands of red and green on a cream background and two with figurative designs: one has a yellow and black palm tree trunk and the other has small open flowers “in dull crimson and pink set among amorphous foliage” (Tester 1961, 91). A piece “showing a fish, possibly a trout, rendered in pink, red and dark blue, swimming in light blue water” (Liversidge 1987, 5; see Meates 1987, Plate I and Meates 1955, 97; Figure 5-13) was found in the cold plunge-bath of the villa at Lullingstone. The stairs leading down to the baths and the corridor north-west of Room 19 were also decorated, the former with a panel scheme (Liversidge 1987, 5; Meates 1987, 6, Fig.1) and the latter “depicting an attempt at marbling” (Meates 1979, 92). The hypocaust channels of Room A of Building 1 at Blacklands School Farm (Kent) were found “filled with fragments of (...) full colour pictorial painted plaster, some showing exquisite paintings of birds darting through foliage” (Wilkinson 2013, 12). In West Sussex, the schemes of some of the walls of both the North Wing and the East Wing baths at Fishbourne have been partially reconstructed. The rooms of the North Wing baths had a deep red dado with a red on white or, more rarely, black and yellow on white panel-schemes in their middle zones (Cunliffe 1971b, vol. 1, 157; vol. 2, 70). The dadoes in Room I of the East Wing baths had grey and red marbling splashed in red, yellow, and black with bands of composite colours (blue, black and white) above, while

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Rooms J and G had deep red dadoes with red on white cornices (Cunliffe 1971b, vol. 1, 176; vol. 2, 75, 78). In East Sussex, the walls of the bath-house at **Beauport Park** were richly decorated, with 11 different colours recorded, and two phases of painting have been identified in its cold plunge-bath (Room III–Brodrigg & Cleere 1988, 272). In Gloucestershire, the baths of three sites dating to this period (Chesters, Woolaston; **Hucclecote, Trevor Road**; and **Whittington Court**) produced pieces of wall paintings of various colours, but their decorative schemes are uncertain. If the baths at Great Witcombe (Gloucestershire) date to the 2nd century as suggested by Cosh and Neal (2010, 157, 160), then the wall paintings in Rooms 34 and 45 of the Upper Bath Suite and Rooms 10 and 5 of the Lower Bath Suite should be included here. A watercolour by C. Stothard and S. Lysons dating to the early 19th century (Cosh & Neal 2010, 158, Fig. 157; Red Portfolio (Gloucestershire) 3, fol. 28, 2, in the Library of the Society of Antiquarians in London) shows that at least the northern and eastern walls of Room 5 had a red dado and a white middle zone separated by a green horizontal band.

The corridor (18) leading to the Phase III baths at Eccles (180–400 CE) had wall paintings with geometric patterns of different colours (Detsicas 1963, 137), while its continuation (15) was externally decorated “to give an impression of marbling” (Detsicas 1968, 45). Fragments have been found in the 3rd-century baths at **Keston** (L.B.B.) and **Northfleet** (Kent). At the latter site, the west wall of Room 10624 was coated with pink plaster, probably with foliage motifs (Biddulph *et al.* 2011, 353) and Room 10581/200055 had red-painted walls. Panels of red, yellow and green lines on a white ground embellished the mid-3rd-century baths (Building 2) at **Six Bells, Farnham** (Surrey; Lowther 1955, 54). The external walls of the large bath-house at Lydney Park (Glos.; second half of the 3rd century) were “rendered in cement with a deep crimson surface” (Wheeler & Wheeler 1932, 55).

Eight baths dating to the 4th century had wall paintings, four of which are in Gloucestershire. At Bax Farm, Teynham (Kent) large quantities of painted plaster were found in Room X (Wilkinson 2011, 415) and the base of the 5th-century fountain in Room IV was painted blue (Wilkinson 2011, 413). Fragments of wall painting were found in Room 3 of the bath-house at **Chatley Farm, Cobham** (Surrey) and from the back-fill of the baths at **Chilgrove 1** (West Sussex). Here the hot bath in Room 1A had red walls and the ceiling of the small alcove above it was painted red, white and blue (Down 1979, 64). Four types of wall plaster fragments have been recovered from the

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area of the South Wing baths at Bignor (West Sussex) and some of them are beautifully illustrated by Samuel Lysons in the third volume of his *Reliquiae Britannico-Romanae* (1813–17, vol. 3, Figs 1-8, Plate XXXII and vignette at the end of List of Plates). In particular, figures 3 and 7 of Plate XXXII represent three pieces painted in imitation of mosaic tesserae, “two of them with a guilloche coloured white, blue, red, yellow, and two shades of grey” (Davey & Ling 1982, 211). In Gloucestershire, fragments come from Room XIV of the baths at **Clearcupboard, Farmington** and Room XI at Chesters, Woolaston, which had red dadoes and panels in the middle zone (Scott-Garrett & Harris 1938, 104). A panel-scheme has been conjectured in Room 11 at **Ironmongers Piece** which also produced grey-buff ceiling-plaster (Blockley 1985, 257). Room 7a of the Lower Bath Suite at Great Witcombe had originally pale green and buff wall painting substituted by pale green/pink at a later stage. During one of these two phases, the decoration included an aquatic scene since fragments of plaster depicting a fish were recovered from cracks in the floor of this room (Davey & Ling 1982, 200).

Traces of wall painting have been found at 12 sites with partial and five with uncertain chronology, but only a few of them are described in any detail. Of these, it is worth mentioning the large quantity of painted wall plaster from Room 7 at Ebrington in Gloucestershire, some of which showed a pattern with fishes (O’Neil 1971-72, 91). The ceiling of the doorway of this room was also decorated and a large piece of it survived, showing foliage on a white background (*ibid.*). Furthermore, evidence of two layers of wall plaster has been recorded in Room 3 (O’Neil 1971-72, 90), similar to that in Room 7a at Great Witcombe.

Fragments of simple floral and pattern-motives, mostly part of panel-schemes from the walls’ middle zones, together with marbling from dadoes, are the most typical findings from private baths in the case study area. Figurative paintings are as rare as figurative mosaics and, apart from the palm tree trunk and the flowers from Cobham Park (Kent) and the birds from Blacklands School Farm (Kent), consist exclusively of aquatic scenes. Pieces with painted fishes have been recovered from three cold plunge-baths: Room 23 at Lullingstone (Kent; late 2nd century), Room 7a at Great Witcombe (Glos.; 4th century), and Room 7 at Ebrington (Glos.; uncertain chronology). Davey and Ling (1982, 156) list another four examples of fragments depicting fishes from villas’ baths in Britain, two from cold plunge-baths (Sparsholt, Hants. and Winterton, Lincs.;

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both 3rd or 4th century) and one from a *frigidarium* (Southwell, Notts.; late 2nd – early 3rd centuries). The fourth one, showing “a fish resembling a roach” (Parker 1878, 3), was also probably part of the decoration of the plunge-bath of the villa at High Wycombe (Bucks).

The imitation of mosaic tesserae from Bignor, “a curious example of cross-fertilisation between the different media” (Davey & Ling 1982, 44), finds three parallels in Britain, all from sites in the south and west: Compton Abdale (Glos.), Lufton (Somerset) and Sparsholt (Hants.), the latter showing the same guilloche motif seen at Bignor. Davey and Ling (1982, 159) suggests that this peculiar decoration may have been “favoured by a workshop operating in the south and west of the province” and report only one continental example from the baths at St.-Romain-en-Gal, France.

This hypothetical *atelier*, together with the one that worked in the *calidarium* of the baths at Wortley, Wotton-Under-Edge (Glos.) and at another four sites in the Severn valley, are among the very few tentatively identified by Davey and Ling (1982, 51-52). Immigrant painters were probably responsible for early works during the Neronian and Flavian periods, possibly including the decoration of the 1st-century baths at Angmering and Fishbourne, but were subsequently substituted by local schools, occasionally showing specifically Romano-British characteristics and motifs (Davey & Ling 1982, 48). Considering the large proportion of sites where evidence of wall plaster has been found, these workshops were certainly frequent in large urban centres (at least one in every major city) and perhaps in minor towns too (*ibid.*). The techniques used by plasterers and painters in Britain differ very little from those employed in other areas of the empire. A thick undercoat (*c.* 8mm) constituted the basis for a finer layer of plaster (*c.* 2mm) on which the decoration was applied. The wall was sometimes keyed with a pointed tool to facilitate the adhesion of the rendering (Davey & Ling 1982, 55). Possible indications of this process have been found on the southern face of the wall between Room J and Room K of the baths at Compton (Surrey), the surface of which “was plastered with cement” and “covered with holes” (Stephenson 1915, 46), and in Room XXXVIII of the baths at Lydney Park, where the walls had “been keyed in Roman times to take a second coating of cement or plaster of which no actual traces remained” (Wheeler & Wheeler 1932, 55). The two layers of painted wall plaster found at Great Witcombe, Beauport Park and Ebrington may indicate a change of taste or, more simply, an essential redecoration in rooms exposed to high levels of humidity. In

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fact, redecorations may have been more frequent in baths than in other rooms, as testified by the five phases of painted plaster in the bath-house of the fort at Lancaster, a building that remained in use for only about 80 years (Davey & Ling 1982, 29).

As for mosaics, copy books may have been used and evidence of preparatory guide-lines is often recorded (Davey & Ling 1982, 59-60). Paintings were executed in fresco employing brushes of different sizes and paint containers have been found at two sites in the case study area, Lullingstone in Kent (Meates 1955, 154) and Great Witcombe in Gloucestershire. At the latter site, two pots and an oyster shell with traces of painting, certainly a palette, were recovered beneath the floor in Room 1 (Clifford 1954, 17, 60). As mentioned in the previous section, the edict of Diocletian indicates that painters were better paid per day than mosaicists, but laying a mosaic in a room would have undoubtedly required more time than painting its walls and ceiling (Ling 1991, 213). Considering the diffusion of wall-plaster in Britain, we can assume that this practice was cheaper overall than other forms of decoration, without necessarily diminishing its importance as a status-symbol (Davey & Ling 1982, 46-47).

Probably due to their lower price, wall paintings were commoner than mosaics in the baths analysed for this study and only a minority of facilities, usually associated with large complexes, had both (22 out of 114). Aquatic scenes were a popular subject for baths and are attested at three sites in different time periods, but most of the fragments recorded were part of marbled dadoes or floral and pattern-motives of panel-schemes. The only two sites where probable regional *ateliers* have been identified are Bignor (West Sussex) and Wortley, Wotton-Under-Edge (Glos.). As for mosaics, the spread of wall paintings follows the general trends of economic growth and recession seen in Chapter 4, with peaks in the South East during the 2nd century and in Gloucestershire during the 4th century. Nevertheless, the fragmentary nature of the evidence and the characteristics of this medium (wall-decoration could have been applied any time after the construction of the walls themselves) defy any attempt to recognise more subtle regional and chronological variations in the area of interest.

5.4.3 *Other forms of decoration*

Only a few baths in the case study area have produced luxury decorative elements separate from mosaics and wall paintings. Slabs of polished Purbeck marble have been found in the baths of the villa at **Abinger** (Surrey; 1–4th centuries) (Bird 2014a, 4) and

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in *frigidarium* II of the 2nd century ‘*Classis Britannica*’ bath-house at **Beauport Park** a slab of this stone was placed in front of a cold plunge-bath (Room III). As noted by Brodribb and Cleere (1988, 224), “its surface would have been less hazardous to wet feet than the smooth tiles” that paved the rest of the room. Room 7 and 8 of the detached baths (Block C) at Folkestone, East Cliff (Kent; late 1st–late 3rd centuries CE) were probably faced with marble slabs (Winbolt, 1925, 51). Evidence of marble lining was also found in Room 7 of the baths at Ebrington (Glos.; uncertain chronology) and the two steps leading down to the plunge-bath in this room were covered with white Carrara marble (O’Neil 1971–72, 91). A basin made of this precious imported stone embellished the apse of Room V of the octagonal bath-house at Bax Farm, Teynham (Kent; late 4th–early 5th centuries CE) which also produced three fragments of decorated stucco (Wilkinson 2011, 415; 2012, 37). When at the beginning of the 5th century the cold plunge-bath (Room IV) at the centre of this structure was substituted by a shallow ornamental pool, a statue was probably added on a base located on the south edge of the room, but only its plinth survived (Wilkinson 2012, 41). A fountain or a basin might have stood at the centre of *frigidarium* II at Beauport Park, a site which also produced two clay statuettes: the head of “a figurine of the DEA NUTRIX type, showing a goddess suckling an infant”, and the base of “a statuette of the so-called Pseudo-Venus type” (Jenkins 1988, 266). A feminine head of a possibly painted stone statuette (height 10.8cm, breadth 8.2cm) was recovered from the hypocaust of Room 54 of the South Wing baths at Bignor (West Sussex; late 3rd–early 5th centuries CE) (Lysons 1813–17, vol. 3, Figs 9-10, Plate XXXII) and “ornamented fragments of hard white stone (...)” (Lysons 1813–17, vol. 3, caption to Figs 3, 4, 6 and 8, Plate XXXI) were found in the hypocausts of the baths. The statuette, now lost, has been defined “a carving of rare distinction” by Martin Henig (1982, 193) and represented the goddess Fortuna, an appropriate choice for the baths where nudity made men vulnerable to chance. In the counties of interest, other examples come from West Sussex (Chilgrove 1, unstratified; Toynbee 1979, 181-183, Plate 11), and Gloucestershire: from the settlement at Kingscote (late 3rd century?; Henig 1981), the complex at **Lydney Park** (Wheeler & Wheeler 1932, 68, Plate XXIV) and a town house at Cirencester (Building XII, 1, 4th century; Henig 1986, 123-124, Figs 90-91). The latter is the most significant of the group because the statue lay in the northern flue of the *praefurnium* (Room VI) of a small private bath-suite.

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While marble and statues are characteristic of the baths of major villas, some of the facilities examined had plain tessellated floors (e.g. Building 3 at **Abbey Farm, Minster-In-Thanet** and the heated rooms of the baths at **Rodmersham**, both in Kent) or specific types of flooring that may be considered decorative in nature. Among these, we should mention Room 2 of the baths at Lickfold, Wiggonholt (West Sussex) with a fine herring-bone floor during Phase 2b (c. 140-180 CE; Winbolt & Goodchild 1940, 57) and the cold plunge-bath (Room XIV) of the 4th-century baths at Clearcupboard, Farmington (Glos.) floored with patterned red tiles (Gascoigne 1969, 47).

5.5 Costs and innovation

The evidence collected in this chapter, although impossible to quantify in precise monetary terms, clearly shows how building and decorating a set of private baths, in Roman Britain as anywhere else in the empire, required a substantial initial expenditure followed by an equally high investment over the long term for its functioning and maintenance, confirming the scatter of information from literary and epigraphic sources analysed in Section 5.1. Special building materials and skilled craftsmen, including mosaicists and painters, were necessary at every stage of the construction and decoration processes. A relevant part of the budget had to be kept for fuel and repairs, the costs of which may have risen considerably when, for instance, complex components of the hypocaust or of the draining system necessitated replacement. Many of the technical solutions adopted by the owners of Romano-British private baths therefore aimed to limit these expenses, in particular by improving the efficiency of the heating systems. The predominant use of local building materials, the choice of less costly options where available (stone *pilae* preferred to the more expensive tiles, as well as the predominance of the relatively cheaper wall paintings over mosaics), the careful orientation of buildings to exploit solar radiation, the occasional adoption of channelled hypocausts, the addition of sloping ramps in some heating systems, and, most importantly, the local invention of heated vaults all point in this direction. On the other hand, large numbers of heated rooms, the employment of imported stones and particularly rich decorations certainly stood out as powerful signs of wealth and ostentation.

The South East played a central role in the process of ‘localisation’ of private baths in Britain. After the initial influence of external stimuli (most likely military architects and skilled immigrants from Gaul), already in the second half of the 1st

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century local craftsmen took over and developed specialised ‘industries’, able to spread and improve the new vaulting technique introduced by a tiliary in the Chichester area. As underlined by Lancaster (2015, 150-151), the newly conquered province had a recently established ceramic tradition and offered fertile ground for technological innovations. The ingenious combination of double flue box-tiles and Westhampnett hollow voussoirs was probably the fruit of continental expertise and local initiative. The large-scale production of box-tiles and hollow voussoirs during the 2nd century, seemingly branded by Romano-British entrepreneurs to advertise and guarantee the quality of their products, corresponded to the acme of the construction of private baths seen in Section 4.1 (particularly in the South East), in line with the general prosperity of the province. At this stage, a mobility of skilled ceramic workers inside the country may have partially replaced the immigration from outside, as testified by the discovery of keyed tiles produced at different sites but presenting the same die (Black 1996, 67).

Artisans from Gaul are most likely to have had a prominent role also among early groups of mosaicists and wall painters in Britain. This continental influence is revealed by characteristic patterns found in the mosaics and paintings that decorated some of the earliest and more elaborate bath buildings in Sussex and Kent. Once again, local craftsmen were able to make good use of these inputs and in some cases specifically Romano-British motifs and regional ‘schools’ can be recognised, testifying to a dynamic and prosperous market with peaks during the 2nd and especially the 4th centuries, when Gloucestershire became the centre of two important groups of mosaicists.

The picture that emerged from this overview therefore contrasts strongly with the traditional idea of Britain as an indolent and remote outpost of the Empire. Albeit triggered by continental stimuli, innovative technologies and crafts were assimilated so well by local entrepreneurs and artisans that they were able to improve what antiquarians considered an “incomparable invention” and a ‘pure’ Roman institution (Stukeley 1761, 680), the heating system of baths. In the next chapter I will investigate in more detail the socio-cultural implications of the success and decline of these facilities in the case study area, engaging with the current theoretical debate around the different degrees of permeability and refractoriness to the ‘Roman way of life’ within different Romano-British social groups.

Chapter 6 The Social Dimension of Rural Baths

In his article about recent developments in theoretical approaches to Roman imperialism, Andrew Gardner (2013, 5) notes how “the complex issue of self-identity and the fundamental relationships between people and changing material cultures” have yet to be thoroughly explored by archaeologists. Building up from the new data collected so far, this chapter discusses the concepts of receptivity and innovation in regard to the introduction of rural baths in Roman Britain, with a focus on the “discontinuous change” (Solomon 2002, 502, cited in Martins 2005, 87) that they implied for individuals of different social and cultural backgrounds. The multifaceted identities of the users of these facilities will also be addressed, stressing the role of the senses in changing the habits of consumers, both primary (the owners) and possible secondary (part of the rural population), as well as highlighting the contribution of these groups to the constitution of a distinct Romano-British way of bathing.

6.1 Receptivity and innovation

6.1.1 *Middle ground*

As demonstrated in Chapter 5, the South East was a prominent territory in the introduction, spread and ‘localisation’ of baths in the province of Roman Britain. The process culminated in the invention of a new vaulting technique that guaranteed higher efficiency of the heating systems and comfort for the users. This outstanding expression of local initiative, albeit admittedly triggered by external stimuli, did not happen in a vacuum. It was inspired, supported and financed by an increasing internal demand, already relevant during the late 1st–early 2nd centuries CE. In Chapter 3.1 I briefly mentioned the growing concern for personal grooming among Late Iron Age societies across southern Britain, confirmed by the appearance of toilet instruments such as nail cleaners in burials from the second half of the 1st century BCE (Hill 1997; Eckardt & Crummy 2008, 23-24, 73-107). Jeremy Taylor (2011, 182) suggests that this early interest contributed to a precocious take up and a “heightened sense of social prestige” attached to bathing in this region. A high degree of receptivity among the local elite towards a specific set of social practices linked to personal care may therefore have facilitated the assimilation of the bathing routine, perceived as part of an evolving

internal socio-cultural trend rather than as a ‘foreign body’ imposed by the new rulers. The connection between toilet instruments and bathing is strengthened by the finds of tweezers, toilet spoons, nail cleaners, as well as complete toilet sets at 12 rural sites equipped with baths in the south-eastern counties examined for this study (recorded in Appendix 1). In four cases these objects have been found in direct association with bath buildings. Nail cleaners, recovered at four sites, are particularly significant since they continued to be used in Britain long after their almost complete disappearance from continental sites in the 1st century CE (Eckardt & Crummy 2008, 69-72), again reaffirming a sense of continuity with pre-conquest fashion.

Together with many other aspects of continuity and adaptation among Late Iron Age communities in this region before and after the Roman conquest (e.g. the role of brooches (Jundi & Hill 1998) and food consumption (van der Veen 2007); cf. Pitts 2010), this concern for personal grooming may be seen as central in the establishment of a middle ground in the context of an ‘asymmetric’ interaction between two diverse cultures. The concept of ‘middle ground’ was firstly introduced by Richard White (1991) in his landmark study on the complex relations between Indians and Europeans in the Great Lakes region between 1650 and 1815. Chris Gosden (2004, 82) has recently synthesised White’s notion as “the creation of a working relationship between incomers and locals that formed a new way of living deriving from the cultural logics that all parties brought to the encounters”. In the case of Roman Britain, Gosden identifies two peculiar characteristics: the long-term impact of Rome on the local socio-cultural environment, and the different scale at which these cultural exchanges operated. Although local middle grounds played a significant role, “these were linked into a more global structure, so that the influence of the empire as a whole was felt on each of the parts and *vice versa*” (Gosden 2004, 106; Figure 6-1). This influence was composed of diverse and conflicting forces, violent imposition and/or gradual negotiation (Mattingly 2006, 13-14; 2011, 30-37). In the following sections I explore the role that bath builders and users played in this negotiation after the Roman take-over.

6.1.2 Early baths: foreign technology, local initiative

The construction of baths required a set of technological skills that simply did not exist in Britain before the Roman conquest. This section briefly discusses when, where, and

through which medium this knowledge was imported, and especially how it reached the rural areas under investigation here.

The evidence for pre-Boudican bath complexes in the young province is limited to early versions of box flue-tiles from a small number of sites, including Colchester, Canterbury and London (thin-walled box tiles in association with half box tiles), and the Neronian military bases at Exeter in Devon (half box tiles) and Usk in Wales (fragment of thin-walled box tile and *tegula mammata*) (Black 1987, 12; Brodribb 1987, 65-67; Black 1996, 60-61; see Section 5.2.2). Considering the military or proto-urban nature of these sites, we can reasonably assume a direct involvement of the army in the production of such building materials and in the construction of the baths they were part of (Black 1992, 122-123; Pringle 2007, 208). In the South East, thin-walled box tile and half box flue-tiles have been found at six villas, all dating to the Neronian or early Flavian periods (**Fishbourne**, **Arundel Park**, **Arundel Tarrant Street** and **Borough Farm**, **Pulborough** in West Sussex; **Snodland** and **Eccles** in Kent). Suggesting military influence at rural sites requires archaeological justification and each case will therefore be carefully evaluated.

At Fishbourne, the presence of the army is supported by the identification of two timber structures (T1 and T2) erected at the site soon after the Roman conquest as military granaries, although a civilian function linked to a commercial port is also possible (Black 2008, 298). According to the traditional interpretation, a so-called ‘proto-palace’—including a large bath-house equipped with thin-walled box tiles in association with ceramic spacers—was built here in the Neronian period together with other two masonry buildings (Cunliffe 1971b, vol. 1, 61-71; *contra* Black 1987, 84-86; 1993 which dates the ‘proto-palace’ to *c.* 75-80). More recently, John Manley and David Rudkin (2003, 137-138) have tentatively identified at least two phases to this structure, with the bath-house likely built by the army in around 43-50 CE “for a number of men billeted in the surrounding timber buildings”. This idea has been re-elaborated by Black (2008, 294-295, 297), proposing a Neronian or earlier date for the bath-house which was built for the customs personnel working at the commercial port. If this new hypothesis is correct and the thin-walled box tiles and ceramic spacers (Cunliffe 1971b, vol. 2, 45 n. 23, 47 n. 34) were used during this phase of the facilities, this type of wall-jacketing would be contemporary to the combination of thin-walled box tiles and half box tiles found at Colchester, Canterbury and London (*contra* Black

1987, 12; Black 1993, 237). In any case, thin-walled tiles were very likely the products of military tile making, as hypothesised by Pringle (2007, 208) for the London specimens.

The sites at Arundel (Park and Tarrant Street) and Borough Farm, Pulborough are unfortunately poorly understood and nothing can be said about military influence there. Two possible half box tiles were found at Arundel Park in 1931–5 and thin-walled box tiles at Arundel, Tarrant Street in 1983, suggesting early bath buildings at each (Hearne 1936, 231, 237; Rudling 1984b; Black 1987, 152-153). Similarly, half box tiles were re-used in a hypocaust at Borough Farm, Pulborough, indicating earlier facilities (Praetorius 1911; Black 1987, 155-156). Half box tiles were in fact also found built into an Anglo-Saxon church at Westhampnett (Hills 1868, 212; Black 1987, 12, 157).

The recent excavations at Snodland revealed building material (fragments of a half box flue-tile, a wheel-thrown ceramic pipe and roof tiles) associated with a probable Neronian bath complex, but very little is known of other forms of occupation during this early phase (Dawkes 2015, 111). The tiles used for this building are in fabric 7 (MOL 2454) produced at the Eccles villa, about 2km to the south-west (Dawkes 2015, 9). Half box tiles in the same fabric have been found at Eccles itself, but unfortunately from an unknown context (ibid.), and from Colchester, London and other military and civilian sites in South-East England (Betts 1992). Although the tilerly excavated by Detsicas dates to the 2nd-century complex (McWhirr 1979, 158; Detsicas 1983, 168), 1st-century pottery manufacture is attested at the site (Detsicas 1977a) and previous tile kilns must have existed somewhere near the villa to provide material for its construction in *c.* 65 CE (McWhirr 1979, 158; Betts 1992, 259). The products of these tileries may have been transported via the River Medway to the Kent coast and from there to London and Colchester (Betts 1992, 260). Despite the lack of evidence of direct involvement of the army in this enterprise, the fact that the tilerly supplied military bases is suggestive. Furthermore, an architect with military background has been proposed for the first large bath-house of the villa, equipped with a circular *laconicum* (Detsicas 1965, 89; Percival 1976, 94; Black 1987, 25; Pollard 1988, 188-189). As seen in Section 4.3.1, these features are fairly common in military establishments (Fair 1927; Nielsen 1990, vol. 1, 78-79) but are exceptional in rural contexts, with only one other example known, at **Ashtead Common** (Surrey). The ornamental *natatio* (*c.* 24.9 x

3.45m) built in front of the villa at Eccles (Appendix 1, 63, Figure 22) is also unusual and may hint at military or continental influence (Figure 0-7; see Section 4.3.1 for other comparanda).

Overall, the evidence for military intervention in the production of tiles for the heating system of early rural baths is circumstantial but plausible at three out of six villas in the South East. **Wortley, Wotton-Under-Edge** is the only rural site in Gloucestershire equipped with baths already in the 60s CE. There too a *natatio*, albeit with functional purpose, was part of a large complex; the stimulus of the army is suggested by the presence of three early ‘legionary wares’ and by the quality of the Phase 1 buildings (Wilson *et al.* 2014, 5, 60). Early box tiles, if present, are not discussed in the excavation report; the only box tile mentioned is the one submitted for microscopic examination, but no dating is given (Waring & Corry 2014).

The way technological exchange between military architects, tile manufacturers and local craftsmen took place can only be speculated (cf. Greene 1992; 2008, 75-77), but may have included some form of coercion and labour *corvées*, at least at an early stage (cf. Mattingly 2011, 128). As discussed in Sections 5.2.2 and 5.4, a possible mediation via skilled Gallic immigrants is likely and may have substantially contributed to the development of local specialised tile ‘industries’, such as the late 1st-century Sussex tiliary able to spread and improve the heating technology essential for bath buildings, as well as local ‘schools’ of decorators. The possible motivations that during the late 1st century CE seemingly convinced an increasing number of British artisans to go into new business, with its risks and uncertainties, are also difficult to establish, but may have comprised opportunism, desire for social advancement, as well as curiosity and creativity. A hint of the previous area of expertise of some of the tile-makers active around Chichester can be seen in the integration of local patterns from bronze mirror decoration in the motives on tile roller stamps (Lancaster 2012, 436). The idea of stamping with roller dies wattle-and-daub walls and, subsequently, tiles also seems to continue a pottery tradition from Gaul and Germany (Lancaster 2012, 435), but once again British creative initiative can surely be recognised.

6.1.3 *Early owners: new expressions of traditional power?*

After discussing the multifaceted interactions that laid the foundation of the bath ‘industry’ in South-East Roman Britain, I will now examine the fundamental but

elusive role of villa owners in the adoption and adaptation of private baths in the countryside, discussing the possible ambitions and motivations that led them to invest a conspicuous amount of their resources into the construction, maintenance and, later, the improvement and elaboration of these facilities.

Christopher B. Martins (2005, 39-67) has recently noted how wealth and personal status display (what he refers to as “the conspicuous consumption thesis”) have been too often employed by Romanists to explain variability in the development and complexity of Romano-British villas. Specifically, he criticises the assumption that individualistic choices and materialistic tendencies were central in a society that, especially during the 1st and early 2nd centuries, was still embedded with collectivist values (Martins 2005, 67). Black (1987, 53-54; 1994, 104-106) considers this complex socio-cultural background and discusses the possibility that social bonds had a strong influence on early owners in the construction of their baths in rural residences. He notes that early villas tend to be equipped with detached baths—a trend recognised also in our study area, particularly in the South East (see Section 4.2). These detached facilities were potentially accessible to people outside the household, thus widening the range of users to estate workers and local rural population—an idea already proposed by Detsicas (1969, 104-106) for the exceptionally large 1st-century baths of the villa at Eccles. This may have reflected a society with “a degree of cohesiveness”, where the provision of ‘communal’ services such as baths for rural communities was a sort of “social obligation” for the members of the elite (Black 1994, 106), similar in nature to the provision of feasts.

I have already noticed the proximity of the villas at Snodland and Eccles, located only *c.* 2km apart, on the eastern and western banks of the River Medway. Within sight of each other, their mid-1st-century baths were certainly two impressive landmarks, especially in a newly annexed landscape where similar facilities were unprecedented. It is reasonable to assume that emulation played a central role here, with the baths at Snodland possibly predating the large bath-house at Eccles by a decade or so. Following up on Black’s intuition, this competition was perhaps not triggered by individual desire for ostentation, but by a more nuanced social network, where the owners had to account for the expectations of the people living in their estates.

Section 1.2.3 briefly noted the ambiguous nature of the so called ‘isolated’ bath-houses, usually attributed to undiscovered timber-built villas (Philp 1973, 87; 2002b, 35). At least some of these baths, especially those dating to the late 1st–early 2nd centuries (e.g. **Baston Manor, Hayes** (LBB), **Boughton Monchelsea** and **Kemsing** (Kent), and **Highdown, Angmering** and **Sidlesham** (West Sussex)) may hint at acts of munificence by local leaders towards the members of the communities living in the surroundings of their villas. Their structural isolation could also have been imposed by the location of water sources or chosen to prevent the fire risk from furnaces at a time when most villas were mainly built of timber (but see the small baths attached to a timber house at **Garden Hill, Hartfield** (East Sussex)). In any case, it is significant that the patrons of these structures were apparently more willing to invest early on in such amenities than in the construction of sophisticated private residences, in striking contrast with contemporary luxurious complexes such as **Fishbourne** and **Southwick** (West Sussex).

The reason could be that landowners with different background and ambitions expressed power in different ways, their choices being affected more by social than economic restraints (Black 1994, 99-100). So, for instance, the first owner of the villa at Eccles may have found more appealing a simple, rectangular house with an ornamental pool and a massive, well decorated and visible-from-afar bath-house than a large and elaborate residence accessible only to a small number of peers; in this instance, the bath-house embodied a series of dramatic innovations to lifestyle for him, his family and his rural workers. Even if we exclude the idea that these facilities were open to a broader ‘public’, the bath houses will have been impressive and demanding structures—materials to build, architects to set up, noises made, and then wood and water to be constantly brought in.

The implications of the sense of wonder that the first sight of a bath-house might have inspired lead us to the next section, where I explore the role played by the senses in the acceptance of this new socio-cultural practice in the early stages of the Roman occupation.

6.1.4 Forging the senses and shaping identities

Sensory archaeology has recently become extremely fashionable (e.g. Skeates 2010; Day 2013; Hamilakis 2014; Mills 2014), and classical scholars have started to apply

these new approaches to diverse aspects of the ancient world (e.g. Butler & Purves (eds) 2013; Toner (ed.) 2014; Bradley (ed.) 2015; Squire (ed.) 2016), trying “to define the range of sensory resources and practices used by different groups within a society, and to make out its variations over space and time” (Skeates 2010, 5). While the theoretical frames underpinning these attempts vary in quality (cf. Buchli 2016, 14-16), this trend is undoubtedly a significant turning point in a discipline that has traditionally been heavily dominated by the sense of sight.

