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KNOLE: SPORT, LABOUR, AND SOCIAL CONTEST

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Abstract. This chapter presents the results of the topographic and geophysical survey undertaken at Knole, Kent, in August 2013. Drawing upon a variety of primary and secondary sources, these results are situated within the context of the long-term history of the Knole landscape and its deer park. A former archiepiscopal property, and still an active deer park and private residence, Knole may appear distinctive among the other National Trust properties surveyed in this volume. However, deer parks were once also crucial elements of the landscapes attached to Bodiam, Ightham, and Scotney. Knole's particular history and landscape demonstrate the changing role of deer parks as scenes of sport, labour, and the negotiation of social hierarchy from the late medieval period onwards.

Introduction

To a contemporary visitor, Knole House and its surrounding landscape look very different from the other National Trust properties in this book (Figs 7.1 & 7.2). The vast house is now laid out around seven main courtyards, dwarfing the plans of Bodiam, Ightham and Scotney (Fig. 7.3). Walled gardens adjacent to the house enclose an area even larger than the house itself. Though Bodiam and Scotney, and possibly Ightham, were once associated with nearby deer parks, only Knole still maintains an active park – indeed the largest surviving medieval deer park in England. Set hard by the bustling market town of Sevenoaks, Knole is also the only property in the survey that still functions in part as a private residence. The Sackville Estate owns

most of the deer park and shares stewardship of the house with the National Trust (Fig. 7.4).

However distinctive it may appear today, Knole, like Bodiam, Ightham and Scotney, was a manorial property in the late medieval period. Indeed, construction of a manorial residence appears to have been underway when William Fiennes sold the property to Thomas Bourchier, Archbishop of Canterbury in 1456. Writers usually credit Bourchier with the consolidation of earlier works into a habitable residence and the foundation of the deer park. Bourchier's successors acquired Knole along with their archiepiscopal title until Henry VIII obliged Archbishop Cranmer to cede him the property in 1537. Knole remained a royal property, intermittently leased out to aristocratic residents, until Thomas Sackville (after many years of divided lease) acquired complete ownership of the property in 1604. Little of the exterior fabric of the building has been altered since Thomas's renovations in the first decade of the 17th century, and the Sackville name has been associated with Knole ever since.

Scholars have failed to reach a consensus on the chronology of development for particular aspects of the house, walled gardens, and surrounding deer park (for

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[1] The fieldwork report presented in this chapter was directed and supervised by Kristian Strutt and Dominic Barker and was conducted by 12-15 students from Northwestern University and the University of Southampton in summer 2013. The final survey results were written-up by Dominic Barker, Ryan Lash and Kristian Strutt. Ryan Lash collated and synthesised the 'grey literature', and developed the wider arguments on deer parks and hunting presented here. The chapter was edited and revised by Kristian Strutt and Matthew Johnson.

Fig. 7.1: The west frontage of Knole House dominated by the four turrets of the gatehouse tower of Green Court. Early etchings and geophysical results indicate that this area was once more elaborately designed with bowling greens and pathways. Photo by Ryan Lash.

recent accounts see Dixon 2008; Gregory 2010; Town 2010; Newman 2012: 337-49). Indeed, the divided stewardship of the property has meant that archaeological assessments commissioned by the Trust or the Sackville Estate have tended to focus research and discussion on only one or another of these three aspects of Knole. This chapter contextualises recent research alongside Knole's existing 'grey literature' and recent discussions of medieval deer parks. It is intended as a starting point for better integrating analyses of the house, park, and gardens.

As with the other sites in our study, the primary goal of the geophysical survey at Knole was to identify remains of late medieval activity at the property and to understand these in terms of lived experience and political ecology. The team applied a number of different techniques including topographic survey, magnetometry, earth resistance, and Ground Penetrating Radar (GPR). Largely, though not entirely, confined to the western area of the house and its two westernmost courtyards, that is the areas under the

Fig. 7.2: This view of Knole House and the surrounding garden wall from the north illustrates how much more expansive this property is from the others surveyed in this book. Photo by Matthew Johnson.
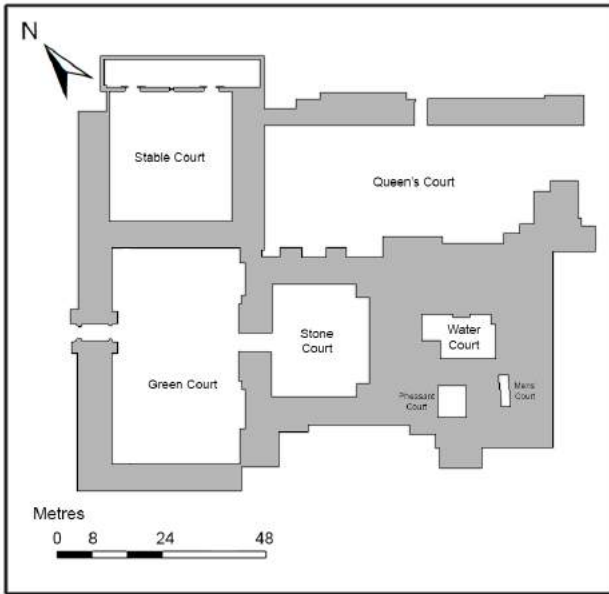
stewardship of the National Trust, our survey identified a number of features that merit further investigation. Most interestingly, GPR survey within the western outer court (Green Court) suggests the presence of sub-surface remains that may predate the construction of the courtyard. Additional investigation of this area, including open area excavation, could shed light on the ongoing debate concerning the origins of Green Court (Bridgman 1817: 149-50; Colvin 1963-82: 218; Faulkner 1970: 145-6; Gregory 2010: 76-8).

In addition to the geophysical and topographic surveys, the team conducted an informal survey of the deer park more broadly, guided in part by an earthwork survey commissioned by the Trustees of the Knole Park Estate in 2008 (Wright 2008). Identifying, dating, and even recognising earthworks within the deer park are difficult endeavours. However, juxtaposing survey results

Fig. 7.3: (Above) A simplified plan view showing the main courtyards of Knole House. Scholars have offered various interpretations of the structure's phasing with the date of Green Court as the major point of debate. GPR survey in 2013 identified a buried rectilinear feature within the courtyard. Future excavation of this feature could help to resolve the chronology of Green Court's construction. Drawing by Kayley McPhee.
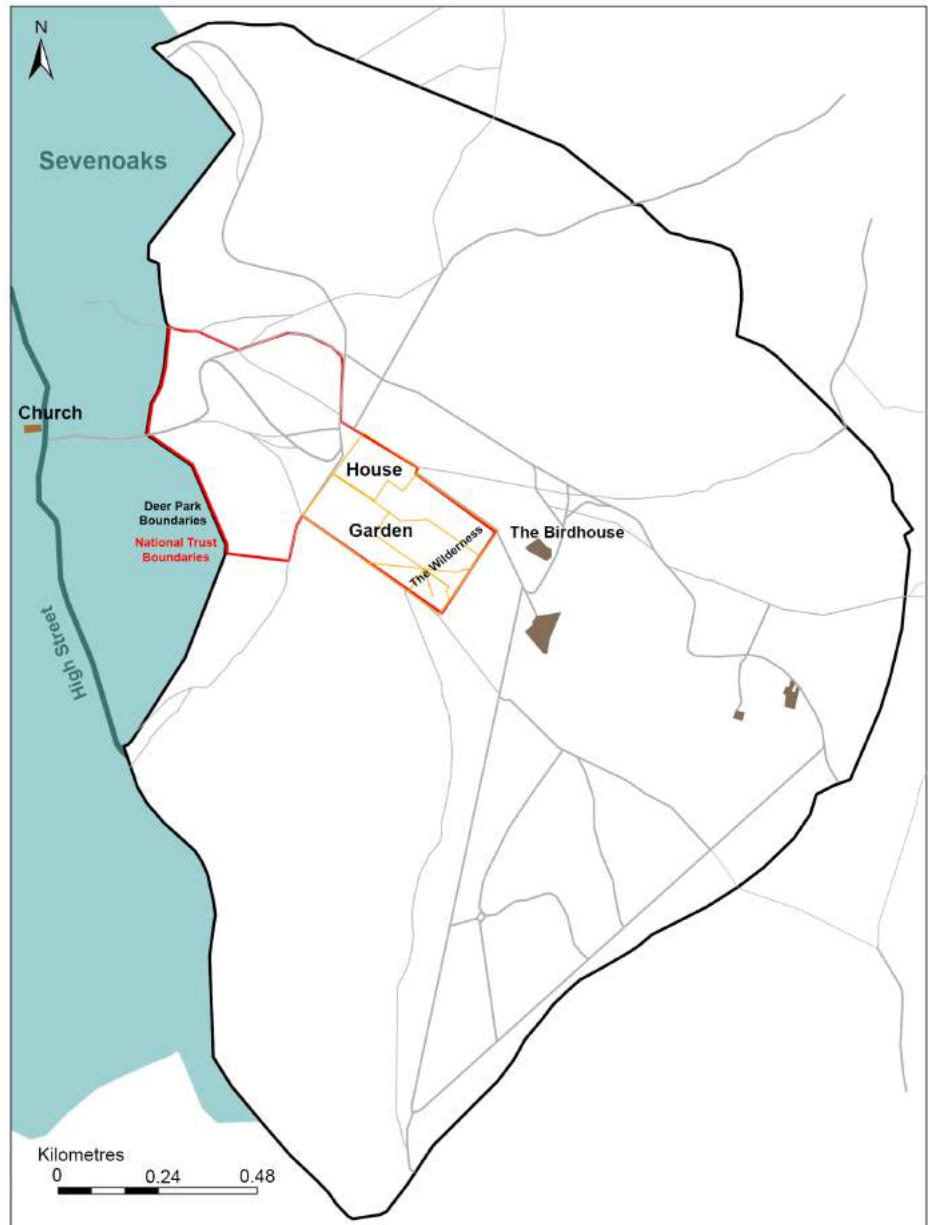

Fig. 7.4: (Right) Plan of Knole landscape indicating the areas under the stewardship of the National Trust and the Sackville Estate. The park's 930 acres were acquired incrementally over many centuries with final acquisitions in 1825-1826. Drawing by Kayley McPhee.

alongside archival records, other contemporary hunting grounds, and contextual evidence for the many different practices and resonances of medieval hunting, allows us to discuss a topic relevant to all of the residences in our survey: the lived experience of late medieval parks as places of sport, labour, and social contest. Knole Park was periodically the scene of elaborate staged hunts, of the mundane work of agriculture and industry, and of riotous protests by common people opposed to the claims of elite privilege. Knole's deer park, like other landscapes in this study, emerges not just as a stage setting for elite performance, but also as a place of work and social disobedience that implicated people from different class backgrounds across many centuries.

Knole: History and Context

The Knole landscape's deep historical and political ecological context

The complex underlying geology of south-east England has had significant repercussions for patterns of human settlement over the millennia. Set between the chalk downs to the north and the Wealden clay lands to the south, the Knole estate is located along the Lower Greensand ridge, whose bedrock formed some 100-125 million years ago. While not particularly productive for arable cultivation, the greensand ridge supports heath and woodland that was particularly appropriate for a medieval deer park. From a broader perspective, Knole's position along the greensand ridge places it at the junction of different landscapes that have afforded different forms of settlement, subsistence, and political relations.

Just north of the greensand ridge, the Darent Valley has been seen as an important channel of movement and settlement within Kent since prehistory (Everitt 1977). From its formation in Westerham, the Darent River runs east towards Sevenoaks and then north through a gap in the North Downs before flowing into the Thames. In contrast to the greensands of Knole, the Darent Valley is characterised by the more fertile Gault Clay. The appeal of this landscape for settlement is apparent in the density of archaeological remains within the valley. Just 6 km north of Knole along the Darent valley sits Otford. In proximity to Otford's town centre are a Bronze Age bowl barrow and multiple Roman sites from the early centuries CE, including a villa and a cremation cemetery at Frogfarm (Pearce 1930; Ward 1990). Additionally, the 7th to 8th-century inhumation cemetery at Polhill is thought to have served an Anglo-Saxon community dwelling at Otford (Philip 2002: 33). By the 9th century, Otford was the centre of an estate owned by the see of Canterbury. Today it houses the ruins of an archiepiscopal

palace commissioned by Archbishop William Warham in the first quarter of the 15th century.

Regardless of the density of archaeology in the Darent Valley, early settlers were certainly not avoiding the greensand ridge. The earliest evidence of human activity within the park comes from a series of Mesolithic (8,500-4,000 BCE) flint finds (Wright 2008: 2). Later prehistoric settlement remains are apparent further afield. A Bronze Age bowl barrow sits on the crest of a prominent sandy ridge at Millpond Wood, some 1.3 km north of Knole Park. Excavation showed that this barrow had been constructed over an earlier Mesolithic flint working site (Abbott 1896). Alastair Oswald has recently suggested that a similar site may lie within Knole Park. The low mound surmounting Echo Mount, now surrounded by a clump of trees, may represent a much-eroded Bronze Age barrow (Alastair Oswald, pers. comm.). The setting – what appears as a high-point in the landscape today – as well as the recent recovery of flint flakes in this area, supports this hypothesis (Fig. 7.5).

Compared to the Darent Valley, there is a dearth of archaeological evidence for Roman and Anglo-Saxon settlement activity at Knole and Sevenoaks. However, a combination of place-name and documentary evidence suggests that early medieval people used the greensands for woodland resources and rough grazing

Fig. 7.5: Neolithic or Bronze Age worked flint uncovered at Echo Mount in 2015. Similar pieces have been found over the last few years, while the Sevenoaks Museum holds a bag of flints reportedly collected from Echo Mount in the early 20th century. These likely also represent surface finds, as the area does not seem to have ever been excavated. Photo by Nathalie Cohen.

(Everitt 1977; 1986). The north-south running hollow ways that traverse the greensand ridge and lead into the Weald were constructed in this period to facilitate the seasonal movement of stock. One such droveway is still visible near Sevenoaks at Kettleswell (Killingray 2010: 40). In Alan Everitt's interpretation (1977; 1986), early medieval settlers eventually transformed seasonal encampments on the greensand ridge and the Weald into permanent settlements dependent on estate centres located on the fertile river valleys and foothills to the north. By the later medieval period, this process created a distinctive pattern of settlement and political relations. This landscape was characterised by relatively isolated small farms, whose tenants enjoyed greater independence from elites – or at least less onerous feudal obligations. This settlement history was a probable factor in the particular perceived unruliness of Kentish husbandmen and yeomen in the later medieval period (see below and Chapter Twelve).

The origins of Sevenoaks and Knole may well belong in the early medieval context of this north to south movement of people, animals, goods, and legal authority between estate centres along the North Downs, settlements in the Weald, and ports along the south coast (Knocker 1926). Whatever the case, the landscape of Knole developed into a major stage for the production and contestation of political authority in subsequent centuries.

The development of Knole Manor, c. 1200–1456

Du Boulay (1974) and Gregory (2010) offer the most detailed accounts of the early history of the Knole estate leading up to its possession by the Archbishop of Canterbury, Thomas Bourchier, in 1456. The earliest references to the estate at Knole and the adjacent town of Sevenoaks date to the 13th century. Sevenoaks was certified as a market town as early as 1200. It was at this time a portion of the manor of Otford. In 1297, a number of tenants from Sevenoaks owed pannage (swine grazing) rents to the Archbishop of Canterbury (Du Boulay 1974: 2). Tenants appear to be mostly smallholders, engaged in various crafts and woodland management rather than arable agriculture. During the 13th and 14th centuries, three local families accumulated rent-paying estates in the vicinity of Sevenoaks – the de Knoles, the Grovehursts, and the Ashburnhams. As their surname suggests, the de Knole's property was concentrated to the south-east of Sevenoaks in the area of present day Knole Park. The head of this family in the late 13th century, Robert de Knole, was bailiff to the Archbishop of Canterbury's Liberty from 1292-1295 (Du Boulay 1974: 5).

During the 14th century, Knole was acquired by and incorporated into the estates of the Grovehursts and then the Ashburnhams. The accumulated property is first referred to as the 'Manor of Knole' when it was inherited by Roger Ashburnham in 1364 (Du Boulay 1974: 6). Roger is unlikely to have had his primary residence at Knole, as he simultaneously owned the Scotney estate where the remains of his manor house still stand. The next two owners are also unlikely to have resided at Knole. Thomas Langley, the Bishop of Durham, purchased the manor in 1419 and it fell to his son-in-law Ralph Leigh after his death. The principal properties of both men were far from Knole (Gregory 2010: 12-3).

At some stage between 1444 and 1450, Knole was purchased by James Fiennes, the Lord Say and Sele. Fiennes had begun work and may nearly have completed building a manor house when he was killed during the Jack Cade rebellion of 1450. Within the existing house at Knole there is no evidence of architectural fabric predating the mid-15th century. Hence, it is unclear whether there was any large-scale manorial residence at Knole prior to Fiennes's work. Gregory offers the intriguing suggestion that the ruins of a house predating Fiennes's work may lie elsewhere at Knole Park. To the east of the house, on a hill that forms the highest point of the park, is set an octagonal cottage and a series of low, ruinous walls. The former, called the 'Birdhouse', is a neo-Gothic structure probably built in the mid-18th century. The latter was described by Vita Sackville-West as a sham ruin fabricated around 1761 (Fig. 7.6; Sackville-West 1922: 26). Knole's late 18th-century residences may well have created the folly from existing stone remains. The main gate arch is certainly no earlier than the 16th century. There is a possibility that other portions of the ruin – of flint construction with rubble core and freestone dressing – may represent medieval architecture, perhaps *spolia* from Otford if not an early manorial residence at Knole. Extending geophysical survey to this area in the future could identify the original form of the ruins or any activity predating the Birdhouse.