This ‘sensory turn’ is not yet fully mirrored in studies of Roman Britain—a gap already highlighted by Gosden (2005, 199), who notes how the debate concerning the appearance of villas in this province has mostly ignored “the sensory and emotional effects that new types of building in a novel landscape might have had on human subjects”. In rural areas bath-houses were certainly among the most spectacular of these new types of structures, not only for their external appearance, but even more so for the multifaceted sensorial stimuli offered by their interiors. Indeed, baths can be considered as sensorial spaces par excellence, with the bathers engaged in a deeply synesthetic experience. On arrival, sight would have been stimulated by the rich decoration of painted wall plaster and mosaics, while the body swiftly reacted to temperature variations. There was the tactile perception of the increasing humidity on the wet surfaces of the rooms, the scent of perfumed oils and the gentle bubbling of the water that accompanied conversations and consumption of delicacies.

The archaeological evidence collected for this study allows us to create a more nuanced picture of this reconstruction. The bright tones of the wall paintings and mosaics (see Sections 5.4.1 and 5.4.2) were probably mitigated by the dim light filtering through the often coloured window glass (see Section 5.2.4). Illumination was possibly managed to obtain specific effects, as suggested by D. S. Neal (Neal *et al.* 1990, 73) for the bath-suite of the villa at Gorhambury (Herefs.), where the blue window glass seems to recall the Egyptian blue wall-plaster of the hot plunge bath. Food consumption is testified by the recovery of mollusc shells (mainly oysters, but also whelks, cockles and mussels) in a number of bath buildings (e.g. at **Thurnham** (Kent), **Baston Manor, Hayes** (LBB) **Six Bells, Farnham** (Surrey) **Lickfold, Wiggonholt** (West Sussex); **Withington Manor Court Field** (Glos.)). Some of these sites lie at several kilometers from the coast, making these delicacies even more exclusive. Consumption of seafood was clearly in line with the marine atmosphere

recreated by some of the mosaics and wall paintings, a suggestion reinforced by the pervasive sound of dripping and gurgling water. The latter may have been emphasised through acoustic arrangements such as the one hypothesised for the luxurious bath-house at **Ebrington** (Glos.), where the water of a nearby brook was conducted via a higher cistern (Room 6) into a cold plunge-bath (Room 7), perhaps through “a small trickling cascade” (O’Neil 1971–72, 88).

The presence of large quantities of water may also have had negative sensorial outcomes. Anyone who has had the chance to enter the modern reconstruction of a military bath-house at the Segedunum Roman Fort (Tyne and Wear) (Stobbs 1999) is familiar with the damp smell of stagnant water that permeates this building and sharpens a general feeling of oppression due to the tight, slightly claustrophobic space. Obviously, we cannot be certain that this was the case in ancient structures, but the practice of sprinkling perfumed water on bathroom walls described by Pliny (*Nat. Hist.* 13.4) may imply an attempt to mask unpleasant odours. In any case, perfumes and oils were commonly used by bathers, and fragments of perfume flasks have been found at several sites in the case study area (e.g. **Lullingstone** and **Thurnham** (Kent); **Fishbourne** (West Sussex); **Chedworth** (Glos.)), although their direct association with bath buildings is infrequent (e.g. **Baston Manor**, **Hayes** (LBB)). This combination of damp smell and perfumes was probably immediately associated with bathing in the minds of the users of these facilities and, after the conquest, some natives may have ascribed it as among the distinctive new ‘Roman smells’ (cf. Skeates 2010, 16).

This brief overview has hopefully shown how the introduction of baths and bathing in rural Britain had many more complex implications than a change in the grooming practice: it involved the acceptance of a whole new set of behaviours in a new sensorial space. The senses are deeply connected with memory and feelings (Hamilakis 2014, 118-125). Once new feelings became familiar and our sensorium is enlarged, this provokes a slow but steady modification in our perception of self and others. This phenomenon is known from diverse historical contexts (e.g. Burke 1996, 17-34, 166-180; Geurts & Adikah 2006; Dietler 2010, 183-256; cf. Porteous 1990, 34) and can be labeled as a ‘colonisation of the senses’ (cf. Howes 2005, 11). The ritual of bathing might have been a bridgehead for this process: what before was perceived as extraneous and possibly hostile (cf. Cassius Dio, 62.6.4), slowly became known, domestic and favoured. The ‘sense-scape’ of baths became not so exotic anymore: it

gained its place within the daily routine of some of the rural inhabitants of Britain, adjusting their senses and shaping their identities. The size and status of this group of people and the different degrees to which these changes may have taken place will be discussed next.

6.2 Owners and users

6.2.1 *How 'private' were early rural baths?*

In Section 6.1.3 I proposed that early owners of baths might have acquired social prestige from the very construction of these facilities, potentially accessible at least to a part of the rural population they were in charge of (i.e. the workers of their estates). When only one bath building is located (e.g. at **Eccles** and **Folkestone, East Cliff** in Kent), the willingness of members of the elite to bathe in the same structure as their subordinates may be questioned (de Haan 2011, 124). Nevertheless, we can reasonably assume that Iron Age aristocrats took part in the communal feasts they were offering, and during similar social occasions they found effective ways to maintain a degree of separation from the lower members of their communities (e.g. showcasing sumptuous dresses and ornaments or consuming diverse or rare food (cf. van der Veen 2007, 112-113)). Similar strategies could have been applied to the bathing process. For instance, we can speculate that, at least in the larger structures, different users had access to different parts of the building, as proposed by Black (1994, 104) for the earlier bath-house at Eccles (Phase 1, sub-phases B/C). According to his reconstruction, a secondary set of baths was inserted at some point in the north-west side of the building (Rooms 61, 62, 63, 65 and 66) and we may recognise here the owner's desire for a more private space for him and his family. Similar duplications of rooms (alternatively interpretable as indication of joint-proprietors—see Black 1987, 74-75) can be identified in the early Flavian bath-house (Building A) at **Angmering** (West Sussex), in the late 1st-century detached bath-houses at **Ashtead Common** (Surrey) and Folkestone, East Cliff (Kent), and in the contemporary 'isolated' bath-house (Phase 1) at **Sidlesham** (West Sussex).

Four phases of the bath-house at Angmering have been identified, but it seems likely that its enlargement in Phase 2 was undertaken shortly after Phase 1 (Gilkes 1999, 64-65). We are dealing here with a 15 room building, equipped with two cold plunge-baths (Rooms H and M), one of which was very large (Room H, c. 6.70 x 4.70m), possibly two latrines (Rooms C and D (Black 1987, 87)), and three heated

rooms (*tepidarium* F, *calidarium* G and Room K, interpreted by the excavator as a *sudatorium* (Scott 1938, 9)). The chronology of the site at Ashted Common is unfortunately not well understood. The first villa building was a structure with chalk floors and timber-founded walls, probably dating to the late 1st century (Bird 2014b). The large detached bath-house, with up to five different construction phases (Black 1987, 105-110), was located about 35m south of the main house which it may predate. These facilities were perhaps intended for the men engaged in the large-scale tile manufactory at the site (Black 1987, 116) and a military link has been suggested (Walthev 1975, 196; Bird 2004c, 116-8). In any case, during its main phase (Black's Periods 2 and 3) this structure had three heated rooms (Rooms B1, B2, and C, the latter equipped with two hot plunge-baths, C1 and C2) plus a circular *laconicum* (Room A) reminiscent of the one at Eccles. At Folkestone, we have a large rectangular room with an apse (Rooms 7 and 8, both heated and interpreted as a *tepidarium* and a warm plunge-bath by the excavator (Winbolt 1925, 50-52)) built to the west side of a traditional row of rooms (Rooms 1-6a) (cf. Black 1987, 30, 74). Finally, at Sidlesham an entire set of smaller rooms (Rooms 5, 7-11), including a secondary *calidarium* (7) with a hot plunge-bath (8), was attached to the south of the main block (Rooms 1-4, 6).

Other forms of possible social separation are less easy to trace archaeologically. Precious ornaments and garments, consumption of costly food, *instrumenta balnei* of valuable materials and a vast entourage of slaves could also have been obvious signs of superiority. After all, we are informed from written sources (e.g. Petronius, *Sat.* 27-28; Lucian, *Nigr.* 34) that in Rome and Italy the wealthy knew how to stand out even in an apparently 'egalitarian' environment such as public baths, where one could expect nudity to level social differences (see Fagan 1999, 206-219 for a detailed discussion). Moreover, baths may have been accessed at different hours of the day by different users, with the warmer hours of the afternoon reserved to the owners and their entourage (see Section 5.2.4; cf. Laurence 1994, 122-132). Finally, more subtle factors such as knowledge (e.g. of the appropriate sequence of gestures and procedures involved in the bathing process) and understanding (e.g. of the allegoric meaning of decorations) may have been important elements of distinction.

At other early sites the presence of two contemporary sets of baths has been recognised and in these cases their distance from the main house seems to have been mainly dictated by social motivations, in line with the precepts of Columella (*De re*

rustica, 1.6.19-20) who includes *rustica balnea*, baths for the countryfolk, among the important component of the *pars rustica* of a villa estate. The large complex at **Darenth** (Kent) was almost completely unearthed by George Payne in 1894–95 and yet its chronology is only partially understood. Rescue excavation in 1968 revealed a small detached bath-house (Block F), dating to *c.* 70 CE and located some 100 metres west of the main villa building (Block C) and its attached baths (Block D) (Philp 1984a, 72-131). According to Black's reconstruction (1989, 52-53; 211, Fig. 15; followed by Millett 2007, 171, Fig. 5.27), Blocks F and D are contemporary, with the former perhaps built as a separate facility for the villa's workforce. The large detached bath-house at **Farningham 2, Manor House** (Kent; late 1st century?) lays about 75m east of the main residence and Black (1987, 53) proposes that it may have been used by both owners and workers before the construction of the small facilities at **Farningham 1**, although the association of the latter with the villa at Farningham 2 (250m to the west-north-west) is far from certain. A slightly later example comes from **Abbey Farm, Minster-In-Thanel** (Kent), where in *c.* 100 CE two bath-houses were built, one immediately to the west of the main house (Building 3) and another outside the villa enclosure (Building 6A). The excavator suggests that the latter was intended for the use of the estate workers, "whose presence within the villa owner's private walled compound was not acceptable (...)" (Parfitt 2007, 293). This may be true, but the mere fact that the owner invested such a great deal of money in the construction of facilities for the wellbeing of his workers is significant, especially since Building 6A is almost double the size of Building 3.

The late 1st-century south-east baths of the villa at **Southwick** (West Sussex), unfortunately badly damaged by the construction of a road in 1931, were not detached, but their marginal location suggests that they could have been part of a separate range of rooms (36, 37, 38, 39 and 42) planned for those who did not have direct access to the main domestic area, such as workers and other non-household people (Rudling & Leigh 2013, 43).

An important implication of the construction of these early 'estate baths' is that, already in the mid to late 1st century CE, members of non-elite groups residing the countryside of South East England were not only aware of the bathing practice, but possibly started to perceive it as a necessity, at a time when none of the major towns in the region were equipped with public baths (see Chapter 3; cf. de Haan 2011, 51-52).

Some of the villa owners were apparently keen to inspire and satisfy this inclination and their facilities were probably the first ones experienced by the rural population living on their estates. This attitude may have transformed these structures into gathering points for local communities, reinforcing the influence and authority of their patrons. Nathalie de Haan (2011, 123; cf. Perring 2002, 177) goes even further by claiming that at least some of these baths became ‘regional’ public baths, built *in praediis* (‘in the premises’) of a villa owner and open to the local population—a phenomenon implied by epigraphic and literary evidence from other areas of the Roman empire (*CIL* 11.721; *CIL* 13.1926; *AE* 1933.49; *CIL* VIII 9183/20821; *Anth. Lat.* 109; see Busch 1999 and Fagan 1999, 317-319).

6.2.2 Estate baths

The duplication of baths seen in some of the late 1st-century sites just analysed hints at a change in the attitude of villa owners in the South East that becomes more noticeable in the course of the 2nd century. Most of the new houses were equipped with attached bath-suites (see Section 4.2) and smaller and more private facilities were built on the rear of the main houses at Folkestone, East Cliff (Kent) and Ashted Common (Surrey). Even if this seems to imply a new “degree of segregation”, it did not prevent the owners of the latter two sites from keeping the larger, detached baths in operation, perhaps moved by a form of “social obligation” towards the workers of their estates (Black 1994, 106). Similarly, early detached or ‘isolated’ facilities at **Eccles** (Kent), **Wingham** (Kent), **Highdown**, **Angmering** (West Sussex) and **Sidlesham** (West Sussex) were rebuilt, enlarged or modified at this time, and at many other sites new detached baths, usually at a distance from the main house, continued to be built (e.g. **Allens Farm**; **Northfleet** and **Snodland** (Kent); **Barcombe**, **Church Field** (East Sussex); **Goring** (West Sussex); **Chelsham Court Farm** (Surrey)). At **Beddingham** (East Sussex), a detached bath-house set c. 40m north east of the main building might have substituted an attached one in the early 3rd century, although the dating of the former is uncertain (Rudling 1998, 54). Perhaps different socio-cultural backgrounds could be recognised here, with the owners of these sites still embedded with more traditional and collectivist values, an attitude that the long period of respect for the location of an Iron Age circular structure at Beddingham may confirm (Rudling 2003a, 11).

Among the 2nd-century sites listed above, Northfleet stands out. The main villa building, possibly constructed in the late 1st century (Andrews *et al.* 2011, 227-228), is

poorly understood due to its excavation in the early 20th century. However, the area north of the house has been recently investigated as part of the High Speed 1 excavation project and this revealed seven main phases of occupation. During Phase 4 (second half of the 2nd century), a detached bath-house was built close to a hall-house (Building 15746) and subsequently attached to a larger aisled building (Building 15747) that probably kept part of the domestic functions of its predecessor. Considering that this part of the site was involved in a large-scale production of malt and possibly ale, different groups of specialised workers (brewers, maltsters, farmers, etc.) must have lived nearby and almost certainly used these facilities (Andrews *et al.* 2011, 230). During the 3rd century the baths were enlarged and we again see a duplication of rooms, with two cold plunge-baths (10509/200240 and 10624), three distinct sets of heated rooms (10344, 10331 and 10330; 10581/200055; 10563) and two entrances, one through *apodyterium/frigidarium* 10332 and one through *calidarium* 10563. The excavators see this as sign of “segregated bathing” for men and women (Andrews *et al.* 2011, 221) and only a semi-public establishment would have required such a restriction.

During the 3rd and 4th centuries, newly built detached baths become less and less common in the South East region. Among those dating to the 3rd century, we have the ‘isolated’ baths at **Fordercroft, Orpington, Poverest Road** (LBB), possibly associated with a small settlement (Philp & Keller 1995, 42), and the facilities at **Rapsley, Ewhurst** (Surrey). Here an early 2nd-century timber building (Building 3) was substituted in *c.* 200 CE by an aisled masonry building (Building 1), a bath-house (Building 6) and a possible shrine (Building 5), these three structures being enclosed by a low wall (Hanworth 1968, 9). While Building 1 may have been residential, an as yet undiscovered main house has been hypothesised in the partially excavated area north to the site (Cunliffe 1973, 84)—an idea reinforced by a fence set in stone foundations that separated the aisled building from the shrine and the baths. These facilities are substantial, with four hypocausted rooms (2, 2a, 3 and 7) and two adjoining timber rooms of uncertain function to the north of the building (13 and 14), one of which (13) was connected by a door to *frigidarium* 9. Rooms 3 and 7 (interpreted as a ‘recreation’ or ‘social’ space by Black (1985a, 83)) seem to be a duplication of *tepidarium* 2 and *calidarium* 2a and may have been intended for different users, possibly a larger group of people (the estate workers?) in consideration of their size. Since the door between Rooms 13 and 9 is apparently the only access to the baths, it is significant that all the

users had to go through *frigidarium* 9 and so appreciate its mosaic floor with a geometric design before entering one of the two sets of heated rooms.

The South Wing baths of the grand villa at **Bignor** (West Sussex) date to the late 3rd century (Period III A) and at their earliest stage they may have been detached from the main house (Aldsworth & Rudling 1995, 136). Another smaller set of attached baths was built at the same time or slightly later on the rear of the residential building (West Wing baths). As noted by Perring (2002, 177), the arrangement here is very similar to the one seen at Folkestone, East Cliff (Kent) and Ashted Common (Surrey) in the 2nd century. Albeit the smaller baths were apparently left unfinished (Frere *et al.* 1982, 161), this does not undermine the importance of their social implications. These were undoubtedly planned to become the private baths for the owner and his family, while the large South Wing baths, richly decorated and enhanced three times in less than a century, were probably open to a broader set of people. The reasons why the West Wing baths were never completed can only be speculated upon, but financial concerns seem unlikely in consideration of the substantial investment that the subsequent enlargement and decoration of the villa and its South Wing baths must have required.

Only two detached baths were built during the 4th century in the South East: the distinctive octagonal bath-house at **Bax Farm, Teynham** (Kent) and the ‘isolated’ facilities at **Chatley Farm, Cobham** (Surrey), perhaps associated with a *mansio* near the crossing of the river Mole on the conjectured London-Winchester Roman road (Bird 2004a, 66-67). The baths at Bax Farm, dating to the beginning of the century and part of a complex that includes three other unexcavated buildings, are clearly exceptional in shape, size and decoration. As mentioned in Section 4.3.4, similar structures have been found at Halcombe (Devon, mid-4th century), Lufton (Somerset, early 4th century) and **Loose Road, Maidstone** (Kent) (see Wilkinson 2011, 419-420; 2012, 9-16), as well as at Bingham Hall Garden, *insula IX*, Cirencester (4th century; Rennie 1986; see Section 6.3.1). Discussing the controversial function of these buildings (cf. Todd 2005; Henig 2006), Wilkinson (2011, 421-422) stresses their primary role as bath-houses, acknowledging that a later conversion to Christian use cannot be excluded. He also proposes that these were alternative versions of grand reception rooms, “possibly to impress paying guests, tenants or clients in what may be for all intents and purposes a public bath in a rural setting” (Wilkinson 2012, 10).

Moving to Gloucestershire, we find that detached baths here are rare during the entire Roman period, with only one possible (**Hucclecote, Trevor Road**) and five certain examples (**Ebrington; Great Witcombe; Lower Woods, Hawkesbury; Tockington Park Farm; Whittington Court**), mostly dating to the late 2nd century. This is probably due to the later appearance of rural baths in this county (the only 1st-century example being the site at **Wortley, Wotton-Under-Edge**), which may have limited the complex socio-cultural trends identified in the South East during the 1st and early 2nd centuries. I will now examine the evidence from these sites that may point to a differentiation of users.

The baths at Hucclecote, Trevor Road (second half of the 2nd century) have been only partially excavated and so their relationship with another building located nearby (a villa?) is uncertain (Hunter 1960; Spry 2012). Two distinct changing rooms (Rooms 2 and 3) were hypothesised by the excavator (Hunter 1960, 166) but the remains are too fragmentary to inform this discussion. The elaborate bath-house at Ebrington, undated, is exceptional in size; its south-eastern side seems to have contained a possible duplication of heated rooms, but again these have not been thoroughly investigated.

The chronology of the construction of the villa at Great Witcombe is not entirely clear. Leach suggests an early 3rd-century date (Leach *et al.* 1998, 122-123), while Cosh and Neal (2010, 157) recognise 2nd-century stylistic features in some of the mosaics found in the west wing of the building (Rooms 5, 6 and 10). The lower baths of the villa were originally a small detached structure (Rooms 9, 10 and 11) which did not align with the walls of the west wing of the residence, so probably predated it (Leach *et al.* 1998, 8, 122-123). When the villa was constructed, another bath-suite was inserted in the northern part of its west wing. The detached baths are claimed to have been intended for the use of estate workers (Neal 1977a, 33), but if this was the case their lavish decoration with wall painting and mosaics might appear surprising, the more so considering that the attached bath-suite did not produce any evidence of tessellated floors.

The final report on the late 2nd-century villa at Lower Woods, Hawkesbury remains unpublished. A detached bath-house stood approximately 95m to the west of the residence—a noteworthy distance matching the *c.* 100m that separated the worker's

facilities from the main house at Darenth (Kent). These baths had probably a similar function, although practical reasons may have played a role here (a spring was located nearby). Likewise, the detached baths of the partially excavated villa at Tockington Park Farm (3rd century?) lean against the eastern part of the wall enclosing the villa, which is an unusual location but was probably chosen for its proximity to a natural spring (Masser & McGill 2004, 95). Finally, little can be said about the users of the 2nd-century detached baths at Whittington Court, since the main house of this phase has not yet been located.

Some of the bath-suites attached to main villa buildings in this county could also have been open to people outside the close circle of the owners' families and friends, as suggested for the late 1st-century south-east baths of the villa at Southwick (West Sussex). An example is the small lower bath-suite (Rooms 38-40, late 2nd-early 3rd century?) attached to the luxurious villa at **Woodchester**, suitable only for the use of servants according to Clarke (1982, 215). Other candidates are the bath-suite of the villa at **Spoonley Wood, Sudeley** (4th century?), accessible only from the courtyard of the villa and with a similar arrangement to the one seen at Bignor (West Sussex), and the oversize baths at **Hucclecote**, albeit the duplication of rooms here is partially ascribable to the overlapping of different phases. The absolute chronology of these facilities is uncertain, but the excavators identified two following sets of baths, the earliest one with two construction periods. Knowles (1933, 342) speculates that at least two rooms (VIII and IX) of these first facilities changed their function but remained in use after the construction of the second bath-suite. A drain found under five of the heated rooms (IXa, IX, VIII, III and I) was described by Knowles (1933, 343) "as a sort of sump or a field drain below the floor and escape for storm water about the furnace". This is probably better understood as an element inserted to collect condensation and rising damp from the hypocaust itself (Younge 1960, 71-75). The latter explanation implies that, when this drain was put in place, all the hypocausts under these four rooms were in operation. If this was the case, we would have two hot rooms (Rooms I and IX) and two warm rooms (III and VIII) functioning simultaneously, possibly suggestive of different groups of users.

The sites at **Barnsley Park** and the evolution of the villa at Great Witcombe in the late 3rd-early 4th centuries (Period 3) are also of particular interest. At Barnsley Park, a bath-house was built in *c.* 340 CE on the north-east corner of a wooden framed

farmhouse and attached to a large rectangular stone building (P). The main entrance to the baths was through the east side of *frigidarium* 1 and this was accessible both from the timber house and from Building P which had a double door on its south side. Webster (1981, 37) therefore interprets the building as an *apodyterium* for the farm-workers and suggests that the double door “would have made it possible to lock the outer door and so effectively seal off the bath-house when in family use”. On the other hand, Smith (1985, 347) criticises this hypothesis, viewing the *apodyterium* in Building P as far too ample for such a modest bath block; accordingly he proposes that the former was a separated residential unit.

In the late 3rd–early 4th centuries (Period 3), the upper bath-suite of the villa at Great Witcombe was enlarged and new, massive facilities were built in the south-west range of the west wing, incorporating the earlier detached structure. The new set of baths was constituted of 11 splendidly decorated rooms, six of which were heated. Leach *et al.* (1998, 128) conjecture that the estate workers were now using the upper bath-suite, where Room 46 may have been added as another entrance, but it is significant that the lower bath-suite could have been accessed only via the villa south courtyard—a picture also seen at Spoonley Wood, Sudeley.

Based on the consistent, if sometimes circumstantial evidence collected, we can maintain with a certain degree of confidence that facilities dedicated or accessible to larger groups of people did exist in both the study regions, with examples dating from the 1st up to the 4th centuries. Furthermore, villa sites with detached baths or with multiple bath blocks operating at the same time potentially open to different users existed elsewhere in Roman Britain (Perring 2002, 177; Martins 2005, 88-89) and are known from all over the empire, including North Africa, Germania and Gaul (de Haan 2011, 81-82, with bibliography). At least some of those examined here were lavishly decorated (e.g. Eccles (Kent); Folkestone, East Cliff (Kent); Bignor (West Sussex); Angmering (West Sussex); Great Witcombe (Glos.)), suggesting that the owners were particularly conscious of the potential return on image that these buildings guaranteed. This would have been even greater if they functioned as rural public baths (de Haan 2011, 123), since their construction would have been seen as an act of *munificentia* comparable to those celebrated in urban contexts (Forbis 1996, 34-42; de Haan 2011, 94-95); admittedly, however, epigraphic attestations of the latter are rare in Britain (Revell 2016, 80-82).

6.2.3 *Other rural baths*

Detsicas (1983, 140), discussing the nature of the so-called ‘isolated bath-houses’, notes how some of them “were clearly built in industrial areas to serve as the equivalent of modern ‘pit-head’ baths”. Among these, he includes the mid-2nd-century ‘*Classis Britannica*’ bath-house at **Beauport Park** (East Sussex), found in a remarkable state of preservation and forming part of a large ironmaking site covering c. 8ha. Despite the vast quantity of CL BR stamped tiles recovered during the excavations of the baths, the involvement of civilians at the establishment is testified by the discovery of women’s and children’s shoes, suggesting a settlement of civilian ironworkers under military supervision (Brodribb & Cleere 1988, 240-241; Millett (2007, 178) is more cautious about this claim). It could be argued that the bath building was exclusively intended for the use of military personnel, although a wooden tank predating the 2nd-century facilities seems to prove otherwise: this structure, lined with lead sheet and provided with a simple drain, has been interpreted as a proto-bath-house (Brodribb & Cleere 1988, 242). If this was the case, a similar basic arrangement would have been appropriate only for the workers to clean up after their shift and it is reasonable to assume that the new masonry building maintained this function.

From the evidence collected for this study, few other sites (all in the South East) fall into Detsicas’ category of ‘pit-head baths’. The late 1st-century facilities at **Lickfold, Wiggonholt** (West Sussex) and the 3rd-century baths at **Six Bells, Farnham** (Surrey) were both associated with industrial activities, although, as noted by Eleanor Scott (1993, 192), “the presence of industry does not preclude the site being a villa, many British villas had industrial functions”. At Lickfold, Wiggonholt, evidence of pottery production, metalworking and tanning have been identified to the north and south of the baths (Evans 1974, 118). The latter were located 50m north of the Greensand Way, the Roman road linking the London to Lewes Way at Barcombe Mills to Stane Street at Hardham. The site at Six Bells, Farnham revealed extensive Roman pottery works and an aqueduct (c. 100–400 CE). The bath-house (Building 2) dates to the second half of the 3rd century; it was subsequently restored and enlarged at the beginning of the following century. At this time, another masonry structure (Building 1), interpreted by the excavator as the house of the ‘manager’ of the potteries (Lowther 1955, 56), was built to the north-west of the baths. This new building had a large main room (Room 1) with a channelled hypocaust, a narrow compartment (Room 2) possibly

housing a staircase (Lowther 1955, 49), and a bath-suite. The size of the latter, which occupied more than half of the entire building, is problematic and Bird (2004c, 97-98) suggests that the 'house' continued to the north and was probably part of a larger villa.

The 2nd-century bath-house at **Boughton Monchelsea** (Kent), built close to the Roman road that connected Rochester to the coast, presents some similarities with the two sites just examined. It was probably linked to a site recently excavated 400m to the northeast, a minor road settlement or a small villa superseding an Iron Age industrial site with a bloomery and a kiln (Howell 2014, 44-51). Three of the structures located there were broadly contemporary with the baths: a ragstone-foundation rectangular building (B2); an aisled building (B3); and a building with flint foundations (B4). The excavator notes how at this time agriculture might have not been the main role at the site and it is significant that this establishment lies close to an important quarrying area for ragstone, a widely used local hard limestone that was exported to London (Howell 2014, 61).

Finally, Kerry Boyce (2007) suggests that the three 'isolated baths' located in the Cray valley (**Bedens Field, Foot's Cray; Fordcroft, Orpington, Poverest Road and Sandy Lane, St. Paul's Cray**) were the foci of productive sites. In contrast with the contiguous Darent valley, this area lacks substantial Roman buildings, with the exception of the villa at **Orpington**; accordingly Boyce (2007, 264) sees these facilities as part of a different approach to rural development, "involving small (perhaps tenanted) farms and industrial sites". As very little is known of the structure at Sandy Lane, St. Paul's Cray, I will assess Bedens Field and Fordcroft. At the former site, three large rectangular enclosures with chalk floors lay close to a small set of baths, dating to the late 1st or early 2nd centuries CE. Considering that the ditches defining these rectangular structures produced large quantities of bone from butchered cattle, Parsons (1973, 88) interpreted them as timber huts for stockmen, possibly the main users of the adjacent facilities. The chronology of the bath-house at Fordcroft is extremely problematic. A late 3rd-century date is proposed by Tyler and Tyler (1995, 29), while Boyce (2008; 2010, 246) sees it as contemporary to some 2nd-century features located nearby (including metalworking hearths, pits, gullies, postholes and a well). If Boyce's interpretation is correct, these might have functioned as collective facilities for a small rural community involved in metalworking.

However intriguing the connection between industry and bath buildings may appear, caution is needed since all of the sites listed above, with the exception of the baths at Beauport Park, could have actually been part of villa complexes, small settlements or *mansiones*. As seen in Chapter 3, roadside settlements became more common in the South East during the late 1st and 2nd centuries and those that functioned as *mansiones* were equipped with baths (**Springhead** in Kent and **Alfoldean** in West Sussex (Black 1995a, 14-15)) as were some religious sites (Blacklands, School Farm in Kent (Wilkinson 2013, 30-42)). The appearance of these rural baths, regardless of the specific functions of the settlements they were associated with, are better understood in a regional context of progressive spread of the bathing practice in the countryside. The discovery of two-glass *aryballoi* (Whiting 1926, 125, no 141, 126, no 146 and plate XVI; Whiting *et al.* 1931, plate 16, nos 141 and 146), vessels used by bathers as perfume or oil containers, at the minor road-settlement of Ospringe (Smith 1987, 132-134) is suggestive in this sense. They derived from two cremation burials (40 and 41) in a 2nd to 3rd-century Roman cemetery, revealing the social appeal of these objects in this small rural community. These vessels are less common in Britain than in other provinces, with examples from a limited number of major urban centres and military sites (Price & Cottam 1998, 189-190); they are known from only three other sites in the South East: the baths at Beauport Park (Shepherd 1988, 254), the settlement at Richborough (Harden *et al.* 1968, 58, no 70) in Kent, and the villa at **Fishbourne** in West Sussex (Cunliffe 1971b, vol. 2, 357).

6.3 Prestige and competition

6.3.1 Baths in late Roman Britain

After what Black (1996, 67) has defined the ‘Hadrianic boom’ in the first half of the 2nd century—a phenomenon confirmed by the data collected for this research (see Section 4.1)—the construction of new baths in the study zones progressively declined and only 10 new facilities were built during the 3rd century, those mostly in the South East. This is a meagre number if compared with the 31 of the previous century. A saturation of the demand partially explains this discrepancy, but it is significant that only seven new villas appeared between the late 2nd and the second half of the 3rd century. The so-called ‘Third-century Crisis’ has been recently downscaled in the literature (de Blois 2001; Liebeschuetz 2007) and the epigraphic evidence indeed suggests that Britain was relatively peaceful during this period (Birley 2007, 48, 54). Nevertheless, the profound

changes that affected the Roman world from the reign of Marcus Aurelius onwards surely had negative consequences on the economic growth of the province, especially during the chaotic middle decades. Symptoms of this contraction can be found in a drop of urban monumental and private building during the first half of the 3rd century and a recession of luxury trades, including imported fineware pottery and mosaics (Faulkner 2000, 86). The latter became rare also in the area under examination and we have only one certain example of a mosaic floor laid in a bath-house during this period (see Section 5.4.1).