Archiepiscopal and royal residence: 1456-1604

Over the last decade, building surveys and archaeological assessments accompanying renovations and construction at Knole have afforded opportunities to examine the building sequence at Knole (Munby 2007; Bartlett 2007; Dixon 2008; Peyre 2010). Synthesising this work, Gregory suggests that James Fiennes had nearly completed a manor house at Knole when the estate was bought from his son by the Archbishop Thomas Bourchier in 1456 (2010: 20-1, 27). Though isolating this building within the existing

Fig. 7.6: Detail of the folly ruins near the Birdhouse. Some of the architectural fabric may have been salvaged from earlier ruins in this location or from Otford. Photo by Matthew Johnson.

fabric of Knole House is difficult, it is likely that this building was centred on what is now known as Water Court (Fig. 7.2; Gregory 2010: 29-38).

Scholars have debated Bourchier's contribution to the house, park, and gardens visible at Knole today. Most agree that Stone Court and the Chapel belong to his tenure (Colvin 1963-82; Faulkner 1970; Emery 2006; Munby 2007). Of Bourchier's successors, the majority of building work is credited to John Morton (1486-1500) or William Warham (1503-32) (Kilburne 1659: 244; Hasted 1798; Bridgman 1817: 149-50; Gregory 2010: 3-7). This work included the construction of the ranges enclosing Pheasant Court and the remodelling of the east range around the Leicester Gallery, the Spangle Bedroom, and the Kitchen. The origins of Green Court remain obscure. Most accounts attribute Green Court either to Bourchier's archiepiscopal successors or to Henry VIII (Colvin 1963-82; Faulkner 1970; Emery 2006; Munby 2007). Building accounts and limited archaeological investigation offer an alternative possibility. Annual account records from the 1470s indicate an emphasis on the purchase of bricks. Though few bricks are visible in ranges of Green Court, their fabric does include brick. More importantly,

small excavations in Green Court have uncovered rubble layers of brick and mortar below the courtyard's south range (Martinez-Jausoro 2009; Peyre 2010: 6). Potentially, the internal ranges of Green Court were originally constructed in this brick, but later rebuilt during renovations in the 17th century (Gregory 2010: 82-3). Geophysical survey within Green Court in 2013 identified a linear anomaly running at an angle to the courtyard walls (see Fig. 7.17 below). Additional exploration of this feature could shed light on the chronology of Green Court.

Bourchier is also often credited with the foundation of an orchard and lavender garden, though the source of this claim is unknown (O'Halloran & Woudstra 2012: 35). The first reference to the paling of the park comes from 1468, and so Bourchier was probably responsible for the foundation of the deer park at Knole. The extent of the park at this time is unknown, but it expanded incrementally in subsequent centuries. (A larger consideration of the use, labour demands, and social dynamics of the deer park is pursued below,).

The deer park is perhaps what attracted Henry VIII to the property. The king visited Archbishop Warham at Knole many times between 1504 and 1514 (Taylor 2003: 165). In 1537, Henry pressured Warham's successor, Thomas Cranmer, to cede him the property. The extent of Henry's contribution to Knole is debated. However, expense records indicate that one Sir Richard Longe was paid 'for making the King's garden at Knole' (O'Halloran & Woudstra 2012: 35). It is unclear how this garden related to the existing gardens at Knole. The estate remained a royal property, leased out to a series of tenants until the early 17th century. The final royal tenant, John Lennard, built a 12 ft ragstone wall to protect four springs within the garden that supplied the house. This work defined the existing boundaries of the garden, and the ragstone wall still encloses much of the garden today (Rardin 2006: 7; O'Halloran & Woudstra 2012: 35).

Under the Sackvilles: 1603-Present

In 1603, Thomas Sackville, Lord Treasurer and cousin to Elizabeth I, used the powers of his office to sell the freehold of Knole to himself. Between 1605 and 1608, Sackville undertook major renovations that gave Knole House the form it largely retains today. Sackville oversaw the rebuilding or remodelling of aspects of Stone Court, Water Court, Stable Court, and Green Court (Munby 2007; Town 2010). At this time, the south range of Green Court was demolished and rebuilt further south. This range was renovated again in the

mid-18th century as the Orangery. A parch-mark visible within Green Court running parallel to the Orangery likely marks the original foundation of the south range.

With the exception of a brief occupation by Parliamentary forces during the English Civil War, Knole House has remained in the Sackville family for more than 400 years. Though the house saw few major changes after Thomas Sackville's work, the Sackville family continued to modify the park landscape in subsequent centuries, not least by the incorporation of additional land. In the early 18th century, the Earls of Sackville became the Dukes of Dorset. The earliest etchings of Knole from the late 17th and early 18th century offer a glimpse of the landscape immediately surrounding the house at this time. The Knyff and Kip engraving, produced in 1698 but not published until 1709, shows the garden at its full extent and a rectangular enclosure lined with trees outside the house's western front (Fig. 7.7). A later engraving published in 1716, shows the addition of an oval-shaped bowling green within the garden and a series of

tree-lined pathways radiating from the western front of the house. One of these pathways is the Duchess Walk in today's landscape (Fig. 7.8). Other familiar aspects of the modern park landscape – including Chestnut Walk, Broad Walk, and the octagonal Birdhouse – were constructed during the occupation of Lionel Sackville (1706-65), the first Sackville Duke of Dorset (Rardin 2006: 3-4). Lionel's son, Charles Sackville, removed thousands of trees when he became the second Duke of Dorset in 1765. He began a replanting project in 1768 that was continued by his nephew, John Sackville, as the third Duke of Dorset. Many trees in the park date to this period (Rardin 2006: 4).

With final acquisitions in 1825-6, the park reached its current area of around 930 acres. This brought to a close a long history of acquiring parcels of land, including commons, in the vicinity of the park. Villagers of Sevenoaks nevertheless maintained certain rights of access to the park. The most important of these was the use of the bridle path that bisected the park from Fawke Common in the east to the border with Sevenoaks in

Knowle in the Parish of Sevenoaks in Kent
Viscount Granfeild Earle of Dorsett & Middl.x &c. Knight of the Garter, & one
being the Mansion House of Charles Sackvile, Baron Buckhurst
of his Maj.tie Most Hon.ble Privy Councill & L.d L.t of the County of Sussex &c.
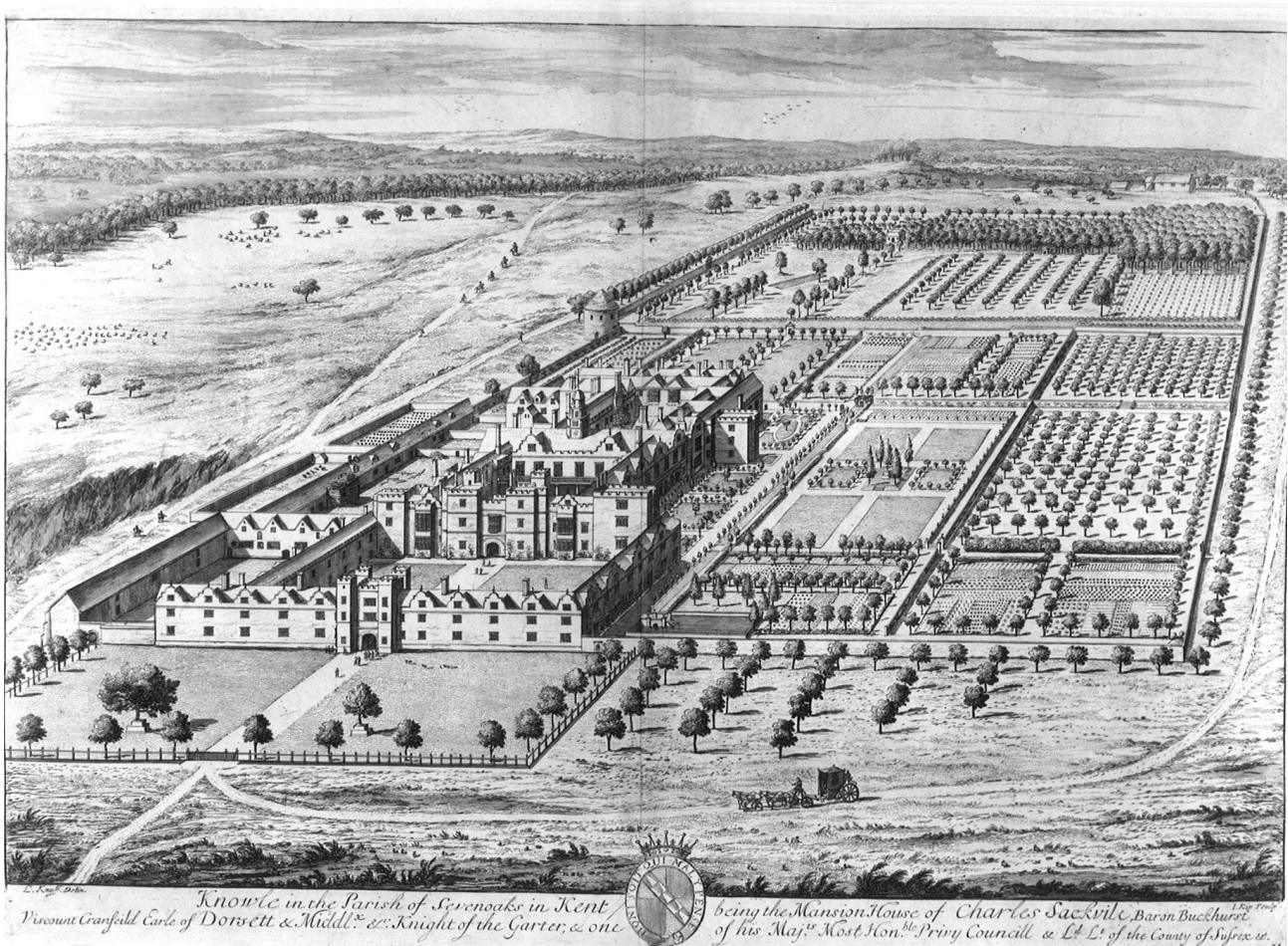
Fig. 7.7: The extent of the house and gardens at Knole has changed little since Leonard Knyff and Jan Kip produced this engraving in 1698. However, note the large rectangular enclosure surrounding a flat green along the west front of the house. Some indication of a feature following the line of this enclosure was revealed in the 2013 earth resistance survey.
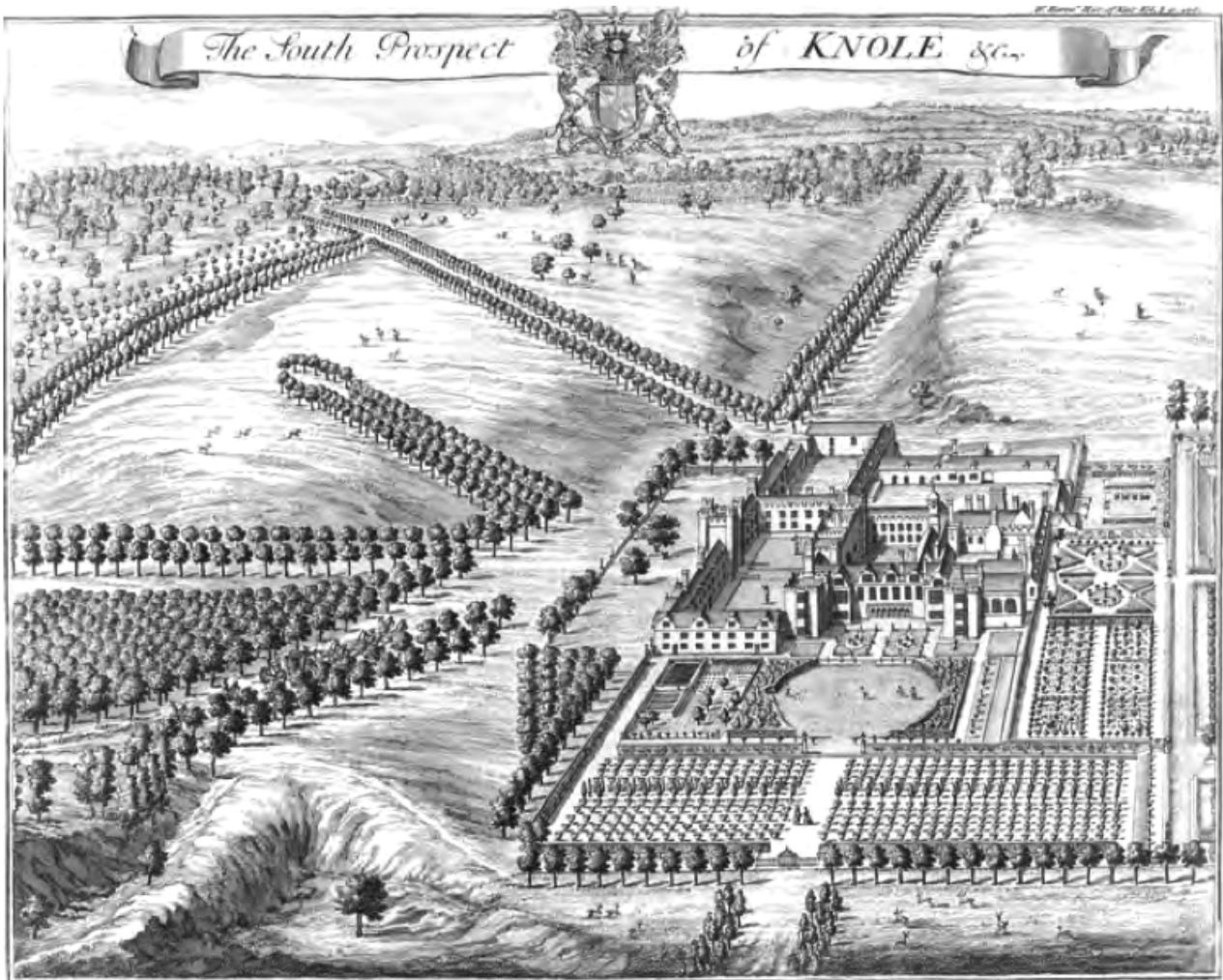
Fig. 7.8: John Harris and Jan Kip produced this engraving for John Harris's History of Kent, published in 1716. Note the tree-lined avenues extending radially from the west front of the house, including one that surmounts Echo Mount.

the west. Frustrated with the influx of day-trippers to Knole Park made possible by the new railway line to London, Mortimer Sackville-West closed public access to the house in 1879 and obstructed the bridle path in 1883. Protesting this affront to traditional rights of access, townspeople from Sevenoaks and villagers from surrounding settlements, stormed the park in 1884, destroyed barriers and dragged their ruins before the door of Knole House. Access to the bridle path was eventually renegotiated, and limited public access to the house was restored under Mortimer's successor, Lionel Sackville-West.

Modifications to Knole Park continued in the 20th century. A golf course inserted in the north-east area of the park in 1923 required major modifications of the landscape, including the clearance of trees and the removal or damaging of earlier landscape features (Wright 2008). The use of the southern portion of the park as a rifle range from at least 1870 and for other military exercises during World War One and Two may have caused additional disturbances. Portions of

the house and the western area of the park came under National Trust stewardship in 1946. Major recent transformations of the park include the insertion of the car park and the great storm of 1987, in which around 70% of the park's trees were destroyed (Sclater 1989). Other notable events of the 20th century include the featuring of the park landscape in The Beatles' music videos for 'Penny Lane' and 'Strawberry Fields Forever', both filmed in 1967.

The 2013 Topographic and Geophysical Survey

Background and methods

The project undertook a survey campaign at Knole with the aim of identifying features that would help to reconstruct the lived experience of the late medieval landscape. A team of students and staff from the University of Southampton and Northwestern University conducted the survey work at Knole between 3rd August and 22nd August 2013 (Fig. 7.9). The area surveyed lay largely within the stewardship of

Fig. 7.9: Conducting survey in the park meant interacting closely with inquisitive locals and day-trippers. Photo by Matthew Johnson.

the Trust, though we thank Lord Sackville for granting permission for us to also survey strips along the north-eastern side of the house and the south-western side of the garden enclosure.

The geology and the presence of brick and masonry within the large survey area at Knole Park meant that earth resistance and magnetometry were the most expedient techniques to apply. GPR was also used on a limited basis to target specific areas of interest or to further explore anomalies apparent in the magnetometer survey results.

For the geophysical survey, grids of 30 m x 30 m were set out across the entire survey area using a Leica GS15 GPS with SmartNet. This instrument was also used to conduct topographic survey, with spot elevation measurements taken at 1 m intervals or at 0.2 m elevation variation, along traverses at 2.5 m separation. The magnetometer survey was carried out using a Bartington Instruments 601-2 dual sensor fluxgate gradiometer (Fig. 7.10). Readings were taken at 0.25 m intervals along 0.5 m traverses, with traverses of data collected in zig-zag mode. Earth resistance was carried out using a Geoscan Research RM15 resistance meter, with measurements taken at 1 m intervals along traverses spaced 1 m apart (Fig. 7.11).

The magnetometer and earth resistance survey data were imported into and processed using Geoplot 3.0 software. The processing of magnetometer data was

necessary to remove any effects produced by changes in the earth's magnetic field during the course of survey, and to minimise any interference in the magnetometer data from surface scatters of modern ferrous material

Fig. 7.10: University of Southampton student Patrick Thewlis wearing the non-magnetic clothing required for magnetometry survey. Photo by Peter Tolly.

Fig. 7.11: Team members conducting earth resistance survey. Photo by Dominic Barker.

and ceramics. Data were de-spiked to remove any large peaks or 'spikes' from the data produced by material on the surface of the field. A mean traverse function was then applied to average out any changes in the data produced by the 'drift' in the earth's magnetic field. Filters were subsequently applied to smooth out any high frequency, small disturbances in the data. Finally 0.5 m values were interpolated from the existing readings to improve the spatial resolution of the results across the traverse lines.