An aspect of the later Roman period particularly relevant to this study is the lack of any technological innovation or experimentation in the production of box-tiles after *c.* 150 CE (Black 1996, 70; see Section 5.2.2). The complex motives that characterised the box-tiles in the South East region became substituted by a limited range of combed keying and scored keying. Early tiles started to be recycled, although the samples of relief-patterned tiles employed in 3rd-century contexts might have been leftover, stockpiled for long periods of time. Reuse becomes more clearly identifiable during the early 4th century, with examples from Canterbury and the rural sites at **Lullingstone** (Kent), **Chatley Farm, Cobham** (Surrey) and **Batten Hanger** (West Sussex) (Black 1996, 72). In general, however, the construction of baths in this region decreases, as does the number of villas, and there is an abandonment of several major coastal sites already in the late 3rd century (e.g. **Folkestone, East Cliff** (Kent); **Fishbourne** (West Sussex); **Arundel, Tarrant Street** (West Sussex)). This phenomenon still requires a convincing explanation since the traditional claims of a rise of pirate attacks during this period seem unconvincing (Cotterill 1993, 235-236; Millett 2007, 180-181; *contra* Rudling 2003b, 124). While a small group of wealthy villas (notably **Eccles** and **Darenth** in Kent, the latter probably with two sets of baths working simultaneously) continued to be occupied and some inland sites show signs of prosperity at this time (e.g. Lullingstone (Kent); **Chilgrove 1 and 2** (West Sussex), both equipped with baths in *c.* 300), Bignor is the only complex that undergoes a substantial upgrade in the late 3rd and early 4th centuries. A late 2nd-century timber structure was superseded there in the mid-3rd century by a small masonry building of corridor type that evolved into a winged-corridor villa during the second half of the century. After *c.* 300 CE, the house was extended eastward to incorporate northern and southern ranges of rooms and was equipped with two sets of baths (see Section 6.2.2). A large aisled

barn and another agricultural building were built to the east of the north wing. During the 4th century, the complex was enlarged further to become one of the most elaborate courtyard villas in the region and underwent an extensive upgrading with the laying of many high-quality mosaic floors. Another exceptional site in this area that sees considerable investment during the first half of the 4th century is the compound of buildings recently located at **Bax Farm, Teynham** in Kent, although only the already discussed octagonal bath-house has been so far thoroughly investigated.

The possibility that the latter facilities might have functioned as rural public baths (Wilkinson 2012, 10; see Section 6.2.2), perhaps sponsored by a rich land owner, is appealing, especially in the context of progressive abandonment of town baths during the 4th century. Neil Faulkner (2000, 123) notes how imperial attempts to revitalise Britannia's urban centres, started in *c.* 286 CE under the usurper Carausius and carried on more systematically during the so-called 'Constantinian renaissance', produced overall ephemeral results. Among these, Faulkner includes the short-lived restoration of some major public baths: out of 15 structures, nine were still functioning in *c.* 300, but none made it to the end of the century. This is the case also for the public facilities at Canterbury, which were refurbished in the early 4th century but abandoned in around 350. Another minor bath building excavated in St. George's Street, possibly a privately-owned establishment open to the public, was constructed in the early 3rd century, enlarged in *c.* 355-360 but soon after destroyed by fire and never rebuilt. On the other hand, a set of private facilities dating to *c.* 300-320 (Building R26, located to the south-east of the public baths) was refurbished in *c.* 350-360 and dismantled only at the end of the century (see Section 3.1). The chronology of the public baths of Chichester is not completely clear, but they were probably still in operation in the late 4th century, since the main well supplying the site was repaired at this time (Down 1988, 42).

Outside these major urban centres, only a few other non-villa sites in this region show evidence of baths still functioning at the turn of the 4th century, all of these located in modern day Kent. Facilities have been found at four military bases of the 'Saxon Shore': *Portus Lemanis* (Lympne), *Dubris* (Dover), *Rutupiae* (Richborough) and *Regulbium* (Reculver) (Millett 2007, 179-181). Occupation at *Portus Lemanis*, established in the mid- to late 270s CE, seems to have ended by the mid-4th century and its small bath-house most likely went out of use at this time (Hutchinson *et al.* 1985, 287-288), although its precise chronology is uncertain due to its 19th-century excavation

(Roach Smith 1852, 20-22). The fort at *Rutupiae*, built in *c.* 275, had contemporary similar facilities that may have been in operation until the final abandonment of the site in the early 5th century (Bushe-Fox 1928, 24-25; Cunliffe 1968, 245-251). The small baths at *Regulbium* also date to the late 3rd century and likely lasted until the military withdrawal from the fort in *c.* 375 (Philp 2005, 54-58, 229). The context at *Dubris* is somehow different: a 2nd-century bath-house, built outside the second fort (*c.* 130), was probably incorporated and re-used within the later military base (Wilkinson 1994, 77). As regards civilian sites, one of the two small facilities associated with the roadside settlement at **Springhead** (Building B.8), probably built in *c.* 150, might have lasted until the early 4th century (Detsicas 1983, 64) and the sanctuary at Blacklands, School Farm near Faversham had two 2nd-century bath-houses (Buildings 1 and 2) still in operation in the late Roman period: Building 1 was abandoned in *c.* 330 (Wilkinson 2013, 31), while Building 2 (rebuilt in *c.* 270–300) lasted until the mid-4th century (Wilkinson 2013, 37). Finally, an exceptionally large 2nd-century bath-house (45 x 15m), possibly part of an emporium linked to a nearby port, has been recently excavated at **Abbey Barns, Faversham**. Pottery from the site indicates that this structure continued in use to the late 4th century and into the early Saxon period, although it is currently uncertain when it ceased to function as a bath-house (Wilkinson 2016).

To sum up, in the South-East region of Britannia only seven new villa baths date to the 4th century (nine if we include the two late 3rd-century facilities at Bignor), all of which were built before 350 CE: **Bax Farm, Teynham** (Kent); **Northfleet** (the second bath-house; Kent); **Chatley Farm, Cobham** (Surrey); **Six Bells, Farnham** (the baths in Building 1; Surrey); **Batten Hanger** (West Sussex); **Chilgrove 1 and 2** (West Sussex). Only one set of baths (Building R26, attached to a town-house at Canterbury) was constructed in a non-villa context after 300, while some earlier structures were restored: the public baths and the facilities in St. George's Street at Canterbury, Building 2 at Blacklands, School Farm, and, at least to some extent, the public baths of Chichester. Excluding the baths at Bignor and at Bax Farm, Teynham, these new establishments at villa sites tend to be compact in size and simply decorated, implying a general reduction of the resources invested by the owners in these amenities.

Gloucestershire, on the other hand, offers a very different picture: seven out of the 14 villa baths dating to the 4th century and recorded for this study come from this

specific county. Their number must have been even higher if we consider the tremendous impact that 18th- and 19th-century excavations have on our understanding of site chronologies in this part of the country (see Section 2.6) and at least two other sites should be tentatively added to the list (**Spoonley Wood, Sudeley and Tockington Park Farm**). Furthermore, a very large bath-house with 15 rooms, dating from the second half of the 3rd to the late 4th century, was located north of the main temple of the religious complex at **Lydney Park** (Wheeler & Wheeler 1932, 52-57; Casey & Hoffman 1999, 87-88, 114).

The public baths at Gloucester are poorly understood and the location of those at Cirencester is unknown, but private facilities have been identified at the latter site. Of these, one was part of Building XII.1 (The Beeches Houses; McWhirr *et al.* 1986, 30-36) (Figure 0-6B) and one of Building XXb.1 (Ashcroft Villas; Haverfield 1902, 377; 1920, table of mosaics, no. 20; Cosh & Neal 2010, 115), while another bath-suite was partially excavated in *insula* IX at Bingham Hall Garden (Rennie 1986). The bath block of Building XII.1, formed of six rooms, was seemingly built during the second half of the 4th century, although the dating evidence is scarce (McWhirr *et al.* 1986, 45). Unfortunately, very little is known about the tessellated pavement and plunge-bath with stone steps that were discovered in *insula* XX during construction works in 1902 (Haverfield 1902, 377). On the other hand, the site at Bingham Hall Garden is particularly significant. Here, a partially heated octagonal structure (Area B), comparable to the one seen at Bax Farm, Teynham in Kent, was excavated in 1958 together with two other hypocausted rooms with small apses (Area C), located *c.* 10m to the south-east. This arrangement presents some similarities with the early 4th-century bath-house of the villa at Lufton (Somerset-Hayward 1952; 1972²⁷), although the structures at Bingham Hall Garden were more likely part of two distinct buildings (a possible yard has been exposed to the north-east of Area B; Rennie 1986, 199). Whereas the two apses undoubtedly formed the heated compartment of a bath complex, the octagonal building, which had a central octagonal room with a channelled hypocaust and a pillared hypocaust underneath an apse in its south-east side, has been interpreted as a heated *triclinium* (Holbrook 1994, 64) and compared with two

²⁷ The accuracy of Hayward's plan has been challenged by recent excavations at the site, carried out under the direction of James Gerrard (Haynes, pers. comm.).

hexagonal dining rooms at Keynsham (Somerset; Russell 1985). Nevertheless, the possibility that this structure was part of another set of baths cannot be excluded. A layer of *opus signinum* in the central octagonal room (Rennie 1986, 196) may indicate the presence of water there (but see Henig 2006) and the apsed room is very reminiscent of a hot plunge-bath. The excavation report offers no precise chronology (four undated phases are recognised in Area B and at least two in Area C: Rennie 1986, 196-201), but a mosaic from the octagonal building (Cosh & Neal 2010, 82-83) and the peculiar shape of the latter strongly suggest a 4th-century date.

Contrary to the South East region, many villas in Gloucestershire reach their peak during the 4th century and are embellished with elaborated mosaics (Scott 2000, 29-43, 81-89). The investment in new baths, sometimes large and richly decorated (e.g. the West Baths at **Chedworth** and those at Spoonley Wood, Sudeley), confirm a positive trend that continues into the second half of that century and that is recognised also at Cirencester (cf. Scott 2012, 186-187), by then possibly the provincial capital of *Britannia Prima* (Holbrook 1994, 74).

6.3.2 *Bathing in late Roman Britain: a bath-suite of my own?*

Next, I can examine the socio-cultural implications of the late antique baths described above and the different patterns of continuity observed in the two case study regions. The architecture and decoration of private residences in the late Roman period have been traditionally seen as mirroring an increasingly hierarchised society (e.g. Thébert 1985; Ellis 1988; Scott 2000). Kim Bowes (2010, 95) has recently challenged this view, arguing that these houses, with their elaborate dining rooms and refined mosaics, were instead “machines for competition” and part of “a conversation, a competitive discourse between neighbouring homeowners”, similar to the one we usually attribute to late Republican and early imperial *domus* in Italy. Similarly, Sadi Maréchal (2016) has interpreted the construction of semi-public baths attached to urban and rural residences in late antique North Africa as an attempt to speed up the process of social advancement by stressing the links between wealthy patrons and their local communities. This somehow questions the idea of an elite more and more isolated from their inferiors at this time, with its members secluded in their luxurious palaces that mimicked all aspects of civic life—including baths (Thébert 1985, 380).

In Section 6.2.2 I discussed the possibility that some of the late 3rd- and 4th-century baths might have been accessible to wider groups of users. The most significant examples are **Bax Farm, Teynham** (Kent); **Bignor** (West Sussex); **Barnsley Park** (Glos.); **Great Witcombe** (Glos.); **Hucclecote** (Glos.); **Spoonley Wood, Sudeley** (Glos.); and **Woodchester** (Glos.); to these we might add **Chesters, Woolaston** (Glos.), **Chilgrove 2** (West Sussex) and **Upmarden** (West Sussex). Bignor, Great Witcombe and possibly Chesters, Hucclecote and Woodchester had two sets of baths working at the same time in the 4th century. The chronology of the villa at **Darenth** in Kent is problematic, but probably during its later phase (4th century?) the complex had a second bath block added to the west of the main house (Block E). **Chedworth** (Glos.) was also equipped with a lavishly decorated second bath-suite (the West Baths) during the 4th century. This phase also saw the earlier North Baths radically modified, gaining a new level of sophistication by the addition of three cold plunge-baths on their northern side separated by low wall with columns. In his reassessment of the site, Simon Esmonde Cleary (2013, 35), following Goodburn (1972, 20), has argued that they were now converted to dry-heat baths, as a complement of the new damp-heat suite in the west wing. The only evidence supporting this change is the abandonment of the main *praefurnium* of the North Baths and the heavy wear on the stylobate of the colonnade (Room 20) separating the two establishments, which might point at their combined use. Alternatively, he proposes two separate facilities for men and women (Esmonde Cleary 2013, 110), although a similar segregation is hard to explain if only members of the household were allowed to bathe there.

Reconsidering the villas of the Coln Valley (near Cirencester), Sarah Scott (2012, 203) has stressed the prominent role of these complexes in the landscape during the 4th century: they “dominated the social, economic and religious lives of those living and working in the vicinity”. Given the size of villas such as Chedworth and **Withington Woods**, the number of people dependant on the owners of these residences might have been substantial, and this can be presumed also for the sites listed above, especially Bax Farm, Bignor and Darenth in the South East and Great Witcombe, Spoonley Wood and Woodchester in Gloucestershire. If we accept that these patrons were keen to maintain and sponsor the religious structures often associated with their estates as a source of social status (cf. Scott 2012, 197; Wright 1985), then the provision of rural semi-public baths would have been another effective way to enhance their

prestige among and influence over their local communities. Below I briefly address the evidence from some key sites to identify structural elements in support of this hypothesis.

The fact that some of the larger baths were located at the end of one of the wings of the building they were attached to and that they were exclusively (as at Great Witcombe and Spoonley Wood) or more easily (Bignor) accessible from the courtyard than from the residential rooms of these complexes, is suggestive of a wider clientele. This seems particularly convincing for the sites with two contemporary sets of baths (Bignor and Great Witcombe). On the other hand, the baths in Block E at Darenth, while difficult to read due to their unstratigraphic excavation, are noteworthy in being separated from the central courtyard of the compound by a wall (Millett 2007, 171, Fig. 5.27), perhaps to establish a social demarcation between their users and the people allowed into the facilities attached to the main house. The lower bath-suite (Rooms 38-40) at Woodchester was inserted in the eastern wing facing the central courtyard of the large residence, possibly already in the late 2nd–early 3rd century. However, its position and small size hint at lower status users living inside the house such as servants more than outsiders (Clarke 1982, 215). Finally, the structural isolation of the octagonal bath-house at Bax Farm makes it an ideal candidate for a set of lavish public facilities offered by a successful landowner to his tenants and estate workers, although caution is needed in consideration of the lack of information about the other structures traced at this site.

Chedworth deserves special mention due to the presence of two religious sites in its surroundings: a very large stone temple with square plan (*c.* 900m to the east), dated approximately from the 2nd till the 4th century, and the so-called ‘Capitol’ (*c.* 175m to the north-west) (RCHME Gloucester 1976, 28), perhaps a circular temple to which probably belong a limestone scallop-shell canopy (Goodburn 1972, 34) and a bronze bust identified with a priest or Saturn (Henig & Goodburn 1982, 252-253). Several fragments of statues of deities and altars were also found at the villa and in its vicinity: these include at least two depictions of Diana, a finger of an over-life-size bronze statue (Sabazius?), a probable *Lar*, a *Genius Cucullatus* and four small

limestone altars, one of which shows a simple outline figure²⁸ underneath an inscription tentatively read as L]EN(O) M[ARTI ('to Lenus Mars') (Goodburn 1972, Plate 10.1; Webster 1983, 16-20; Esmonde Cleary 2013, 90-96). Bearing in mind the important religious component that these features add to the site, the disposition of the villa's bath-suites can be read as a sort of frame for the focal point of the inner courtyard: a *nymphaeum* (rooms 17), built over a former reservoir and broadly contemporary to the construction of the West Baths (4th century). This was an elegant apsidal structure, most likely with a columned entrance, which contained an octagonal basin where the water from the spring was channelled. Without entering into the merits of the theory that reinterpreted the entire site as a sanctuary dedicated to water healing deities (Webster 1983; Walters 2000), the possible association of the baths with some form of religious practice is intriguing, especially if we consider that the sacred spring, monumentalised in the *nymphaeum*, was the source of water supply for these facilities (Esmonde Cleary 2013, 44). If so, then the owner would have been able to offer a rather unique experience to his guests: bathing in sacred water, conceivably believed to have healing properties. Might these baths have been available also to people of lower status visiting the shrine, perhaps during special occasions such as religious festivities? This would explain the presence of the small, crudely carved altar, seemingly a rather humble votive offer to a god associated with healing (Webster 1983, 16). If this was the case, the community living nearby might have perceived it as an act of munificence from their patron, comparable, albeit on a smaller scale, to the commitment shown by his peer Titus Flavius Senilis in commissioning the laying of at least one of the mosaics of the temple at **Lydney Park**, also equipped with a large bath complex and dedicated to the healing god Mars Nodens (Wright 1985; Cosh & Neal 2010, 173, 181-182).

Turning to the rural sites of comparatively less grandeur, we can consider those baths structurally similar to the ones reviewed above. Among these, the facilities at Chilgrove 2 in West Sussex are reminiscent of the arrangements seen at Bignor, Great Witcombe and Spoonley Wood: a quite substantial semi-detached structure located to the south-west of the main house, apparently accessible only from a courtyard. Furthermore, it is tantalising to read the ample room to the west of

²⁸ A fifth altar, now in the Museum at Chedworth and presumably from the villa, depicts an even more crudely carved figure that may represent the same deity (Goodburn 1972, Plate 10.3; Webster 1983, 16), but its authenticity cannot be taken for granted.

tepidarium 10b (created in the mid-4th century by demolishing the wall between Rooms 12 and 13) as an *apodyterium* adjusted for the needs of a larger number of people than previously expected. Not far from Chilgrove, the villa at Upmarden, unfortunately only partially explored, offers another semi-detached (?) set of baths of some pretention. This building had a level of permeability with the facing courtyard, since corridor 8 was adapted into a veranda possibly at the time of the refurbishment of the baths (late 3rd century) or slightly later (Down 1979, 103). Moving to Gloucestershire, the villa at Chesters, Woolaston, raises again some problems of interpretation due to its early excavation. It seemingly had two facilities working at the same time during its Period II (c. 320–5th century CE), or, alternatively, an oversize bath-suite. We find a similar context at Hucclecote, where one or possibly two bath-suites occupied a considerable part of this relatively modest villa. In Section 6.2.2, I demonstrated how the earlier facilities here were likely still in operation when the second set of baths was constructed, revealing an apparent duplication of the heated rooms linked to a possible differentiation of users. Finally, we have clear evidence indicating that the bath block at Barsley Park, built in c. 340 CE attached to a wooden framed farmhouse, was accessible also from a rectangular building (P, a large *apodyterium*?) to the north of these facilities. Even if building P were a separate residential unit as suggested by Smith (1985, 347), this would nevertheless challenge the traditional concept of ‘private’ baths.

I have noted how some of the baths attached to townhouses in North Africa were likely semi-public establishments, a practice recorded in other urban centres and regulated by late antique juridical texts (Maréchal 2016, 130). The detached facilities excavated in St. George’s Street at Canterbury have been read in this way (Frere & Stow 1983, 39) and the establishment attached to a private house located immediately to the southeast of the public baths might have had a similar function (Blockley *et al.* 1995, 210-227). The close proximity with the public facilities is suggestive in this sense, since similar ‘clusters’ of baths have been recognised elsewhere and are particularly evident in late antique Ostia (DeLaine 2006, 338, 341, Fig. 3). The owners of these privately-owned facilities offered a more intimate alternative to the crowded public counterparts and might have even made a profit out of them, at the same time (and perhaps more importantly) gaining the gratitude and the support of their fellow citizens (cf. Fagan 1999, 165-170). These alternatives to the public baths would have

been even more appealing if provided with fashionable and ‘exotic’ architectonic features, an element certainly valued by the patron of the octagonal building at Bingham Hall Garden, Cirencester, although the partial nature of the excavations at this site prevents a more secure identification.

The degree of publicness that I have identified in some late antique ‘private’ baths does not prevent them to have been settings of choice to host friends and guests, where villa or townhouse owners showcased their taste and culture (cf. Sid. Apoll. *Epist.* II, II). Large and luxuriously decorated facilities would have impressed peers as well as members of the lower classes, raising in the former a desire for emulation. This might have been a powerful incentive for the owner of the villa at Chilgrove 2 (West Sussex), which decided to invest in a set of baths soon after the construction of these amenities at Chilgrove 1, located only 150m away. Similarly, the proprietors of the villas in the Coln Valley seem to have influenced each other in the decoration of their baths, as testified by the choice of the same group of mosaicists (the Corinthian Orpheus Group) at Chedworth and **Withington Manor Court Field** (see Section 5.4.1). Furthermore, the appearance of sophisticated structures in different parts of late Roman Britain, such as the octagonal baths at Bax Farm, Teynham (Kent), Halcombe (Devon), Lufton (Somerset) and possibly Cirencester, suggests a level of elite mobility within and outside of regions, with the wealthy reproducing in their own residences the fashionable features they came to admire while paying a visit to equals, perhaps even on the continent.

The evidence discussed implies that baths played a central role in the construction of the late antique “machines for competition” described by Bowes (2010, 95), both in rural and urban contexts. Nevertheless, the previous section revealed a markedly different pace in the two case study regions during the late Roman period: while most sites and baths in the South East showed signs of decay and abandonment already by *c.* 350, a good number of villas in Gloucestershire thrived well into the second half of the 4th century, with Cirencester and the nearby Coln Valley experiencing a phase of particular prosperity (Scott 2012, 186). The local-scale economic patterns beyond these macro trends are difficult to trace (cf. Allen & Fulford 1996), but, if Cirencester was indeed the capital of one of the four provinces which composed the diocese of Britain at the end of the 3rd century, this could explain the longer-lasting investments into this city compared to Canterbury and Chichester (cf.

Ward-Perkins 1998, 386-387). Part of the new privileged class attracted by similar centres of powers was formed of military men and members of the enlarged imperial bureaucracy (Kelly 2004), social groups that might have initiated a wave of private building in the town and its surroundings. In turn, this might have triggered a new form of elite competition between them, the old aristocracy, and low-level provincial senators, the “bewildering variety of aristocracies” caused by Diocletian’s fiscal and economic reforms and by Constantine’s expansion of the senatorial order (Bowes 2010, 88-89). Furthermore, the emergence of more specialised economies in the Cotswolds described by Holbrook (2006, 108), including wool production and cattle and sheep farming, may account for the rural vitality of this region during the 4th century—a phenomenon attested far beyond the area of influence of Cirencester.

Despite the details of this contrasting picture remaining partially unclear, it is striking that wherever economic means were available, in Gloucestershire as well as at fewer sites in the South East, the investment in construction, refurbishment and decoration of baths remained a natural choice for late antique villa owners. I have discussed the socio-cultural reasons that might have led some of the wealthier to do so: a return in prestige in a context of fierce competition between peers. However, even in the case of small facilities clearly intended for the comfort of the owner and his household (e.g. **Chilgrove 1** (West Sussex); **Boughspring** (Glos.) **Clearcupboard**, **Farmington** (Glos.)), baths seemingly maintained their allure of *humanitas* and remained desirable status symbols in a fast-changing world.

6.4 Bathing as a Roman?

Looking back at the chronological and regional overview provided in this and Chapter 5, the variety of forms, functions and social implications associated with private baths and bathing in Britain during the Roman occupation stands out. At an early stage, bathing practices were instrumental in constructing a common ground between the newcomers and the natives, in particular among the receptive communities of the South East. This resulted in the very early appearance of baths in civilian contexts, although perhaps not where one would expect them: with the exception of a few proto-urban sites, the countryside became the hotspot for early facilities and the villa the place where innovative technological solutions were introduced. An increasing internal demand for these amenities already in the second half of the 1st century encouraged the development of specialised ‘industries’, responsible for the diffusion of the new

vaulting technique introduced by a tiliary in the Chichester area. However, the process of ‘localisation’ of bathing was not confined to technical advancements and commercial initiatives. As demonstrated in Sections 6.1.3 and 6.2.1, early rural baths might have been less ‘private’ than has been assumed, with the lingering socio-cultural complexity of late Iron Age societies still deeply affecting the relationship between the owners of these facilities and the local communities. If these patrons were really offering access to their baths in compliance with a form of “social obligation” towards their subordinates (Black 1994, 106), then members of rural non-elite groups might have started to be aware of, and possibly appreciate, baths and bathing earlier than their urban counterparts. The senses and the powerful subconscious responses they ignited seemingly played a central role in the acceptance and enjoyment of these unprecedented physical and social experiences, as well as in the construction of bridgeheads for the cultural values the baths were imbued with.

Despite the appearance of more ‘private’ sets of baths in the 2nd century, during this and the following two centuries we can still identify a number of sites with evidence for a broader range of users. Separate facilities for the estate workers, where clearly identifiable, tended to remain in operation as long as the more ‘domestic’ ones, and were often the larger and, sometimes, the better decorated establishment of the two, with expected higher costs for maintenance and supply. This would make even more sense if at least some of them functioned as rural public baths (de Haan 2011, 123) and were therefore valued by their users as acts of *munificentia*, with the resulting prestige rewarding the patrons for their economic efforts.

The increasing elite competition that Bowes (2010) has highlighted in the later Roman period conceivably accentuated the desire of villa owners to impress and tie closer to their family the population living and working in their estates, perhaps also through the construction of rural baths. This phenomenon is more visible in Gloucestershire than in the South East, due to the exceptional prosperity experienced by this region during the 4th century, and might have involved to some extent also the city of Cirencester, now perhaps the provincial capital of *Britannia Prima*.

The possibility that in different periods and places some of the villas’ ‘private’ baths were indeed accessible to a part of the rural population does not simply imply that more individuals than previously thought shared the joys of a hot bath. The owners, in

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providing a similar service, certainly constructed a form of rural patronage and strengthened their bonds with members of the communities living in the environs of their villas; but it is the impact on the latter that is particularly fascinating here. These people in fact would have encountered a very special kind of bathing experience, one filtered through and affected by the personal taste and economic means of their patrons. More than a uniform block of cultural traits embodied by the ‘Roman way of bathing’, they would have been confronted with a myriad of local, alternative and unique versions of this practice. For many of them the personal, daily and possibly exclusive perception of the ‘Roman’ baths had nothing to do with the splendour and grandeur of the urban public facilities, but remained anchored to the narrow, if sometimes richly decorated, spaces of the buildings examined for this study.

This overview highlights the innovative insights gained through a meticulous re-evaluation of the archaeological evidence in view of current theoretical debate. As noted in the Introduction, research on baths in Roman Britain and rural baths in particular is scattered in a number of different publications and has been rarely informed by solid theoretical frameworks. Baths associated with villas have been often overlooked as an obvious and unproblematic appendix to these residences. Instead, this chapter has demonstrated how nuanced and complex the history and stories of these facilities are, by setting them in a broader regional and provincial frame. We can thus see the notable role of these buildings in the early and crucial phases of the Roman occupation, when they acted as fundamental media in the process of cultural interaction between the newcomers and the natives—an exchange that worked in both directions, as testified by some impressive examples of local initiative and technological innovation. Furthermore, this study has challenged the view that rural baths were a prerogative of the elite, introducing the possibility that wider communities might have been able to experience these establishments. This hypothesis allows for a reconsideration of the social relationship between villa owners and the inhabitants of their estates, shedding light on the lives of this often invisible yet sizeable part of the Romano-British population.

Chapter 7 Conclusions

This concluding chapter summarises the main themes developed across this thesis, stressing the significance of the results achieved, discussing their broader implications for the discipline and evaluating their potential for further research.

7.1 Beyond ‘private’ baths

Baths were central to the ‘Roman way of life’ and the appreciation of these facilities, with their diverse forms and functions, seems to have been a cross-class and cross-territorial phenomenon, apparently defying differences of status and cultural background. In short, bathing, with all its variants, was among the few daily practices shared by citizens of Ephesus and *Londinium* alike. Perhaps because of their popularity in the ancient world and their archaeological distinctiveness, antiquarians, as well as many modern scholars, have tended to take for granted the function of these buildings and, more importantly, their socio-cultural significance. This is particularly true in a provincial context such as Britain, where Romanists have focused on military and public baths, neglecting the variegated field of rural bathing. The assumption that baths associated with villas were a prerogative of the owner and his small circle of kin and friends has been too often uncritically accepted, so far limiting the role of these facilities in the recent theoretical debates concerning the process of cultural change within Roman Britain.

The main aim of this doctoral research was to reassess the potential of rural baths in expanding our current understanding of the cultural exchanges and interactions that occurred in Britain during the almost four centuries of Roman occupation. In order to achieve this aim, it was essential to identify and explain regional variations in the chronology, typology and distribution of these facilities and to evaluate their social and economic impact. I have therefore undertaken a comparative study of four counties in two regions, namely South East (Kent, Surrey and Sussex) and Central South West England (Gloucestershire), reviewing in detail antiquarian and modern scholarship (Chapters 2 and 3) and providing a comprehensive catalogue of villas and rural baths in these areas (Appendix 1). This large amount of previously disparate data has then been sorted into a database (Appendix 2) and employed to track regional trends over time

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(Chapter 4). This approach identified a different pace in the development of villas and the construction of bathing facilities in the two regions, with a concentration of early sites in the South East and a flourishing of sites in the later Roman period in the South West. Furthermore, the variability of bath forms and typologies has been analysed in relation to the type and size of villa they were part of, highlighting important tendencies such as a consistent number of large facilities associated with small houses in the South East during the 1st century and a concentration of large and elaborate courtyard complexes with large baths in Gloucestershire during the 4th century.

To evaluate the scale of the investment that Romano-British villa owners made for their baths in the case study area, a detailed examination of the archaeological evidence has been carried out and a vast amount of information about the different components of these structures has been collected, including: building materials, technology, water supply, fuel, maintenance, and decoration (Chapter 5). The results suggest a substantial initial expenditure followed by an equally high investment over the long term for their functioning and maintenance, with special building materials and skilled craftsmen, including mosaicists and painters, essential at every stage of the construction and decoration processes. Among the most significant outcomes of this overview, the role played by the South East in the introduction, spread and ‘localisation’ of baths in Britain stands out. The process culminated in the invention of a new vaulting technique in the Chichester area that improved the efficiency of the heating systems, thanks to a fruitful combination of continental expertise and local initiative. On the other hand, the late prosperity of Gloucestershire underpinned the constitution of two important groups of mosaicists that developed specific Romano-British motifs, found in some of the most luxurious villa baths of this period.

I have then investigated the socio-cultural implications that might have justified this large investment in baths, discussing the concepts of receptivity and innovation with regard to the introduction of these facilities in Britain after the Roman conquest and looking at the possible interactions between villa owners and rural communities (Chapter 6). I have thus demonstrated how baths and bathing, with their rich and new sensory stimuli, were instrumental in constructing a common ground between the newcomers and the natives, particularly in the South East. This resulted in a very early appearance of villa baths in this region, at a time when the number of military and public establishments in the province was still limited. In consideration of

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the high degree of receptivity toward baths demonstrated by a society still dominated by autochthonous values and binds, I provided a new interpretation of the relationship between the owners of these early facilities and the communities living on their estates. The detached baths typical of this period might have been made accessible to at least a part of the rural population (the estate workers) in response to a form of “social obligation” (Black 1994, 106), with a significantly larger group of people than previously thought experiencing these amenities. A careful evaluation of the architectonic evidence of later baths seems to indicate that this practice continued during the 2nd century and after, with the construction of new detached baths and the refurbishment of the existing ones, even where more ‘private’, attached facilities appeared. These might have been seen as acts of rural *munificentia*, with the resulting prestige rewarding the patrons for their economic efforts, and their effects would have been even greater in the highly competitive late antique society, when villa baths became particularly elaborate especially in the thriving area around Cirencester.

This research has therefore demonstrated that a thorough reevaluation of the archaeology of Romano-British rural baths, informed by a solid theoretical frame, can produce a far more nuanced picture of broader phenomena such as the social interactions between newcomers and natives in the aftermath of the conquest as well as between villa owners and rural population during the Roman occupation. As recently remarked by Louise Revell (2016, 62), for the set of values and behaviours that identified all kinds of elite to be effective status-enhancers, they need to be acknowledged and at least partially understood also by the non-elite. Letting members of the rural population living on their estates enter their new, richly decorated bath-houses would have been a powerful way for the landowners to impress them and to establish or re-establish their authority and prestige, especially during the transitional stage that followed the annexation of Britain into the Empire.

7.2 Wider implications: gendering the baths?

The hypothesis that, under certain circumstances, larger rural communities might have experienced what has been traditionally classified as elitist status symbols raises a wide range of new questions. Among these, the need for a clearer definition of the identities of the diverse people that used rural baths, especially their gender and age, is preeminent and this section will briefly discuss the feasibility and potential of a similar investigation.