The earth resistance data also required processing to remove any high resistance spikes in the data, to edgematch the grids, and to remove any effects in the data from broad geological variations in the subsoil. As such, the data were de-spiked, and the grids were edgematched to ensure uniformity of background measurements across the survey area. Additionally, High Pass and Low Pass filters were applied to the dataset.

The GPR survey was conducted using a Sensors and Software instrument with Smart Cart (Fig. 7.12). A 500 MHz antenna was used, with traverses collected

Fig. 7.12: Team members operate the GPR equipment. Photo by Matthew Johnson.

at 0.5 m intervals in zig-zag fashion. The GPR data were processed using GPR Slice, with background and bandpass filter functions being used on the datasets. The processed radargrams were then collated and sliced in the software to provide a series of horizontal datasets showing the changes in amplitude at increasing depth.

The following sections detail the results of our survey, organised according to the location of features identified within the survey area. Where possible, we use published and unpublished archaeological research to interpret geophysical or topographic anomalies.

The elevated area north-west of the house

The elevated ground to the north-west of the house is now one of the most conspicuous highpoints within the park. Whether this 'knoll' represents the estate's namesake is only speculation. However, it certainly is a crucial component of the lived experience of the landscape today. When approaching the estate along the modern drive, the house is obscured from view before appearing, as if from nowhere, as one proceeds around the curve of the knoll.

The 2013 survey aimed to shed additional light on peoples' use and experience of this area in the past. Two major anomalies are apparent in the data warrant discussion. The first is a linear feature immediately to the west of Echo Mount, extending on a rough north-south alignment. Visible to the naked eye as a low ridge, this same feature is apparent in the magnetometry as a positive linear anomaly, some 120 m in length and tapering at its northern and southern ends from a width of 15 m (Figs 7.14 & 7.15). The resistance survey also detected this feature as a strip of low resistance (Fig. 7.18). Following identification of the feature with magnetometry and resistance survey, a trial GPR grid was placed in this area to target the linear feature. The results indicate the presence of a broad feature some 15 m across, which then widens out at increased depth. This seems to suggest that the anomaly is a break in the geology of the area (Fig. 7.16).

Alastair Oswald (pers. comm.) has suggested that this ridge is related to one of a series of relict agricultural lynchets and hollowed trackways to the north of the car park. The 2008 survey by Wessex Archaeology (Wright 2008: 73) also identified a series of linear earthworks in the area north of Echo Mount. Interestingly, there is a reference of 1612 to 'paling about the mount', but it is unclear precisely to what and where this refers (Taylor 2003: 179). The 2013 geophysical survey suggests that the low ridge identified by Oswald is not a humanly
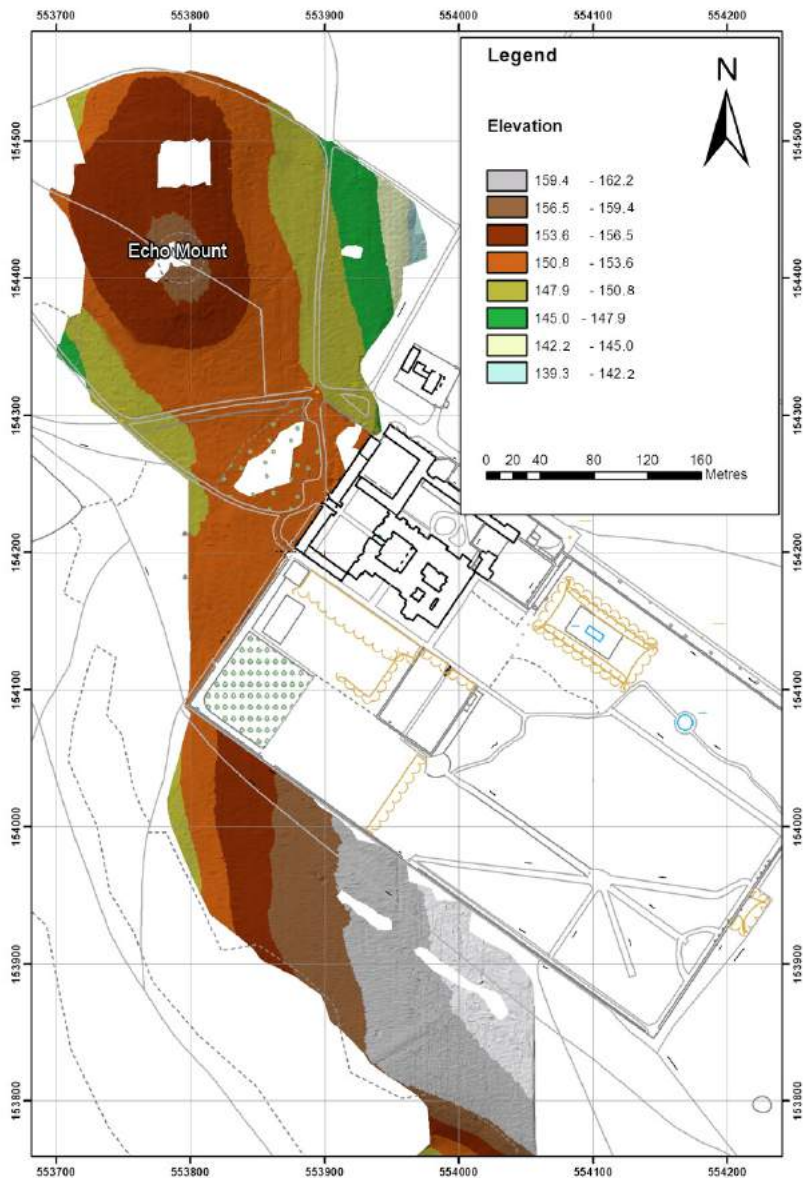
Fig. 7.13: Results of the topographic survey at Knole. Despite Echo Mount's prominence, it is not the highest point in the landscape.

constructed feature, but rather reflects an anomaly in the underlying geology. If there were lynchets or palings here, their remains were not detected by geophysical survey.

The second feature apparent in the geophysical survey of this area suggests the former presence of a rectangular enclosure near the clump of trees north of Echo Mount. The magnetometry readings identified a rectilinear positive anomaly here measuring 25 m x 25 m (Fig. 7.15). This response may relate to earth or stonework here associated with a standing or viewing platform. A letter written by John Lennard, the leasee of Knole, to Lord Burghley in 1587 references a bill issued for the repair of a 'stanyng'. It is uncertain where this standing was and what its intended function was. Lady Anne Clifford, wife to Richard Sackville, mentions the 'standing in the garden' multiple times in her diary. Notably, each reference includes the qualifier 'in the garden', suggesting that other standings may also

once have been present at Knole (Taylor 2003: 167-9). Timber standings associated with hunting grounds, such as the remodelled example in Epping Forest, are thought to have been used to advantage spectators or archers during the coursing or hunting of deer. A multi-storied standing by this clump of trees may have provided an impressive vista, but not advantageous views of any areas particularly suited to coursing or driving deer (see below).

An early depiction of Knole suggests that this elevated area was formerly an important component of a planned park landscape at Knole. The Harris and Kip engraving of the south prospect of Knole, published in 1716, shows a number of tree-lined pathways extending out from the western front of the house. One path leads up to the top of the elevated area to a circular area enclosed by trees (Fig. 7.8). This circular clump of trees appears to correspond with

a small mound surmounting Echo Mount, though alternatively, it may correspond to the position of the rectilinear anomaly slightly further north. Whatever the case, the spot likely provided a better vista towards Sevenoaks than towards the house itself.

Despite its conspicuousness within the park, the mound atop Echo Mount itself yielded no significant anomalies in the geophysical survey results. As mentioned above, recent flint finds from Echo Mount suggest that the low mound there may represent an eroded prehistoric monument. As the ground was too dry in August 2013 for our equipment to measure earth resistance on Echo Mount, only magnetometry was undertaken in this area. The results yielded no evidence in support of any manner of substantial archaeological remains on the mound atop Echo Mount.

Topographic survey revealed a somewhat surprising observation concerning the relative elevation of Echo

Mount and the Knole gardens. Today, Echo Mount appears as a prominent highpoint in the park landscape. However, as seen in the topographic model (Fig. 7.13), the highest elevation of Echo Mount is actually 2-3 m lower than the area along the southern side of the garden wall. The high ground around Echo Mount is still conspicuous in terms of the pitch of elevation change over a small area. Nevertheless, it may not have offered the best vantage point in a prehistoric or even early medieval landscape prior to the construction of the house and garden walls.

The western front of Knole House

Earth resistance survey along the western front of the house revealed a series of linear features of low resistance (Fig. 7.18). One long thin feature runs north-east to south-west at approximately 50 m from and parallel to the western wall of the house. This feature intersects with a wider (c. 10 m) linear feature of high resistance whose alignment corresponds with that of the entrance
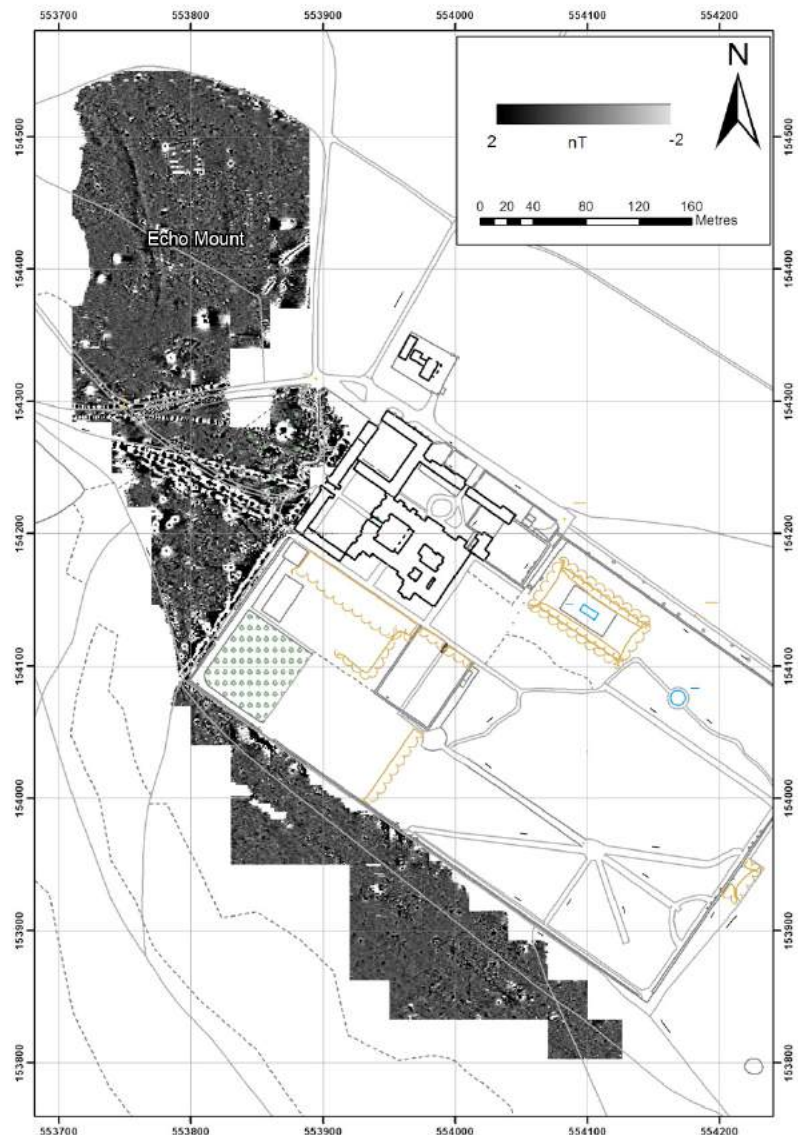

Fig. 7.14: Results of the magnetometry survey. The long linear features extending from the western front of the house represent utility pipes.

Fig. 7.15: Detailed view of the magnetometry around Echo Mount. Note the long north-south ridge and the rectilinear feature.

way to Green Court. These features appear to correspond with the enclosure and pathway visible on the earliest engravings of Knole House from the late 17th and early 18th century. Though it corresponds spatially, it is unlikely that the tree-lined fence shown in the engravings accounts on its own for the linear low resistance anomaly. Perhaps a ditch was dug around this area, either as part of a 'ha-ha', or merely to introduce soil to create a level surface for bowling greens that are mentioned here in an early 17th-century text (Ravilious 2016: 48).

GPR survey also provided evidence for a structure undocumented in early texts or depictions of the house. As seen in the GPR results, the line of the entrance to the house is visible with high amplitude responses on either side some 50 m from the western front of the house (Fig. 7.17). These responses may relate to the buried remains of some gateway arch or other structure here. Excavation could shed additional light on this hypothesis.

A number of other linear and curvilinear low resistance anomalies were detected to the south-west of the former front enclosure. These features likely represent the trenches excavated for utility pipes detected in this area with the magnetometry survey. Finally, earth resistance survey identified a number of discrete low resistance anomalies that appear to correspond with positive magnetic anomalies in the magnetometry. These may represent pits dug around the park, but their purpose remains enigmatic.

Along the southern garden wall

In addition to the line of the modern pathway along the southern garden wall magnetometry revealed a series of linear positive anomalies cutting across the ridge from south-west to north-east (Fig. 7.14). Topographic survey noted a ditch in this area running on a similar south-west/north-east alignment (Fig. 7.13). These results may relate to tillage in this area, either predating or associated with the deer park.

Fig. 7.16: Results of the GPR survey.
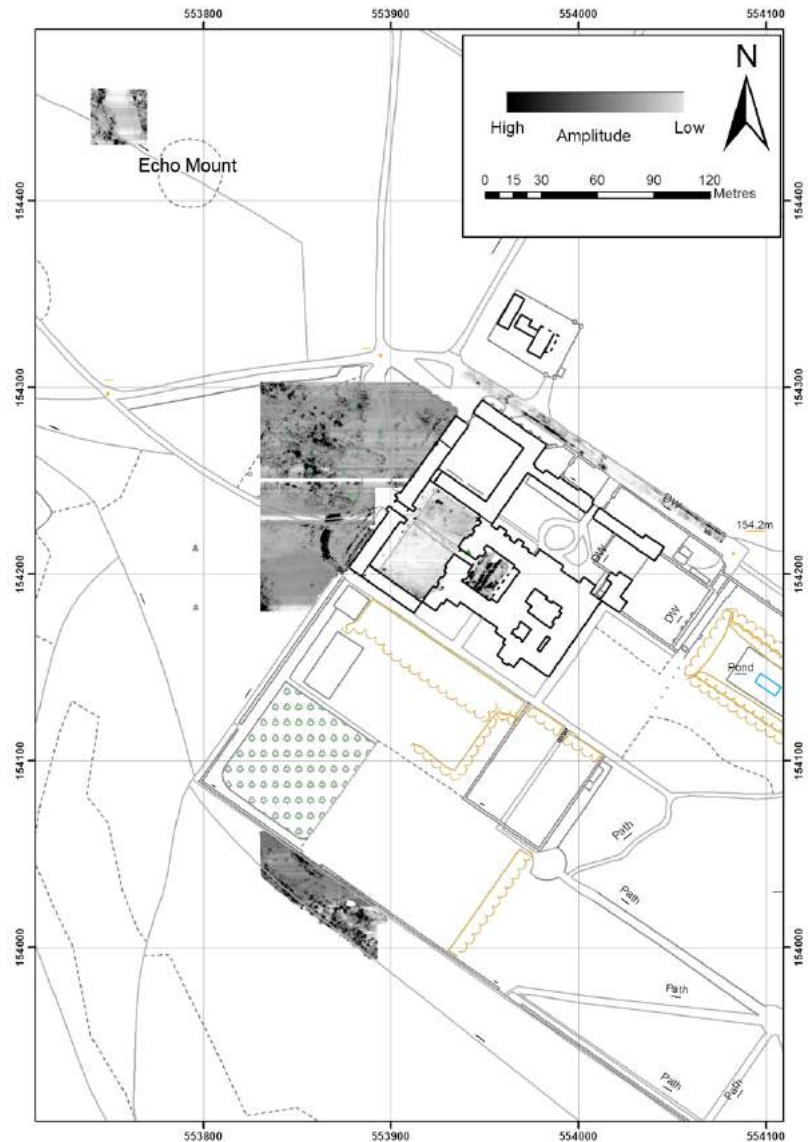
Stone Court and Green Court

GPR survey was also undertaken within the areas enclosed by Stone Court and Green Court (Fig. 7.17). Two linear high amplitude anomalies run south-west/north-east across the centre of Stone Court. These likely represent two brick built cisterns previously identified by archaeological assessments within Stone Court (Miller Tritton & Partners 2003; Osiris Marine Services Ltd 2005; Henderson 2007: 4-5). Other high amplitude readings within the court may represent other drainage features underlying Stone Court.

In Green Court, high amplitude responses appear to relate to a rectilinear feature underlying the grass to the north of the pathway dividing the courtyard. Notably, the alignment of this feature runs at a tangent to the alignment of the courtyard wall; nor does it correspond to the alignment of a metal utility pipe identified by the earth resistance survey

undertaken in 2007 (Bartlett 2007). This probable rectilinear feature may be interpreted in the light of excavation results previously undertaken in Green Court (Henderson 2007). An archaeological watching brief was commissioned during the removal, repair, and replacement of the flagstone pathway leading through Green Court. Only the area covered by the flagstone path was excavated, but excavators identified an alignment of four ragstone blocks set within a cut feature underlying the northern edge of the pathway, some 8-10 m from the external entrance to Green Court (Henderson 2007: 6). Given the correspondence in position, it is possible that the excavated ragstone feature represents the edge of the rectilinear feature identified in the GPR.