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In her reassessment of the archaeology of the Roman West, Revell (2016, 105-106, 127-129) has compellingly recognised a general tendency in the literature to exclude or marginalise issues related to gender and age. The language used in this thesis to describe the two main groups of possible bath users, villa owners and other inhabitants of the estate, has been kept deliberately gender- and age-neutral. The main reason for this is that the archaeological evidence, as presented in the excavation reports that constitute the foundation of this research, says very little indeed about these crucial issues, with small finds consistently discussed and illustrated only in more recent publications. However, this is not just a question of research priorities. It is also related to the peculiar nature of the structures we are looking at: baths were often systematically robbed and dismantled in antiquity or afterward to obtain valuable metals (e.g. lead from the pipes and bronze from the boilers; Brodrigg & Cleere 1988, 242) and building materials (e.g. box-flue tiles; Black 1996, 71-72). The consequence of this is that we very rarely obtain from rural baths the same amount of material culture usually deriving from other abandoned structures such as dwellings or agricultural buildings. Furthermore, the scraps of evidence that did survive, while possibly suggestive of the social status of some of the bath users (e.g. glass perfume vessels (Philp 1973, 90) and oyster shells (Parfitt 2007, 292)), tend to be of very little help in determining their gender or age.

Finds from large and well-excavated facilities such as the legionary fortress baths at Caerleon prove that women and children were allowed into these structures (Zienkiewicz 1986, vol. 2, 17-21; Allason-Jones 2005, 173-174). Yet, the picture for rural baths in the case study area is far less clear. While bone and bronze hair-pins have been found at some of the facilities potentially accessible to a broader public (e.g. the detached baths at **Folkestone, East Cliff** (Kent), **Wingham** (Kent), **Ashted Common** (Surrey) and **Lickfold, Wiggonholt** (West Sussex)), their simple shape, when recorded, makes their association with female users uncertain (Zienkiewicz 1986, vol. 2, 19; Revell 2016, 109). Other objects linked to the bathing process, such as nail cleaners and tweezers, were almost certainly used by both genders indiscriminately (Eckardt & Crummy 2008, 92-96) and this was very likely the case also for strigils, perfume bottles and oil-flasks. On the other hand, in Chapter 6 we have seen how in at least two cases the possibility of segregated bathing has been proposed based on the structural remains alone. The first instance is the large bath-house at **Northfleet** (Kent), where a

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seemingly separate set of rooms created during its enlargement in the 3rd century might have been intended for the use of women (Andrews *et al.* 2011, 221). The two sets of baths at Chedworth have also been tentatively read as separate facilities for men and women (Esmonde Cleary 2013, 110), although this interpretation remains purely speculative. Evidence for age is even scantier: the only probable sign of child presence in a rural bath building recorded in Appendix 1 is a silver ring “for a very small finger, with bevelled shoulders” (Hanworth 1968, 33) found in the bath-drain of Building 6 at **Rapsley, Ewhurst** (Surrey).

The difficulties highlighted in this section are not meant to discourage attempts in gendering rural baths or in establishing the age of their users, especially because, as stated in Chapter 1, the finds included in entries in Appendix 1 were limited to those directly (e.g. perfume vessels, oil-flasks, toilet instruments) or indirectly (e.g. oyster shells, hair-pins, game counters, valuable objects recovered from drains) associated with bathing. Vice versa, these considerations aim to underline the impact that a more accurate and systematic recording of material culture from rural baths might have on family and gender studies in Roman Britain. As I have said, this is only one of the many, broader questions raised by this work. In the next section, I will discuss more specifically the ways in which these questions may shape future research.

7.3 A broader picture: methodological improvements and further research

This thesis has increased our understanding of rural baths in Roman Britain, analysing in detail their structural characteristics as well as showing their variegated social implications. The necessarily limited size of the case study area, however, advises against any generalisation about their spread and social function across the province. On the contrary, the levels of variability established in the two regions examined suggest similar discrepancies in other parts of the country. For this reason, a broader study of rural baths extended to the whole of Roman Britain has the potential to shed further light on their forms and functions, as well as providing a more accurate insight into the complex socio-cultural interactions that shaped the lives of the often neglected non-elite inhabitants of the countryside.

With a larger case study area, the chances to add other elements to the elusive identities of rural bath users mentioned in the previous section rise substantially. In addition to the material culture connected to bathing recorded for this work, an

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assessment of all the finds from bath buildings subdivided into different typologies of objects could highlight patterns and identify specific categories of people. An example might be the presence of jet ornaments, typically associated with women (Allason-Jones 1996). Also, comparison between areas where villas appear at an early or late date, are particularly numerous or scattered, or where other forms of settlements prevail would allow a larger scale evaluation of the success of rural baths in diverse contexts, establishing the regions where these facilities were adopted early on, late or not at all. In turn, this would provide supplementary information to discuss the level of receptivity or refractoriness to the bathing practice and Roman influence more generally within different parts of Roman Britain.

While public and military baths in the area under examination have been included in the discussion of this study, a more detailed consideration of their development and spread would guarantee a wider perspective on bathing in each region. This would be even more relevant in the case of a provincial-level assessment. Military establishments were seemingly among the earliest baths experienced by the local population of Britain and their influence on both public and private facilities, in terms of structure and practice, requires an exhaustive reevaluation.

Finally, another promising area for future investigation is the role played by the senses in 'promoting' the diverse aspects of Roman culture, including baths, in the aftermath of the conquest. This will be the main theme of a forthcoming publication (Derrick & Savani (eds)) that will bring together young scholars to consider the sensory impact that the influx of external material culture, behaviours, urbanism and populations had on indigenous communities.

7.4 Final thoughts

While many questions clearly still need to be addressed in order to produce a more complete picture of rural bathing in Roman Britain, the research undertaken for this thesis constitutes a valuable introduction from both a methodological and theoretical point of view, providing at the same time useful tools for future studies. For instance, Appendix 1 makes available to scholarship a large amount of previously disparate information about rural baths in the case study area, including a complete catalogue of plans specifically redrawn for this work. The meticulous assessment of the distribution of various building materials and decorative motives associated with these baths

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(Chapter 5) forms another useful source of reference and comparanda. Finally, the hypothesis that rural baths were accessible to larger groups of people and the acknowledgement of their role in constituting a common ground during the delicate post-conquest phase (Chapter 6) have revealed a series of previously neglected socio-cultural interactions, paving the way for similar investigations in other provinces.

Bibliography

Abbreviations:

AE = Année épigraphique

AJA = American Journal of Archaeology

AntAfr = Antiquités africaines

Anth. Lat. = Antologia Latina

Antiq. Journ. = The Antiquaries Journal

ARA = The Bulletin of The Association for Roman Archaeology

Arch. Ael. = Archaeologia Aeliana

Arch. Cambrensis = Archaeologia Cambrensis

Arch. Cant. = Archaeologia Cantiana

Archaeol. J. = The Archaeological Journal

BAR = British Archaeological Reports

BFC = Proceedings of the Bath Field Club

BHA = Bulletin of the History of Archaeology

BIALond = Bulletin of the Institute of Archaeology of the University of London

BMQ = The British Museum Quarterly

Bristol and Avon Arch. = Bristol and Avon Archaeology

CBA = Council for British Archaeology

Bibliography

CIL = Corpus Inscriptionum Latinarum

CRJ = Classical Receptions Journal

Envir. Arch. = Environmental Archaeology

EJA = European Journal of Archaeology

Gentl. Mag. = The Gentleman's Magazine

HispAnt = Hispania antigua. Revista de historia antigua

ILS = H. Dessau *Inscriptiones Latinae Selectae* (1892–1916)

JAMT = Journal of Archaeological Method and Theory

J. Brit. Archaeol. Assoc. = Journal of the British Archaeological Association

JRA = Journal of Roman Archaeology

JRS = Journal of Roman Studies

KAR = Kent Archaeological Review

KAFSN = Kent Archaeological Field School Newsletter

KASN = Kent Archaeological Society Newsletter

Med. Arch. = Medieval Archaeology

MHR = Mediterranean Historical Review

Medit. Arch. = Mediterranean Archaeology

Mém. Comm. Arch. = Mémoires de la Commission d'Archéologie

MEFRA = Mélanges de l'École Française de Rome

Mosaic = Journal of the Association for the Study and Preservation of Roman Mosaics

Bibliography

NRFD = The New Regard of the Forest of Dean

ODAS Archives = Orpington and District Archaeological Society

Oxford Journ. Archaeol. = Oxford Journal of Archaeology

PBSR = Papers of the British School at Rome

PCNFC = The Proceedings of the Cotteswold Naturalists' Field Club

Phil. Trans. Roy. Soc. London = Philosophical Transaction of the Royal Society of London

PPM = Pompei. Pitture e Mosaici, I-X, Rome, 1990-present

PPP = Pompei. Pitture e Pavimenti, Bragantini, I., de Vos, M., Parise Badoni, F. and Sampaolo, V., (eds), I-IV, Rome, 1981-1992

Proc. Devon Arch. Soc. = Proceedings of the Devon Archaeological Society

Proc. Soc. Antiq. London. = Proceedings of the Society of Antiquaries of London

Proc. Soc. Antiq. Scot. = Proceedings of the Society of Antiquaries of Scotland

PSANHS = Proceedings of the Somersetshire Archaeological and Natural History Society

RCHME = Royal Commission on Historical Monuments (England)

Rec. Bucks = Records of Buckinghamshire

RIB = Roman Inscriptions of Britain

SE = Studi etruschi

SNQ = Sussex Notes and Queries

Surrey Arch. Coll. = Surrey Archaeological Collections

Bibliography

SASB = Surrey Archaeological Society Bulletin

Sussex Arch. Coll. = Sussex Archaeological Collections

Sussex Arch. Soc. Newsletter = Sussex Archaeological Society Newsletter

TBGAS = Transactions of the Bristol and Gloucestershire Archaeological Society

TCSME = Transactions of the Canadian Society for Mechanical Engineering

TDDAS = Transactions of the Dartford and District Antiquarian Society

TESAH = Transactions of the Essex Society for Archaeology and History

TLL = Thesaurus Linguae Latinae, Lipsia

TLMAS = Transactions of the London and Middlesex Archaeological Society

TRS = Transactions of the Radnorshire Society

Univ. London Inst. Archaeol. Bull. = Bulletin of the Institute of Archaeology,
University of London

WorldArch = World Archaeology

Yorks. Arch. Journ. = The Yorkshire Archaeological Journal

Primary sources:

Aulus Gellius, *Noctes Atticae*. Text edited and translated by Y. Julien, Paris: Les Belles
Lettres (Collection des Universités de France), 1998.

Caesar, *Commentarii de bello Gallico*. Text translated by H. J. Edwards, Loeb Classical
Library 72, London: W. Heinemann, 1917.

Columella, *De re rustica*. Text translated by B. A. Harrison, Loeb Classical Library
361, London: Cambridge: Harvard University Press, 1941.

Bibliography

- Dio Cassius, *Ρωμαϊκή Ιστορία libri I-XI*. Text translated by E. Cary, H. B. Foster, Loeb Classical Library 32, Cambridge: Harvard University Press, 1914.
- Homer, *Ιλιάς*. Text edited and translated by V. Mazon, Paris: Les Belles Lettres (Collection des Universités de France), 2002.
- Homer, *Ὀδύσσεια*. Text edited and translated by P. Bérard, Paris: Les Belles Lettres (Collection des Universités de France), 2009.
- Lucian, *Νιγηρίνου Φιλοσοφία*. Text translated by A. M. Harmon, Loeb Classical Library 14, Cambridge: Harvard University Press, 1913.
- Petronius, *Satyricon*. Text translated by M. Heseltine and W. H. D. Rouse, Loeb Classical Library 15, Cambridge: Harvard University Press, 1913.
- Plautus, *Asinaria*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 60, Cambridge: Harvard University Press, 2011.
- Plautus, *Mercator*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 163, Cambridge: Harvard University Press, 2011.
- Plautus, *Mostellaria*. Text edited and translated by A. Ernout, Paris: Les Belles Lettres (Collection des Universités de France), 1935.
- Plautus, *Persa*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 163, Cambridge: Harvard University Press, 2011.
- Plautus, *Poenulus*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 260, Cambridge: Harvard University Press, 2012.
- Plautus, *Rudens*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 260, Cambridge: Harvard University Press, 2012.
- Plautus, *Trinummus*. Text edited and translated by Wolfgang de Melo, Loeb Classical Library 328, Cambridge: Harvard University Press, 2013.

Bibliography

Pliny the Elder, *Naturalis Historia*. Text commented and translated by H. Rackham and W. H. S. Jones, Loeb Classical Library 330, 352, 353, 370, 371, 392, 393, 394, 418, 419, Cambridge: Harvard University Press, 1938–63.

Seneca, *Epistulae morales ad Lucilium*, XII. Text edited, commented, and translated by H. Noblot, Paris: Les Belles Lettres (Collection des Universités de France), 1980.

Sidonius Apollinaris, *Epistulae*. Text commented, and translated by W. B. Anderson. Loeb Classical Library 296. Cambridge: Harvard University Press, 1936.

Suetonius, *De Vita Caesarum, Julius Augustus Tiberius Gaius Caligula*. Text translated by J. C. Rolfe. Loeb Classical Library 31. Cambridge: Harvard University Press, 1914.

Terentius, *Phormio*. Text edited, commented, and translated by J. Marouzeau, Paris: Les Belles Lettres (Collection des Universités de France), 1948.

Tacitus, *Agricola*. Text edited, commented, and translated by E. de Saint-Deni, Paris: Les Belles Lettres (Collection des Universités de France), 1956.

Tacitus, *The Agricola and the Germania*, translated with an introduction by H. Mattingly; translation revised by S. A. Handford, Harmondsworth and New York: Penguin Books, 1970.

Varro, *De lingua Latina*, IX. Text edited and translated by M. Nisard, Paris: Institut de France, 1875.

Vitruvius, *De Architectura*, V. Text edited, commented, and translated by C. Saliou, Paris: Les Belles Lettres (Collection des Universités de France), 2009.

Secondary sources:

Abdy, C. and Bierton, G. 1997: "A gazetteer of Romano-British archaeological sites in Ewell", *Surrey Arch. Coll.* 84, 123-41.

Bibliography

- Addy, J. 1874: "Account of a Roman villa lately discovered at Beddington, Surrey", *Surrey Arch. Coll.* 6, 118-121.
- Adkins, L. and Adkins, R. 1982: "Excavations at Beddington", *London Archaeologist* 4.1, 199-203.
- Adkins, L. and Adkins, R. 1983a: "Excavations at Beddington", *London Archaeologist* 4.2, 326-329.
- Adkins, L. and Adkins, R. 1983b: "Beddington Roman villa", *Current Archaeology* 88, 155-157.
- Adkins, L. and Adkins, R. 1986: *Under the Sludge, Beddington Roman Villa: Excavations at Beddington Sewage Works*, London: Beddington, Carshalton & Wallington Archaeological Society.
- AEA (Accademia Ercolanese di Archeologia) 1796: *Gli Ornati delle Pareti ed i Pavimenti delle Stanze dell'Antica Pompei Incisi in Rame*, Naples: Stamperia Reale.
- Alcock, L. 1956: "Castell Collen excavations 1956", *TRS* 26, 10-21.
- Aldsworth, F. G. 1983: "Excavations at Bignor Roman villa 1975-6", *Sussex Arch. Coll.* 121, 203-208.
- Aldsworth, F. G. and Rudling, D. R. 1995: "Excavations at Bignor Roman villa 1985-1990", *Sussex Arch. Coll.* 133, 103-188.
- Allason-Jones, L. 1996: *Roman Jet in the Yorkshire Museum*, York: Yorkshire Museum.
- Allason-Jones, L. 2005: *Women in Roman Britain*, new edition, York: Council for British Archaeology.
- Allason-Jones, L. (ed.) 2010: *Artefacts in Roman Britain: Their Purpose and Use*, Cambridge and New York: Cambridge University Press.
- Allen, A. F. 1959: "Roman building at Chalk", *Arch. Cant.* 48, 207-208.

Bibliography

- Allen, D. 2002: "Roman Window Glass", in M. Aldhouse-Green and P. Webster (eds), *Artefacts and Archaeology: Aspects of the Celtic and Roman World*, Cardiff: University of Wales, 102-111.
- Allen, J. R. L. and Fulford, M. G. 1996: "The distribution of South-East Dorset Black Burnished Category I pottery in south-west Britain", *Britannia* 27, 223-281.
- Allen, J. R. L. and Standing, G. 2012: "Early Roman stone tesserae from Southwick villa, West Sussex", *Sussex Arch. Coll.* 150, 95-107.
- Allen, M. J. 1977: "Plumpton Roman villa", *Lewes Arch. Group Newsletter* 37.
- Allen, M. J. 1984: "Plumpton Roman villa (TQ 360147), a cursory note", *Sussex Arch. Coll.* 122, 219-220.
- Allen, M. and Sykes, N. 2011: "New animals, new landscapes and new worldviews: the Iron Age to Roman transition at Fishbourne", *Sussex Arch. Coll.* 149, 7-24.
- Allen, T. 1829–30: *History of the Counties of Surrey and Sussex*, 2 vols, London: I.T. Hinton.
- Allen, T. G., Darvill, T. C., Green, L. C. and Jones, M. 1993: *Excavations at Roughground Farm, Lechlade, Gloucestershire: A Prehistoric and Roman Landscape*, Oxford: Oxford University Committee for Archaeology.
- Allison, P. 2001: "Using the material and written sources: turn of the millennium approaches to Roman domestic space", *AJA*, 105, 2, 181-208.
- Andrews, C. 2001: "Romanisation: a Kentish perspective", *Arch. Cant.* 121, 25-42.
- Andrews, P., Biddulph, E., Hardy, A. and Brown, R. 2011: *Settling the Ebbsfleet Valley. High Speed 1 Excavations at Springhead and Northfleet, Kent. The Late Iron Age, Roman, Saxon, and Medieval Landscape. Volume 1: The Sites*, Salisbury: Oxford Wessex Archaeology.
- Anonymous 1775: "Miscellaneous plate", in *The Antiquarian Repertory: A Miscellany, Intended to Preserve and Illustrate Several Valuable Remains of Old Times*.

Bibliography

Adorned with Elegant Sculptures, Vol. 1, London: Printed for the proprietors, 162.

Anonymous 1816: "Roman hypocaust at Duncton", *Gentl. Mag.* 86, Part 2, 17-20.

Anonymous 1843: "Address", *The Ecclesiologist* 1, 1-4.

Anonymous 1853: "Report", *Sussex Arch. Coll.* 1, vii-xii.

Anonymous 1858a: "Introduction", *Arch. Cant.* 1, 5-22.

Anonymous 1858b: "The Inaugural Meeting", *Arch. Cant.* 1, xxxiii-lix.

Anonymous 1858d: "Contributions to the library and museum", *Surrey Arch. Coll.* 1, xxvii-xxxiv.

Anonymous 1869: "Report of proceedings 1865-66", *Surrey Arch. Coll.* 4, ix-xxix.

Anonymous 1876: "The Inaugural Meeting", *TBGAS* 1, 7-30.

Ansell, R. J. 1982: "Thameside Archaeological Group", *KAR* 69, 85-86.

Ansell, R. J. 1983: "Thameside Archaeological Group", *KAR* 74, 201-202.

Ansell, R. J. 1985: "Coal from the Romano-British site at Northfleet", *KAR* 79, 220-221.

Apted, M. R., Gilyard-Beer, R. and Saunders A. D. (eds): *Ancient Monument and their Interpretation. Essays Presented to A. J. Taylor*, London and Chichester: Phillimore & Co. Ltd.

Arnold, F. H. 1898: "On the discovery of a Roman cemetery at Chichester", *Sussex Arch. Coll.* 41, 1-3.

Aubrey, J. 1718-19: *The Natural History and Antiquities of the County of Surrey*, 5 vols, Dorking: Kohler & Coombes.

Aubrey, J. 1898: *Brief Lives Chiefly of Contemporaries Set Down by John Aubrey between the Years 1669 and 1696*, edited by A. Clark, Oxford: Clarendon Press.

Bibliography

- Ayres, P. 1997: *Classical Culture and the Idea of Rome in Eighteenth-century England*, Cambridge: Cambridge University Press.
- Baddeley, C. 1904: "The Painswick or Ifold villa", *TBGAS* 27, 156-171.
- Baddeley, C. 1926: "The Roman pavement at Woodchester", *TBGAS* 48, 74-97.
- Baddeley, C. 1931: "The Roman-British temple, Chedworth", *TBGAS* 52, 255-264.
- Bagnall, A. and Taylor, B. 2011: "Wortley Romano-British villa site: reconstructing painted wall-plaster found in the cellar", *TBGAS* 129, 41-52.
- Baker, T. 1845: "Roman villa, discovered at Bisley, Gloucestershire", *Archaeol. J.* 2, 42-45.
- Baker, T. 1847: "Roman villa, discovered at Bisley, Gloucestershire", *J. Brit. Archaeol. Assoc.* 2, 324-327.
- Balmelle, C. 2001: *Les Demeures Aristocratiques d'Aquitaine. Société et Culture de l'Antiquité Tardive dans le Sud-Ouest de la Gaule*, "Mémoires" Aquitania 10, Bordeaux; Paris: Ausonius.
- Barker, P. A., White, R. H., Pretty, K. B., Bird, H. and Corbishley, M. H. 1997: *The Baths Basilica, Wroxeter. Excavations: 1966-90*, London: English Heritage.
- Basaran, T. and Ilken, Z. 1998: "Thermal analysis of the heating system of the Small Bath in ancient Phaselis", *Energy and Buildings* 27, 1-11.
- Bastet, F. L. 1979: *Beeld en Reliëf: Gids voor de Verzameling Griekse en Romeinse Beeldouwkunst in het Rijksmuseum van Oudheden te Leiden*, Gravenhage: Staatsuitgeverij.
- Bathurst, W. H. 1879: *Roman Antiquities at Lydney Park, Gloucestershire*, London: Longmans, Green & co.
- Baxter, M. J. and Cool, H. E. M. 1991: "An approach to quantifying window glass", in S. Rahtz and K. Lockyear (eds), *CAA90. Computer Applications and*

Bibliography

- Quantitative Methods in Archaeology 1990*, BAR International Series 565, Oxford: Tempus Reparatum, 127-131.
- Becker, J. A. and Terrenato, N. (eds) 2012: *Roman Republican Villas. Architecture, Context, and Ideology*, Ann Arbor: The University of Michigan Press.
- Becker, J. A. and Terrenato, N. 2012: "Introduction", in Becker & Terrenato (eds), 1-7.
- Bedo, G. 1874: "Roman remains discovered in and near Faversham", *Arch. Cant.* 9, 72.
- de la Bédoyère, G. 1991: *The Buildings of Roman Britain*, London: B.T. Batsford.
- Bedwin, O. 1978: "The excavation of a Romano-British site at Ranscombe Hill, South Malling, East Sussex, 1976", *Sussex Arch. Coll.* 116, 241-255.
- Beeson, A. J. 2008: "A new villa and mosaic from Comberley, Gloucestershire", *Mosaic* 35, 23-25.
- Bell, M. G. 1976: "The excavation of an early Romano-British site and Pleistocene Land Forms at Newhaven, Sussex", *Sussex Arch. Coll.* 114, 218-305.
- Belloc, H. 1913: *The Stane Street*, London: Constable.
- Bellows, J. 1876: "On the Roman wall of Gloucester", *TBGAS* 1, 153-166.
- Bennett, J. 1980: *Towns in Roman Britain*, Princes Risborough: Shire Publications.
- Bennett, P., Couldrey, P. and Macpherson-Grant, N. (eds) 2007: *Highstead near Chislet, Kent. Excavations 1975-1977*, The Archaeology of Canterbury New Series 4, Canterbury: Canterbury Archaeological Trust Ltd.
- Betts, I. M. 1992: "Roman tile from Eccles, Kent, found at Colchester", in P. Crummy, J. Bayley, R. H. Moyes and T. W. Cook, *Excavations at Culver Street, the Gilbert School, and Other Sites in Colchester, 1971-85*, Colchester Archaeological Report 6, Colchester: Colchester Archaeological Trust, 259-260.
- Betts, I. M., Black, E. W. and Gower, J. L. 1994: *A Corpus of Relief-patterned Tiles in Roman Britain*, Journal of Roman Pottery Studies 7, Oxford: Oxbow.

Bibliography

- Bevan, L. 1998a: "Bracelets", in P. E. Leach, E. Greenfield, L., Bevan, and T. Pearson 1998: *Great Witcombe Roman Villa, Gloucestershire. A Report on Excavations by Ernest Greenfield 1960-1973*, BAR, British series 266, Oxford: B.A.R, 107, 86-88.
- Bevan, L. 1998b: "Toilet accessories", in P. E. Leach, E. Greenfield, L., Bevan, and T. Pearson 1998: *Great Witcombe Roman Villa, Gloucestershire. A Report on Excavations by Ernest Greenfield 1960-1973*, BAR, British series 266, Oxford: B.A.R, 107, 91.
- Biddulph, E., Schuster, J. and Seager Smith, R. 2011: *Settling the Ebbsfleet Valley. High Speed 1 Excavations at Springhead and Northfleet, Kent. The Late Iron Age, Roman, Saxon, and Medieval Landscape. Volume 2: Late Iron Age to Roman Finds Reports*, Salisbury: Oxford Wessex Archaeology.
- Bidwell, P. T. 1979: *The Legionary Bath-House and Basilica and Forum at Exeter*, Exeter Archaeological Reports 1, Exeter: Exeter City Council; University of Exeter.
- Bidwell, P. T. 1997: *Roman Forts in Britain*, London: Batsford/English Heritage.
- Birbeck, V. 1995: "Excavations on a Romano-British villa at Churchfields, Snodland, 1992-94", *Arch. Cant.* 115, 71-120.
- Bird, D. G. 1987: "The Romano-British period in Surrey", in Bird & Bird (eds), 165-196.
- Bird, D. G. 2000: "The environs of *Londinium*: roads, roadside settlements and the countryside", in Haynes *et al.* (eds), 151-174.
- Bird, D. G. 2002a: "Roads and temples: Stane Street at Ewell", *London Archaeologist*, 10.2, 41-45.
- Bird, D. G. 2002b: "Chiddingfold Roman villa: a suggested reinterpretation", *Surrey Arch. Coll.* 89, 245-248.
- Bird, D. G. 2004a: "Surrey in the Roman period: a survey of recent discoveries", in Cotton *et al.* (eds), 65-76.

Bibliography

- Bird, D. G. 2004b: "Roman religious sites in the landscape", in Cotton *et al.* (eds), 77-90.
- Bird, D. G. 2004c: *Roman Surrey*, Stroud: Tempus.
- Bird, D. G. 2009: "Darwin and Cocks Farm, Abinger", *SASB* 416, 5-8.
- Bird, D. G. 2011a: "Excavation at Cocks Farm 2011" *SASB* 430, 4-7.
- Bird, D. G. 2011b: "Ashtead Roman villa and tileworks", *SASB* 425, 2-7.
- Bird, D. G. 2014a: "Cocks Farm, Abinger: excavations 2013", *SASB* 445, 2-5.
- Bird, D. G. 2014b: "2013 Excavations at Ashtead Roman villa and tileworks", Surrey Archaeological Society webpage, viewed 4 July 2014, found at <http://www.surreyarchaeology.org.uk/node/746>
- Bird, D. G. 2016: *Agriculture and Industry in South-Eastern Roman Britain*, Oxford: Oxbow.
- Bird, J. 2001: "Romano-British", in Williams (ed.), 310-318.
- Bird, J. and Bird, D. (eds) 1987: *The Archaeology of Surrey to 1540*, Castle Arch, Guildford: Surrey Archaeological Society.
- Birley, A. 2001: *Vindolanda's Military Bath Houses: Report on the Pre-Hadrianic Military Bath House Found in 2000, with Analysis of the Early Third Century Bath House Excavated in 1970/71, and Possible Sites of Other Bath Houses*, Greenhead: Published for the Vindolanda Trust by Roman Army Museum Publications.
- Birley, A. 2007: "Britain during the third century crisis", in Hekster *et al.* (eds), 45-55.
- Bishop, L. and Bishop, B. 1987: "Bibury Roman villa. Watching brief at Bibury. Autumn 1986", *Glevensis* 21, 42-45.
- Blaauw, W. H. 1853: "On Sussex archaeology", *Sussex Arch. Coll.* 1, 1-13.
- Black, E. W. 1981: "The Roman villa at Darent", *Arch. Cant.* 97, 159-183.

Bibliography

- Black, E. W. 1985a: "Hypocaust heating in domestic rooms in Roman Britain", *Oxford Journ. Archaeol.* 4.1, 77-92.
- Black, E. W. 1985b: "The dating of relief-patterned flue-tiles", *Oxford Journ. Archaeol.* 4.3, 353-376.
- Black, E. W. 1987: *The Roman Villas of South-East England*, BAR British Series 171, Oxford: B.A.R.
- Black, E. W. 1992: "A pre-Boudican bath-building at Colchester", *TESAH* 23, 120-123.
- Black, E. W. 1993: "The period 1C bath-building at Fishbourne and the problem of the 'proto-palace'", *JRA* 6, 233-237.
- Black, E. W. 1994: "Villa-owners: Romano-British gentlemen and officers", *Britannia* 25, 99-110.
- Black, E. W. 1995a: *Cursus publicus. The Infrastructure of Government in Roman Britain*, BAR British Series 241, Oxford: Tempus Reparatum.
- Black, E. W. 1995b: "Roman tile, Voussoirs and wall-tiles", in K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in the Marlowe Car Park and Surrounding Areas*, The Archaeology of Canterbury 5, Canterbury: Canterbury Archaeological Trust, 1267-1293.
- Black, E. W. 1996: "Box flue-tiles in Britannia: the spread of Roman bathing in the first and second centuries", in *Archaeol. J.* 153, 60-78.
- Black E. W. 2008: "Fishbourne, Chichester, and Togidubnus *rex* revisited", *JRA* 21, 293-303.
- Blagg, T. F. C. 1982: "Roman Kent", in Leach (ed.), 51-60.
- Blagg, T. F. C. 1983: "Two decorative relief carvings at Lydney Park, Gloucestershire", *Antiq. Journ.* 62, 2, 355-359.
- Blagg, T. F. C. 1990: "Building stone in Roman Britain", in Parson (ed.), 33-50.

Bibliography

- Blockley, K. 1985: *Marshfield, Ironmongers Piece Excavations 1982-3. An Iron Age and Romano-British Settlement in the South Cotswolds*, BAR British Series 141, Oxford: B.A.R.
- Blockley, K. 1989: *Prestatyn 1984-5. An Iron Age Farmstead and Romano-British Industrial Settlement in North Wales*, BAR British Series 210, Oxford: B.A.R.
- Blockley, K., Blockley, M., Blockley, P., Frere, S. S. and Stow S. 1995: *Excavations in the Marlowe Car Park and Surrounding Areas*, The Archaeology of Canterbury 5, Canterbury: Canterbury Archaeological Trust.
- Blows, J. 2011: *Strategic Stone Study: A Building Stone Atlas of Kent*, London: English Heritage.
- Blyth, P. H. 1999: "The consumption and cost of fuel in hypocaust baths", in DeLaine & Johnston (eds), 87-98.
- Boon, G. C. 1972: *Isca: The Roman Legionary Fortress at Caerleon*, Cardiff: National Museum of Wales.
- Booth, P. 2011: "The Late Iron Age and Roman periods" in P. Booth, T. Champion, S. Foreman, P. Garwood, H. Glass, J. Munby and A. Reynolds, *On Track: the Archaeology of High Speed I Section I in Kent*, Oxford: Oxford Wessex Archaeology, 243-340.
- Booth, P. 2016: "Southern Counties", *Britannia* 47, 348-359.
- Booth, P., Cool, H., Keys, L., Northover, P. and Shaffrey, R. 2006: "*Small Finds from Thurnham Roman Villa, Kent*", *HS1 Specialist Report Series*, in Archaeology Data Service 2006 found at <http://archaeologydataservice.ac.uk/archives/view/ctrl/reference.cfm>.
- Bouet, A. 1996: "Les thermes des maisons urbains en Gaule Narbonnaise", in C. Balmelle (ed.): *La Maison Urbaine en Gaule Narbonnaise et dans les Provinces Voisines. Actes du Colloque, Avignon 1994*, Documents d'Archéologie Vauclusienne 6, Avignon: Association pour la promotion de la recherche archéologique en Vaucluse, 169-183.