The presence of architectural remains underlying Green Court potentially has significant implications for understanding the chronology of the house. As discussed above, the date of construction of Green Court remains

a sticking point in debates concerning the development of Knole. Further investigation of this feature, ideally with open area excavation, could shed light on the matter: any secure dating evidence from the purported architectural feature would provide a *terminus post quem* for Green Court, and thereby suggest which resident of the estate commissioned its construction.

Summary of the 2013 survey

Our survey campaign raises a series of questions and avenues for future investigation. Geophysical analysis and previous landscape surveys suggest that three areas in particular would reward additional investigation, particularly excavation. The first is the elevated area around Echo Mount. GPR or trial excavation may shed light on the possibility of a Bronze Age monument here. Geophysical results could not define the identity of earthworks observed here by other researchers. Nevertheless, the conspicuousness of this elevated area

appears to have appealed to people as a vantage point or focus of activity in different centuries.

The second area is along the main entrance path to the house, about 50 m west of Green Court. High amplitude responses in the GPR suggest buried stone remains here, possibly a gateway arch. Identification and dating of this feature would inform understandings of how one of the approaches to Knole House was framed in the past. The route of formalised approaches in the late medieval or early modern period was likely very different than the route taken by most visitors today.

The third area is within Green Court. Opening up a wider area of excavation in this courtyard would identify the linear feature apparent in the GPR survey and define its relationship to the flagstone feature excavated in 2007. Results could clarify when Green Court was constructed and determine what structures previously lay in this area.
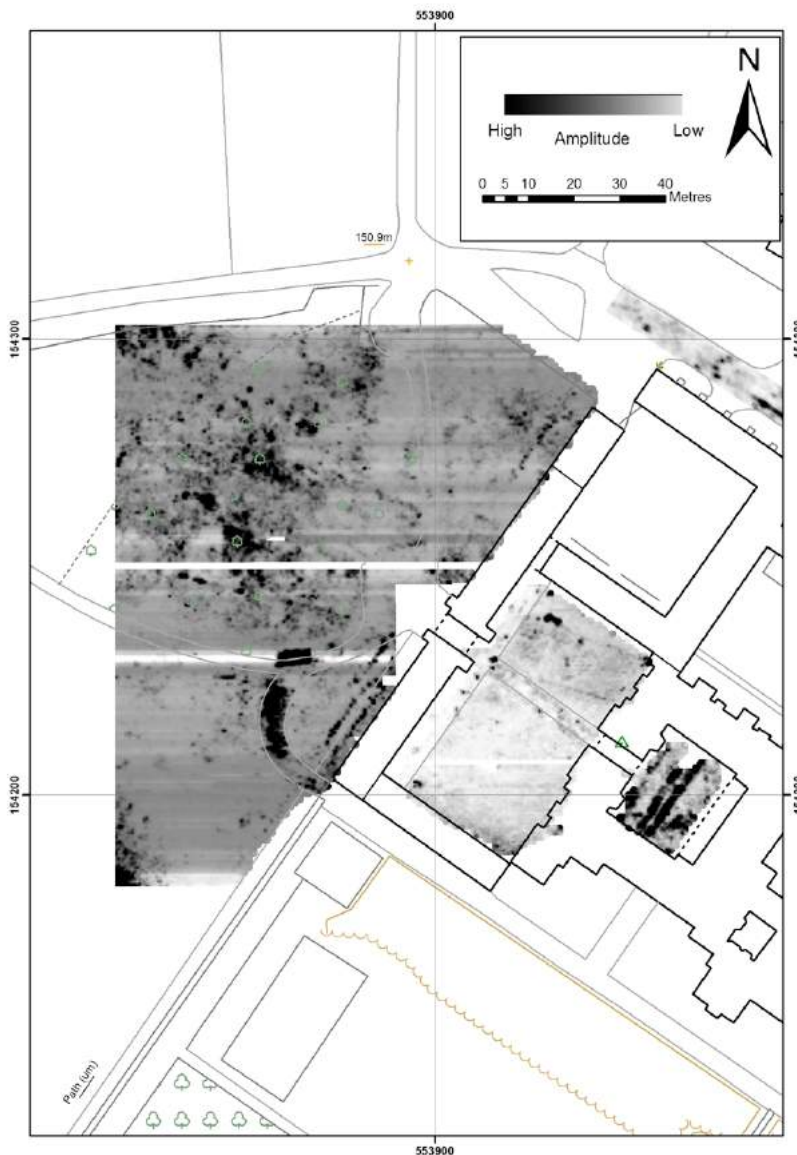

Fig. 7.17: Detailed view of the GPR survey results from the west front of the house and within Green Court and Stone Court. The faint rectilinear feature within Green Court probably corresponds with a ragstone feature encountered during maintenance work in 2007.

Fig. 7.18: Results of the resistance survey. Note the linear feature of low resistance that runs parallel to the west front of the house. The line of this feature, perhaps the remnants of an in-filled ditch, corresponds with the fence enclosing a flat green depicted on early engravings of Knole.
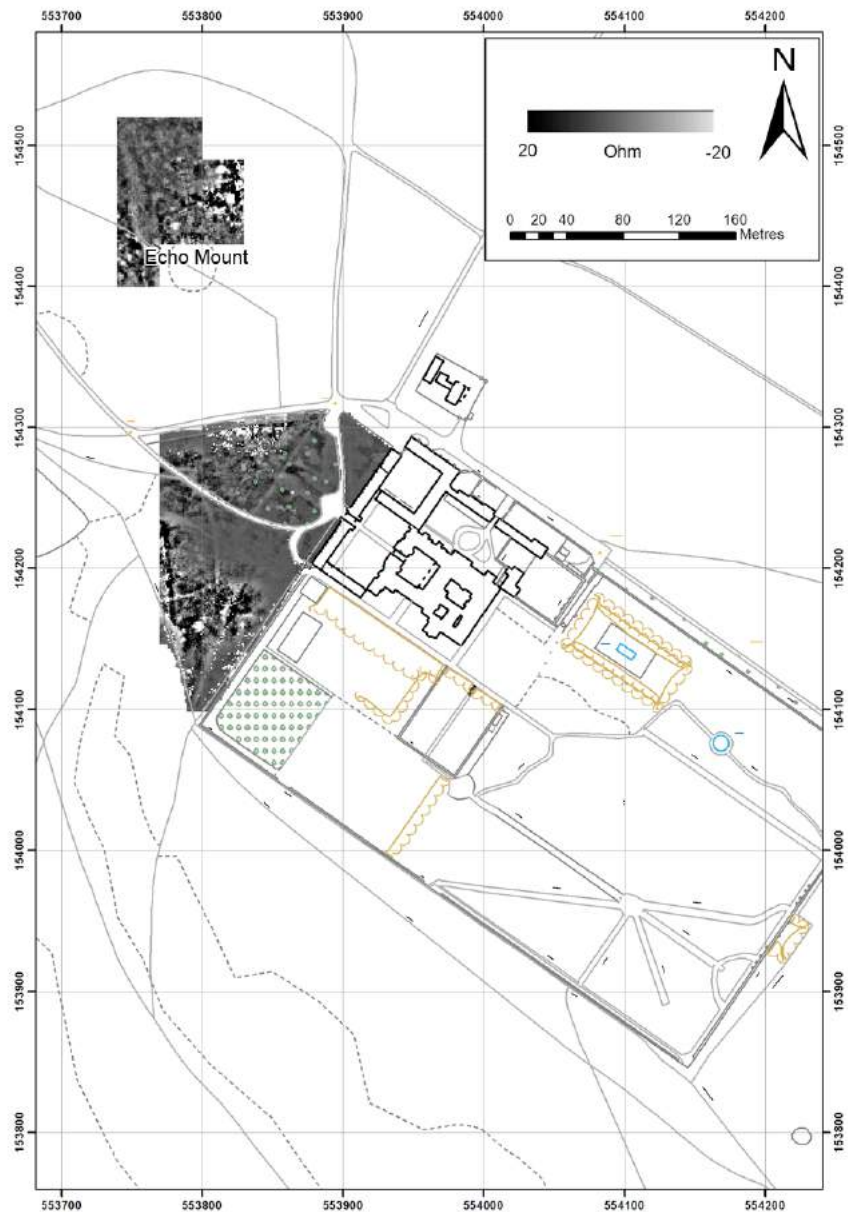
Pursuing these three areas of research would enrich current understandings of Knole's landscape. At present, the work of documentary historians and archaeological surveys and investigations commissioned by the trustees of the Knole estate allow for a more detailed consideration of how the lived-experience of Knole Park fostered certain political and ideological dynamics. The last section of this chapter takes up this task. Though the focus remains on Knole, consideration of hunting, park-making, and poaching as means of social contest are relevant to the deer parks at other properties in the survey.

Sport, Labour, and Social Contest in Knole Park

Compared to the amount of detailed scholarship concerned with the development and chronology of Knole House, scholars have devoted relatively little attention to

the deer park at Knole (Taylor 2003). There are both practical and theoretical reasons for these circumstances. The National Trust's stewardship of the house means that maintenance and construction work within the house are accompanied by archaeological assessments. When cross-checked with surviving building records and early depictions of the house, these assessments can provide great insight into the history of the house (Dixon 2008; Gregory 2010; Town 2010). The wider landscape is a different matter. Much of the park lies outside the stewardship of the Trust, and so archaeological assessments associated with construction works have been far fewer. However, an earthwork survey commissioned by the Trustees of the Knole Estate in 2008 identified over 300 elements of earthwork features throughout the park (Wright 2008). Stratigraphic relationships and cross-checking with archival records and early depictions of the landscape are again an important means of dating.

Unfortunately, earthworks are often very difficult to identify given levels of vegetation or unless seen under certain light conditions.

These logistical factors aside, scholars' concerns to identify building works at Knole with one of the elite men who owned the house results from two dominant perspectives common to historical disciplines. The first is a simple and valid historical concern to establish a detailed chronology of development – who commissioned what and when? The second is an equally valid assumption of a link between large-scale building works and the status of medieval elites. It is the contention of this volume that such concerns are entirely valid but can be complemented by an analysis of the wider context. In our view, focusing more attention on the lived experience of the deer park as a place of sport and labour reveals how social difference and identity was created and contested by both everyday and extraordinary actions of people from various class backgrounds.

Hunting the Park

Hunting was one of the most pervasive cultural practices of the Middle Ages. The chase – whether physical or imagined – acted as a metaphor for sentiments ranging from the salacious to the spiritual (Cummins 1988). For the elite, hunting was a leisure pastime, a preparation for combat, an opportunity for networking, and a performance of social privilege (Mileson 2007). More often than not, elite hunting took place on land especially set aside for that purpose, whether forests, chases, warrens, or parks (Bond 1994). Access to hunting in these landscapes was, in theory, highly restricted. For commoners, elite hunting grounds could represent a means of employment or an affront to traditional land-use rights. Effacing elite privilege by trespassing and poaching within a park could be a means of food acquisition as well as a form of social disobedience. To understand the late medieval deer park at Knole, one must confront this multifariousness. One must imagine how the park's symbolic resonances, hunting events, maintenance demands, and landscape setting structured the thoughts and actions of both nobles and commoners. Juxtaposing Knole's landscape alongside comparative sites, contemporary hunting methods, documentary sources, and artwork aids this imagining.

Medieval parks were areas of carefully managed animal and plant resources. The boundaries of parks were often delimited by an internal ditch and embankment topped with oaken staves, or in some cases, a thick hornbeam hedge. Parks functioned primarily as hunting grounds

for deer, especially fallow deer, but also included other quarries, such as rabbits, pheasants, herons, peafowl, partridges, swans, and freshwater fish (Sykes 2007: 50). The extent to which these animals were hunted for aristocratic leisure rather than unceremoniously culled by servants to supply lordly feasts is a matter of some debate (Rackman 1986: 125; Mileson 2009). Larger forests were likely better suited to the elaborate ceremony of the *chasse par force de chiens* (chase with use of dogs). Gaston Phébus Count de Foix, author of the 14th-century hunting manual *Livre de Chasse*, considered this multi-staged rite the noblest form of hunting. The quarry of this hunt was the male red deer, or hart. Mounted hunters aided by dogs singled out the strongest looking hart, running him to exhaustion over many miles. Once the hart was brought to bay, the lord would dismount to kill the animal. An elaborate butchering or 'breaking' ritual followed, in which the feudal hierarchy was symbolically reaffirmed as the lord apportioned different cuts of the meat to his retainers, the church, the dogs, and even the poor (Judkins 2013).

Though less elaborate, the bow-and-stable method was more effective at killing deer *en masse*. In this method, dogs and hunters would drive deer – principally fallow deer, but also roe and red deer – towards a pre-positioned group of archers. The archers would then fire upon those animals in season. Greyhounds positioned with the archers would run down those animals not immediately killed. Notably, the 14th-century poem Sir Gawain and the Green Knight depicts the bow-and-stable method underway within a park surrounding a castle. Smaller, enclosed park landscapes, were better suited to the bow-and-stable method, though *par force* hunts, or hybrid forms, were likely possible in larger parks (Cummins 2002: 43-52; Sykes 2007: 50-1; Mileson 2009: 30-3). The advantage of parks was the ability to modify the landscape to facilitate one or the other form of hunting. The bow-and-stable method was particularly contingent on the landscape. Topography and tree cover aided hunters in channeling deer towards hidden archers.

Later forms of sport relied to an even greater extent on specifically designed landscapes. In 'paddock coursing', a single deer was chased or 'coursed' down an enclosed trackway by a number of greyhounds. Onlookers made wagers on the outcome – which of the hounds would catch the deer, or might it outrun them all? Cartographic evidence illustrates the landscape settings constructed for such practices. A map of Windsor Little Park produced in 1607 shows a deer course enclosed with a hedge and fit with a greyhound in hot pursuit of a fallow deer (Mileson 2009: 174).

Formalised paddock coursing was especially popular in the 17th and 18th centuries. Yet, some limited textual and landscape evidence suggests that coursing or analogous practices developed in the late medieval period (Taylor 2003).

At Knole there is no unambiguous evidence of landscape modification to aid any of these forms of sport. However, there are a series of dry river valleys with steep sloping sides that run through the park. With hedges, fences, or close coordination between dogs and hunters, these valleys could have aided the channeling of deer along predetermined routes. Additionally, the top of the slopes would have afforded advantageous views over the action unfolding in the valleys below. Paddock coursing was designed entirely for spectating, but other forms of sport might also include spectators. As mentioned above, there is documentary evidence for a standing at Knole, but it is unclear where this structure was located and whether it had anything to do with hunting. The fallow deer that roam the park today are reportedly of the same stock introduced in the 15th century (Fig. 7.19). The tendency of this breed to maintain a herd structure when flushed made them particularly susceptible to bow-and-stable hunting (Recarte *et al.* 1998; Sykes 2007: 51). The inclusion of 'redeere pie hott' on a banquet menu from Knole in 1636 is the first hint that red deer may also have been hunted in the park (Taylor 2003: 166).

The kinds of hunting activities undertaken at Knole would have been crucial to the park's role in constituting the status and identities of its elite residences. Different hunting techniques and quarries were endowed with different gendered status associations in the Middle Ages. The *par force* hunt for the male red deer was the

Fig. 7.19: A group of fallow deer rest in the August sun, 2014. Because fallow deer herd together when startled, they would have been particularly susceptible to the bow-and-stable method of hunting. Photo by Ryan Lash.

masculine hunt *par excellence*. At the opposite end of the spectrum, according to Gaston Phébus, trapping was

> *properly the delight of a fat man or an old man or a priest or a man who doesn't want to work, and it is a good hunt for them, but not for a man who wants to hunt by mastery and true venery*
>
> (Judkins 2013: 77)

Perhaps tellingly, Edward of Norwich, when adapting Phébus's work for the English royal court in the early 15th century, totally omitted the section on trapping. Yet, elite men were not the only people to hunt. The 15th-century *Debate between the Heralds* indicates that hunting deer in parks with long bows was a pleasure enjoyed by noble ladies in England (Cummins 1988: 7). Thus, hunting was not exclusive to one group of people, but its conduct and context had important implications for the performance of gender.

As (at least ideally) sedentary and celibate men, male clergy held ambiguous positions within medieval conceptions of gender difference (Gilchrist 2012: 98) Canon Law officially restricted clergy from hunting, because the use of weapons and mode of exercise were considered military in nature (Miller 2010: 209). Nevertheless, many bishops and monastic establishments kept deer parks. Actual participation in hunting likely varied widely among clergy, and perhaps especially between monastic and episcopal elites. In some cases, ecclesiastically owned parks may have functioned primarily to meet demands of hospitality. Elected in 1182, Abbot Samson of Bury St Edmunds neither hunted nor ate meat, but retained many parks and huntsmen and hounds. Important guests would hunt for entertainment, while *'the abbot would sit with his monks in a woodland clearing to watch the hounds giving chase'* (Greenway & Sayers 1989: 26). In other cases, great churchmen were avid hunters. The Boldon Book of 1183 records the various obligations that tenants owed to facilitate the Bishop of Durham's enthusiasm for the chase. High-ranking ecclesiastics often came from elite families. Thomas Bourchier's lineage was royal – he was a grandson of Edward III. It is not unlikely that churchmen of Bourchier's background shared aristocratic enthusiasm for hunting as a leisure activity and perhaps also as a performance of elite masculinity (Roberts 1988; Miller 2010).

Despite official disapproval for clerical hunting, the pursuit of game could also have spiritual connotations. Due to their superlative fertility and subterranean dwellings, rabbits evoked the resurrection of Christ from his tomb (Stocker & Stocker 1996). Hence, the

artificial mounds – warrens – used to breed and trap rabbits could have indexed theological concepts within the landscape of medieval parks, including Knole. A few mounds visible today amid the wooded area south of the main entrance to Knole may represent former rabbit warrens (Fig. 7.20). Even deer hunting might have evoked spiritual meanings. The image of the white hart was associated with Christ, and its pursuit could evoke the spiritual pursuit of Christ's example of purity (Cummins 1988; Fletcher 2001: 78). It is difficult to know how Thomas Bourchier and his archiepiscopal successors negotiated the tensions and potential harmonies between deer hunting and a spiritual life. Did Bourchier establish a park to entertain secular guests, to stock his tables, or to give chase himself?