Bibliography

- Bouet, A. 2003: *Les Thermes Privés et Publics en Gaule Narbonnaise*, 2 vols, Collection de l'Ecole française de Rome 320, Rome: Ecole française de Rome.
- Bowes, K. 2010: *Houses and Society in The Later Roman Empire*, London: Duckworth.
- Boyce, K. 2007: "The implications of isolated Roman bath-houses in the Cray Valley", *London Archaeologist*, 11.10, 260-264.
- Boyce, K. 2008: "Letter to the editor", *London Archaeologist*, 11.11, 289.
- Boyce, K. 2010: "The Roman Cray Valley: some peripheral landholdings on the Crofton Villa estate", *London Archaeologist*, 12.09, 244-248.
- Bradley, M. 2015: *Smell and the Ancient Senses*, Senses in antiquity, London; New York: Routledge.
- Bradley, R. 1992: "Roman salt production in Chichester Harbour: rescue excavations at Chidham, West Sussex", *Britannia* 23, 27-44.
- Branigan, K. 1973: "Gauls in Gloucestershire?", *TBGAS* 92, 82-94.
- Branigan, K. and Miles, D. (eds) 1989: *The Economies of Romano-British Villas*, Sheffield: Department of Archaeology and Prehistory, University of Sheffield.
- Braund, D. 1996: *Ruling Roman Britain*, London: Routledge.
- Bray, W. 1789: "On a Roman road in Surrey", *Archaeologia* 9, 109-109.
- Brayley, E. W., Britton, J., Mantell, G. A. and Allom T. 1850: *A Topographical History of Surrey*, 5 vols, London: G. Willis.
- Brent, J. 1861: "Roman cemeteries in Canterbury, with some conjectures concerning its earliest inhabitants", *Arch. Cant.* 4, 27-42.
- Bridgewater, N. P. 1973: "Boughspring, Glos. Site A", *Glevensis* 7, 7.
- Broise, H. and Jolivet, V. 1991: "Le bain in Etrurie à l'époque hellénistique", in *École Française de Rome* (ed.), 79-95.

Bibliography

- Brodribb, A. C. C., Hands, A. R. and Walker D. R. 1973: *Excavations at Shakenoak Farm, near Wilcote, Oxfordshire. Part 4: Site C*, Omega Press: Oxford.
- Brodribb, G. 1987: *Roman Brick and Tile*, Stroud: Sutton Publishing Ltd.
- Brodribb, G. and Cleere, H. 1988: "The 'Classis Britannica' bath-house at Beauport Park, East Sussex", *Britannia* 19, 217-274.
- Brown, F. E. 1980: *Cosa: The Making of a Roman Town*, Ann Arbor: The University of Michigan Press.
- Bruno, V. J. and Scott, R. T. 1993: *Cosa IV: The Houses*, Memoirs of the American Academy in Rome 38, University Park, Pa.: Published for the American Academy in Rome by the Pennsylvania State University Press.
- Buchli, V. 2016: *An Archaeology of the Immaterial*, London; New York: Routledge.
- Burgers, A. 1997: *The Water Supplies and Related Structures of Roman Britain*, PhD thesis at the University of Leicester.
- Burgers, A. 2001: *The Water Supplies and Related Structures of Roman Britain*, Oxford: John and Erica Hedges Ltd.
- Burke, T. 1996: *Lifebuoy Men, Lux Women: Commodification, Consumption, and Cleanliness in Modern Zimbabwe*, Body, commodity, text series, Durham: Duke University Press.
- Burstow, G. P. and Wilson, A. E. 1939: "A Roman bath, Highdown Hill, Sussex", *Sussex Arch. Coll.* 80, 63-87.
- Busch, S. 1999: *Versus Balnearum. Die antike Dichtung über Bäder und Bäder im römischen Reich*, Stuttgart: Teubner.
- Bushe-Fox, J. P. 1928: *Second Report on the Excavation of the Roman Fort at Richborough, Kent*, Reports of the Research Committee of the Society of Antiquaries of London 7, Oxford: Printed at the University Press by J. Johnson for the Society of Antiquaries.

Bibliography

- Butler, C. 2002: *An Archaeological Excavation at Clayton Manor, Clayton, West Sussex*, Mid Sussex Field Archaeological Team unpublished report.
- Butler, C., Rudling, D. and Gammon, A. 2006: *Barcombe Roman Villa*, King's Lynn: Heritage Marketing & Publications.
- Butler, S. and Purves, A. C. (eds) 2013: *Synaesthesia and the Ancient Senses*, Senses in antiquity, Durham: Acumen.
- Canham, R. A. 1966: "Southwick Roman villa", *SNQ* 16, 280-281.
- Canterbury Archaeological Trust 2007: "Interim reports on recent work carried out by the Canterbury Archaeological Trust", *Arch. Cant.* 127, 321-332.
- Caracuta, V. and Fiorentino, G. 2012: "Wood for fuel in Roman hypocaust baths: new data from the Late-Roman villa of Faragola (SE Italy)", in E. Badal, Y. Carrión, M. Macías, M. Ntinou (eds), *Wood and Charcoal: Evidence for Human and Natural History*, Saguntum Extra-13, València: Departament de prehistòria i arqueologia, Universitat de València, 199-208.
- Casey, P. J. and Hoffman, B. 1999: "Excavations at the Roman temple in Lydney Park, Gloucestershire in 1980 and 1981", *Antiq. Journ.* 79, 81-143.
- Carte, S. n. d.: "An account of Roman pavements; particularly of those discovered at Wellow in Somersetshire, 1737", Society of Antiquaries, MS 264. fol. 103.
- Catling, C. 2011: "Kent's latest home from Rome", *Current Archaeology* 261, 6.
- Chaffers, W. 1849: "On a Roman building discovered in Lower Thames Street, in the City of London", *JBAA* 4, 38-45.
- Chamonard, J. 1922: *Exploration Archéologique de Delos, Faite par l'École Française d'Athènes, VIII/3 Le Quartier du Théâtre. Construction et Technique – Appendices*, Paris: De Boccard.
- Champion, T. 2007a: "The growth of archaeology in Kent", in Williams (ed.), 7-24.
- Champion, T. 2007b: "Prehistoric Kent", in Williams (ed.), 69-132.

Bibliography

- Chaplin, R. E. 1962: "Excavations in Rochester, winter 1961–62", *Arch. Cant.* 77, 1-li.
- Charles, T. 1844: "Roman antiquities found at and near Maidstone in Kent", *Archaeologia* 30, 535-537.
- Charles, T. 1847: "Account of an extensive Roman villa on the Mount close to the Medway, near Maidstone", *J. Brit. Archaeol. Assoc.* 2, 86-88.
- Clark, P. (ed.) 2004: *The Dover Bronze Age Boat in context: Society and Water Transport in Prehistoric Europe*, Oxford: Oxbow.
- Clark, J., Cotton, J., Hall, J., Sherris, R. and Swan, H. (eds) 2008: *Londinium and Beyond*, CBA Research Report 156, York: Council for British Archaeology.
- Clarke, G. 1982: "The Roman villa at Woodchester", *Britannia* 13, 197-228.
- Clarke, J. 1854: "The diggings at Gloucester. Second article", *Gentl. Mag.* 196, 248-249.
- Cleere, H. and Crossley, D. 1985: *The Iron Industry of the Weald*, Leicester: Leicester University Press.
- Clewley, G. 1973: "(4) The wall-plaster", in B. Philp, *Excavations in West Kent, 1960-1970: the Discovery and Excavation of Prehistoric, Roman, Saxon and Medieval Sites, Mainly in the Bromley Area and in the Darent Valley*, Kent Monograph Series 2, Dover: Kent Archaeological Rescue Unit, 91.
- Clifford, E. M. 1954: "The Roman villa, Witcombe, Gloucestershire", *TBGAS* 73, 5-69.
- Clifford, E. M. 1961: "The Hucclecote Roman villa", *TBGAS* 80, 42-49.
- Clifford, E. M., Scot, F. S. A. 1933: "The Roman villa, Hucclecote near Gloucester", *TBGAS* 55, 323-376.
- Cockett, R. A. C. 1972: "Fawkham and Ash", *Arch. Cant.* 87, 237-238.
- Cockett, R. A. C. 1973: "Fawkham and Ash Archaeological Group", *Arch. Cant.* 88, 219-221.

Bibliography

- Cockett, R. A. C. and Connell, T. 1987: "A Roman villa excavated", *KASN* 11, 1-3.
- Collingwood, R. G. and Taylor, M. V. 1924: "Roman Britain in 1924: I. Sites explored: II. Inscriptions", *JRS* 24, 206-251.
- Collingwood, R. G. and Taylor, M. V. 1934: "Roman Britain in 1933: I. Sites explored: II. Inscriptions", *JRS* 24, 196-221.
- Collins, A. H., Wilson, A. E. and Wilson, C. 1973: "Sidlesham Roman site", *Sussex Arch. Coll.* 111, 1-19.
- Conder, E. 1909–11: "The Roman villa at Cromhall, Gloucestershire", *Proc. Soc. Antiq. London.* 23, 20-23.
- Cook, J. M. 1959: "Bath-tubs in Ancient Greece", *Greece & Rome* 6, 1, 31-41.
- Cook, N. C. 1928: "A Roman site in the church field at Snodland", *Arch. Cant.* 40, 79-83.
- Cook, R. M. 1959: "Die Bedeutung der bemalten Keramik", *Jahrbuch des deutschen archäologischen Instituts* 74, 114-23.
- Cool, H. E. M. and Price, J. 1987: "The glass", in Meates, 110-142.
- Cooper, T.S., Gower, J. L. and Gower, M. 1984: "The Roman villa at Whitebeech, Chiddingfold: excavations in 1888 and subsequently", *Surrey Arch. Coll.* 75, 57-83.
- Corner, G. R. 1855: "Excavations on the site of Roman buildings at Keston", *Archaeologia* 36, 124.
- Cosh, S. R. and Neal, D. S. 2002: *Roman Mosaics of Britain. Volume I, Northern Britain*, London: Society of Antiquaries of London.
- Cosh, S. R. and Neal, D. S. 2009: *Roman Mosaics of Britain. Volume III, South-East Britain*, 2 vols, London: Society of Antiquaries of London.

Bibliography

- Cosh, S. R. and Neal, D. S. 2010: *Roman Mosaics of Britain. Volume VI, Western Britain*, London: Society of Antiquaries of London.
- Cotterill, J. 1993: "Saxon raiding and the role of the Late Roman coastal forts of Britain", *Britannia* 24, 227-239.
- Cotton, J. Crocker, G. & Graham, A. (eds) 2004: *Aspects of Archaeology and History in Surrey: Towards a Research Framework for the County*, Castle Arch, Guildford: Surrey Archaeological Society.
- Coulson, I. 2013 (ed.): *Folkestone to 1500. A Town Unearthed*, Ashford: Canterbury Archaeological Trust.
- Cox, W. L. 1979: "Waltham Roman villa, Whittington", *Glevensis* 13, 47-50.
- Creighton, J. 2000: *Coins and Power in Late Iron Age Britain*, Cambridge: Cambridge University Press.
- Crowley, L. 2011: "The role of mortuary ritual in the construction of social boundaries by privileged social groups within villa landscapes", in Roymans & Derks (eds), 195-209.
- Crummy, P. and Hurst, H. R. 1999 (eds): *The Coloniae of Roman Britain: New Studies and a Review*, Supplementary series 36, International Roman Archaeology Conference series, Portsmouth, R. I.: Journal of Roman archaeology.
- Cunliffe, B. W. 1968: "The development of Richborough", in Cunliffe (ed.), 231-251.
- Cunliffe, B. W. 1969: *Roman Bath*, Reports of the Research Committee of the Society of Antiquaries of London 24, London: Society of Antiquaries of London.
- Cunliffe, B. W. 1971a: *Roman Bath Discovered*, London: Routledge & Kegan Paul.
- Cunliffe, B. W. 1971b: *Excavations at Fishbourne 1961-1969*, 2 vols, Leeds: Research Reports of the Society of Antiquaries of London.
- Cunliffe, B. W. 1971c: *Fishbourne: A Roman Palace and its Garden*, Baltimore: Johns Hopkins Press.
- Cunliffe, B. W. 1973: *The Regni*, London: Duckworth.

Bibliography

- Cunliffe, B. W. 1980: "Excavations at the Roman fort at Lympe, Kent 1976–78", *Britannia* 11, 227-288.
- Cunliffe, B. W. 1988: *Greeks, Romans and Barbarians: Spheres of Interaction*, London: Batsford.
- Cunliffe, B. W., Down, A. and Rudkin, D. 1996: *Chichester Excavations IX: Excavations at Fishbourne 1969-88*, Chichester: Chichester District Council.
- Daniels, C. M., Hartley, B. R, Gillam, J. P. and Charlesworth, D. 1959: "The Roman bath house at Red House, Beaufront, near Corbridge", *Arch. Ael.*, 4 ser., 37, 85-176
- Darvill, T. and Locke, R. 1988: "Aerial photography in the Upper Thames Valley and East Costwolds", *TBGAS* 106, 192-198.
- Davenport, C. 2003: "The late pre-Roman Iron Age of the West Sussex coastal plain: continuity or change?", in Rudling (ed.), 101-110.
- Davey, N. and Ling, R. 1982: *Wall-painting in Roman Britain*, Gloucester: Sutton.
- Davies, E. M. 1997: "An assessment of a Romano British villa site at Chelsham, Surrey", Surrey County Council Sites and Monument Record unpublished report.
- Davies, E. M. 2001: "Death and social division at Roman Springhead", *Arch. Cant.* 121, 157-169.
- Davies, E. M. 2004: "Cabriabanus – a Romano-British tile craftsman in Kent", *Arch. Cant.* 124, 163-182.
- Davies, E. M. 2009: "The evidence of settlement at Plaxtol in the Late Iron Age and Romano-British periods", in *Arch. Cant.* 129, 257-278.
- Davis, C. E. 1884: *The Excavations of Roman Baths at Bath*, Bath: Lewis, Sons and Tyte.

Bibliography

- Dawkes, G. 2009: *A Post-excavation Assessment Report and Updated Project Design on Archaeological Excavations at High St, Snodland, Kent*, Archaeology South-East unpublished report.
- Dawkes, G. 2015: *Flavian and Later Buildings at Snodland Roman Villa. Excavations at Cantium Way, Snodland, Kent*, Portslade: SpoilHeap Publication.
- Day, J. 2013: *Making Senses of the Past: Toward a Sensory Archaeology*, Occasional paper (Southern Illinois University Carbondale. Center for Archaeological Investigations) 40, Carbondale: Center for Archaeological Investigations, Southern Illinois University Carbondale and Southern Illinois University Press.
- Dearne, M. J. and Branigan, K. 1995: "The use of coal in Roman Britain", *Antiq. Journ.* 75, 71-105.
- de Blois, L. 2001: "The crisis of the third century in the Roman Empire: a modern myth?", in L. de Blois and J. Rich (eds), *The Transformation of Economic Life under the Roman Empire*, Impact of empire 2, Amsterdam: Gieben, 204– 217.
- Defoe, D. 1748: *A Tour thro' the Whole Island of Great Britain*, 3 vols, 4th edition, London: Printed for S. Birt, T. Osborne, D. Browne, J. Hodges, J. Osborn, A. Millar and J. Robinson.
- de Haan, N. 2011: *Römische Privatbäder: Entwicklung, Verbreitung, Struktur und Sozialer Status*, Frankfurt am Main: Peter Lang.
- DeLaine, J. 1989: "Some observations on the transition from Greek to Roman baths in Hellenistic Italy", *Medit. Arch.* 2, 111-125.
- DeLaine, J. 1997: *The Baths of Caracalla: a Study in the Design, Construction, and Economics of Large-scale Building Projects in Imperial Rome*, JRA Supplementary Series 25, Portsmouth, Rhode Island: Journal of Roman Archaeology.
- DeLaine, J. 1999: "Bathing and society", in DeLaine & Johnston (eds), 7-16.

Bibliography

- DeLaine, J. 2006: "Baths and bathing in Late Antique Ostia", in C. C. Mattusch, A. A. Donohue and A. Brauer (eds), *Proceedings of the XVIth International Congress of Classical Archaeology, Boston, August 23-26, 2003: Common Ground: Archaeology, Art, Science, and Humanities*, Oxford: Oxbow Books, 338-343.
- DeLaine, J. and Johnston D. E. (eds) 1999: *Roman Baths and Bathing. Proceedings of the First International Conference on Roman Baths Held at Bath, England, 30 March – 4 April 1992. Part 1: Bathing and Society*, JRA Supplementary Series 37.1, Portsmouth, Rhode Island: Journal of Roman Archaeology.
- Déonna, W. 1938: *Le Mobilier Délien*, Paris: De Boccard.
- Derrick T. J. and Savani, G. (eds) forthcoming: *Experiencing Britannia: Sensory Approaches in a Colonial Context*, Oxford: Oxbow.
- Detsicas, A. P. 1963: "Excavations at Eccles, 1962", *Arch. Cant.* 78, 125-141.
- Detsicas, A. P. 1964: "Excavations at Eccles, 1963", *Arch. Cant.* 79, 121-35.
- Detsicas, A. P. 1965: "Excavations at Eccles, 1964", *Arch. Cant.* 80, 69-90.
- Detsicas, A. P. 1966: "Excavations at Eccles, 1965", *Arch. Cant.* 81, 44-52.
- Detsicas, A. P. 1967: "Excavations at Eccles, 1966", *Arch. Cant.* 82, 162-178.
- Detsicas, A. P. 1968: "Excavations at Eccles, 1967", *Arch. Cant.* 83, 39-48.
- Detsicas, A. P. 1969: "Excavations at Eccles, 1968", *Arch. Cant.* 84, 93-106.
- Detsicas, A. P. 1970: "Excavations at Eccles, 1969", *Arch. Cant.* 85, 55-60.
- Detsicas, A. P. 1971: "Excavations at Eccles, 1970", *Arch. Cant.* 86, 25-34.
- Detsicas, A. P. 1972: "Excavations at Eccles, 1971", *Arch. Cant.* 87, 101-110.
- Detsicas, A. P. 1973: "Excavations at Eccles, 1972", *Arch. Cant.* 88, 37-80.
- Detsicas, A. P. 1974: "Excavations at Eccles, 1973", *Arch. Cant.* 89, 119-34.

Bibliography

- Detsicas, A. P. 1975: "Excavations at Eccles, 1974", *Arch. Cant.* 91, 41-45.
- Detsicas, A. P. 1976: "Excavations at Eccles, 1975", *Arch. Cant.* 92, 157-63.
- Detsicas, A. P. 1977a: "First century pottery manufacture at Eccles, Kent", in J. Dore and K. Greene (eds), *Roman Pottery Studies in Britain and Beyond*, BAR British Series 30, Oxford: B.A.R.
- Detsicas, A. P. 1977b: "Excavations at Eccles, 1976", *Arch. Cant.* 93, 55-59.
- Detsicas, A. P. 1985: "Review of *Excavations of the Roman and Saxon Site at Orpington*", *Arch. Cant.* 102, 278-80.
- Detsicas, A. P. 1983: "*The Cantiaci*", Gloucester: Alan Sutton.
- Detsicas, A. P. 1989: "Excavations at Eccles: a progress report", *Arch. Cant.* 107, 83-88.
- de Saint Non J. C. R. 1781-86: *Voyage Pittoresque; ou Description des Royaumes de Naples et de Sicile*, Paris: Imprimerie de Clousier.
- Dietler, M. 2010: *Archaeologies of Colonialism. Consumption, Entanglement, and Violence in Ancient Mediterranean France*, Berkley; Los Angeles; London: University of California Press.
- Donovan, H. E. 1935: "Roman finds in Bourton on the Water, Gloucestershire", *TBGAS* 57, 234-259.
- Douglas, J. 1793: *Nenia Britannica, or a Sepulchral History of Great Britain, From the Earliest Period to its General Conversion to Christianity*, London: J. White.
- Dowker, G. 1872: "Account of the Society's researches in the Roman castrum at Richborough", *Arch. Cant.* 8, 18-49.
- Dowker, G. 1878: "The Roman castrum at Reculver", *Arch. Cant.* 12, 1-13.
- Dowker, L. 1882: "A Roman villa at Wingham", *Arch. Cant.* 14, 134-139.
- Dowker, L. 1883: "A Roman villa at Wingham, part II", *Arch. Cant.* 15, 51-57.

Bibliography

- Down, A. 1978: *Chichester Excavations III*, Chichester: Phillimore for Chichester Excavations Committee.
- Down, A. 1979: *Chichester Excavations IV*, Chichester: Phillimore for Chichester Excavations Committee.
- Down, A. 1988: *Roman Chichester*, Chichester, Sussex: Phillimore.
- Down, A. and Magilton J. 1994: "Compton: excavations at Pitlands Farm, Up Marden (SU 797 124)", *The Archaeology of Chichester and District 1994*, 21-24.
- Dudely, C. 1981: "A re-appraisal of the evidence for a Roman villa in Springfield Road, Brighton, following further discoveries on the site", in Kelly & Dudely, 68-69.
- Dunbabin, K. M. D. 1989: "*Baiarum grata voluptas*: pleasures and dangers of the baths", *PBSR* 57, 6-46.
- Dunbabin, K. M. D. 1999: *Mosaics of the Greek and Roman World*, Cambridge: Cambridge University Press.
- Duncan-Jones, R. 1994: *Money and Government in the Roman Empire*, Cambridge: Cambridge University Press.
- Dunning, G. C. 1976: "Salmonsbury, Bourton on the Water", in Harding (ed.), 76-118.
- Dyer, S. 1996: *Cocks Farm, Abinger Hammer, Surrey. An Interim Report of Archaeological Excavations on a Romano-British Building in 1995 and a Summary of Other Research*, Castle Arch, Guildford: Surrey Archeological Society.
- Dyson, S. 2006: *In Pursuit of Ancient Past: A History of Classical Archaeology in the Nineteenth and Twentieth Centuries*, New Haven: Yale University Press.
- Eames, J. 1957: "A Roman bath-house at Little Chart, Kent", *Arch. Cant.* 71, 130-146.
- Eckardt, H. and Crummy, N. 2008: *Styling the Body in Late Iron Age and Roman Britain: a Contextual Approach to Toilet Instruments*, Montagnac: Éditions Monique Mergoïl.

Bibliography

- École Française de Rome (ed.)1991: *Les Thermes Romains. Actes de la Table Ronde Organisé par Ecole Française de Rome (Rome 11-12 Novembre 1988)*, Collection de l'Ecole française de Rome 142, Rome: Ecole française de Rome.
- Ellis, P. 2000: *The Roman Baths and Macellum at Wroxeter: Excavations by Graham Webster 1955-85*, Archaeological Report English Heritage 9, London: English Heritage.
- Ellis, S. 1988: "The end of the Roman house", *AJA* 92, 565-576.
- Elliston Erwood, F. C. 1954: "A Romano-British house at Orpington", *Arch. Cant.* 68, 207-208.
- Englefield, H. 1792: "Account of antiquities discovered at Bath 1790", *Archaeologia* 10, 325-333.
- Eschebach, H. 1979: *Die Stabianer Thermen in Pompeji*, Berlin: de Gruyter.
- Esmonde Cleary A. S. 1989: *The Ending of Roman Britain*, London: Batsford.
- Esmonde Cleary A. S. 2013: *Chedworth. Life in a Roman Villa*, Stroud: Tempus.
- Étienne, R., Müller C. and Prost F. 2000: *Archéologie Historique de la Grèce Antique*, Paris: Ellipses.
- Ettlinger, V. 1998: "Appendix: summary of other work in Dorking", *Surrey Arch. Coll.* 85, 96.
- Evans, A. 1921: *The Palace of Minos: a Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos*, vol. 1, London: Macmillan.
- Evans, K. J. 1974: "Excavation on a Romano-British site, Wiggonholt, 1964", *Sussex Arch. Coll.* 112, 97-151.
- Fabbricotti, E. 1976: "I bagni nelle prime ville romane", *Cronache Pompeiane* 2, 29-111.

Bibliography

- Fagan, G. G. 1999: *Bathing in Public in the Roman World*, Ann Arbor: University of Michigan Press.
- Fagan, G. G. 2001: "The genesis of the Roman public bath: recent approaches and future directions", *AJA* 105, 3, 403-426.
- Fair, M. C. 1927: "Circular bath buildings in connection with cohort forts", *JRS* 17, 220-224.
- Farrer, J. 1865: "Notice of recent excavation in Chedworth Wood, on the estate of the Earl of Eldon in the county of Gloucester", *Proc. Soc. Antiq. Scotl.* 6, Pt. 2, 278-283.
- Faulkner, N. 2000: *The Decline and Fall of Roman Britain*, Stroud: Tempus.
- Faussett, B. 1856: *Inventorium Sepulchrale: An Account of some Antiquities Dug up at Gilton, Kingston, Sibertswold, Barfriston, Beakesbourne, Chartham, and Crundale, in the County of Kent, from A.D. 1757 to A.D. 1773*, London: T. Richards.
- Fentress, E. 2013: "Strangers in the city: élite communication in the Hellenistic central Mediterranean", in J. R. W. Prag and J. C. Quinn (eds), *The Hellenistic West: Rethinking the Ancient Mediterranean*, Cambridge; New York: Cambridge University Press.
- Fernández Ochoa, C. and García Entero, V. (eds) 2000: *Termas Romanas en el Occidente del Imperio. II Colloquio Internacional de Arqueología, Gijón 1999*, Gijón: VTP.
- Figg, W 1849: "On the remains of a Roman building, discovered at Wiston in 1848", *Sussex Arch. Coll.* 2, 313-314.
- Finberg, H. P. R. 1955: *Roman and Saxon Withington: a Study in Continuity*, University of Leicester Department of English Local History occasional papers 8, Leicester: The University Press.
- Fitchett, M. 1986: "Excavations at Park Farm, Lydney", *NRFD* 2, 24-27.

Bibliography

- Fitzpatrick, A. P. 2003: "Roman Britain in 2002: sites explored. Southern Counties", *Britannia* 34, 351-359.
- Fitzpatrick, A. P. 2004: "Roman Britain in 2003: sites explored. Southern Counties", *Britannia* 35, 309-316.
- Fitzpatrick, A. P. 2005: "Roman Britain in 2004: sites explored. Southern Counties", *Britannia* 36, 439-446.
- Fleming, K. 2006: "The use and abuse of antiquity. The politics and morality of appropriation", in C. Martindale and R. F. Thomas, *Classics and the Uses of Reception*, Oxford: Blackwell.
- Forbis, E. 1996: *Municipal Virtues in the Roman Empire: The Evidence of Italian Honorary Inscriptions*, Stuttgart: Teubner.
- Fournet, T, Lucore, S., Redon, B. and Trümper, M. 2013: "Catalog", in Lucore & Trümper (eds), 269-333.
- Fox, G. E. 1887: "The Roman villa at Chedworth, Gloucestershire", *Archaeol. J.* 44, 322-336.
- Fox, G. E. 1905: "Notes on some probable traces of Roman fulling in Britain", *Archaeologia* 59, 207-232.
- Fox, N. P. 1955: "Warbank, Keston: a Romano-British site", *Arch. Cant.* 69, 96-116.
- Foy, D. and Fontaine, S. D. 2008: "Diversité et évolution du vitrage de l'Antiquité et du haut Moyen Âge", *Gallia* 65, 405-459.
- Freeman, P. W. 1993: "'Romanisation' and Roman material culture", *JRA* 6, 438-45.
- Frere, S. S. 1949: "The excavation of a late Roman bath-house at Chatley Farm, Cobham", *Surrey Arch. Coll.* 50, 73-93.
- Frere, S. S. 1986: "Roman Britain in 1985: sites explored", *Britannia* 17, 364-427.
- Frere, S. S. 1987: "Roman Britain in 1986: sites explored", *Britannia* 18, 302-359.

Bibliography

- Frere, S. S. 1988: "Roman Britain in 1987: sites explored", *Britannia* 19, 416-484.
- Frere, S. S. 1989: "Roman Britain in 1988: sites explored", *Britannia* 20, 258-326.
- Frere, S. S. 1990: "Roman Britain in 1989: sites explored", *Britannia* 21, 304-364.
- Frere, S. S. 1991: "Roman Britain in 1990: sites explored", *Britannia* 22, 222-292.
- Frere, S. S. 1992: "Roman Britain in 1991: sites explored", *Britannia* 23, 256-308.
- Frere, S. S. and Anderson, I. 1987: *Canterbury Excavations: Intra- and Extra-mural Sites, 1949-55 and 1980-84*, The Archaeology of Canterbury 8, Maidstone: Kent Archaeological Society.
- Frere, S. S., Kraay, C. M., Grew, F., Charlesworth, D., Hartley, B. R., Wilson, M. G., Henig, M. and Salter, C. 1982: "The Bignor Roman villa", *Britannia* 13, 135-195.
- Frere, S. S. and Stow, S. 1983: *Excavations in the St. George's Street and Burgate Street Areas*, The Archaeology of Canterbury 7, Maidstone: Kent Archaeological Society.
- Freshfield, E. 1882: "Roman villa at Walton-on-the-Hill", *Proc. Soc. Antiq. London.* 9, 110.
- Friendship-Taylor R. M. and Friendship-Taylor D. E. (eds) 1997: *From Round House to Villa: The Proceedings of a Conference Held in 1993 to Celebrate the Upper Nene Archaeological Society's 30th Anniversary*, Fascicule 3 of the Upper Nene Archaeological Society, Northampton: Upper Nene Archaeological Society.
- Fulford, M. G. (ed.) 2012: *Silchester and the Study of Romano-British Urbanism*, JRA Supplementary Series no. 90, Portsmouth, R.I.: Journal of Roman Archaeology.
- Fulford, M. G. 2015: "The Rural Settlement of Roman England: from regional perspectives to national synthesis. Summing up", PowerPoint presentation at *The Rural Settlement of Roman England: From Regional Perspectives to National Synthesis* conference, Reading, retrieved from <http://www.reading.ac.uk/archaeology/research/roman-rural-settlement/>.

Bibliography

- Fulford, M. G. and Allen J. R. 1992: "Iron-making at the Chesters villa, Woolaston, Gloucestershire: survey and excavation 1987-91", *Britannia* 23, 159-215.
- Gaimster, D., McCarthy, S. and Nurse, B. (eds) 2007: *Making history: Antiquaries in Britain 1707-2007*, London: Royal Academy of Arts.
- Galestin, M. C. 2001: "The Simpelveld sarcophagus. A unique monument in a provincial Roman context", in T. A. S. M. Panhuysen (ed.), *Die Maastrichter Akten des 5. Internationalen Kolloquiums über das provinziälromische Kunstschaffen im Rahmen des CSIR. Typologie, Ikonographie und soziale Hintergründe der provinziellen Grabdenkmäler und Wege der ikonographischen Einwirkung - Maastricht 29. Mai bis 1. Juni 1997*, Maastricht: Stichting Willem Goossens, 63-76.
- Gardiner, M. 2003: "Economy and landscape change in post-Roman and early Medieval Sussex, 450-1175", in Rudling, 151-160.
- Gardner, A. 2007: *An Archaeology of Identity. Soldiers and Society in Late Roman Britain*, Publications of the Institute of Archaeology, University College London, Walnut Creek, Calif.: Left Coast Press.
- Gardner, A. 2013: "Thinking about Roman imperialism: postcolonialism, globalisation and beyond?", *Britannia* 44, 1-25.
- Gardner, A. 2016: "Debating Roman imperialism: critique, construct, repeat?", in Mandich *et al.*, 1-14.
- Gardner, E. 1912: "Some prehistoric and Saxon antiquities found in the neighbourhood of Weybridge", *Surrey Arch. Coll.* 25, 129-135.
- García de Castro, F. J. 1996: "Las termas en villae tardoromanas de Hispania. Estado de la cuestión", in *HispAnt* 20, 409-431.
- Garrett, S. 1976: "Romano-British finds from Plumpton", *Sussex Arch. Coll.* 114, 326.
- Gascoigne 1969: "Clear Cupboard Villa, Farmington, Gloucestershire", *TBGAS* 88, 34-67.