There are no definite answers to these questions. Hunting was certainly taking place at Knole. Under Archbishop Morton, a building known as 'the Dranes' was renewed as a private slaughter-house for the park even though there was no shortage of butchers in Sevenoaks (DuBoulay 1976: 10; Taylor 2003: 164). Whether the Dranes was kept stocked by paid hunters, aristocratic guests, or the archbishops is another matter. However, a wall painting from Canterbury Cathedral, dated around 1480, suggests that an Archbishop of Canterbury could at least recognise the symbolic potency of the hunt. Set along the north aisle of the cathedral, the wall painting depicts a series of scenes from the life of St Eustace. Depicted prominently and nearest eye-level is the scene in which Eustace, a pagan, is converted while hunting when he beholds an

Fig. 7.20: One of four possible rabbit warrens located in the wooded area across the long valley south-west of the house. Photo by Ryan Lash.

image of the crucified Christ between the antlers of a stag (Fig. 7.21). It is not impossible that Bourchier was involved with the commissioning of this painting. Bourchier died in 1486 and his tomb is set a little further down the north aisle of the cathedral. In any case, the presence of the painting in the late 15th century suggests that men of the highest clerical status could imagine a harmony between the pursuit of game and the pursuit of grace.

Making and breaking the Park

Regardless of Bourchier and his successors' predilections for the chase, hunting would always have represented a
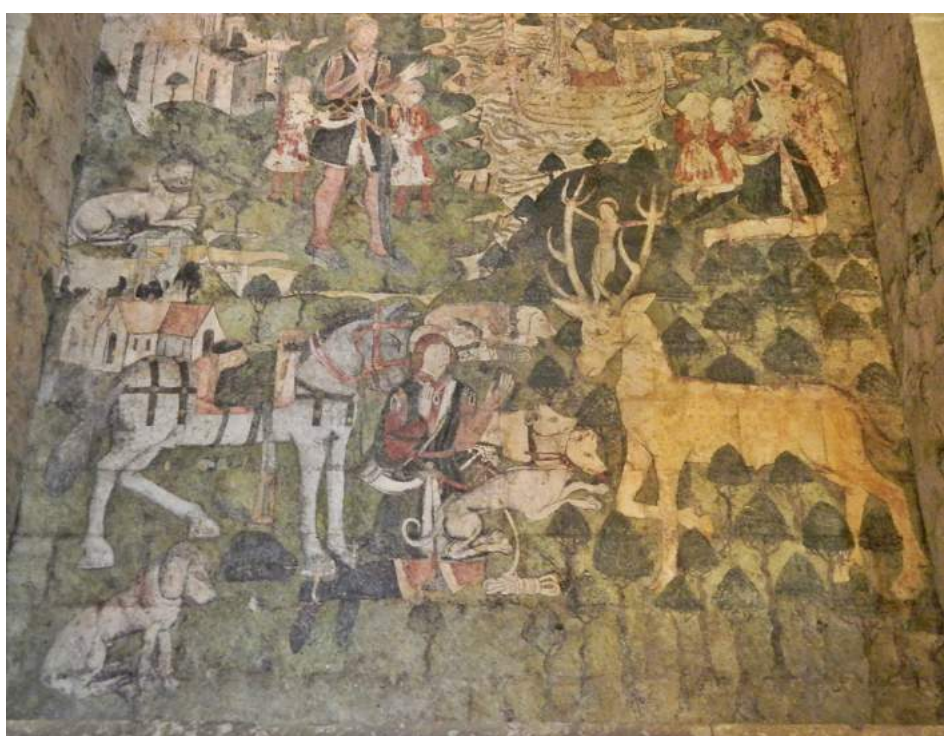

Fig. 7.21: The conversion of St Eustace from a wall painting along the north aisle of the choir of Canterbury Cathedral. The scene is the most distinctive episode in Eustace's biography and is featured most prominently in the wall painting. The late 15th-century date of the painting makes it a close contemporary with Bourchier and his archiepiscopal successors.

small portion of the activity undertaken in the park. Parklands served a variety of economic functions. They provided important supplies of timber, and a park owner might grant rights or collect fees for local tenants to collect fallen branches or graze pigs (pannage). A document from Maidstone Archive indicates that swine were kept in the park in the early 16th century (Strutt & Parker 1989). According to Vita Sackville-West's account, during the 17th century, cattle grazed the park in the summer months and the sale of rabbits constituted one-fifth of the park's income (Sackville-West 1922: 91). Though some of the lynchets observed by Alastair Oswald may date to prehistory, documentary sources indicate that some portions of the park were intermittently used for arable agriculture (Sackville-West 1922: 25; Taylor 2003: 169). As mentioned above, carefully managing woodland and open fields facilitated different methods of hunting such that the pursuit of sport and economic productivity were not necessarily in conflict.

Parks could also be the scene and supplier of resources for manufacture. John Lennard leased a portion of the Knole estate in 1570 for the purpose of glass manufacture. The actual glassworks may have been located south-west of the park at Hubbard's Hill, but the park no doubt was a crucial source of sand and timber for the furnaces (Eve 2014). A number of quarries throughout the park likely represent the large-scale gathering of sand for the glassworks, and later, for brick manufacture in the 18th century (Wright 2008: 18).

Thus, even if parks were created principally as exclusive spaces for elites to pursue game, they fulfilled many other functions that relied on the labour of people from many different class backgrounds. The park pale perhaps best represents this tension between social exclusion and entanglement. Pales were among the most vital material components of parks – they delimited the extent of exclusive space and prevented game from escaping. They also required a great deal of intermittent maintenance as embankments and staves decayed or as a park's boundaries fluctuated. At Knole, there is both documentary and archaeological evidence for the maintenance and replacement of the pale.

In one of the earliest recorded palings in 1468, money was paid for the production and transportation of 1000 palings from the nearby farm of Breton to Knole (Taylor 2003: 154). Each addition of land to the park required a new paling campaign. By 1561, much land had been added to the park and presumably paled, as a survey by the Earl of Leicester recorded the park extent in this year at 446 acres (Taylor 2003: 154). The pale would

have been extended again when St Julian's, Rumshott, and Fawke Commons were purchased in 1724. Wessex Archaeology's 2008 earthwork survey identified eleven landscape features that potentially represent the remnants of embankments for former park pales (Wright 2008). One of the most prominent examples cuts across the golf course north of the house (Fig. 7.22). Another possible pale remnant is a low rounded ridge that runs east to west across the long north-south river valley west of the house. Based on the number of references to paling in the documentary record, Taylor concludes that the park pale was *'continually and conscientiously repaired from its first enclosing'* (2003: 154).

The constant rhythm of decay, maintenance, and rebuilding of the pale is no small matter. At Knole Park, as everywhere, social relations were tied to material qualities and temporal flows implicit in the landscape. From a deep historical perspective, the ecology and geology of south-east England afforded a certain process of settlement expansion throughout the medieval period. This in turn afforded certain patterns of settlement, agriculture, and feudal relations (see above Part II and Chapter Twelve). Built elements within the landscape emerge over shorter time scales, but can still influence generations or centuries of human interactions. Consider the key role played by the durability of stone architecture and its rhythms of maintenance in each of the buildings surveyed in this book. Amassing the labour to heap great amounts of stone together makes a durable product from what are often temporary and contingent power relations. The construction of an elite residence literally 'materialised' the power relationships between elite residents, workers, and people in the surrounding landscape. Without relationships of coercion,

Fig. 7.22: This rounded embankment, now part of a fairway in the golf course, may represent a former park pale. Photo by Matthew Johnson.

monetary exchange, and feudal obligation, elites could not organise the labour to build their residences in the first instance. However, the material product of this labour could work to perpetuate ideologies of aristocratic authority and maintain relations of inequality. The layout and (in)accessibility of buildings can organise movements and interactions according to differences of status, age, and gender. Meanwhile, the sheer scale of elite residences, evoke the authority that built them and threaten the mobilisation of that authority against challengers. In fact, the maintenance demands of elite buildings forced their residents either to mobilise their network of social privilege or allow their building to decay. Park pales can be seen in the same way. The tendency of oaken palisades to decay, embankments to slip, and ditches to silt up established a tempo to social life. At Knole Park periodic decay challenged park owners to remobilise their authority. The park pale, as a material boundary, simultaneously required the labour of commoners while excluding their access to game in the park. Moments of repair or extension were potential turning points where the social privilege that premised the park might be either reproduced or put to challenge.

Indeed, breaking into parks to poach animals or simply cause destruction was a method used by both elites and commoners to contest lordly authority. When the king's uncle John of Gaunt gained land in Sussex in the late 14th century, resentful local gentry, including Bodiam's Edward Dallingridge, mounted a campaign of violence and intimidation against Gaunt's officials and estates. In 1377, Gaunt's chase at Ashdown Forest was illegally hunted (Walker 1983: 88). In what appears to be an instance of deliberate trespass that turned to violence, Dallingridge was prosecuted in 1384 for attacking the ranger of Ashdown and killing a sub-forester, Nicholas Mouse (Walker 1983: 88).

Park-breaking was not confined to the quibbling of secular elites. Breaking into and vandalising episcopal hunting grounds is well documented in feuds between bishops and secular elites. The religious vows and duties of bishops may have made them particularly susceptible to park-breaking as a symbol of emasculated authority (Miller 2010). For commoners, poaching was more often a dangerous economic opportunity or a challenge to elite privileges rather than a desperate means of food procurement. Elites particularly feared poaching as a challenge to social hierarchy in the wake of the Peasants' Revolt of 1381. Fearing that poaching offered opportunities for conspiratorial assembly, legislation passed by Richard II in 1390, placed new restrictions on hunting. Previously, restrictions on hunting were based on territory. Certain

hunting grounds – forests, parks, warrens, etc. – were reserved for elite privilege, but commoners could hunt elsewhere. The new legislation issued restrictions based on class. It forbade lay persons with lands or tenements worth less than 40 shillings a year (or priests with incomes less than 10 pounds a year) from even owning animals or equipment for taking 'gentlemen's game' (Harvey 2004: 174; Mileson 2009: 145).

Half a century later, Kent and Sussex were rife with poaching during the lead up to the Jack Cade Rebellion. For example, in 1448, a group of Sussex poachers led by a dyer from Salehurst took three bucks and six doe from Bodiam park (Harvey 2004: 180). Poaching may even have offered an opportunity for organisation among discontents. Harvey's survey of the textual accounts of contemporary legal proceedings shows that poaching gangs were composed of people from different parishes in multiple counties (2004: 178). Furthermore, not only were poachers largely from the same yeomanry class that led the rebellion, some men who sought pardoning for their part in the uprising had previously been convicted as poachers (Harvey 2004: 176-7).

The creation of the park at Knole has to be seen in the context of the fallout of the Jack Cade uprising. Sevenoaks was the scene of one of the earliest skirmishes between the rebels and royal forces. Six years after the revolt, Bourchier acquired Knole from William Fiennes, whose father James had been executed by the Jack Cade rebels for his apparent corruption as Lord Treasurer and representative of Kent in parliament. The first known paling of the park in 1468 was followed in 1486 by new legislation reaffirming old restrictions on the owning of hunting equipment. This legal reaffirmation reflected growing fear of social disorder, especially in Kent, Surrey, and Sussex (Harvey 2004: 182). In the early years of Bourchier's ownership, he appointed many very powerful servants as trustees to buy up property in the vicinity of Knole to add to the park. Du Boulay compares this acquisition campaign to the pressure later applied by Henry VIII to acquire Knole from Archbishop Cranmer. In his words, *'what could be done by obscure men like William Quyntyn, John Walder, John Brydde or William Merden who possessed acres in or about Knole Park which the archbishop wanted?'* (Du Boulay 1974: 8).

If the making of the park was expedited by political pressure, it also would have required renegotiation of traditional land-use rights for nearby tenants. Indeed, this would have been required each time new properties, especially commons, were added to the park. Thus, while every new impaling reiterated the
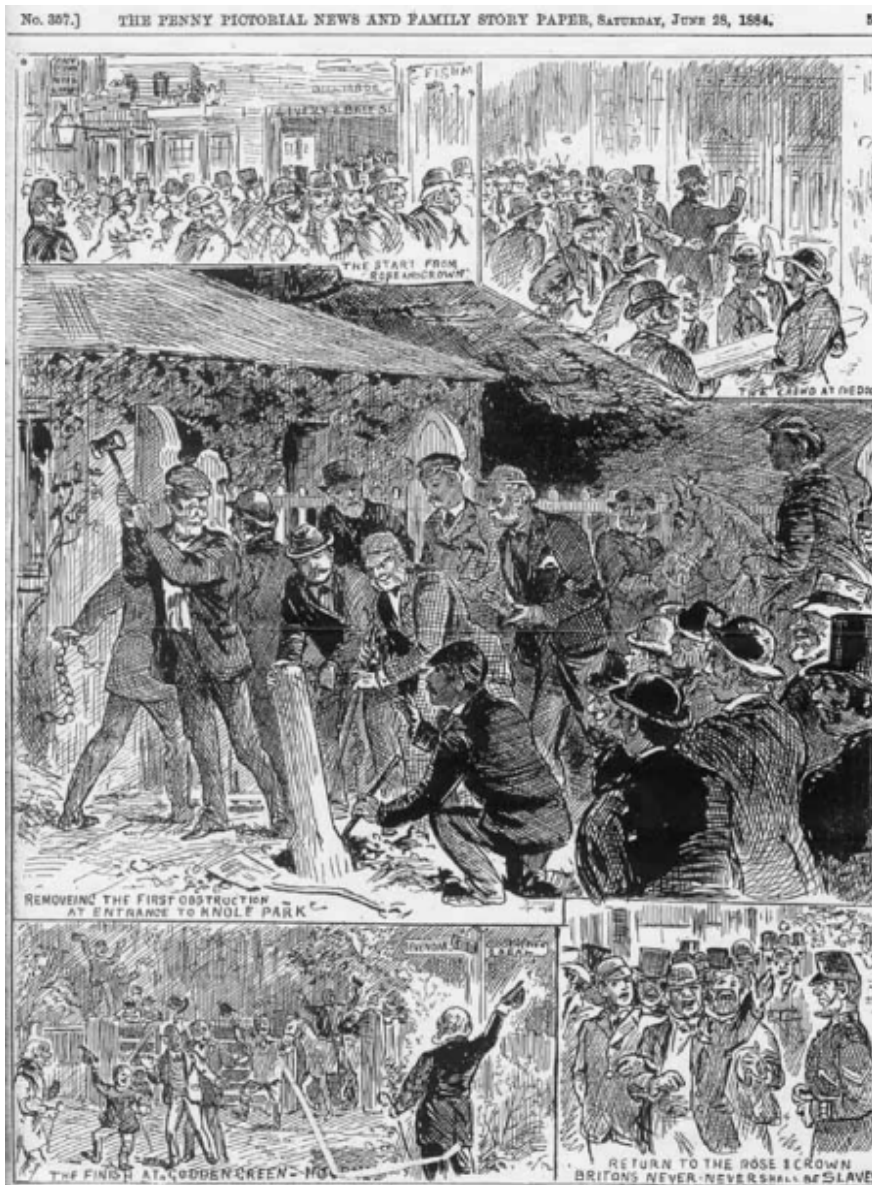
Fig. 7.23: Several national newspapers covered the events at Knole Park in June 1884. These illustrations come from The Penny Pictorial News and Family Story Paper 28th June 1884.

privilege of the great household of Knole, breaking the park and poaching offered an opportunity to challenge or at least display discontent with that privilege. There are, in fact, intermittent references to illicit hunting in Knole Park (Taylor 2003: 165-6). For example, in 1539 *'several local men who went muffleyd to Knole about 8pm and hunted deer with dogs and bows: a number were killed including a grey one'* (Phillips 1923: 395). This incident took place soon after Henry VIII confiscated the estate, but it is unclear whether this timing reflects any particular political motivation on the part of the poachers or merely a coincidence of preservation.

Later incidences of park-breaking were clearly inspired by more pointed political grievances. Mortimer Sackville-West restricted access to the bridle path in 1883 by closing Fawke Common Gate and erecting a wooden post at the town entrance that excluded

horses from entering. This pathway was essential for local tradespeople to bring their goods into town via horse-drawn carts (Killingray 1994: 67). After multiple attempts at destruction, Mortimer had the posts at the town entrance reinforced in wrought iron. On 18th June 1884, frustrated townspeople and neighboring villagers tore down these new posts and the Fawke Common Gate and placed their ruins before the main door to Knole House (Fig. 7.23). Protests continued the following night in a carnival-like atmosphere, with people riding symbolically back and forth along the bridle way and men dressed as women pushing prams across the park (Killingray 1994: 70-1). Though the political circumstances were very different, one cannot help but see a similarity between the character of these protests and the group of poachers who broke into Penshurst in 1450 with charcoaled faces and false beards, carried off 82 deer, and called themselves servants of the Queen of the Fairies (Harvey 2004: 176).

The actions undertaken by townspeople of Sevenoaks during the Knole 'disturbances' of 1884 highlight how the park's material enclosing features were barriers that attempted to impose elite privilege while presenting a material medium through which that privilege could be challenged. Like elite buildings, deer parks were stage settings for the performance of social difference, whether to do with class, spiritual status, or gender (Johnson 2002). But crucially, these stages were constructed and could be contested by many different hands across time.