Bibliography

- Gater, J. 1998: *Geophysical Survey: Beauport Park*, Thorton, Bradford: Geophysical Surveys of Bradford (GSB Propection), Report No. 1998/59. doi: 10.5284/10011329.
- Geering R. 1942: "A Roman site at Little Chart, west of Ashford", *Arch. Cant.* 55, 76-77.
- Geurts, K. L. and Adikah, E. G. 2006: "Enduring and endearing feelings and the transformation of material culture in West Africa", in E. Edwards, C. Gosden and R. B. Phillips, *Sensible Objects: Colonialism, Museums and Material Culture*, Wenner-Gren Center international symposium series, Oxford; New York: Berg, 35-60.
- Gilkes, O. J. 1993: "Iron Age and Roman Littlehampton", *Sussex Arch. Coll.* 131, 1-20.
- Gilkes, O. J. 1999: "The bathhouse of Angmering Roman villa. A reconsideration of its sequence and context", *Sussex Arch. Coll.* 137, 59-69.
- Ginouvès, R. 1962: *Balaneutiké*, Paris: De Boccard.
- Goldsworthy, A. 2003: *The Complete Roman Army*, London: Thames & Hudson.
- Gomonde, W. H. 1849: *Notes on Cheltenham: Ancient and Medieval*, privately printed.
- Goodburn, R. 1972: *The Roman villa, Chedworth*, London: National Trust.
- Goodburn, R. 1976: "Roman Britain in 1975: sites explored", *Britannia* 7, 291-377.
- Goodburn, R. 1979: "Roman Britain in 1978: sites explored", *Britannia* 7, 268-338.
- Goodchild, R. G. 1937: "Roman brickworks at Wykehurst Farm", *Surrey Arch. Coll.* 45, 74.
- Goodchild, R. G. 1943: "T-shaped corn-drying ovens in Roman Britain", *Antiq. Journ.* 23, 148-149.
- Gosden, C. 2004: *Archaeology and Colonialism*, Cambridge: Cambridge University Press.

Bibliography

- Gosden, C. 2005: "What do objects want?", *JAMT* 12, 3, 193-211.
- Gower, J. L. 1984: "Three pellets of Egyptian Blue from the Ashtead Roman villa", *Surrey Arch. Coll.* 75, 303-304.
- Gowing, R. and Heritage, A. (eds) 2003: *Conserving the Painted Past: Developing Approaches to Wall Painting Conservation: Post-Prints of a Conference Organised by English Heritage, London, 2-4 December, 1999*, London: James & James.
- Gracie, H. S. 1970: "Frocester Court Roman villa, Gloucestershire. First report 1961-67", *TBGAS* 89, 15-86.
- Graham, D. and Graham, A. 2011: "Recent investigations on the site of the Roman buildings at White Beech, Chiddingfold", *Surrey Arch. Coll.* 96, 175-189.
- Graham, J. 1936: "A Romano-Celtic temple at Titsey and the Roman road", *Surrey Arch. Coll.* 44, 84-101.
- Grainge, G. 2005: *The Roman Invasions of Britain*, Stroud: The History Press.
- Grebanier, B. 1965: *The Great Shakespeare Forgery*, New York: Norton and Company.
- Green, M. 1976: *A Corpus of Religious Material from the Civilian Areas of Roman Britain*, BAR British Series 24, Oxford: B.A.R.
- Green, T. K. 1970. "Roman tileworks at Itchingfield", *Sussex Arch. Coll.* 108, 23-38.
- Greene, D. 1947: "The Roman villa at Well", *Yorks. Arch. Journ.* 36, 465-467.
- Greene, K. 1992: "How was technology transferred in the western provinces?", in A. M. Wood and F. M. V. R. Queiroga (eds), *Current Research on the Romanization of the Western Provinces*, BAR, International series S575, Oxford: B.A.R, 101-105.
- Greene, K. 2008: "Learning to consume: consumption and consumerism in the Roman Empire", *JRA* 21, 64-82.

Bibliography

- Greenfield, E., Meates, G. W. and Birchenough, E. 1948: "Darent Valley Archaeological Research. Schedule of new discoveries in Darent Valley 1947-48", *Arch. Cant.* 61, 180-183
- Greep, S. J. 1988: "Bone pins", 260-261, in G. Brodribb and H. Cleere, "The 'Classis Britannica' bath-house at Beauport Park, East Sussex", *Britannia* 19, 217-274.
- Grover, J. W. 1873: "Notes on the foundations of a Roman villa at Teston, Kent", *J. Brit. Archaeol. Assoc.* 29, 45-7, 71.
- Gwilt, A. and Haselgrove, C. 1997 (eds): *Reconstructing Iron Age Societies. New Approaches to the British Iron Age*, Oxbow Monograph 71, Oxford: Oxbow.
- Hamilakis, Y. 2014: *Archaeology and the Senses: Human Experience, Memory, and Affect*, New York: Cambridge University Press.
- Hamilton, W. 1775: "Account of discoveries at Pompeii", *Archaeologia* 4 (1786), 160-75.
- Hammon, A. 2011: "Understanding the Romano-British–Early Medieval transition: a zooarchaeological perspective from Wroxeter (*Viroconium Cornoviorum*)", *Britannia* 42, 275-305.
- Hampton, J. N. 1996: "Chelsam, a 'new' Roman villa", *Surrey Arch. Coll.* 83, 244.
- Hanworth, R. 1968: "The Roman villa at Rapsley, Ewhurst (parish of Cranleigh)", *Surrey Arch. Coll.* 65, 1-70.
- Hanworth, R. and Tomalin, D. J. 1977: *Brooklands, Weybridge: the Excavation of an Iron Age and Medieval Site, 1964-5 and 1970-71*, Research volume of the Surrey Archaeological Society 4, Castle Arch, Guildford: Surrey Archeological Society.
- Harden, D. B. 1961: "Domestic window glass, Roman, Saxon and Medieval", in E. M. Jope (ed.), *Studies in Building History: Essays in Recognition of the Work of Bryan O'Neil*, London: Odhams Press, 44-52.

Bibliography

- Harden, D. B. 1974: "Window-glass from the Romano-British bath-house at Garden Hill, Hartfield, Sussex", *Antiq. Journ.* 54, 280-281.
- Harden, D. B., Painter, K., Pinder-Wilson R. and Tait, H. 1968: *Masterpieces of Glass: A Selection*, London: British Museum.
- Harding, D. W. (ed.): *Hillforts. Later Prehistoric Earthworks in Britain and Ireland*, London: Academic Press.
- Hardy, L. 2013: "'Objects of Loving Attention': Antiquarian Views of Folkestone. Part One", *Arch. Cant.* 133, 215-234.
- Harker, S. R. 1975: "Excavations at Chalk", *KAR* 40, 282-284.
- Harker, S. R. 1980: "Another glimpse of Chalk in Roman times", *KAR* 61, 8-9.
- Harman, M. 1988: "The animal bones", 272-273, in G. Brodribb and H. Cleere, "The 'Classis Britannica' bath-house at Beauport Park, East Sussex", *Britannia* 19, 217-274.
- Harrison, A. C. 1983: "Romano-British building in Snodland", *KASN* 3, 6.
- Harrison, E. 1950: "Report for the year ended 31st December, 1949", *Arch. Cant.* 63, xlv-xlv.
- Hartley, B. R. 1953-60: "A Romano-British villa at High Wycombe", *Rec. Bucks* 16, 227-257.
- Haselgrove, C. 1982: "Wealth, prestige and power: the dynamics of late Iron Age political centralization in south-east England", in Renfrew & Shennan (eds), 79-88.
- Haselgrove, C. and Moore, T. (eds) 2007: *The Later Iron Age in Britain and Beyond*, Oxford: Oxbow.
- Hassall, M. W. C. 1999: "Soldier and civilian: a debate on the bank of the Severn", in Crummy & Hurst 1999 (eds), 181-185.

Bibliography

- Hasted, E. 1778–1800: *The History and Topographical Survey of the County of Kent*, 11 vols, Wakefield, Yorkshire: EP Pub. in collaboration with Kent County Library.
- Haverfield, F. 1902: “Quarterly notes on Roman Britain”, *Antiquary* 38, 376-377.
- Haverfield, F. 1915: *Roman Britain in 1914*, British Academy supplemental papers III, London: pub. for the British Academy by Humphrey Milford.
- Haverfield, F. 1920: “Roman Cirencester”, *Archaeologia* 69, 161-209.
- Haverfield 1932: “Romano-British Kent. Part II. Military elements of Roman Kent”, in Page (ed.), 13-59.
- Hayman, G. 1993: *An Archaeological Evaluation of the Tongham Nursery Borrow Pit*, Woking: Surrey County Archaeology Unit.
- Hayman, G. 1998: “Excavations in St Martin’s Walk, Dorking”, *Surrey Arch. Coll.* 85, 63-95.
- Hayman, G. 2008: “Excavations on a possible Roman villa and earlier activity at land off Wyphurst Road, Cranleigh”, *Surrey Arch. Coll.* 94, 251-292.
- Haynes, I., Sheldon, H. and Hanning, L. (eds) 2000: *London Under Ground: the Archaeology of a City*, Oxford: Oxbow.
- Hayward, L. C. 1952: “The Roman villa at Lufton, near Yeovil”, *PSANHS* 97, 90-112.
- Hayward, L. C. 1972: “The Roman villa at Lufton, near Yeovil”, *PSANHS* 116, 59-77.
- Hearne, T. 1712: “A discourse concerning the Stunsfield tessellated pavement”, in J. Leland, *The Itinerary of John Leland the Antiquary*, 9 vols, Oxford: printed at the Theater for the publisher, vol. 8, vii-xxxv.
- Hearne, E. J. F. 1936: “‘Shepherds Garden’, Arundel Park: a pre-Roman and Roman-British settlement”, *Sussex Arch. Coll.* 77, 221-243.

Bibliography

- Hekster, O., de Kleijn, G., and Slootjes, D. (eds) 2007: *Crises and the Roman Empire: Proceedings of the Seventh Workshop of the International Network Impact of Empire (Nijmegen, June 20-24, 2006)*, Leiden; Boston: Brill.
- Henderson, C. G. 1999: "The design of the Neronian fortress baths at Exeter", in Delaine & Johnston (eds), 164-183.
- Henig, M. 1981: "A figure of Fortuna from Kingscote, Gloucestershire", *Antiq. Journ.* 61, 2, 351-352.
- Henig, M. 1982: "Appendix II: The statuette of Fortuna", 193-194, in S.S. Frere, C. M. Kraay, F. Grew, D. Charlesworth, B. R. Hartley, M. G. Wilson, M. Henig and C. Salter, "The Bignor Roman villa", *Britannia* 13, 135-195.
- Henig, M. 1986: "A statuette of Fortuna", 123-124, in A. D. McWhirr, J. Bayley and N. Griffiths, *Houses in Roman Cirencester*, Cirencester Excavations 3, Cirencester: Cirencester Excavation Committee.
- Henig, M. 1988: "The jewellery", 257-259, in G. Brodrigg and H. Cleere, "The 'Classis Britannica' bath-house at Beauport Park, East Sussex", *Britannia* 19, 217-274.
- Henig, M. 2006: "Neither baths nor baptisteries", *Oxford Journ. Archaeol.* 25, 105-107.
- Henig, M. and Goodburn, R. 1982: "A Roman bronze bust, possibly from Chedworth", *TBGAS* 100, 251-253.
- Henrich, P. 2006: *Die römische Besiedlung in der westlichen Vulkaneifel*, Trierer Zeitschrift für Geschichte und Kunst des Trierer Landes und seiner Nachbargebiete 30, Trier: Rheinisches Landesmuseum.
- von Hesberg, H. 1992: *Römische Grabbauten*, Darmstadt: Wissenschaftliche Buchgesellschaft.
- Hickson, M. 1973: "A Roman bronze nail-cleaner from Hayes, Kent", *KAR* 32, 43.
- Hill, J. D. 1997: "'The end of one kind of body and the beginning of another kind of body'? Toilet instruments and 'Romanization' in southern England during the first century AD", in Gwilt & Haselgrove (eds), 96-107.

Bibliography

- Hill, J. D. 2007: "The dynamics of social change in Later Iron Age eastern and south-eastern England c. 300 BC-AD 43", in Haselgrove & Moore (eds), 16-40.
- Hills, G. M. 1868: "The church of West-Hampnett, Sussex, chiefly in reference to its Roman remains", *J. Brit. Archaeol. Assoc.* 24, 209-218.
- Hines, J. 2004: "Sūþre-gē – the foundations of Surrey", in Cotton, *et al.* (eds), 91-102.
- Hingley, R. 1996: "The legacy of Rome: the rise, decline, and fall of the theory of Romanization", in Webster & Cooper (eds), 111-23.
- Hingley, R. 2003: "Recreating coherence without reinventing Romanization", *Digressus*, Supplement 1, 111-119.
- Hingley, R. 2005: *Globalizing Roman Culture: Unity, Diversity and Empire*, London, New York: Routledge.
- Hingley, R. 2007: "Situating a post-colonial Roman Britain", *JRA* 20, 2, 535-540.
- Hingley, R. 2008a: "Not so Romanized? Tradition, reinvention or discovery in the study of Roman Britain", in *WorldArch* 40:3, 427-43.
- Hingley, R. 2008b: *The Recovery of Roman Britain 1586-1906: A Colony so Fertile*, Oxford: Oxford University Press.
- Hirst, K. n. d.: "An evaluation of archaeological remains at Waltham Roman villa, Gloucestershire", London: Time Team unpublished report.
- Holbrook, N. 1994: "*Corinium Dobunnorum*: Roman *civitas capital* and provincial capital", in T. Darvill and C. Gerrard, *Cirencester: Town and Landscape*, Cirencester: Cotswold Archaeological Trust, 57-86.
- Holbrook, N. 2003: "Great Witcombe Roman villa, Gloucestershire: archaeological investigations 1997-1998", *Britannia* 35, 39-76.
- Holbrook, N. 2004: "Turkdean Roman villa, Gloucestershire: archaeological investigations 1997-1998", *Britannia* 35, 39-76.
- Holbrook, N. 2006: "The Roman Period", in Holbrook & Juřica (eds), 97-131.

Bibliography

- Holbrook, N. 2008: "Cirencester and the Cotswolds: the Early Roman evolution of a town and rural landscape", *JRA* 21, 304-323.
- Holbrook, N. and Juřica, J. (eds) 2006: *Twenty-five Years of Archaeology in Gloucestershire. A review of New Discoveries and New Thinking in Gloucestershire, South Gloucestershire and Bristol 1979-2005*, Bristol and Gloucestershire Archaeological Report 3, Cirencester: Cotswold Archaeological Trust.
- Holloway H. 2014: "Roman villa images revealed at Plumpton college", *The Argus*, 26th March, viewed 15 May 2014, found at http://www.theargus.co.uk/news/11101096.Roman_villa_images_revealed_at_Plumpton_college/.
- Holman, D. 2000: "Iron Age coinage in Kent: a review of current knowledge", *Arch. Cant.* 120, 205-233.
- Holmes, S. 1887: "On a building at Cilurnum, supposed to be Roman baths", *Arch. Ael.*, 2 ser., 12, 124-127.
- Holmes, N. M. 1979: "Excavations at Cramond, Edinburgh 1975-78", in D. J. Breeze (ed.): *Roman Scotland: Some Recent Excavations*, Edinburgh: Inspectorate of Ancient Monuments, 9-13.
- Holwerda, J. 1933: "Der römische Sarkophag von Simpelveld", *Archäologischer Anzeiger*, 56-75.
- Horsley, J. 1732: *Britannia Romana*, London: printed for John Osborn and Thomas Longman.
- Hoselitz, V. 2007: *Imagining Roman Britain. Victorian Responses to a Roman Past*, Woodbridge, UK; Rochester, NY: Royal Historical Society/The Boydell Press.
- Houliston, M. 1999: "The excavations at the Mount Roman villa, Maidstone, 1994", *Arch. Cant.* 119, 71-172.
- Howell, I. (ed.) 2005: *Prehistoric Landscape to Roman Villa: Excavations at Beddington, Surrey 1981-7*, London: Museum of London Archaeology Service.

Bibliography

- Howell, I. 2014: "Continuity and change in the Late Iron Age-Roman transition within the environs of Quarry Wood *Oppidum*: excavations at Furfield Quarry, Boughton Monchelsea", *Arch. Cant.* 134, 37-66.
- Howes, D. 2005: "Introduction. Empires of the senses", in D. Howes (ed.), *Empires of the Senses. The Sensual Culture Reader*, London; New York: Berg Publishers.
- Hunter A. G. 1960: "A Romano-British bath-block at Trevor Road, Hucclecote, Glos", *TBGAS* 79, 159-173.
- Hurst H. R. 1985: *Kingsholm: Excavations at Kingsholm Close and Other Sites with a Discussion of the Archaeology of the Area*, Cambridge: Gloucester Archaeological Publications.
- Hüser, H. 1979: "Wärmetechnische Messungen an einer Hypokaustenheizung in der Saalburg", *Saalburg Jahrbuch* 36, 12-30.
- Husson, G. 1972: "Carreaux de fenêtres dans les papyrus grecs", *Chronique d'Égypte* 47, 278-282.
- Hutchinson, J. N., Poole, C., Lambert, N. and Bromhead, E. N. 1985: "Combined archaeological and geotechnical investigations of the Roman fort at Lympne, Kent", *Britannia* 16, 209-236.
- Inker, P. 2000: "Technology as active material culture: the quoit-brooch style", *Med. Arch.* 44, 25-52.
- Ireland, R. 2005a: "Archaeology in Lower Woods, South Gloucestershire", *CBA South West Journal* 14 (Winter 2005), 29-32.
- Ireland, R. 2005b: "Hawkesbury", *TBGAS* 123, 116.
- Ireland, W. H. 1829–31: *A New and Complete History of the County of Kent*, 4 vols, London: G. Virtue.
- Jackson, G., Maloney, C. and Saich, D. 1999: "Archaeology in Surrey 1994-5", *Surrey Arch. Coll.* 84, 195-243.
- Jackson, R. 2010: "Medicine and hygiene", in Allason-Jones (ed.), 243-268.

Bibliography

- Janković, M. A. 2012: "The social role of Roman baths in the province of Moesia Superior", in M. Żuchowska (ed.), *The Archaeology of Water Supply*, BAR international series 2414, Oxford: Archaeopress, 27-39.
- Jenkins, C. R. C. 1874: "The basilica of Lyminge; Roman, Saxon, and Mediaeval", *Arch. Cant.* 9, 205-223.
- Jenkins, C. R. C. 1876a: "Remarks on the early Christian basilicas, in connection with the recent discoveries at Lyminge", *Arch. Cant.* 10, xlv-xlv.
- Jenkins, C. R. C. 1876b: "On a Roman hypocaust discovered at Folkestone, A. D. 1875", *Arch. Cant.* 10, 173-177.
- Jenkins, F. 1984: "The re-excavation of the Roman 'villa' at Wingham", *Arch. Cant.* 100, 87-99.
- Jenkins, F. 1988: "Clay statuettes", 266, in G. Brodribb and H. Cleere, "The 'Classis Britannica' bath-house at Beauport Park, East Sussex", *Britannia* 19, 217-274.
- Jenkins, F. 2007: "The hypocausted building (Area C)", in Bennett *et al.* (eds), 95-99.
- Jessup, R. F. 1932: "Bigberry Camp, Harbledown, Kent", *Archaeol. J.* 89, 87-115.
- Jessup, R. F. and Cook, N. C. 1936: "Excavations at Bigberry Camp, Harbledown", *Arch. Cant.* 48, 151-168.
- Jessup, R. F. and Taylor, M. V. 1932: "A history of Kent. Part VII. Topographical index", in Page (ed.), 144-175.
- Johnston, D. E. 1972: "A Roman building at Chalk, near Gravesend", *Britannia* 3, 112-148.
- Jones, E. W. 1959: "Biological flora of the British Islands. *Quercus* L.", *Journal of Ecology* 47, 1, 169-222.
- Jones, H. A. 2014: "The Roman villa at Minster-in-Thamet. Part 9: an architectural reconstruction", *Arch. Cant.* 135, 189-207.

Bibliography

- Jones, P. and Poulton R. 2010: *Roman and Medieval Staines: the Development of the Town*, SpoilHeap Monograph 2, Norwich: SpoilHeap Publications.
- Jones, T. E. 1846: *The Britton Testimonial: An Account of a Public Dinner Given to J. Britton, F.S.A, at the Castle Hotel, Richmond, on the 74th Anniversary of his Birth, July 7, 1845, with the Toasts & Speeches on the Occasion, a List of Subscribers; And an Explanatory Preface*, London: printed for the subscribers to the Testimonial.
- Joseph, J. K. 1961: "Air reconnaissance in Britain, 1958-1960", *JRS* 51, 119-135.
- Jundi, S. and Hill, J. D. 1998: "Brooches and identities in first century AD Britain: more than meets the eye?", in C. Forcey, J. Hawthorne and R. Witcher (eds), *TRAC 97. Proceedings of the Seventh Annual Theoretical Roman Archaeology Conference, Nottingham 1997*, Oxford: Oxbow Books, 125-137.
- Keef, P. A. M. 1944-45: "Angmering Roman villa site: interim report on excavations, 1941", *Sussex Arch. Coll.* 84, 83-108.
- Keith, A. and Ward, G. 1936, "The Snodland skeleton", *Arch. Cant.* 46, 202-203.
- Kelly, C. 2004: *Ruling the Later Roman Empire*, Cambridge (Mass.); London: Belknap Press of Harvard University Press.
- Kelly, D. B. 1992: "The Mount Roman villa, Maidstone", *Arch. Cant.* 110, 177-235.
- Kelly, E. and Dudely, C. 1981: "Two Romano-British burials", *Surrey Arch. Coll.* 119, 65-88.
- Kempe, A. J. 1846: "Notice of Roman remains, near Bletchingley, in Surrey", *Gentl. Mag.* 180, 184.
- Kennard, A. S. 1933: "XI. Mollusca", *TBGAS* 55, 374-375.
- Kenny, J., Lyne, M., Magilton, J. and Buckland, P. 2016: "A Late Roman 'Hall' at Batten Hanger, West Sussex", *Britannia* 47, 193-207.

Bibliography

- Kenyon, K. M. 1948: *Excavations at the Jewry Wall Site, Leicester*, Reports of the Research Committee of the Society of Antiquaries of London 15, London: Society of Antiquaries.
- Knowles, W. H. 1933: "I. Notes on the buildings", *TBGAS* 55, 339-348.
- Koster, A. 1997: *Description of the Collections in the Provincial Museum G. M. Kam at Nijmegen 13: The Bronze Vessels 2. Acquisitions 1954–1996 (Including Vessels of Pewter and Iron)*, Nijmegen: Provincie Gelderland.
- Krause, D. 2006: *Eisenzeitlicher Kulturwandel und Romanisierung im Mosel-Eifel-Raum*, Römisch-germanische Forschungen 63, Mainz am Rhein: P. von Zabern.
- Krencker, D. 1929: *Die trierer Kaiserthermen*, Augsburg: B. Filser.
- Kretschmer, F. 1953: "Hypocausten", *Saalburg Jahrbuch* 12, 7–41.
- Lambarde, W. 1826: *A Perambulation of Kent, Containing the Description, Hystorie, and Customes of that Shire; Written in the Yeere 1570, First Published in the year 1576, and Now Increased and altered from the Author's Owne Last Copie*, London: Baldwin, Chadock and Joy.
- Lambert, 1921, *Bletchingley: A Parish History*, 3 vols, London: Mitchell, Hughes and Clarke.
- Lafon, V. X. 1991: "Les bains privés dans l'Italie romaine au IIe siècle av. J.-C. ", in *École Française de Rome* (ed.), 99-114.
- Lancaster, L. C. 2012: "A new vaulting technique for early baths in Sussex: the anatomy of a Romano-British invention", *JRA* 25, 419-440.
- Lancaster, L. C. 2015: *Innovative Vaulting in the Architecture of the Roman Empire: 1st to 4th Centuries CE*, Cambridge: Cambridge University Press.
- Lancaster, L. C., Sottili, G., Marra, F. and Ventura, G. 2010: "Provenancing of lightweight volcanic stones used in ancient Roman concrete vaulting: evidence from Turkey and Tunisia", *Archaeometry* 52.6, 949-969.

Bibliography

- Lawrence, S. 2006: "The Iron Age settlement and Roman villa at Thurnham, Kent", *HS1 Integrated Site Report Series*, in Archaeology Data Service 2006 found at <http://archaeologydataservice.ac.uk/archives/view/ctrl/reference.cfm>.
- Leach, P. E. (ed.) 1982: *Archaeology in Kent to AD 1500*, Council for British Archaeology Research Report 48, London: Council for British Archaeology.
- Leach, P. E. 1998: "Coal", in P. E. Leach, E. Greenfield, L., Bevan, and T. Pearson 1998: *Great Witcombe Roman Villa, Gloucestershire. A Report on Excavations by Ernest Greenfield 1960-1973*, BAR, British series 266, Oxford: B.A.R, 107.
- Leach, P. E., Greenfield, E., Bevan, L. and Pearson, T. 1998: *Great Witcombe Roman Villa, Gloucestershire. A Report on Excavations by Ernest Greenfield 1960-1973*, BAR, British series 266, Oxford: B.A.R.
- Leveson-Gower, G. 1869: "On a Roman villa discovered at Titsey", *Surrey Arch. Coll.*, 4, 214-237.
- Levine, P. 1986: *The Amateur and the Professional: Antiquarians, Historians, and Archaeologists in Victorian England, 1838-1886*, Cambridge: Cambridge University Press.
- Lewis E. 2007: "Lost and Found", in Gaimster *et al.* (eds), 53-67.
- Lewis T. J. 1966: *Temples in Roman Britain*, Cambridge Classical Studies, Cambridge: Cambridge University Press.
- Liakos, A. 2001: "The construction of national time: the making of the modern Greek historical imagination", *MHR* 16, 1, 27-42.
- Laurence, R. 1994: *Roman Pompeii: Space and Society*, London; New York: Routledge.
- Liebeschuetz, W. 2007: "Was there a crisis of the third century?", in Hekster *et al.* (eds), 11-20.

Bibliography

- Ling, R. 1989: "Lullingstone and the study of wall painting in Roman Britain", *JRA* 2, 378-84.
- Ling, R. 1991: *Roman Painting*, Cambridge: Cambridge University Press.
- Ling, R. 2003: "Wall painting in Roman Britain: the current state of research", in *Gowing & Heritage*, 9-16.
- Liversidge, J. E. A. 1987: "The baths", in G. W. Meates, *The Roman Villa at Lullingstone, Kent. Vol. 2, the Wall Paintings and Finds*, Maidstone: Kent Archaeological Society, 5.
- Lloyd Baker, T. B. 1853: "Address read to the Cotteswold Naturalists' Club, at their Winter Meeting, held at Gloucester, January 18th, 1849", *PCNFC* 1, 9-14.
- Loftus Brock, E. P. 1895: "The excavation of a Roman villa in the Wadfield, near Sudeley Castle, Gloucestershire", *J. Brit. Archaeol. Assoc.* 1, 242-250.
- Lower, M. A. 1849: "On Roman remains at Eastbourne, discovered in December, 1848", *Sussex Arch. Coll.* 2, 257-259.
- Lowther, A. W. G. 1927: "Excavations at Ashted, Surrey", *Surrey Arch. Coll.*, 37, 144-163.
- Lowther, A. W. G. 1929: "Excavations at Ashted, Surrey, second report (1927-1928)", *Surrey Arch. Coll.* (pt. I), 38, 1-17.
- Lowther, A. W. G. 1930: "Excavations at Ashted, Surrey, third report (1929)", *Surrey Arch. Coll.* (pt. 2), 38, 132-149.
- Lowther, A. W. G. 1934: "The Roman 'chimney-pots' from Ashted, and parallel examples from other sites", *Surrey Arch. Coll.* 42, 61-66.
- Lowther, A. W. G. 1949: "Appendix III – Patterns-stamped flue-tiles from the "Chatley Farm" bath-building", *Surrey Arch. Coll.* 50, 93-98.
- Lowther, A. W. G. 1950: "Roman villa at Sandilands Road, Walton-on-the-Hill. Excavations of 1948-49", *Surrey Arch. Coll.* 51, 65-81.

Bibliography

- Lowther, A. W. G. 1954: "A brief history of the Society", *Surrey Arch. Coll.* 53, 1-34.
- Lowther, A. W. G. 1955: "Report of the excavation, 1946-7, of a Roman site at Farnham, Surrey", *Surrey Arch. Coll.* 54, 47-56.
- Lowther, A. W. G. 1976: "Romano-British chimney-pots and finials", *Antiq. Journ.* 61, 35-48.
- Lowther, A. W. G. and Goodchild, R. G. 1943: "Excavations at Farley Heath, Albury, during 1939", *Surrey Arch. Coll.* 48, 31-40.
- Luard, R. A. 1859: "On the recent discoveries of Roman remains at Plaxtol, in Kent", *Arch. Cant.* 2, 1-8.
- Lucore, S. K. and Trümper, M. (eds) 2013: *Greek Baths and Bathing Culture: New Discoveries and Approaches*, Bulletin Antieke Beschaving 23, Leuven; Walpole, MA: Peeters.
- Luke, M. and Wells, J. 2000: "New evidence for the origins, development and internal morphology of the Roman roadside settlement at Alfoldean", *Sussex Arch. Coll.* 138, 75-101.
- Lyne, M. A. B. 1994: "The Hassocks cemetery", *Sussex Arch. Coll.* 132, 53-85.
- Lyne M. A. B. 2003: "The pottery supply to Roman Sussex", in Rudling, 141-150.
- Lyne, M. A. B. and Jefferies, R. S. 1979: *The Alice Holt/Farnham Roman Pottery Industry*, Research report (Council for British Archaeology) 30, London: Council for British Archaeology.
- Lysons, S. 1789: "An account of some Roman antiquities discovered at Comb End Farm near Cirencester, Gloucestershire", *Archaeologia* 9, 319-322.
- Lysons, S. 1792: "Account of Roman antiquities discovered in the county of Gloucestershire", *Archaeologia* 10, 131-136.
- Lysons, S. 1797: *An Account of the Roman Antiquities Discovered at Woodchester*, London: Strahan.

Bibliography

- Lysons, S. 1813–17: *Reliquiae Britannico-Romanae. Containing Figures of Roman Antiquities Discovered in Various Parts of England*, 4 vols, London: Dadell & Davies.
- Lysons, S. 1815: *An Account of the Remains of a Roman Villa Discovered in Bignor in Sussex in the Years 1811, and Four Following Years*, London: Clarke & Lewis.
- Lysons, S. 1817a: “Discoveries at Rodmarton”, *Archaeologia* 18, 113-116.
- Lysons, S. 1817b: “Discoveries at Withington”, *Archaeologia* 18, 118-121.
- Lysons, S. 1817c: Account of the remains of a Roman villa, discovered at Bignor, in Sussex, in the years 1811, 1812, 1813, 1814 and 1815”, *Archaeologia* 18, 203-21.
- Lysons, S. 1817d: “An account of remains of a Roman villa discovered in the parish of Great Witcombe in the country of Gloucester”, *Archaeologia* 18, 112-125.
- Lysons, S. 1821: “Account of further discoveries of the remains of a Roman villa, discovered at Bignor, in Sussex (read 4th February 1818)”, *Archaeologia* 19, 176-177.
- MacDonald, G. 1931: “The bath-house at the fort of Chesters (*Cilurnum*)”, *Arch. Ael.*, 4 ser., 8, 219-305.
- MacDonald, G. 1933: “Notes on the Roman forts at Rough Castle and Westerwood, with a postscript”, *Proc. Soc. Antiq. Scot.* 67, 243-296.
- Maclean, J. 1887–88: “The manor of Tockington in the county of Gloucestershire and the Roman villa”, *TBGAS* 12, 123-169.
- Maclean, J. 1888–89: “The Roman villa, Tockington Park – second notice”, *TBGAS* 13, 196-202.
- Magallón, M. A., Mínguez, J. A., Navarro, M., Fabre, J. M., Rico, C., Sillières, P., Fincker, M. and Laberthe, J. 1995: “Labilolosa (Cerro del Calvario, La Puebla de Castro, Huesca). Informe de la campaña de excavación realizada en 1993”, *Caesaraugusta* 71, 147-227.

Bibliography

- Magilton, J. 1991: "Elsted: the Roman villa at Batten Hanger (SU 818 153)", in *The Archaeology of Chichester and District 1991*, 27-32.
- Malden, H. E. (ed.) 1912: *The Victoria History of the County of Surrey*, vol. 4, London: Constable & Co. Limited.
- Mandich, M. J., Derrick, T. J., Sanchez, S. G., Savani, G. and Zampieri, E. (eds) 2016: *TRAC 2015: Proceedings of the Twenty-Fifth Annual Theoretical Roman Archaeology Conference, which Took Place at the University of Leicester, 27-29 March 2015*, Oxford: Oxbow Books.
- Manley, J. 2003: "Inside/outside: architecture and the individual at Fishbourne Roman palace", in Rudling, 127-140.
- Manley, J. and Rudkin, D. 2003: *Facing the Palace: Excavations in Front of the Roman Palace at Fishbourne, Sussex, UK 1995-99*, Lewes: Sussex Archaeological Society.
- Manley, J. and Rudkin, D. 2005: "A pre-A.D.43 ditch at Fishbourne Roman Palace, Chichester", *Britannia* 36, 55-99.
- Manley, J. and Rudkin, D. 2006: "More buildings facing the palace at Fishbourne", *Sussex Arch. Coll.* 144, 69-113.
- Manning, O. and Bray, W. 1804–14: *The History and Antiquities of the County of Surrey*, 3 vols, London: printed for J. White by J. Nichols.
- Manning, W. H. and Painter S. 1967: "A Roman iron window-grille from Hinton St. Mary, Dorset", *BMQ* 31, 3/4, 122-130.
- Maréchal, S. 2016: "Public and private bathing in late antique North Africa. Changing habits in a changing society?", in Mandich *et al.*, 125-140.
- Margary 1953: "Recent discoveries by the Ordnance Survey of Roman roads in Sussex", *Sussex Arch. Coll.* 91, 1-19.
- Marsden, B. M. and Nurse, B. 2007: "Opening the tomb", in Gaimster *et al.* (eds), 95-107.

Bibliography

- Marsden, P. 1976: "Two Roman public baths in London", *TLMAS* 27, 1-70.
- Marsden, P. 1980: *Roman London*, London: Thames and Hudson.
- Martin, M. H., Martin, J. and Jackson A. W. 2003: *Badminton: A Geophysical Survey*, Archaeological Report No. 2, Harrow, Middlesex: Sagascan.
- Martin, P. J. 1859: "Stane Street Causeway", *Sussex Arch. Coll.* 11, 145.
- Martin, R. 1974: *L'Urbanisme dans la Grèce Antique*, Paris: Picard.
- Martins, C. B. 2005: *Becoming Consumers: Looking Beyond Wealth as an Explanation for Villa Variability*, BAR, British series 403, Oxford: B.A.R.
- Masefield, R. & Williams, D. 2003: "A Roman tiler at Doods Farm, Reigate, Surrey Arch. Coll. 90, 247-259.
- Mason, D. J. P. 2005: *Excavations at Chester: The Roman Fortress Baths. Excavation and Recording 1732-1998*, Archaeological Service Excavation and Survey Report 13, Chester: Chester City Council.
- Masser, P. and McGill, B. 2004: "Excavations of Romano-British sites at Tockington Park Farm and Westerleigh, South Gloucestershire, in 1997" *TBGAS* 122, 95-116.
- Mattingly, D. J. 2004: "Being Roman: expressing identity in a provincial setting", *JRA* 17, 5-25.
- Mattingly, D. J. 2006: *An Imperial Possession: Britain in the Roman Empire*, London: Allen Lane.
- Mattingly, D. J. 2011: *Imperialism, Power, and Identity: Experiencing the Roman Empire*, Miriam S. Balmuth lectures in ancient history and archaeology, Princeton, N.J.: Princeton University Press.
- McGrail, S. 1987: *Ancient Boats in North West Europe*, London: Longman.
- McKinley, J. I. 2004: "Welcome to *Pontibus*...gateway to the West", *Surrey Arch. Coll.* 91, 1-69.

Bibliography

- McParland, L. C., Hazell, Z., Campbell, G., Collinson, M. E. and Scott, A. C. 2009: "How the Romans got themselves into hot water: temperatures and fuel types used in firing a hypocaust", *Envir. Arch.*, 14, 2, 176-183.
- McWhirr, A. D. 1979: "Tile-kilns in Roman Britain", in A. D. McWhirr (ed.), *Roman Brick and Tile: Studies in Manufacture, Distribution, and Use in the Western Empire*, BAR international series 68, Oxford: British Archaeological Reports.
- McWhirr, A. D. 1981: *Roman Gloucestershire*, Gloucester: Alan Sutton.
- McWhirr, A. D. 1984: "The cities and large rural settlements of Roman Gloucestershire", in Saville, 212-222.
- McWhirr, A. D., Bayley J. and Griffiths, N. 1986: *Houses in Roman Cirencester*, Cirencester Excavations 3, Cirencester: Cirencester Excavation Committee.
- Meates, G. W., Greenfield, E. and Birchenough, E. 1950: "The Lullingstone Roman villa", *Arch. Cant.* 63, 1-49.
- Meates, G. W., Greenfield, E. and Birchenough, E. 1952: "The Lullingstone Roman villa: second interim report", *Arch. Cant.* 65, 26-78.
- Meates, G. W. 1953: "The Lullingstone Roman villa: third interim report", *Arch. Cant.* 66, 15-36.
- Meates, G. W. 1955: *Lullingstone Roman villa*, London: Heinemann.
- Meates, G. W. 1973: "Farningham Roman villa II", *Arch. Cant.* 88, 15-36.
- Meates, G. W. 1979: *The Roman Villa at Lullingstone, Kent. Vol. 1, the Site*, Maidstone: Kent Archaeological Society.
- Meates, G. W. 1987: *The Roman Villa at Lullingstone, Kent. Vol. 2, the Wall Paintings and Finds*, Maidstone: Kent Archaeological Society.
- Middleton, J. H. 1890: "On a Roman villa in Spoonley Wood, Gloucestershire; and on Romano-British houses generally", *Archaeologia* 52, 651-668.

Bibliography

- Miles, D. 1984: "Romano-British settlement in the Gloucestershire Thames Valley", in Saville (ed.), 191-211.
- Miller, S. N. 1922: *The Roman Fort at Balmuildy (Summerston, near Glasgow) on the Antonine Wall*, Glasgow: Printed for the Glasgow Archaeological Society by Maclehose, Jackson & Co.
- Millett, M. 1979: "The dating of Farnham (Alice Holt) pottery", *Britannia* 10, 121-137.
- Millett, M. 1990: *The Romanization of Britain: An Essay in Archaeological Interpretation*, Cambridge: Cambridge University Press.
- Millett, M. 2007: "Roman Kent", in Williams (ed.), 135-184.
- Millett, M. 2016: "'By small things revealed'. Rural settlement and society", in M. Millett, L. Revell and A. Moore (eds), *The Oxford Handbook of Roman Britain*, Oxford: Oxford University Press, 699-719.
- Millett, M. and Wilmott, A. 2003: "Rethinking Richborough", in Wilson (ed.), 151-279.
- Mills, S. 2014: *Auditory Archaeology: Understanding Sound and Hearing in the Past*, Walnut Creek, CA: Left Coast Press.
- Millum, D., Rudling, D. and Butler, C. 2013: "Reflections on a cold plunge. Reporting on the final year's dig in Church Field at Barcombe", *Sussex Past and Present* 129, 4-5.
- Milne, G. (ed.) 1985: *The Port of Roman London*, London: B.T. Batsford.
- Money, M. G. 1974a: "Garden Hill", *Current Archaeology* 41, 185-188.
- Money, M. G. 1974b, "Clay spacers from the Romano-British bath-house at Garden Hill, Hartfield, Sussex, *Antiq. Journ.* 54, 278-280.
- Money, M. G. 1977: "The Iron-Age hill-fort and Romano-British iron-working settlement at Garden Hill, Sussex: interim report on excavations, 1968-1976", in *Britannia* 8, 339-350.

Bibliography

- Money, M. G. and Streeten, A. D. F. 1979: "Excavations in the Iron Age hill fort and Roman-British ironworking settlement at Garden Hill, Hartfield, East Sussex (1968-1978)", *Wealden Iron* 15, 16-26.
- Moore, C. 1869: "The Mammalia and other remains from drift deposits in the Bath basin", *BFC* 2, 37-55.
- Moore, J., Heathcote, J. and Dungworth, D. 2003: *Geochemical Survey at Richborough, Kent: An Assessment*, Centre for Archaeology Report 4, Eastney: English Heritage.
- Moore, T. 2006: "The Iron Age", in Holbrook & Juřica (eds), 61-96.
- Moore, T. 2007: "Life on the edge? Exchange, community and identity in the Later Iron Age of the Severn-Cotswolds", in Haselgrove & Moore (eds), 41-61.
- Morgan, G. C. 2013: "Appendix 9. The Roman wall plaster", unnumbered pages, in P. Wilkinson, *The Roman Religious Sanctuary at 'Blacklands', School Farm, Graveney Road, Faversham, Kent*, Faversham: The Kent Archaeological Field School.
- Morgan Evans, D., Shaw, C. and James, R. 2003: *Rebuilding the Past. A Roman Villa*, London: Methuen.
- Morris, P. 1979: *Agricultural Buildings in Roman Britain*, BAR British Series 70, Oxford: B.A.R.
- Mortimer Wheeler, R. E. 1932: "A history of Kent. Part III. The towns of Roman Kent", in Page (ed.), 60-101.
- Müller, K. 1930: *Tiryns, III, Die Architektur der Burg und des Palastes*, Augsburg: B. Filser.
- Mulvin, L. 2002: *Late Roman Villas in the Danube-Balkan Region*, BAR, International series 1064, Oxford: B.A.R.
- Neal, D. S. 1965: "The *frigidarium* mosaics", *Arch. Cant.* 80, 90-91.

Bibliography

- Neal, David S. 1974: *The excavation of the Roman Villa in Gadebridge Park, Hemel Hempstead, 1963–8*, Reports of the Research Committee of the Society of Antiquaries of London 31, London: Society of Antiquaries of London.
- Neal, D. S. 1977a: “Witcombe Roman villa: a reconstruction”, in M. R. A. P. G. Gilyard-Beer and A. D. Saunders (eds), *Ancient Monuments and their Interpretation*, London: Phillimore, 27-40.
- Neal, D. S. 1977b: “Repairs and irregularities in Romano-British mosaics”, *Mosaic* 2, 7-8.
- Neal, D. S. 1981: *Roman Mosaics in Britain: An Introduction to their Schemes and a Catalogue of Paintings*, Britannia Monograph Series 1, London: Society for the Promotion of Roman Studies.
- Neal, D. S., Wardle, A. and Hunn, J. 1990: *Excavation of the Iron Age, Roman, and Medieval Settlement at Gorhambury, St Albans*, Archaeological Report (English Heritage) 14, London: Historic Buildings & Monuments Commission for England.
- Newman, C. W. 1981: “Castell Collen Roman fort: a summary”, *TRS* 51, 64-67.
- Newstead, R. 1937: “The Roman station, Prestatyn. First interim report”, *Arch. Cambrensis* 92, 208-232.
- Niblett, R. 2005: “Roman Verulamium”, in Niblett, R. and Thompson, I. (eds): *Alban’s Buried Towns: An Assessment of St. Albans’ Archaeology up to AD 1600*, Oxford: Oxbow, 41-165.
- Nielsen, I. 1990: *Thermae et Balnea*, 2 vols, Aarhus: Aarhus University Press.
- Nielsen, I. 1999: “Early provincial baths and their relations to early Italic baths”, in Delaine & Johnston (eds), 35-43.
- Ocock, M. A. 1974: “Late-Belgic pottery from Court Lodge Farm, Teston”, *Arch. Cant.* 89, 206-207.

Bibliography

- Ocock, M. A. and Syddell, M. J. E. 1967: "The Romano-British buildings in Church Field, Snodland", *Arch. Cant.* 82, 192-217.
- Ocock, M. A. and Syddell, M. J. E. 1968: "Industrial...ised archaeology at Snodland", *KAR* 11, 8-9.
- O'Connell, M. and Bird, J. 1994: "The Roman temple at Wanborough, excavations 1985-1986", *Surrey Arch. Coll.* 82, 1-168.
- Oetelaar, T. and Johnston, C. 2012: "Determination of the convective heat transfer coefficient of hot air rising through terracotta flues", *TCSME* 36, 4, 413-427.
- Oetelaar, T., Johnston, C. R., Wood, D. H., Hughes, L. A. and Humphrey, J. W. 2013: "A computational investigation of a room heated by subcutaneous convection. A case study of a replica Roman bath", *Energy and Buildings* 63, 59-66.
- Oetelaar, T., Johnston, Hughes, L. A., Humphrey, J. W., Johnston, C. R. and Wood, D. H. 2014: "A computational investigation of the thermal environment of the caldarium in a replica Roman bath", *JRA* 27, 392-402.
- Oldham, P. E. 1970: "Maidstone Area Archaeological Group", *Arch. Cant.* 85, 188-189
- O'Neil, H. E. 1952a: "Whittington Court Roman villa, Whittington, Gloucestershire", *TBGAS* 71, 13-87.
- O'Neil, H. E. 1952b: "Spoonley Wood Roman villa, Gloucestershire", *TBGAS* 71, 163-166.
- O'Neil, H. E. 1955: "Woodchester Roman villa", *TBGAS* 74, 172-175.
- O'Neil, H. E. 1968: "The Roman settlement on the Fosse Way at Bourton Bridge, Bourton-on-the-Water, Gloucestershire", *TBGAS* 87, 29-55.
- O'Neil, H. E. 1971-72: "A Roman bathing establishment at The Grove Ebrington, Gloucestershire", *PCNFC* 36, 87-93.
- Orton, C. 1997: "Excavations at the King William IV site, Ewell, 1967-77", *Surrey Arch. Coll.* 84, 89-122.

Bibliography

- Osgood, R 2004: "The Roman mosaic at Badminton", *CBA South West* 12, 28-29.
- Osgood, R 2009: "The first Badminton house: discovery of a Late Roman mosaic in South Gloucestershire", *TBGAS* 127, 203-211.
- Oswald, A. 1963: "Roman material from Dorn", *TBGAS* 82, 18-24.
- Ousterhout, R. 2004: "The East, the West, and the appropriation of the past in Early Ottoman architecture", *Gesta*, 43, 2, 165-176.
- Owen, D. 2011: *Strategic Stone Study: A Building Stone Atlas of Gloucestershire*, London: English Heritage.
- Page, W. (ed.) 1932: *The Victoria History of the County of Kent*, vol. 3, London: The St. Catherine Press.
- Page, W. 1935: "Romano-British Sussex", in Salzman (ed.), 1-70.
- Page, W. and Keate, E. M. 1912: "Romano-British Surrey", in Malden (ed.), 343-378.
- Palmer, S. 1984: *Excavations of the Roman and Saxon Site at Orpington*, Bromley: London Borough of Bromley.
- Palmer, S. and Phil, M. 1973: "Orpington (Fordcroft)", *Arch. Cant.* 88, 223.
- Palmer, S. and Phil, M. 1974: "Orpington", *Arch. Cant.* 89, 220.
- Palmer, S. and Phil, M. 1975: "Orpington", *Arch. Cant.* 91, 206.
- Panton, F., and Elder J. 1992: "Interim report on work carried out in 1992 by the Canterbury Archaeological Trust", *Arch. Cant.* 110, 357-381.
- Papi, E. 1999: "*Ad denimenta vitiorum* (Tac, *Agr.*, 21). Il *balneum* nelle dimore di Roma dall'età repubblicana al I secolo d. C.", *MEFRA* 111, Rome, 695-728.
- Parfitt, K. 2004a: "The bath-house excavation", *Arch. Cant.* 124, 33-49.
- Parfitt, K. 2004b: "A search for the prehistoric harbours of Kent", in Clark (ed.), 99-105.

Bibliography

- Parfitt, K. 2007: "The Roman villa at Minster-in-Thanel. Part 4: the south-west buildings, 6A and 6B", *Arch. Cant.* 127, 261-296.
- Parfitt, K. 2013: "Folkestone during the Roman period", in Coulson (ed.), 31-54.
- Parfitt, K., Boast E. and Moody, G. 2009: "The Roman villa at Minster-In-Thanel. Part 6: The villa enclosure; Buildings 2 and 5", *Arch. Cant.* 129, 333-358.
- Parker, J. 1878: *The Early History and Antiquities of Wycombe, in Buckinghamshire*, Wycombe: Butler & Son.
- Parsons, A. J. J. 1956: "Cray Valley Archaeological Report, 1952", *Arch. Cant.* 70, 262-263.
- Parsons, A. J. J. 1957: "Orpington Historical Records Society Report, 1956", *Arch. Cant.* 71, 239-240.
- Parsons, A. J. J. 1958: "Orpington Historical Records and Natural History Society Archaeological Report, 1957-8", *Arch. Cant.* 72, 209-211.
- Parsons, A. J. J. 1959: "Orpington Historical Records and Natural History Society Archaeological Report, 1958-9", *Arch. Cant.* 73, 1.
- Parsons, A. J. J. 1973: "'Isolated' Roman bath-houses", *KAR* 33, 85-88.
- Patrick, G. 1897: "Discovery of the remains of a Roman house at Burham, Kent", *J. Brit. Archaeol. Assoc.* 3, 31-35.
- Payne, G. 1897: "The Roman villa at Darent", *Arch. Cant.* 22, 49-84.
- Payne, G. 1898: "II. Foundations of a Roman house discovered at Burham, Kent", *Arch. Cant.* 23, 10-13.
- Payne, G. 1920: "Burham", *Arch. Cant.* 34, 155.
- Payne, A. 2008: *Batten Hanger, Elsted & Treyford, West Sussex. Report on Geophysical Survey, May 2008*, Portsmouth: English Heritage.

Bibliography

- Pelling, R. 2013: *Stanley Meadow, Lower Woods, South Gloucestershire: Charred Plants Remains from a Corn-drier. Environmental Studies Report*, Research Report Series 30-2013, Portsmouth: English Heritage.
- Penn, W. S. 1957: "The Romano-British settlement at Springhead. Excavations of the bakery, Site A", *Arch Cant.* 71, 53-105.
- Penn, W. S. 1958: "The Romano-British settlement at Springhead. Excavations of Watling Street, shop and pedestal, Site B", *Arch Cant.* 72, 77-110.
- Penn, W. S. 1959: "The Romano-British settlement at Springhead. Excavations of Temple I, Site C1", *Arch Cant.* 73, 1-61.
- Penn, W. S. 1960: "Springhead: Temples III and IV", *Arch Cant.* 74, 113-140.
- Penn, W. S. 1962: "Springhead: Temples II and V", *Arch Cant.* 77, 170-189.
- Penn, W. S. 1964: "Springhead: the temple ditch site", *Arch Cant.* 79, 113-140.
- Penn, W. S. 1965: "Springhead – map of discoveries", *Arch Cant.* 80, 107-117.
- Penn, W. S. 1967: "Springhead: Temple IV/Gateway", *Arch Cant.* 82, 53-105.
- Penn, W. S. 1968: "Springhead: miscellaneous excavations", *Arch Cant.* 83, 163-192.
- Percival, J. 1976: *The Roman Villa: An Historical Introduction*, Berkeley: University of California Press.
- Perkins, D. R. J. 1996: "The Abbey Farm villa training excavation", *Arch. Cant.* 116, 325-329.
- Perkins, D. R. J. 1999: "Roman villa site (Abbey Farm): Minster-in-Thanel", *Arch. Cant.* 119, 393.
- Perkins, D. R. J. 2004: "The Roman villa at Minster-in-Thanel. Part 1: introduction and report on the bath-house", *Arch. Cant.* 124, 25-33.
- Perkins, D. R. J. and Parfitt, K. 2004: "The Minster Roman villa", *Current Archaeology* 193, 38-41.

Bibliography

- Perring, D. 2002: *The Roman House in Britain*, London and New York: Routledge.
- Philp, B. 1968: *Excavations at Faversham, 1965. The Royal Abbey, Roman Villa and Belgic Farmstead*, Research reports of the Kent Archaeological Research Groups' Council 1, Bromley: Kent Archaeological Research Groups' Council.
- Philp, B. 1969: "Emergency excavations: Darenth Roman villa", in *KAR* 18, 18-21.
- Philp, B. 1970: "Darenth Roman villa", in *KAR* 19, 16-17.
- Philp, B. 1973: *Excavations in West Kent, 1960-1970: The Discovery and Excavation of Prehistoric, Roman, Saxon and Medieval Sites, Mainly in the Bromley Area and in the Darent Valley*, Kent Monograph Series 2, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1981: *The Excavation of the Roman Forts of the Classis Britannica at Dover, 1970-1977*, Kent Monograph Series 3, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1984a: *Excavations in the Darenth Valley, Kent: the Detailed Reports on the Discovery and Excavation of a Complete Iron Age Farmstead Site at Farningham Hill; The Excavation of Important Prehistoric, Roman and Saxon Sites at Darenth and the Excavation of the South-East Area of the Archbishops of Canterbury's Medieval Manor-house and Tudor Palace at Otford*, Kent Monograph Series 4, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1984b: "The Roman villa at Orpington", *KAR* 78, 196-199.
- Philp, B. 1988: "Orpington Roman villa saved from destruction", *KAR* 94, 74-78.
- Philp, B. 1989: *The Roman House with Bacchic Murals at Dover*, Kent Monograph Series 5, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1990a: "The Roman villa at Orpington. Work starts on preservation scheme", *KAR* 101, 1.
- Philp, B. 1990b: "Excavations on the Roman villa at Folkestone 1989", *KAR* 99, 206-209.

Bibliography

- Philp, B. 1991: *The Roman Villa Site at Keston, Kent: First Report (Excavations 1968-1978)*, Kent Monograph Series 6, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1996a: *The Roman Villa Site at Orpington, Kent*, Kent Monograph Series 7, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 1996b: "Roman building discovered near Faversham", *KAR* 123, 55-57.
- Philp, B. 1999: *The Roman Villa Site at Keston, Kent Second Report Excavations 1967 & 1979-99*, Kent Monograph Series 8, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 2002a: *Archaeology in the Front Line. 50 Years of Kent Rescue 1952-2002*, Dover: Kent Archaeological Rescue Unit.
- Philp, B. 2002b: *Roman Bath-house, Kemsing*, Kent Excavation Report 1, Dover: Council for Kentish Archaeology.
- Philp, B. 2005: *The Excavation of a Roman Fort at Reculver*, Kent Monograph Series 10, Dover: Kent Archaeological Rescue Unit.
- Philp, B. and Baxter, R. 1986: "The discovery of a Roman villa at Rodmersham", *KAR* 83, 51-53.
- Philp, B. and Keller, P. 1995: *The Roman Site at Fordcroft, Orpington: The Detailed Excavation of a Site at Poverest Road and a Consideration of the Roman Settlement in the Fordcroft-Kent Road Area*, Kent special subject series 8, Orpington: Kent Archaeological Trust.
- Piggot, S. 1976: *Ruins in a Land Scape. Essays in Antiquarianism*, Edinburgh: Edinburgh University Press.
- Pirie, E. 1960: "Thurnham Roman villa", *Arch. Cant.* 74, 162-170.
- Pitts, M. 2007: "The emperor's new clothes? The utility of identity in Roman archaeology", *AJA* 111, 4, 693-713.

Bibliography

- Pitts, M. 2010: "Re-thinking the Southern British oppida: networks, kingdoms and material culture", *EJA* 13, 1, 32-63.
- Playne C. 1880–81: "Remarks on the Roman pavement at Woodchester", *TBGAS* 5, 142-147.
- Pocock, W. W. 1864: "Roman pavement, etc. upon Walton Heath", *Surrey Arch. Coll.* 2, 1-13.
- Pollard, R.J. 1988: *The Roman Pottery of Kent*, Monograph Series of the Kent Archaeological Society 5, Maidstone: Kent Archaeological Society.
- Pollard, S. 1974: "A late Iron Age settlement and a Romano-British villa at Holcombe, near Uplyme, Devon", *Procs. Devon Arch. Soc.* 32, 59-162.
- Pooley, J. 2005: "Owen Manning, William Bray and the writing of Surrey's county history, 1760–1832", *Surrey Arch. Coll.* 92, 91-123.
- Porteous, J. D. 1990: *Landscapes of the Mind: Worlds of Sense and Metaphor*, Toronto; Boston: University of Toronto Press.
- Porter, D. H. 1998: *The Thames Embankment: Environment, Technology, and Society in Victorian London*, Akron, Ohio: University of Akron Press.
- Poste, B. 1859: "Discovery of a Romano-British cemetery at Westborough, Maidstone", *Arch. Cant.* 2, 143-148.
- Poulton, R. 2004: "Iron Age Surrey", in Cotton *et al.* (eds), 51-64.
- Poulton, R. 2005: "Excavations near Broad Street Common, Worplesdon, Guildford, in 1994, 1997 and 1998", *Surrey Arch. Coll.* 92, 29-89.
- Poulton, R. 2007: "Farley Heath Roman temple", *Surrey Arch. Coll.* 93, 1-147.
- Praetorius, C. J. 1911: "Report on the villa at Borough Farm, Pulborough", *Proc. Soc. Antiq. London* 23, 121-129.

Bibliography

- Price, A. 2002: "Geology and building materials", in D., Verey and A., Brooks, *Gloucestershire I: The Cotswolds*, The Buildings of England Series, New Haven and London: Yale University Press, 23-29.
- Price, E. 2000a: *Frocester: A Romano-British Settlement, its Antecedents and Successors. 1: The Sites*, Stonehouse (Gloucestershire): Gloucester and District Archaeological Research Group.
- Price, E. 2000b: *Frocester: A Romano-British Settlement, its Antecedents and Successors. 2: The Finds*, Stonehouse (Gloucestershire): Gloucester and District Archaeological Research Group.
- Price, J. 1982: "The Glass", 174-185, in G. Webster and L. Smith, "The excavations of a Romano-British rural establishment at Barnsley Park, Gloucestershire, 1961-79. Part II, c. A.D. 360-400 +", *TBGAS* 100, 65-189.
- Price, J. 2000: "Glass vessels, objects and window glass", 103-122, in E. Price 2000b: *Frocester: A Romano-British Settlement, its Antecedents and Successors. 2: The Finds*, Stonehouse (Gloucestershire): Gloucester and District Archaeological Research Group.
- Price, J. and Cottam, S. 1998: *Romano-British Glass Vessels: A Handbook*, Practical handbooks in archaeology 14, Walmgate, York: Council for British Archaeology.
- Price, J. E. 1882: "On excavations in the camp, the tumulus, and Romano-British cemetery, Seaford, Sussex", *Sussex Arch. Coll.* 32, 167-200.
- Priest, F. G. S. and Cumberland, A. 1925: "Some results of the 1925 excavations at Roman site at Farningham", *TDDAS* 1, 66-73.
- Pringle, S. 2006: "Early box flue tiles from London", *London Archaeologist*, 11.5, 124-129.
- Pringle, S. 2007: "London's earliest Roman bath-houses?", *London Archaeologist*, 11.8, 205-209.

Bibliography

- RCHME Gloucester 1976: *Royal Commission on Historical Monuments (England). Ancient and Historical Monuments in the County of Gloucester. Volume One: Iron Age and Romano-British Monuments in the Gloucestershire Cotswolds*, London: Her Majesty's Stationery Office.
- Rebuffat 1991: "Vocabulaire thermal. Documents sur le bain romains", in *École Française de Rome* (ed.), 1-34.
- Redknap, M. and Millet, M. 1980: "Excavations on a Romano-British farmstead at Elsted, West Sussex", *Sussex Arch. Coll.* 118, 197-229.
- Renfrew, A. C. and Shennan, S. (eds) 1982: *Ranking, Resource and Exchange*, Cambridge: Cambridge University Press.
- Rennie, M. 1986: "Excavations in the Bingham Hall Gardens, 1958", in A. D. McWhirr, J. Bayley and N. Griffiths, *Houses in Roman Cirencester*, Cirencester Excavations 3, Cirencester: Cirencester Excavation Committee, 194-201.
- Revell, L. 2007: "Military bath-houses in Britain—a comment", *Britannia* 38, 230-237.
- Revell, L. 2009: *Roman Imperialism and Local Identities*, Cambridge: Cambridge University Press.
- Revell, L. 2016: *Ways of Being Roman. Discourse of Identity in the Roman West*, Oxford: Oxbow.
- Reyes Hernando, O. V. 2000: "Síntesis evolutiva de las termas en las villas de Britannia", in Fernández Ochoa & García Entero (eds), 373-382.
- Reynolds 2006: "The early Medieval period", in Holbrook & Juřica (eds), 133-165.
- Reynolds-Moreton, H. J., Beddoe, J. and Hallett, P. 1876: "Proposed Bristol and Gloucestershire archaeological society", *TBGAS* 1, 3-6.
- Richardson, A. 2013: "Late Roman and Algo-Saxon Folkstone (c. AD 300–900)", in Coulson (ed.), 55-76.

Bibliography

- Richmond, I. A. 1959: "The Roman villa at Chedworth, 1958–59", *TBGAS* 78, 5-23.
- Richmond, I. A. 1969: "The plans of Roman villas in Britain", in Rivet (ed.), 49-70.
- Riddler, I. 2013: "Appendix 10. The Roman small finds", unnumbered pages, in P. Wilkinson, *The Roman Religious Sanctuary at 'Blacklands', School Farm, Graveney Road, Faversham, Kent*, Faversham: The Kent Archaeological Field School.
- Rigold, S. E. 1972: "Roman Folkestone reconsidered", *Arch. Cant.* 87, 31-41.
- Rivet, A. L. F. (ed.) 1969: *The Roman Villa in Britain*, London: Routledge & Kegan Paul.
- Roach Smith, C. 1844: "Remains of some Roman buildings in the church-field at Snodland in Kent", *Archaeol. J.* 1, 164.
- Roach Smith, C. 1848–80: *Collectanea Antiqua, Etchings and Notices of Ancient remains, Illustrative of the Habits, Customs, and History of Past Ages*, 7 vols, London: J. R. Smith.
- Roach Smith, C. 1849: "Further notes in connexion with the preceding paper", *J. Brit. Archaeol. Assoc.* 4, 45-49.
- Roach Smith, C. 1852: *Report on Excavations Made on the Site of the Roman Castrum at Lymne, in Kent, in 1850*, London: T. Richards.
- Roach Smith, C. 1876: "On a Roman villa near Maidstone", *Arch. Cant.* 10, 163-172.
- Robertson, I. 2008: *The Roman Villa at Blacksmith's Corner, Walberton, West Sussex: An Interim Report on the 2008 Excavations*, Worthing Archaeological Society unpublished report.
- Robinson, D. M., and Graham J. W. 1938: *The Hellenic House. A Study on the Houses Found at Olynthus with a Detailed Account of those Excavated in 1931 and 1934, Excavations at Olynthus, VIII*, Johns Hopkins University Studies in Archaeology 25, Baltimore-London-Oxford: Johns Hopkins.

Bibliography

- Rogers, A. 2011: *Late Roman Towns in Britain: Rethinking Change and Decline*, Cambridge: Cambridge University Press.
- Rook, T. 1978: "The Development and operation of Roman hypocausted baths", *Journ. Archaeol. Sci.* 5, 269-282.
- Rook, T. 1992: *Roman Baths in Britain*, Princes Risborough: Shire Publications.
- Rooke, H. 1779: "Description of two Roman camps in Gloucestershire", *Archaeologia* 5, 207-214.
- Rowsome, P. 1999: "The Huggin Hill baths and bathing in London: barometer of the town's changing circumstances?", in DeLaine, & Johnston (eds), 263-277.
- Roymans, N. and Derks, T. (eds) 2011: *Villa Landscapes in the Roman North: Economy, Culture, and Life-styles*, Amsterdam: Amsterdam University Press.
- Roymans, N and Derks, T. 2011: "Studying Roman villa in landscapes in the 21st century. A multi-dimensional approach", in Roymans & Derks (eds), 1-44.
- Rudling, D. 1983a: "Further investigations of a Roman villa at Goring, West Sussex", *BIALond* 20, 87-89.
- Rudling, D. 1983b: "Worthing College, Goring (TQ 105 038)", *Sussex Arch. Soc. Newsletter* 39, 323.
- Rudling, D. 1984a: "Worthing College, Goring, West Sussex", *Sussex Arch. Soc. Newsletter* 42, 364.
- Rudling, D. 1984b: "Excavations in Tarrant Street, Arundel, West Sussex", *Univ. London Inst. Archaeol. Bull.* 21, 45-47.
- Rudling, D. 1985: "Excavations on the site of the Southwick Roman villa, 1965 and 1981", *Sussex Arch. Coll.* 123, 73-84.
- Rudling, D. 1986: "The excavation of a Roman tiler on Great Cansiron Farm, Hartfield, East Sussex", *Britannia* 17, 191-230.