Conclusion

Today Knole is carefully managed by the National Trust and the Sackville estate and the vast majority of the grounds are open to the public. As this chapter has attempted to show, Knole Park, like other elite landscapes in this book, was deeply implicated in the negotiation of status, gender identity, and political and economic relationships between elites and commoners. Late medieval deer parks, like manorial residences, were both products and producers of political inequality and ideologies of elite privilege. Their environmental attributes, spatial dynamics and maintenance demands influenced the lived experience of elites and commons alike by structuring the character and rhythms of social interactions.

Survey work in 2013 points towards new avenues of exploration for deciphering the history of building works within Green Court and along the western front of Knole. In addition to excavation in these areas, LiDAR survey would provide a valuable means of identifying and displaying earthworks within the park. At the time of writing, volunteer groups are working with Alastair Oswald to conduct a pedestrian survey of the park. This not only offers a means of identifying and reappraising sites, it also offers a way for community members to participate in the maintenance and exploration of the park. It is hoped that more opportunities for community collaboration become possible in the future. The National Trust does valuable work when maintaining and augmenting public access to heritage sites. Strategies of heritage maintenance do well to heed the rhyme first raised in ridicule of the enclosure movement in the 17th century, and later recited by James German to a meeting of townspeople on the first night of the Knole protests in 1884:

> The law imprisons man or woman
> Who steal the goose from off the common
> But leaves the greater felon loose
> Who steals the Common from the goose

IGHTHAM MOTE: TOPOGRAPHICAL ANALYSIS OF THE LANDSCAPE

Matthew Johnson, Timothy Sly, Carrie Willis[1]

Abstract. This chapter reports on survey at Ightham Mote in 2013 and 2014, and puts the survey results in the context of a wider analysis of the Ightham landscape. Ightham is another late medieval building surrounded by water features, whose setting might be seen as a 'designed landscape'. Here, we outline and evaluate the evidence for the landscape as it developed through time. As with the other buildings and landscapes discussed in this volume, rather than argue for either an exclusively utilitarian or exclusively aesthetic view, we provide an alternative framework with which to explore the way that barriers and constraints on movement in physical space reflect boundaries in social space. Rather than labelling a landscape aesthetic or practical, we can identify the practices and experiences implicated in landscapes, and their active role in social relations.

Ightham Mote is the fourth late medieval building and landscape to be discussed in this volume (Fig. 8.1; for location see Fig. 1.1). Like the others, Ightham is a National Trust property. The buildings consist of an inner and outer court, whose 'footprint' and external appearance was probably substantially complete by the end of the Middle Ages. The standing structure is a patchwork of different building phases from the early 14th century to the present day. Most recently, the building went through a comprehensive conservation programme costing over ten million pounds, and involving the controlled disassembly and reconstruction of large parts of the house. The information revealed by this process enabled others to put together a very detailed outline of the development of the house from the 14th century to the present (Leach n.d., a-f).

Fig. 8.1: The inner court of Ightham Mote, from the south-west.

The buildings at Ightham sit within a very distinctive landscape. The house is placed at the bottom of a narrow valley running north-south. The inner court is moated, and there is a series of artificial ponds to both the north and south of the inner court. The present form of these water features is the result of post-medieval landscaping, and there is no direct physical

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1   The topographical and geophysical survey work reported on in this chapter was carried out under the direction of Timothy Sly. The 'grey literature' and contextual information on Ightham was collated by Matthew Johnson, Ryan Lash and Carrie Willis. The first draft of this chapter was written by Carrie Willis, with additions and revisions by Matthew Johnson and Timothy Sly.

evidence for their medieval form. However, most if not all of these water features probably existed in some form in the later Middle Ages.

The Southampton/Northwestern team worked at Ightham in the summers of 2013 and 2014. We wanted to reconstruct and understand the form of the landscape at Ightham as it might have appeared in the later Middle Ages. To this end, in 2013, Timothy Sly and a team of Southampton and Northwestern students did a complete topographical survey of the valley area (LiDAR data not being available for the site), while Ryan Lash and Matthew Johnson collated and digitised the relevant archival and 'grey literature'. In 2014, we returned to do a geophysical survey of the orchard. During and after the 2014 field season, Carrie Willis worked up the data into the geospatial models that are
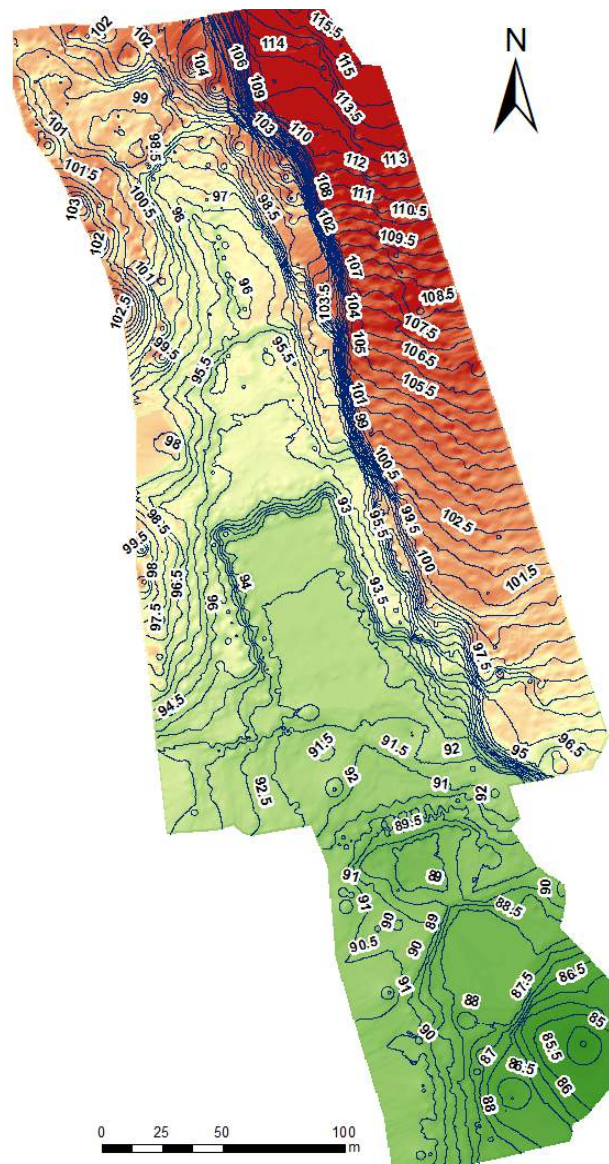
Fig. 8.3: *Contour map of the area surveyed at Ightham Mote. The eastern and western ridges are higher than the centre of the valley, and descend in height from north to south. Note that the highest point in this surveyed area is the northern extent of the western ridge, shown in red. Rendered by Carrie Willis.*

presented below, and put together the first draft of this chapter as her Senior Thesis at Northwestern.

Ightham Mote's landscape offers an opportunity to investigate some of the ideas of 'lived experience' first raised in the Introduction. Specifically, it offers insights into embodied daily practice and the constraint and control of movement throughout the environment. The Ightham landscape inspires questions that throw into perspective the traditional conception of designed landscapes in the medieval context (Liddiard & Williamson 2008, Creighton 2009). How does the landscape at Ightham help us to understand what it

Fig. 8.2: *A simplified diagram of Ightham Mote as it exists today, with key features indicated. The northern pond, fed by the Mote Stream, appears at the north, with the house in the middle of the diagram, and the south pond and farm courtyard complex to the south-west and south-east respectively. Diagram by Kayley McPhee.*
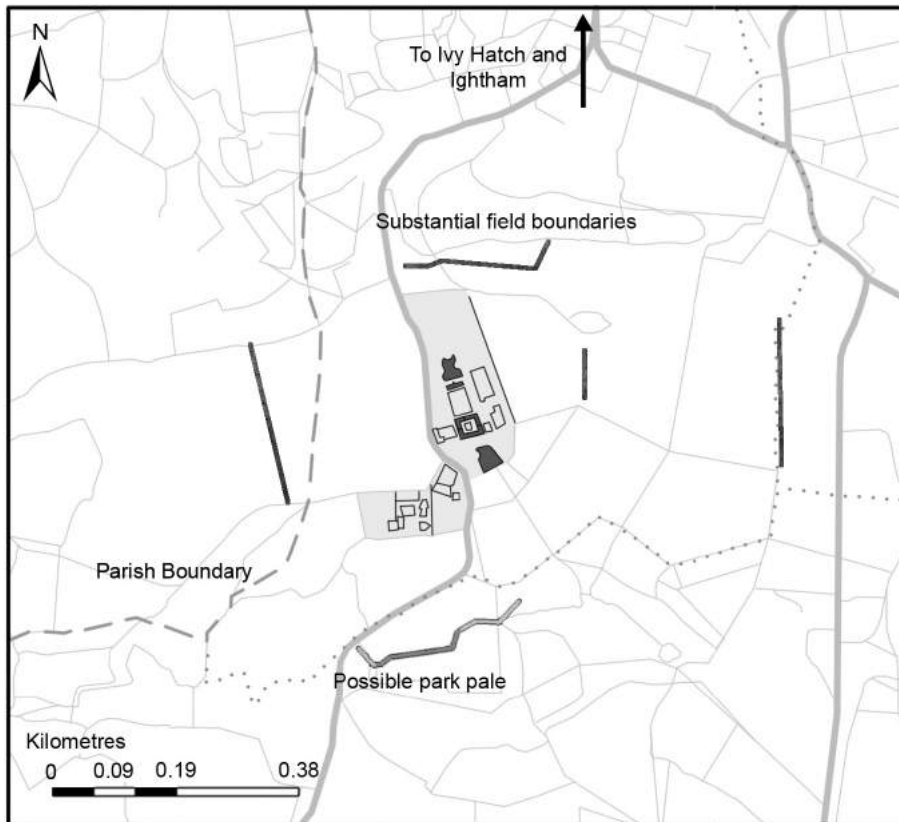
Fig. 8.4: The wider landscape of Ightham Mote, with the location of possible sections of park pale and other substantial field boundaries indicated. The dotted and dashed lines indicate the parish boundary; the dashed line is also the district boundary. Drawing by Kayley McPhee.

means for a landscape to be 'designed'? Likewise, how does the landscape at Ightham enter into the discourse of landscapes as places of work, pleasure grounds, or reflections of social status?

The concluding discussion in this chapter will investigate the ways in which the landscape at Ightham Mote reflects and reinforces ideas of practice and lived experience. Through the analysis of three-dimensional models of the topography, we examine the way the features of the landscape, both natural and modified, constrain and express movement throughout space, and how this movement both reflects, reinforces and renegotiates ideas of status and social identity.

Ightham Mote: Description and History

Ightham Mote is a moated manor house owned and managed by the National Trust. The site is located 8 km east of the town of Sevenoaks in Kent, and 7 km east of the Knole Estate and deer park discussed in the previous chapter. The house is located within a north-south oriented valley, which decreases in elevation from north to south (Figs 8.2 & 8.3). The estate currently includes the two-storey house, its outer courtyard and stables, an orchard, gardens, farm complex, and surrounding fields and woodland (see Figs 8.3 & 8.4). The water features that exist today include one large and two small ponds

towards the north of the house and one large pond towards the southern extent. The inner court of the house is oriented with its main entrance facing west, facing directly towards the outer court.

The estate is composed of 208.42 hectares (515 acres), including 149.74 hectares (370 acres) of farmland and 58.68 hectares (145 acres) of woodland. The site is located at the junction between the Upper and Lower Greensand on the edge of the Weald. Geologically, it is built on a combination of loam, sand, and mudstone, phasing into the Wealden clay towards the southern extent of the property. The property contains multiple springheads feeding into a stream which runs through the property on a north-south axis.

Human occupation in the vicinity of Ightham has been dated to as early as the Mesolithic period. At Oldbury, a site to the north of Ightham Mote, occupation scatters have been dated to 100 BCE (Thompson 1986). Nicola Bannister (1999: 21) and Peter Rumley (2007) suggested that a previous settlement may have existed at the site of Ightham Mote before the manor house was built. However, archaeological excavations undertaken during renovations of the house in 2003 did not indicate any pre-existing structures below the site of the house (Leach n.d., a&b). In the 8th to 12th centuries, when many English villages were created and much of the agricultural
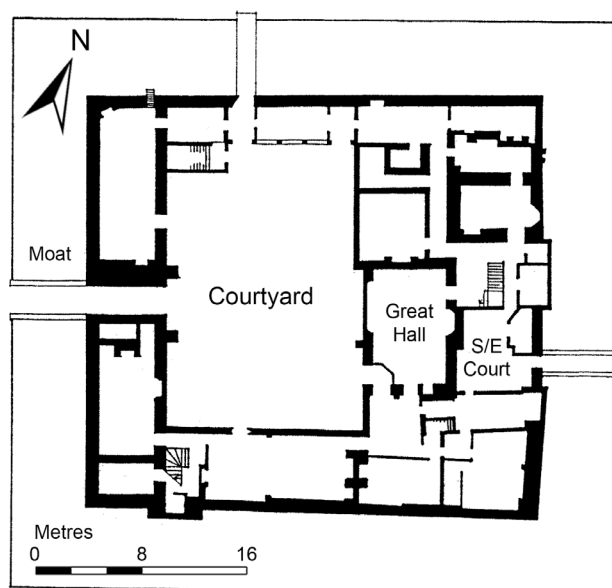
Fig. 8.5: Ground plan of the inner court as it exists today. The bridge at the left centre of the image, crossing the moat, lines up with the opening of the outer courtyard, allowing for a processional approach. The bridge at the right, just below the centre of the image, would have allowed for a rear approach to the house. Drawing by Kayley McPhee, after Nicolson 2005 [1998], inside front cover.

landscape reorganised, Wealden Kent was less affected by this process than, for example, the Midlands or North of England. The Wealden landscape exhibited continuity and piecemeal change rather than large-scale transformation during these centuries (Cantor 1982; Everitt 1986; see also Chapter Twelve, this volume).

It is not possible to associate a name with the initial building of the present structure of Ightham Mote, as documentary records from the very earliest phases of the house do not exist or have not been located. An entry in the Assize Rolls for Kent from 1371 lists Ightham Mote as belonging to Sir Thomas Couen (variously spelt Coven, Couen or Cawne). Additional documentary evidence lists Couen as a resident from 1360 to 1374 (Minihan 2015). Prior to this, there is some evidence that the estate was owned by a widow, Isolde Inge, in the 1340s.

The best published account of the structural history of the house itself can be found in Anthony Emery's gazetteer of later medieval houses (Emery 2006: 257-64). In its earliest phases, the house consisted of a kitchen-service-hall-solar block in one range; successive generations extended this into a courtyard house, with the addition of the second courtyard in the later 15th century. Tree-ring dating performed on roof timbers in the solar, hall, and chapel of the house dates these areas to 1340, 1344 and 1347 respectively (Leach n.d., a).

The very earliest standing fabric probably dates to the 1320s. The outer court was added towards the end of the 15th century. While the footprint and external walls of the inner court are mostly medieval, the room interiors have been adapted and transformed over the centuries in a continuous, generation-by-generation process that has left the built structure of Ightham as a patchwork of different phases and periods from the 14th to 20th centuries (Figs 8.1, 8.5 & 8.6).

The experience of the modern visitor to Ightham Mote is quite distinctive. Most visitors arrive from the north, along some kilometres of narrow, winding country lanes flanked by hedgerows, small fields and woodland. The road forks north of the house, and the eastern branch leads down through woodland to the visitor car park, partly housed within the walls of a former orchard. From here, two routes lead steeply down, either a path through the modern ticket office or a road winding round to the south. The overall impression is of a small-scale, occluded landscape, without sweeping views (though these may be obtained by a short walk east or west, leading to commanding views over the Weald). Ightham Mote affords a strong subjective impression of a tucked away, forgotten place, unlike other grand country houses.

However, this modern visitor experience has to be 'thought away' before an understanding of the earlier landscape can be attempted. The modern visitor's approach to the property, culminating in parking within and to the north of enclosed garden walls, may well not have been the approach of most medieval visitors (below we argue for the possibility that this was a high-status, perhaps exclusive, route of approach to the house, with most traffic approaching the lower court via a western route). Much of the woodland, orchard and garden walls are products of the last two centuries. Beyond this, it is difficult to make definitive statements
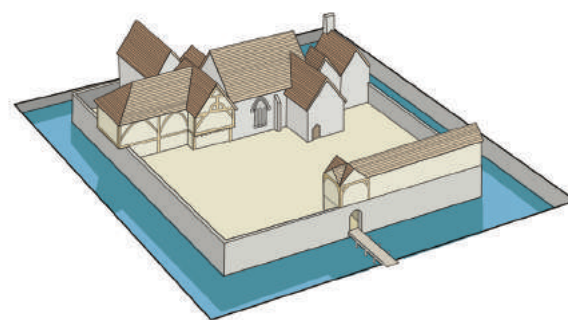

Fig. 8.6: Reconstruction of the inner court in the 14th century. This reconstruction shows the house without the outer court, which was added towards the end of the 15th century. Drawing by Kayley McPhee, after Nicolson 2005 [1998]: 6.

about which features of the modern landscape may have existed when Ightham Mote was first created. The stables at Ightham Mote are dated to the 19th century, while the farm complex dates from the post-medieval period. The surrounding copses of trees immediately adjacent to the valley on either side are primarily composed of mature trees planted between the 16th and 19th centuries, with some old growth scattered throughout (Bannister 1999; Rumley 2007). Historic maps only reach as far back as the late 17th century. The wooded areas that appear in these maps had not been natural forest for some millennia; in common with virtually all woodland in the lowland British Isles, they would have been humanly managed to a greater or lesser extent from prehistory onwards (Rackham 1990).