Bibliography

- Rudling, D. 1988a: "Excavation at Beddingham Roman villa", *Sussex Arch. Soc. Newsletter* 53, 4.
- Rudling, D. 1988b: "Field archaeology fieldwork, 1987", *Sussex Arch. Soc. Newsletter* 54, 10.
- Rudling, D. 1990: "Excavation at Beddingham villa, 1989", *Sussex Arch. Soc. Newsletter* 60, 9.
- Rudling, D. 1997: "Round 'house' to villa: the Beddingham and Watergate villas", in Friendship-Taylor & Friendship-Taylor (eds), 1-8.
- Rudling, D. 1998: "The development of Roman villas in Sussex", *Sussex Arch. Coll.* 136, 41-65.
- Rudling, D. 2003a: "A tale of two villas: Beddingham and Barcombe", *ARA* 15, 10-15.
- Rudling, D. 2003b: "Roman rural settlement in Sussex: continuity and change", in Rudling (ed.), 111-126.
- Rudling, D. (ed.) 2003: *Archaeology of Sussex to AD 2000*, King's Lynn: Heritage Marketing & Publications on behalf of the Centre for Continuing Education, University of Sussex.
- Rudling, D. and Butler, C. 2002: "Barcombe Roman villa", *Current Archaeology* 179, 486-489.
- Rudling, D., Butler, C. and Wallace, R. 2010: "Barcombe Roman villa", *British Archaeology* 111, 22-27.
- Rudling, D. and Leigh, G. J. 2013, "Southwick Roman villa. Its discovery, excavation, public display and eventual loss—a cautionary tale", *Sussex Arch. Coll.* 151, 27-52.
- Russell, J. 1985: "The Keynsham Roman villa and its hexagonal *triclinia*", *Bristol and Avon Arch.* 4, 6-12.
- Russell, M. 2006: *Roman Sussex*, Stroud, Gloucestershire: Tempus.

Bibliography

- Saliou, C. 2004: “Bains d’été et bains d’hiver: Antioche dans l’Empire Romain”, in Cabouret, B., Gatier, P. L. and Saliou C., *Antioche de Syrie. Histoire, Images et Trace de la Ville Antique*, Actes du Colloque, Lyon: De Boccard, 221-238.
- Salmon, N. 1736: *Antiquities of Surrey: Collected from the Most Antient Records*, London: Printed for the author.
- Salway, P. 1993: *The Oxford Illustrated History of Roman Britain*, Oxford: Oxford University Press.
- Salzman, L. F. (ed.) 1935: *The Victoria History of the County of Sussex*, vol. 3, London: Oxford University Press.
- Salzman, L. F. 1946: “A history of the Sussex Archaeological Society”, *Sussex Arch. Coll.* 85, 3-76.
- Sărățeanu-Müller, F. 2000: *Die gallo-römische Villenanlage von Reinheim, Saarpfalz*, Homburg: Blätter für Geschichte und Volkskunde, Sonderheft.
- Sărățeanu-Müller, F. 2011: “The Roman villa complex of Reinheim, Germany”, in Roymans & Derks (eds), 301-315.
- Saville, A. (ed.) 1984: *Archaeology in Gloucestershire: From the Earliest Hunters to the Industrial Age*, Cheltenham: Jointly published by Cheltenham Art Gallery and Museums, and the Bristol and Gloucestershire Archaeological Society.
- Scarth, H. M. 1852: “On the Roman remains discovered at Bath”, *PSANHS* 3, 108-113.
- Scott, E. 1993: *A Gazetteer of Roman Villas in Roman Britain*, Leicester: Leicester University Archaeological Research Centre, School of Archaeological Studies, University of Leicester.
- Scott, L. 1938: “The Roman villa at Angmering”, *Sussex Arch. Coll.* 79, 3-45.
- Scott, L. 1939: “Angmering Roman villa. Report of the excavations in 1938”, *Sussex Arch. Coll.* 80, 89-93.

Bibliography

- Scott, S. 2000: *Art and Society in Fourth-century Britain. Villa Mosaics in Context*, Oxford Committee for Archaeology Monograph 53, Oxford: Oxford University School of Archaeology.
- Scott, S. 2012: “Fourth-century villas in the Coln Valley, Gloucestershire: identifying patrons and viewers”, in S. Birk and B. Poulsen (eds), *Patrons and Viewers in Late Antiquity*, Aarhus studies in Mediterranean antiquity 10, Aarhus: Aarhus University Press.
- Scott, S. 2013a: “Samuel Lysons and his circle: art, science and the remains of Roman Britain”, *BHA* 23, 2, 1-22.
- Scott, S. 2013b: “Pioneers, publishers and the dissemination of archaeological knowledge: a study of publishing in British archaeology 1816–1851”, *Internet Archaeology* 35. doi: 10.11141/ia.35.1
- Scott, S. 2014: “Britain in the classical world: Samuel Lysons and the art of Roman Britain 1780–1820”, *CRJ* 6, 2, 294-337.
- Scott-Garrett, C. 1959: “Roman iron mine in Lydney Park”, *TBGAS* 78, 86-91.
- Scott-Garrett, C. and Harris, F. H. 1938: “Chesters Roman villa, Woolaston, Gloucestershire”, *Arch. Cambrensis* 93, 93-125.
- Sgobbo, I. 1928: “Terme flegree ed origine delle terme romana”, in anonymous, *Atti del I Congresso di Studi Romani*, Roma: Istituto di Studi Romani, 186-194.
- Sheldon, H., Corti, G., Green, D. and Tyers, P. 1993: “The distribution of villas in Kent, Surrey and Sussex: some preliminary findings from a survey”, *London Archaeologist*, 7.2, 40-46.
- Shepherd, J. D. 1988: “The glass”, 252-256, in G. Brodribb and H. Cleere, “The ‘Classis Britannica’ bath-house at Beauport Park, East Sussex”, *Britannia* 19, 217-274.
- Sibthorpe, A. 1831: “Roman pavement at Worplesdon, in Surrey”, *Archaeologia* 23, 398-403.

Bibliography

- Skeates, R. 2010: *An Archaeology of the Senses: Prehistoric Malta*, Oxford: Oxford University Press.
- Smith, A. H. V. 1985: "Provenance of coal from Roman site at Northfleet, Kent", *KAR* 79, 221-222.
- Smith, B. 1849: "Proceedings of the Association: A note from Mr Cobb on Sutton Baron", *J. Brit. Archaeol. Assoc.* 4, 68-69.
- Smith, D. J. 1969: "The mosaic pavements", in Rivet (ed.), 75-125.
- Smith, D. J. 1975: "Roman mosaics in Britain before the Fourth Century", in H. Stern and M. Le Glay (eds), *La Mosaïque Gréco-Romaine II: Ile Colloque International pour l'Étude de la Mosaïque Antique, Vienne, 30 Août-4 Septembre 1971*, Paris: A. & J. Picard, 269-290.
- Smith, D. J. 1978: "Regional aspects of the winged corridor villa in Britain", in Todd (ed.), 117-147.
- Smith, J. T. 1978: "Villas as a key to social structure", in Todd (ed.), 149-185.
- Smith, J. T. 1983: "Flight of capital or flight of fancy?", *Oxford Journ. Archaeol.* 2, 2, 239-246,
- Smith, J. T. 1985: "Barnsley Park villa: its interpretation and implications", *Oxford Journ. Archaeol.* 4, 3, 341-351.
- Smith, R. F. 1987: *Roadside Settlements in Lowland Roman Britain: A Gazetteer and Study of their Origins, Growth and Decline, Property Boundaries, and Cemeteries*, BAR British Series 157, Oxford: B.A.R.
- Smith, V. 1980: "Thameside Archaeological Group", *KAR* 62 (winter), 43-44.
- Smythe, C. T. 1842: "Account of various Roman remains discovered in a field called the Slade, in the Parish of Boughton Monchelsea, in Kent", *Archaeologia* 29, 414-420.
- Solomon, M. R. 2002: *Consumer Behaviour. Buying, Having and Being*, 5th edition, Toronto: Prentice Hall.

Bibliography

- Spry, N. 2012: *An Archaeological Watching Brief at No 1 Ashwood Way, Hucclecote, Gloucester. June 2012*, Gloucester and District Archaeological Research Group unpublished report.
- Squire, M. (ed.) 2016: *Sight and the Ancient Senses*, Senses in antiquity, London; New York: Routledge.
- Standing, G. 2010: "Beyond the villa: excavations at Southwick, West Sussex, 2008", *Sussex Arch. Coll.* 148, 247-261.
- Standing, G. 2011: "Further beyond the villa: Southwick revisited, 1933 and 2008", *Sussex Arch. Coll.* 149, 221-222.
- Steadman, W. H. 1913: "Excavations on a Roman site at Northfleet", *The Dartford Antiquary* 1, 4-15.
- Stephens, G. R. 1985: "Military aqueducts in Roman Britain", *Archaeol. J.* 142, 216-236.
- Stephenson, M. 1915: "A Roman building found at Compton", *Surrey Arch. Coll.* 28, 41-50.
- Stephenson, M. 1916: "Coins found at Abinger and presented to the museum by Lord Farrer", *Surrey Arch. Coll.* 29, 154-155.
- Stern, H. 1957: *Recueil Général des Mosaïques de la Gaule, I. Gaule-Belgique 1, Partie Ouest*, Paris: Centre National de la Recherche Scientifique.
- Stobbs, G. 1999: "All fired up! Testing the reconstructed baths at Wallsend", *Arbeia Magazine* 20, 12-15.
- Stukeley, W. 1734: *Of the Gout*, London: J. Roberts.
- Stukeley, W. 1761: "The structure and use of Roman baths in England", unpublished paper, Society of Antiquarians, Minute Books, viii (typescript), 677-678.
- Stukey, J. 1742: *A Compleat History of Somersetsshire*, 9 vols, Sherborne: publisher unknown.

Bibliography

- Summit, J. 2007: "Leland's Itinerary and the remains of the medieval past", in G. McMullan and D. Matthews, *Reading the Medieval in Early Modern England*, Cambridge: Cambridge University Press, 159-76
- Sutton, T. 1952: "The Eastbourne Roman villa", *Sussex Arch. Coll.* 90, 1-11.
- Sutton, T., Gilbert, R. and Stevens, L. 1973: *The Eastbourne Roman Villa*, Eastbourne: Crain Services.
- Suzuki, S. 2000: *The Quoit Brooch Style and Anglo-Saxon Settlement: A Casting and Recasting of Cultural Identity Symbols*, Woodbridge, Suffolk, UK; Rochester, N.Y.: Boydell Press.
- Sweet, R. 2004: *Antiquaries. The Discovery of the Past in Eighteenth-Century Britain*, London: Hambledon and London.
- Sweet, R. 2007: "Founders and Fellows", in Gaimster *et al.* (eds), 53-67.
- Tabor, J. 1717: "On a tessellated pavement and other Roman antiquities near Eastbourne", *Phil. Trans. Roy. Soc. London* 351, 549.
- Tang, B. 2005: *Delos, Carthage, Ampurias: The Housing of Three Mediterranean Trading Centres*, Rome: L'Erma di Bretschneider.
- Tatton-Brown, T. 2006: "A new survey of the fabric of the Church of the Holy Trinity, Bosham, West Sussex", *Sussex Arch. Coll.* 144, 129-154.
- Taylor, D. J. A. 2003: "An analysis of Building 3", in J. Manley and D. Rudkin, *Facing the Palace: Excavations in Front of the Roman Palace at Fishbourne, Sussex, UK 1995-99*, Lewes: Sussex Archaeological Society, 20-29.
- Taylor, J. 2011: "The idea of the villa. Reassessing villa development in south-east Britain", in Roymans & Derks (eds), 179-194.
- Taylor, H. M. 1969: "Lyninge Churches (TR 161408)", *Archaeol. J.* 126, 257-260.
- Taylor, H. M. and Taylor J. 1965: *Anglo-Saxon Architecture*, vol. 1, Cambridge: Cambridge University Press.

Bibliography

- Taylor, M. and Hill, D. 2002: "An experiment in the manufacture of Roman window glass", *ARA* 13, 19.
- Taylor, M. V. 1932: "A history of Kent. Part IV. Country houses and other building", in Page (ed.), 102-126.
- Taylor, M. V. 1962: "Romano-British sculpture from Dorn", *TBGAS* 81, 194-195.
- Taylor, M. V. and Collingwood, R. G. 1925: "Roman Britain in 1925", *JRS* 15, 223-252.
- Tester, P. J. 1959: "Cobham Park: interim report on the society's excavations, 1959", *Arch. Cant.* 73, 224-225.
- Tester, P. J. 1960: "Cobham Park excavations, 1960", *Arch. Cant.* 74, 177-178.
- Tester, P. J. 1961: "The Roman villa in Cobham Park, near Rochester", *Arch. Cant.* 76, 88-109.
- Tester, P. J. and Caiger, J. E. L. 1954: "Excavations on the site of a Romano-British settlement in Joyden's Wood, near Bexley", *Arch. Cant.* 68, 167-183.
- Thébert, Y. 1985: "Vie privée et architecture domestique en Afrique romaine", in P. Brown, E. Patlagean, M. Rouche, Y. Thébert and P. Veyne, *Histoire de la Vie Privée, 1: De l'Empire Romain à l'An Mil*, Paris: Seuil, 233-309.
- Thébert, Y. 2003: *Thermes Romains d'Afrique du Nord et leur Contexte Méditerranéen: Études d'Histoire et d'Archéologie*, Bibliothèque des écoles françaises d'Athènes et de Rome fasc. 315, Rome: École française de Rome.
- Thill, G. 1967: "Nouvelles découverts autour d'une villa romaine à Mersch", *Hémecht* 19, 477-484.
- Thomas, E. 2007: *Monumentality and the Roman Empire: Architecture in the Antonine Age*, Oxford: Oxford University Press.
- Thompson, F. H. 1955: "A Graffito from the Roman Villa at Witcombe, near Gloucester", *TBGAS* 74, 171-172.

Bibliography

- Thompson, F. H. 1983: "Excavations at Bigberry Camp, near Canterbury 1978–80", *Antiq. Journ.* 63, 237-278.
- Thorpe, J. 1769: *Registrum Roffense: Or, a Collection of Ancient Records, Charters, and Instruments of Divers Kinds, Necessary for Illustrating the Ecclesiastical History and Antiquities of the Diocese and Cathedral Church of Rochester*, London: W. and J. Richardson.
- Thorpe, J. 1788: *Custumale Roffense: From the Original Manuscript in the Archives of the Dean and Chapter of Rochester: To which are Added, Memorials of that Cathedral Church; And some Account of the Remains of Churches, Chapels, Chantries, etc.*, London: John Nichols.
- Thorpe, J. 1780–90: "Illustrations of several Antiquities in Kent which have hitherto remained undescribed" in J. Nichols, *Bibliotheca Topographica Britannica*, 10 vols, London: John Nichols, vol. 1, 1-61.
- Timby, J. R. 1998: *Excavations at Kingscote and Wycomb, Gloucestershire*, Cirencester: Cotswold Archaeological Trust.
- Todd, M. 1970: "The small towns of Roman Britain", *Britannia* 1, 114-130.
- Todd, M. (ed.) 1978: *Studies in the Romano-British Villa*, Leicester: Leicester University Press.
- Todd, M. 2005: "Baths or baptisteries? Holcombe, Lufton and their analogues", *Oxford Journ. Archaeol.* 24, 307-311.
- Toner, J. (ed.) 2014: *A Cultural History of the Senses in Antiquity*, Cultural History of the Senses 1, London; New York: Bloomsbury Academic.
- Tosi, G. 1976: "La villa romana nelle *Epistulae ad Lucillum* di L. Anneo Seneca", in *Aquileia nostra* 1, Aquileia, 218-226.
- Toulmin-Smith, L. (ed.) 1907: *The Itinerary of John Leland in or about the Years 1535–1543*, London: G. Bell and Sons, Ltd.

Bibliography

- Toynbee, J. M. C. 1971: *Death and Burial in the Roman World*, New York: Cornell University Press.
- Toynbee, J. M. C. 1979: "The statuette of Fortuna", 181-183, in A. Down, *Chichester Excavations IV*, Chichester: Phillimore for Chichester Excavations Committee.
- Trow, S. 1988: "Excavations at Ditches hillfort, North Cerney, Gloucestershire. 1982-3", *TBGAS* 106, 19-86.
- Trow, S., James S. and Moore, T. 2008: *Becoming Roman, Being Gallic, Staying British: Research and Excavations at Ditches Hillfort and Villa 1984-2006*, Oxford: Oxbow.
- Trümper, M. 2010: "Bathing culture in Hellenistic domestic architecture", in S. Ladstätter and V. Scheibelreiter (eds), *Städtisches Wohnen im östlichen Mittelmeerraum 4. Jh. v. Chr.-1. Jh. n. Chr.: Akten des internationalen Kolloquiums vom 24.-27. Oktober 2007 an der Österreichischen Akademie der Wissenschaften*, Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 529-571.
- Trümper, M. 2013: "Urban context of Greek public baths", in Lucore & Trümper (eds), 33-72.
- Tsiolis, V. 2013: "The baths at *Fregellae* and the transition from *balaneion* to *balneum*", in Lucore & Trümper (eds), 89-111.
- Turner, D. 2002: "Farnham Quarry: evaluation 2001", *SASB* 358, 12.
- Tyler, D. and Tyler, A. 1995: "Excavations at the Romano-British bath-house, Poverest Road, Orpington 1993", *ODAS Archives* 17.2, 23-46.
- Van Arsdell, R. D. 1994: *The Coinage of the Dobunni. Money Supply and Coin Circulation in Dobunnic Territory*, Studies in Celtic Coinage 1, Oxford University Committee for Arcaeology Monograph 38, Oxford: Oxford University Committee for Archaeology.
- Van der Veen, M. 2007: "Food as an instrument of social change: feasting in Iron Age and early Roman Southern Britain", in K. C. Twiss (ed.), *The Archaeology of*

Bibliography

- Food and Identity*, Occasional paper, Southern Illinois University Carbondale, Center for Archaeological Investigations 34, Carbondale: Center for Archaeological Investigations, Southern Illinois University Carbondale, 117-129.
- Van der Veen, M. 2008: "Food as embodied material culture: diversity and change in plant food consumption in Roman Britain", *JRA* 21, 83-109.
- Veal, R. 2012: "From context to economy: charcoal as an archaeological interpretative tool. A case study from Pompeii (3rd c. B.C.–A.C. 79)", in I. Schrüfer-Kolb, *More than just Numbers? The Role of Science in Roman Archaeology*, JRA Supplementary Series 91, Portsmouth, Rhode Island: Journal of Roman Archaeology, 19-51.
- Vipard, P. 2009: "L'usage du verre à vitre dans l'architecture romaine du Haut Empire", in S. Lagabrielle and M. Philippe (eds), *Verre et Fenêtre de l'Antiquité au XVIIIe Siècle: Actes du Premier Colloque International de l'Association Verre et Histoire, Paris–La Défense/Versailles, 13–15 Octobre 2005*, Les Cahiers de Verre & Histoire 1, Paris: Verre et Histoire, 3-10.
- Wacher, J. 1995: *The Towns of Roman Britain*, 2nd edition, Berkeley: University of California Press.
- Waldron, T., Taylor G. M. and Rudling D. 1999: "Sexing of Romano-British baby burials from the Beddingham and Bignor villas", *Sussex Arch. Coll.* 137, 71-79.
- Walker, B. F. 1986: "Boughspring: a moderately sophisticated Romanised farmhouse", *Glevensis* 20, 37-40.
- Walsh, R. 1970: "Ash Romano-British villa. An interim report", *KAR* 20, 13-20.
- Walters, B. 2000: "Chedworth: Roman villa or sanctuary? A re-interpretation of a well-known site", *ARA* 9, 10-13.
- Walthew, C. V. 1975: "The town house and the villa house in Roman Britain", *Britannia* 6, 189-205.

Bibliography

- Ward, C. R. 1934a: "Discovery at Southwick Roman villa", *SNQ* 5, 52.
- Ward, C. R. 1934b: "Roman villa at Southwick, new discoveries, 1933–4", *SNQ* 5, 90-91.
- Ward-Perkins, B. 1998: 'The cities', in A. Cameron and P. Garnsey (eds), *Cambridge Ancient History, Vol. 13: The Late Empire AD 337–425*, Cambridge: Cambridge University Press, 371-410.
- Ward-Perkins, J. B. and Toynbee, J. M. C. 1949: "The Hunting Baths at Leptis Magna", *Archaeologia* 93, 165-195.
- Wardle, A. 2008: "*Bene lava*: bathing in Roman London", in Clark *et al.* (eds), 201-211.
- Waring, J. and Corry, H. 2014: "Tile and plaster samples", in D. Wilson, A. Bagnall, and B. Taylor, *Report on the Excavation of a Romano-British Site in Wortley, South Gloucestershire*, BAR British Series 591, Oxford: B.A.R., 182-184.
- Warman, E. 1965a: "West Kent Border Archaeological Group", *KAR* 1, 16.
- Warman, E. 1965b, "West Kent Border Archaeological Group", *KAR* 2, 15.
- Warner, R. 1801: *History of Bath*, Bath: printed by R. Cruttwell.
- Warnicke, R. M 1973: *William Lambarde. Elizabethan Antiquary*, London: Phillimore.
- Webb, G. B. 1858: "Inaugural and other General Meetings of the Society, during the years 1854 and 1855", *Surrey Arch. Coll.* 1, i-xxvi.
- Webster, G. 1959: "Roman windows and grills", *Antiquity* 33, 10-15.
- Webster, G. 1967: "Excavations at the Romano-British villa in Barnsley Park, Cirencester, 1961–66. An interim report", *TBGAS* 86, 74-87.
- Webster, G. 1983: "The function of Chedworth Roman 'villa'", *TBGAS* 101, 5-20.

Bibliography

- Webster, G. 1981: "The excavations of a Romano-British rural establishment at Barnsley Park, Gloucestershire, 1961–79. Part I, c. A.D. 140–360", *TBGAS* 99, 21-77.
- Webster, G., Fowler, P., Noddle, B. and Smith, L. 1985: "The excavations of a Romano-British rural establishment at Barnsley Park, Gloucestershire, 1961–1979. Part III", *TBGAS* 103, 73-100.
- Webster, G. and Smith, L. 1982: "The excavations of a Romano-British rural establishment at Barnsley Park, Gloucestershire, 1961–79. Part II, c. A.D. 360–400 +", *TBGAS* 100, 65-189.
- Webster, G. and Smith, L. 1987: "Reply to J. T. Smith's suggested re-interpretation of Barnsley Park villa", *Oxford Journ. Archaeol.* 6 (1), 69-89.
- Webster, J. 1996: "Roman imperialism and the 'post-imperial age'", in Webster & Cooper (eds), 111-23.
- Webster, J. 2001: "Creolising Roman Britain", *AJA* 105, 209-25.
- Webster, J., and Cooper, N. (eds) 1996: *Roman Imperialism: Post-colonial Perspectives: Proceedings of a Symposium Held at Leicester University in November 1994*, Leicester: School of Archaeological Studies, University of Leicester.
- Welch, M. 2007: "Anglo-Saxon Kent", in Williams (ed.), 187-248.
- Wessex Archaeology 2006a: *Withington, Gloucestershire. Archaeological Evaluation and Assessment of the Results*, Salisbury: Wessex Archaeology Limited.
- Wessex Archaeology 2006b: *Alfoldean, Slinfold, West Sussex. Archaeological Evaluation and Assessment of the Results*, Salisbury: Wessex Archaeology Limited.
- Wessex Archaeology 2008: *Coberley Villa, Gloucestershire Archaeological Evaluation and Assessment of Results*, Salisbury: Wessex Archaeology Limited.

Bibliography

- Westherall, D. 1998: "The growth of archaeological societies", in V. Brand (ed.), *The Study of the Past in the Victorian Age*, Oxbow Monograph 73, Oxford: Oxbow, 21-34.
- Wheeler, R. E. M. & Wheeler T. V. 1932: *Report of the Excavations of the Prehistoric, Roman and Post-Roman Site in Lydney Park, Gloucestershire*, Reports of the Research Committee of the Society of Antiquaries of London 9, Oxford: Oxford University Press for the Society of Antiquaries.
- White, R. 1991: *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650–1815*, Cambridge: Cambridge University Press.
- White, R. and Barker, P. 1998: *Wroxeter: Life and Death of a Roman City*, Stroud: Tempus.
- Whiting, W. 1926: "The Roman cemeteries at Ospringe: description of the finds concluded", *Arch. Cant.* 38, 123-151.
- Whiting, W., Hawley, W. and May, T. 1931: *Report on the Excavation of the Roman Cemetery at Ospringe, Kent*, Reports of the Research Committee of the Society of Antiquaries of London 8, London: Society of Antiquaries.
- Wilkinson, P. 1994: "Excavations on the White Cliffs Experience site, Dover, 1988–91", *Arch. Cant.* 114, 51-148.
- Wilkinson, P. 1997: *Swale Archaeological Survey. Interim Report on the Roman Villa at Deerton Street, Teynham, Kent*, Faversham: The Kent Archaeological Field School.
- Wilkinson, P. 2000: *The Swale District. An Archaeological Survey. March 2000. Foreword by Professor Alan Everitt*, Faversham: The Kent Archaeological Field School.
- Wilkinson, P. 2009: *An Archaeological Investigation of the Roman Aisled Stone Building at Hog Brook, Deerton Street, Faversham, Kent. 2004–5*, Faversham: The Kent Archaeological Field School.

Bibliography

- Wilkinson, P. 2011: "An octagonal bath-house at Bax Farm, Teynham", *JRA* 24, 407-422.
- Wilkinson, P. 2012: *An archaeological investigation of the Roman octagonal bath-house at Bax Farm, Teynham, Kent. 2006 and 2009*, Faversham: The Kent Archaeological Field School.
- Wilkinson, P. 2013: *The Roman Religious Sanctuary at 'Blacklands', School Farm, Graveney Road, Faversham, Kent*, Faversham: The Kent Archaeological Field School.
- Wilkinson, P. 2016: "The investigation of a substantial Roman building at Abbey Barns in Faversham", *KAFSN* 11, unpagged.
- Williams, D. 2002: "Purbeck marble in Roman and Medieval Britain", in D. A. Hinton (ed.), *Purbeck Papers*, Oxford: Oxbow, 126-131.
- Williams, J. H. 1971a: "Roman building materials in South-East England", *Britannia* 2, 166-195.
- Williams, J. H. 1971b: "Roman building materials in the South-West", *TBGAS* 90, 95-119.
- Williams, J. H. 2003: "New light on Roman Kent", *JRA* 16, 219-236.
- Williams, J. H. 2007 (ed.): *The archaeology of Kent to AD 800*, Kent History Project 8, Woodbridge; Rochester, N.Y.: The Boydell Press and Kent County Council.
- Williams, T. 2003: "Water and the Roman city: life in Roman London", in P. Wilson (ed.), *The Archaeology of Roman Towns: Studies in Honour of John S. Wacher*, Oxford: Oxbow, 242-250.
- Wilson, A. E. 1947: "Angmering Roman villa", *Sussex Arch. Coll.* 86, 1-21.
- Wilson, D. R. 1963: "Roman Britain in 1962: sites explored", *JRS* 53, 125-159.
- Wilson, D. R. 1970: "Roman Britain in 1969: sites explored", *Britannia* 1, 269-305.
- Wilson, D. R. 1975: "Roman Britain in 1974: sites explored", *Britannia* 4, 220-283.

Bibliography

- Wilson, D. 1986: "Excavation at Wortley near Wotton-Under-Edge. First interim report-1985", *Glevensis* 20, 41-44.
- Wilson, D. 1988: "Excavation at Wortley-Third interim report 1987", *Glevensis* 22, 47-57.
- Wilson, D., Bagnall, A. and Taylor, B. 2014: *Report on the Excavation of a Romano-British Site in Wortley, South Gloucestershire*, BAR British Series 591, Oxford: B.A.R.
- Wilson, P. 1999: "Military and civilian baths at Catterick (*Cataractonium*)", in Delaine & Johnston (eds), 239-244.
- Wilson, P. (ed.) 2003: *The Archaeology of Roman Towns: Studies in Honor of John S. Wacher*, Oxford: Oxbow.
- Winbolt, S. E. 1923: "Alfoldean Roman station: first report, 1922", *Sussex Arch. Coll.* 64, 81-104.
- Winbolt, S. E. 1924 "Alfoldean Roman station: second report (on 1923)", *Sussex Arch. Coll.* 65, 122-157.
- Winbolt, S. E. 1925: *Roman Folkestone: A Record of Excavation of Roman Villas at East Wear Bay, with Speculations and Historical Sketches on Related Subjects*, London: Methuen & Co.
- Winbolt, S. E. 1926a: "Queries. Southwick Roman villa site", *SNQ* 1, 26.
- Winbolt S. E. 1926b: "Two notes on Roman Sussex", *Sussex Arch. Coll.* 67, 85-88.
- Winbolt, S. E. 1927: "Excavations at Hardham Camp, Pulborough", *Sussex Arch. Coll.* 68, 122-127.
- Winbolt, S. E. 1932: "Roman villa at Southwick", *Sussex Arch. Coll.* 73, 13-32.
- Winbolt, S. E. 1935: "Romano-British Sussex" in Salzman (ed.), 1-70.
- Winbolt, S. E. and Goodchild, R. G. 1937: "A Roman villa at Lickfold, Wiggonholt", *Sussex Arch. Coll.* 78, 13-36.

Bibliography

- Winbolt, S. E. and Goodchild, R. G. 1940: "The Roman villa at Lickfold, Wiggonholt"
Sussex Arch. Coll. 81, 55-67.
- Winbolt, S. E. and Herbert, G. 1930: *The Roman Villa at Bignor, Sussex*, 2nd edition,
Chichester: Phillimore.
- Witcher, R. 2000: "Globalisation and Roman imperialism: perspectives on identities in
Roman Italy", in E. Herring and K. Lomas (eds), *The Emergence of State
Identities in Italy in the 1st Millennium BC*, London: Accordia Research
Institute, 213-225.
- Witts, G.B. 1883: *Archaeological Handbook of Gloucestershire*, Cheltenham: G.
Norman.
- Witts, P. A. 2005: *Mosaics in Roman Britain: Stories in Stone*, Stroud: Tempus.
- Wolseley, G. R., Smith, R. A. and Hawley, W. 1927: "Prehistoric and Roman
settlement on Park Brow", *Archaeologia* 76, 1-40.
- Woodward, A. and Leach, P. 1993: *The Uley Shrines. Excavation of a Ritual Complex
on West Hill, Uley, Gloucestershire: 1977-9*, English Heritage Archaeological
Report 17, London: English Heritage in association with British Museum Press.
- Woolf, G. 1998: *Becoming Roman. The Origins of Provincial Civilization in Gaul*,
Cambridge: Cambridge University Press.
- Worssam B. C. and Tatton-Brown T. 1993: "Kentish Rag and other Kentish building
stones", *Arch. Cant.* 112, 93-125.
- Wright, R. P. 1957: "Roman Britain in 1956: sites explored", *JRS* 47, 198-234.
- Wright, R. P. 1959: "Roman Britain in 1958: sites explored", *JRS* 49, 102-135.
- Wright, R. P. 1961: "Roman Britain in 1960: sites explored", *JRS* 51, 157-191.
- Wright, R. P. 1962: "Roman Britain in 1961: sites explored", *JRS* 52, 160-199.
- Wright, R. P. 1985: "A revised restoration of the inscription on the mosaic pavement
found in the temple of Lydney Park, Gloucestershire", *Britannia* 16, 248-249.

Bibliography

- Wright, R. P. and Hassall, M. W. C. 1971: "Roman Britain in 1970: II. Inscriptions", *Britannia* 2, 289-304.
- Wright, T. 1854: *Wanderings of an Antiquary*, London: J.B. Nichols.
- Yegül, F. 1992: *Baths and Bathing in Classical Antiquity*, New York: The MIT Press.
- Yegül, F. 2013: "Thermal matters: intersected legacies of Greek and Roman baths and bathing culture", in Lucore & Trümper (eds), 73-88.
- Yegül, F. and Couch, T. 2003: "Building a Roman bath for the cameras", *JRA* 16, 153-177.
- Young, A. 2003: "Wickwar", 287, in J. Wills 2003, "Archaeological Review 2002", *TBGAS* 121, 267-289.
- Younge, J. M. 1960: *Romano-British Villa Bath-Suites and Bath Houses*, unpublished M.A. thesis, University of Leeds.
- Yourcenar, M. 1992: *That Mighty Sculptor, Time*, trans. Walter Kaiser, New York: Farrar, Straus and Giroux.
- Zienkiewicz, J. D. 1986: *The Legionary Fortress Baths at Caerleon*, 2 vols, Cardiff: National Museum of Wales/Cadw.