If the existing field and forest boundaries can be extrapolated further back into the past, we can use 17th through 19th-century Tithe maps, Ordnance Survey maps, and other documentary evidence to approximate landholdings in the first few years after Ightham Mote

Fig. 8.8: Water features north of the house as they exist today, with valley sides and woods beyond, viewed from the gatehouse tower. Photo by Matthew Johnson.

was erected. It is clear from the Ordnance Survey and Tithe maps and other documentary evidence that by the 18th century, Ightham Mote's holdings included the house, farm, gardens, orchard, southern meadow, a significant expanse of fields to the east and west, and tracts of Scathes Wood and Martin's Wood. The earliest map known of Ightham Mote and its surrounding land, a 1692 estate map by Abraham Walter, confirms these landholdings in the 17th century, though the whereabouts of this map is currently unknown.

The wider landscape context of the house is well known from estate maps dating to the 17th to 19th centuries, but is less clear for the later Middle Ages. The general pattern with later medieval houses of this status would lead one to look for the possibility of surrounding water features, and possibly a wider landscape setting such as a deer park. The evidence for a deer park is fragmentary at best; that for water features circumstantial but very likely (Figs 8.7-8.9).

Fig. 8.7: Possible layout of landscape and water features around the house in the 14th century, before the addition of the outer court. The area between the house and the north pond would have been used as a middle pond for the storage of fish bred in the north pond. The south pond may have functioned as a mill pond, drawing water away from the house via the Moat Stream. The possibility of a park beyond is discussed in the text. Diagram by Kayley McPhee, after Rumley 2007: 42.

Fig. 8.9: Dam, of post-medieval form but possibly of medieval origin, between the two ponds north of the house, looking east. Photo by Matthew Johnson.

Seven hundred metres south of the house, towards and just below the summit of a slope, there is a section of an earthwork now used as a modern field boundary (Fig. 8.10). It is possible this earthwork represents part of a park pale. It has a ditch on the 'inner' side, and faces up the slope. Elsewhere, however, it is very difficult to trace a hypothetical deer park. There are substantial field boundaries north, east and west of the house, but none have the appearance of a park pale, and nor can they be easily joined up to form the classic oval shape of a deer park. The boundary on the shoulder of the rise to the west is quite massive. However, it has no trace of an accompanying ditch. The boundary to the east is wide but of little height, and the trees upon it are of no great antiquity. The existence of a deer park at Ightham must therefore remain unproven one way or the other; the lack of intensive survey, excavation, and coring done on the earthworks surrounding Ightham Mote limits our ability to make claims about park boundaries based on these features.

Documentary sources indicate that there was a watermill at Ightham, and the ease with which the valley could be dammed to create a mill pond is quite apparent. However, the date of its foundation remains uncertain and while the ideal location for a mill somewhere in the vicinity of the dam for the south pond is clear, its precise site is a matter of debate. The belief that a mill existed at Ightham Mote stems from a church record from the parish church of Shipbourne, which details that 'John sonne of Samuel Lyn, the miller of Mote in Ightham' was baptized on 16th November 1583 (Bannister 1999: 21; Rumley 2007). Despite the documentary record of the existence of a mill at Ightham Mote, and the general plausibility of the presence of a watermill at a site of this kind, no archaeological or geophysical evidence exists to validate its existence. Likewise, no other documentary evidence, including building permits or maps, list the mill or its location on the property.

North of the house itself, there are a series of banks retaining bodies of water. The modern form of these banks is the result of the post-medieval landscaping of the area, and there is no direct evidence that these banks existed in the Middle Ages. However, given the form of the valley, and the position of the house, it is unlikely that a medieval owner would have forsaken the opportunity to create a series of fishponds or other water features. Ightham Mote may have had four bodies of water in the Middle Ages, each fed in turn by the Mote Stream that originates to the north in the Upper Greensand and runs down the length of the valley on a north-south axis (Rumley 2007; see Figs 8.7-8.9). The last bank would have stopped the

Fig. 8.10: An earthwork ditch, now used as a modern field boundary, 700 m south of the house (see Fig. 8.3). This earthwork may be the possible remnants of a park pale; it also marks the parish boundary. Photo by Matthew Johnson.

Mote Stream at its southern extent, creating what is now known as the south pond. In 2003, N. Griffin and colleagues undertook geophysical survey in the north lawn to determine whether this area was in fact a lake in the past. The results of this geophysical survey were inconclusive (Griffin 2003; Rumley 2007). Additional auguring or coring in this area may prove beneficial in identifying whether this lawn may have constituted a 'middle pond' in the early or middle medieval period.

If these bodies of water existed in anything like their present form in the Middle Ages, one would expect them, in parallel with similar features elsewhere (Creighton 2009), to have practical as well as visual purposes: the north pond and middle pond would have been used to breed and store fish, respectively; the moat would have been used for the discharge of refuse from the kitchens and garderobes; and the south pond would have functioned as a mill pond. It is likely that the whole valley was set up as an hydraulic system: as water flowed from the moat into the south pond, the watermill would employ the water flow, discharging it into the Moat Stream at the southern extent, away from the house, flowing southwards towards the Low Weald.

Fieldwork at Ightham Mote

An intensive programme of restoration and conservation has taken place at Ightham Mote since its acquisition by the National Trust in 1984. Since then, multiple geophysical, topographical, and building survey methods have been applied at Ightham Mote (see Leach n.d., a-f; Bannister 1999; Rumley 2002; 2006; 2007; Griffin 2003; Leach & Rumley n.d.). The systematic taking-apart and reconstruction of the house was accompanied by detailed record-keeping; a series

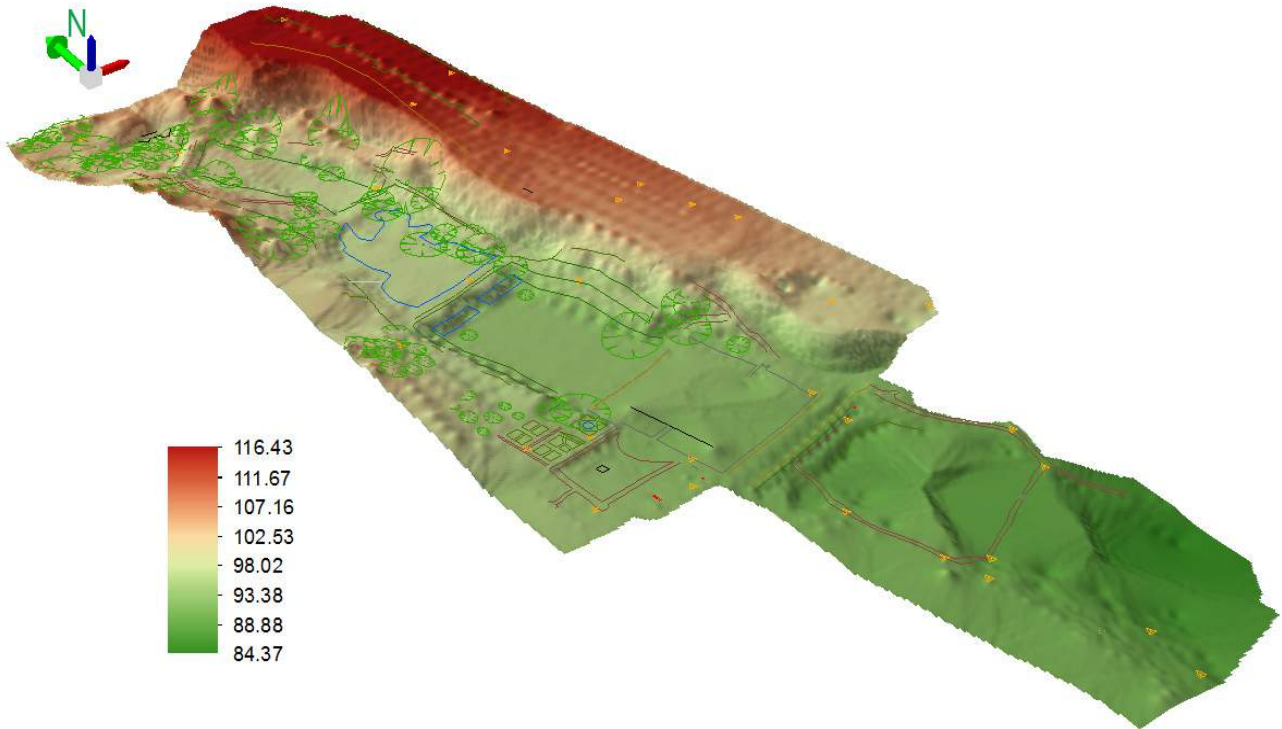|	
116.43	
111.67	
107.16	
102.53	
98.02	
93.38	
88.88	
84.37	

Fig. 8.11: (Above) Three-dimensional topographical model of the landscape at Ightham Mote, rendered in ArcGIS. Drawn to the same scale as the contour map (Fig. 8.3). The slopes of the eastern and western ridges are more visible here, as well as the lookout point created by the elevation of the northern extent of the eastern ridge. Vertical exaggeration is 1.76, calculated from extent. The lighting angles are 319.7 degrees (azimuth) and 31.9 degrees (altitude). Contrast is 50 (default). Rendered by Carrie Willis.

116.43	
111.85	
107.27	
102.69	
98.11	
93.53	
88.95	
84.37	
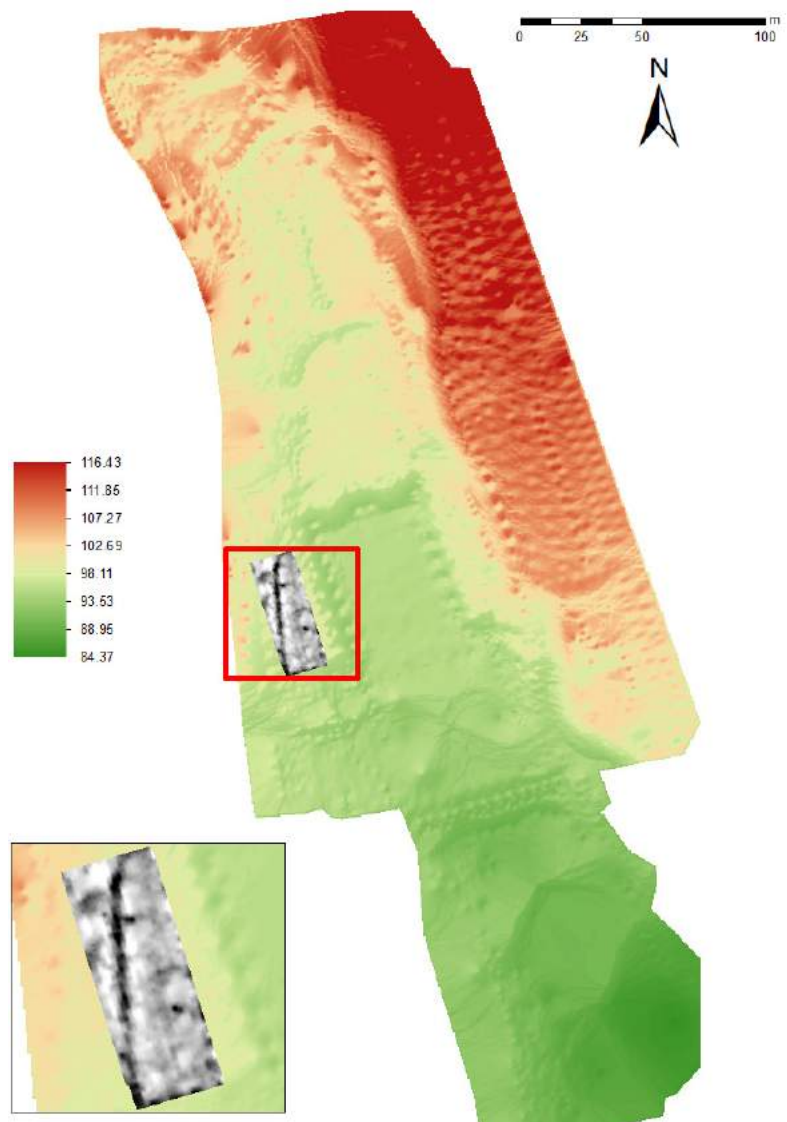
Fig. 8.12: (Right) GPR results from survey in the orchard at Ightham Mote. The thick black line at a north-south axis indicates that the material here is more densely packed than the surrounding white areas; we believe that this indicates a densely-packed or even-paved path cutting through the orchard on a north-south axis. Rendered by Carrie Willis.

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Fig. 8.13: View north-west from the gatehouse tower towards the orchard, with modern reconstructed gardens in the foreground and the valley sides beyond. Photo by Matthew Johnson.

of unpublished volumes of recording and analysis were produced by Peter Leach (Leach n.d., a-f) before his untimely death. At the same time, a variety of traditional craftsmen were employed in the reconstruction work; the lively interactions between members of the conservation and restoration programme, and their different viewpoints on the work, were recorded in a special episode of the Channel 4 TV documentary series *Time Team*. An account of this work, and the insights it provided on the development of the house and on medieval buildings generally, remains unpublished, but is of great significance, not simply in telling us about the history of the building, but also in terms of method – a very rare opportunity to take down a medieval house and build it up again.

The most recent round of fieldwork on the immediate landscape around Ightham Mote was conducted between 2012 and 2014 as an international collaborative effort between the National Trust, the University of Southampton, and Northwestern University.

Fieldwork by Northwestern and Southampton Universities at Ightham Mote commenced in 2013. A team of six Northwestern undergraduates and six Southampton undergraduates conducted topographic and geophysical survey at Knole, and topographic survey at Ightham. Rotating teams of three undergraduates under the direction of Timothy Sly used a total station to plot and code over 500 three-dimensional points. The work progressed at a much faster rate than anticipated, and the bulk of fieldwork at both Ightham and Knole was completed in the 2013 season. At Ightham, this work consisted of a detailed topographical (contour) analysis of the area of the property owned by the National Trust.

The 2014 season was initially planned as a second and final season for the work at Ightham and Knole. However, the success of the 2013 field season left little additional survey to be done, particularly at Knole, and thus the 2014 field season was used for more analytic work. The 2014 team was much smaller, composed of two Northwestern undergraduates, two Northwestern graduate students, and one Southampton graduate student. The team was tasked with completing additional geophysical survey at Ightham, preparing geospatial renderings of the Ightham and Bodiam landscapes, and compiling copies of the grey literature for previous seasons at Bodiam, Ightham, and Knole. The team created three-dimensional topographic renderings of the Ightham Mote landscape, which are presented in this chapter.

Figs 8.3, 8.11 & 8.12 are different views of the results: a three-dimensional model of the immediate valley landscape of Ightham Mote. The model shows the narrow valley in which the house is located. This valley runs from the elevated Upper Greensand ridge at the north all the way through to the rolling clay hills of the south, where the land is considerably lower. The house is located at the southern end of the valley, where valley widens out. One can see the higher ridges at the north and east of the valley. Mote Stream, which feeds the ponds at Ightham Mote, begins somewhere over the top of this northern greensand ridge, and follows the slope to the south to fill the northern ponds, then the moat, then the southern pond.

Geophysical Survey of the Orchard, 2014

The plan set for the 2014 field season was to conduct Ground Penetrating Radar (GPR) in the orchard, outer courtyard, and an area near the south pond. Time permitting, our team were in discussion with the National Trust to potentially use GPR in the Great Hall. The area near the south pond proved too difficult to work with. The area was being treated for an invasive strain of weed, and the team was not able to remove weeds from the area as this would have hastened further spread of the species. This would have made it impossible to use the GPR unit, and thus the decision was made to abandon that area and go on with the rest of the survey as planned. Survey commenced with the orchard area, and a significant amount of this area was surveyed. Logistical difficulties, however, meant that further plans to survey the outer courtyard and other areas could not be carried out.

The results of the GPR survey in the orchard contain the clear signature of a path cutting running across it. The results show a well-delineated linear anomaly crossing the survey area on a north-south axis, curving to the east

at its northern extent (see Figs 8.12 & 8.13 for a general view of the area). The darkness of the line in Fig. 8.12, at the 5-8 ns level, indicates that the material which composes the anomaly is dense. The GPR results of this area at a shallower depth shows the line, particularly at the northern extent where it curves east, in a much lighter shade. This indicates that the material here is much looser. We suggest that these findings represent a well-packed or even-paved path cutting through the orchard, overlain by looser soil.

Images and maps of Ightham Mote from the 1800s indicate a curved footpath cutting through the garden. In 2015, gardeners at Ightham Mote removed the top layer of soil from this area and exposed a linear row of stones or paving slabs. We suggest that this finding corroborates the existence of a path in this area of the orchard. However, further investigation into the soil composition of this area is necessary to confirm whether the anomaly represents a formally constructed path or one created by consistent use.

Topographic Analysis: Possible Routes of Approach

The topography of the site, as revealed both through the 2013 topographical survey and the map evidence of the surrounding area, gives some indication of the different possible routes of approach to Ightham Mote. Analysis of these different routes offers an initial understanding of different possible experiences of the place in the Middle Ages. This may have been very different from the modern experience, conditioned as it is by large areas of more recent woodland and vegetation.

The contour survey clearly depicts the very steep slope of the western and eastern ridges that form the valley. These slopes would be difficult and costly – in terms of energy – to scale, and potentially hazardous for carts or other vehicles. It is unlikely that travellers to and from Ightham Mote would have used paths that went straight up and down these ridges. It is more likely, based on the topography of the landscape, that travellers would
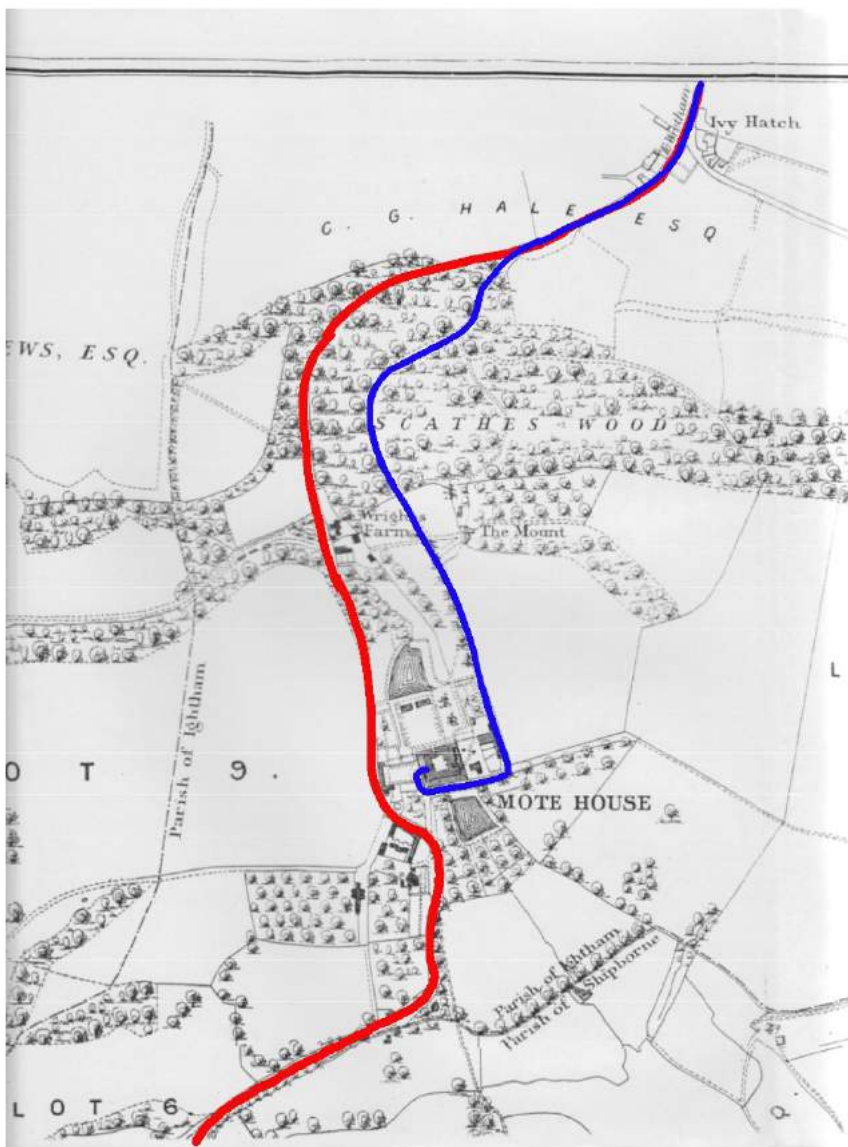
Fig. 8.14: The route of approach to Ightham Mote from the eastern side of the valley (blue line) and western side of the valley (red line), superimposed on the 1889 Sale Particulars map. The red line indicates the public path, serving traffic through the area, while the blue line represents a more private path, serving traffic to the house. Routes of approach to Ightham Mote from the eastern and western sides of the valley. The western route served general traffic through the area, while the eastern route may have been a more exclusive approach, serving traffic to the house. Drawing by Carrie Willis.

have walked down the gentle descent of the eastern or western ridges to approach the property from the north, or up the gradual incline from the south.

19th-century Ordnance Survey, estate, and Sale Particulars maps, can be used to indicate former routes that may have been used to reach the property. From the Sale Particulars map, one can see two routeways lead directly to Ightham Mote (see Fig. 8.14). Both run south from the hamlet of Ivy Hatch; one runs along the eastern ridge and the other runs along the slope of the eastern side.

Approach via the western side of the valley

The 19th-century Sale Particulars map indicates that a north-south route runs south from Ightham village and divides to the south-east and south-west (see Fig. 8.14). The western branch of this main road continues south-west, through the hamlet of Ivy Hatch, and cuts through Scathes Wood to the north of Ightham Mote, almost on the outskirts of the wood. The road then continues south along the western side of the valley which houses Ightham Mote. The road extends south, past Ightham Mote, past Budd's Green, and continues south towards Hildenborough. Topographically, the energy cost of using this road is minimal; the land decreases at varying degrees of steepness as one goes south. The road is a route that connects up a range of places across the landscape; although it passes Ightham Mote, and indeed may have been diverted to accommodate the new outer court in the later 15th century, it is not intended as a route specifically for travellers to Ightham Mote. It serves major foot and horse traffic from wider areas of the region, with Ightham Mote as only one stop along its path.

A visitor travelling south on the major road would first come through the outskirts of Scathes Wood to cross fields and a minor wooded area (see Fig. 8.14). The age of Scathes Wood is not known for certain, so the visual effect of this approach may have varied over time. An earlier map by Andrews *et al.* dated to 1769 does not appear to show the wood, although it does appear to show the major (western) and minor (eastern) roads that cut through it. The woods appear in the subsequent 1801 Ordnance Survey map, which suggests that the shape of the wood as it appears on later maps through to the present time was the result of 18th-century landscape modifications.

The traveller would then proceed south along a slight incline and through a smaller copse of trees before the property was revealed to their left. Because the land decreases in elevation from north to south, the visitor would have a clear view of the property, slightly from above, viewing it from across the area now occupied by the north pond and lawn, and probably the site of water features in the Middle Ages. The visitor would continue south with the house at their left, along the side of the west front of the outer court, and would then either turn into the outer court through the western gate, or continue around to the south-west corner of the south pond. From this position, the visitor would turn sharply left and head north, viewing the house's southern aspect, with the north lawn and pond providing a backdrop, to come to the entrance between the inner and outer courts. Alternatively, such a visitor would continue on the road as it veered to the south-west towards Nuttree Green and the intersection with what is now Hildenborough Road.

A visitor travelling north-east on the major road, from Nuttree Green and the Low Weald, would also first see the house framed by water features; the land increases in elevation when coming from the south, so the individual would come north through a copse of trees and initially see the tower, roofs and upper parts of the house from across the south pond. The mill may well also have been highly visible from this angle of approach, to one side of the south pond and between the house and the road. As the house was approached, visitors would have the pond on their right and see the house with its northern water features in the background before turning right into the western courtyard.

Approach from the eastern ridge

To return to the northern side, a route now forks from the major road where it meets the northern extent of Scathes Wood, cutting through an area of woodland (see Fig. 8.14). This is the approach taken by contemporary visitors to the Trust property. It then moves south through the wood, curves slightly to the west, then comes south along the eastern valley ridge. It continues south until parallel with the south-east corner of the house, and then turns westward at a sharp right angle.

It then moves west along a tightly defined causeway between the south pond and the southern aspect of the house, before turning north, through the perimeter of the outer court, to terminate at the space between the outer court and main entrance. Topographically, this route of approach would also be a convenient one; the eastern ridge of the property, though steep on its western face, is a gentle and manageable descent moving from north to south.

The approach from the western side of the valley covers additional ground by running along the northern and western outskirts of Scathes Wood, and is also the main routeway running north-south between Ivy Hatch and Nuttree Green. The minor road affords more direct access from the north, cutting through Scathes Wood on a direct path to the more gentle eastern face of the valley at Ightham Mote. The major road does provide access to Ightham Mote, but the minor road appears to be less heavily trafficked, more private, and with more direct access to Ightham Mote.

The Scathes Wood route is listed in a 19th-century map as a 'carriage drive'. It may have been created in the 1600s by the Selby family (Rumley 2007: 58), and it may have been either created or modified at some other date in the post-medieval period. However, it may well be earlier. It may be that rather than the trees being planted to create the carriage drive, the trees were planted to accentuate an existing routeway, and that this routeway was the most common route of access from the northern villages to Ightham Mote.

A visitor travelling south on this route would be in the woods for slightly longer, emerging at the northeast corner of the property (see Fig. 8.14). Upon exiting the woods, a visitor would emerge at the top of an elevated area of the eastern ridge. The northeast point of the property is much higher than the surrounding land; from this point, the visitor would have been able to see the entire property, including the south pond, from this vantage point. As the visitor descended the slope to the south, a full view of the eastern face of the house would be visible. At the base of the slope, the visitor would turn sharply to the west, and either enter the house across the bridge and through the small eastern entrance, or proceed with the south pond to the left and the house to the right. Another right turn would deliver them almost immediately into the space between the outer and inner courts. The minor road appears to join up with the major road at the south-west corner of the south pond. Therefore, a southerly approach is not possible from the minor road.

Both roads lead through Scathes Wood, the minor road more deeply through the wood and the major road on its outskirts. From the point where they fork, the minor road is a shorter distance and time to Ightham Mote. While the northerly approach from the major road would have gradually revealed first the north pond, then the middle pond or north lawn, then the house, the high elevation of the northern aspect of the eastern ridge would have made the entire property visible upon

Fig. 8.15: The outer court, probably added in the 1470s, as seen looking west from the summit of the gate tower. The ground rises beyond the road to the edge of the parish and a substantial field boundary beyond, indicated in Fig. 8.4. Photo by Matthew Johnson.

exiting Scathes Wood. This would have had the effect of emerging from the limited visual range of the enclosed wood to be immediately met with an impressive view of the landscape in its entirety. While the major road leads past the outer court to the south-west corner of the south pond and back up, the placement of the main entrance away from the eastern ridge would have forced the traveller using the minor road to come across the southern face of the house, lengthening the travel time.

The two routes of approach appear to be complementary: the western route is that of an everyday route, along with the main traffic through the valley on the way north to Ivy Hatch and south to Nuttree and the Low Weald, and leading to the lower court and the service activities housed therein, while the eastern route is more specialised and possibly restricted to household staff and/or visitors.

Discussion

To summarise the evidence that we have for the later medieval landscape at Ightham Mote:

• The house itself, and the moat surrounding the inner court, date back to at least the 1320s.
• The outer court was added in the later 15th century.
• There is no direct evidence for a series of ponds or water features north and south of the house, but the existence of most or all of these is probable given the context and parallels with other late medieval sites.
• Similarly, there is no physical evidence for medieval gardens, but one would expect a house like Ightham to have one or more gardens after the medieval pattern, that is small enclosed spaces.

• There is documentary reference to a mill; the pond to the south probably served as the mill pond.

• The approach along the western side of the valley is part of a route likely to be early medieval in origin, but was probably diverted to run around the new outer court in the later 15th century.

• The approach along the eastern side of the valley may well also have existed in the Middle Ages.

• Both approaches would have afforded impressive views of the house in its landscape setting that are now not possible due to tree planting and other post-medieval modifications to the site.

• There is at least one fragment of what appears to be a park pale to the south of the house.

To these observations, we add a further speculative point:

• The addition of the outer court in the later 15th century, under the Hautes, was a major transformation in the scale of the house (Fig. 8.15); it is possible that insofar as there was ever a designed landscape at Ightham Mote, it may have been created or enlarged at this point.

How best to interpret these observations? It is very tempting to note the likely existence of a series of water features, combined with approach routes that probably afforded views over the valley and the house therein, and the possibility of a deer park beyond, and conclude that Ightham Mote is an example of a designed landscape. This was the view taken in the 2007 archaeological assessment of the garden, in which Peter Rumley joined together the field boundaries outlined in Fig. 8.4 to postulate the presence of a deer park (Rumley 2007: 51). This view was sharply rebutted by the landscape archaeologist Chris Taylor in an appendix to the Garden Conservation Plan of 2008 (Ford & Rutherford 2009: 120). Taylor pointed to the lack of physical evidence at Ightham for medieval gardens, and that the field boundaries marked in Fig. 8.4 could not be plausibly joined up to create the oval form characteristic of medieval parks. However, as we have seen with Bodiam and Scotney in earlier chapters, the underlying problem here is the use and definition of the term 'designed landscape'. This has a series of issues, both in terms of the concept, and in terms of the evidence that might be marshalled in support of it.

Despite its extreme popularity in landscape archaeology, the phrase designed landscape has some problematic conceptual baggage associated with it. Primarily, it is a difficult term to define within the medieval context. As Creighton (2009) explains, the phrase designed landscape was not originally created to describe features of medieval landscape archaeology. The phrase is typically used to describe post-medieval parks and gardens surrounding large country homes, beginning in the Tudor period and popularised in the 19th century (Johnson 2002; Liddiard & Williamson 2008; Creighton 2009). Using the term designed landscape in the medieval context indexes 19th-century ideas of the role and experience of landscape, which may not match medieval perceptions and understandings of the landscape (Smith 2003). Furthermore, as Creighton (2009) mentions, the boundaries of the designed landscape are hazy at best; where does the designed portion of the landscape end and the 'natural' part begin? Are designed and natural landscapes mutually exclusive (Edgeworth 2011)? Furthermore, how complex does a landscape have to be in order to be considered designed (Creighton 2009)? Can vernacular, peasant landscapes also be designed?

The word 'design' also implies a governing scheme or concept in which there is an a *priori* blueprint or template and construction takes place, for the most part, in one phase. At Ightham, the different elements of the landscape strongly suggest a piecemeal evolution. The wider structure of the landscape – the north-south routeways, the overall dispersed nature of the settlement -- was of some antiquity by the 1300s, and the house was fitted into it. The origins of the house itself are unclear, and the form of the immediate landscape in its initial phases must remain uncertain. As stated above, it is very possible that the addition of the outer court in the 1470s was not simply a major addition to the house, but marked a transformation in the surrounding landscape as well; it is probable that the line of the road was diverted at this juncture, and it may be that the series of northern ponds were added or formalised at this quite late stage.

It is easier to say what Ightham Mote was not. The popular image of the house is one of a modest retreat, never built or rebuilt in the grand manner, and tucked away in a forgotten, isolated valley. The post-medieval history and current appearance of Ightham lends additional force to this perception, and it is a vision which animates much of the popular presentation and understanding of the site. However, to a late medieval visitor, particularly after the construction of the outer court, Ightham may well have appeared as quite a grand place. The view down into the valley, coming after an extended journey to an isolated location, would have revealed an extensive suite of buildings, arranged around two major courtyards and with a gatehouse tower at its centre, its walls and gate tower reflected in the waters of the moat and probably framed on either side by outer gardens and extensive water features.

If the landscape was designed, what was it designed to do? One could argue that the landscape at Ightham Mote was designed to be viewed and enjoyed, and to provide a 'theatrical route of approach' (Creighton 2009: 86) which controlled movement and revealed the house and its surroundings in stages. The hypothesised routes of approach certainly do this, though they achieve this effect through the use of the pre-existing lie of the land. The stage-by-stage revealing of different elements of the landscape is a result of the landscape's natural topography.

The landscape at Ightham is a perfect illustration of the use of the natural topography of the landscape to create a setting for a house. Rather than the *landscape* being designed, the *house* was designed – or rather, carefully placed and oriented – to enhance and make use of the landscape's natural features. The house's main gate and outer court are oriented away from the approach from the east, towards the north-south route to the west. This directs visitors or inhabitants using the eastern approach to come around the house in a sharp turn in order to enter, prolonging the amount of time viewing the house, and exposing different sides of the house and aspects of the landscape to the viewer. The north-south decline in elevation and natural spring allow for a cascading effect of water features throughout the landscape. The placement of a pond at either extreme of the landscape with the house between ensures that the house is seen across a lake from either a northerly or southerly approach, while the cascading effect of the water also ensures that waste deposited into the moat is flushed out and deposited in the south pond.

The existence of two approaches, one for general traffic and one for accessing Ightham Mote directly, has implications for different power dynamics within the landscape. Ightham Mote is isolated, at the southern end of the parish of Ightham and the border with the parish of Shipbourne. Furthermore, it has its own chapel, which means that those who lived at Ightham Mote may not have needed to regularly leave the property to attend the church at the far north of the parish of Ightham. Those who worked in the house and in its immediate landscape would have lived in the house as servants and domestic workers, while those who worked in the more distant outfields and demesne lands would likely have only approached as far as the fields. Thus, the only individuals who would regularly travel to and from Ightham Mote would be the owners on occasional travel, those invited directly, and those who walked or rode past the property on their way down the main road.

It is not known whether the eastern route was created especially for the house, whether it already existed in the landscape, or indeed if it was a post-medieval addition. In the first two cases, it is very possible that by the later Middle Ages, the minor road was used more or less exclusively to access Ightham Mote. The gentle slope of the eastern ridge, procession between the south pond and house, and termination between the inner and outer court, as opposed to meeting the major road, seem to support this interpretation. If it is the case that the eastern approach was used as a more social, restricted access to Ightham Mote, then it holds that use of the road would be limited to the household, its guests, and household staff.

The presence of a separate route of approach of some length, over 1000 m from the northern fork to the house – either formally or through frequent use – intended primarily for members of the household of Ightham Mote, reflects a social segregation in the landscape. This ideological and social separation is expressed through the use of physical separation. However, as Adam T Smith explains in *The Political Landscape*, 'space not only expresses but also argues' (Smith 2003: 61). Smith claims that when practices are limited to certain spaces – for example, limiting the driving of automobiles to the road – these practices legitimise the spaces, give them power to limit behaviours and practices. However, the limitation of practices to particular spaces also reinforces the social and political institutions that the creation of these spaces directly benefit. The designation of a road for 'procession' or 'approach' and a road for simply 'passing by' designates the landscape as set apart, not an element of the daily back and forth through the landscape, of people of a variety of social classes and identities, but rather for a privileged class. Those lower-class individuals accessing the landscape by either approach, whether invited or not, would have been aware of this distinction as they entered the property. This creates a very tangible social space around the immediate landscape of Ightham Mote.

If the experience of space is the framework of human knowledge of the world (Hillier & Hanson 1989), then the existence of two roads which spatially and socially segregate two separate groups shapes our understanding of the social relationships between those who use the main road and those who use the private drive. This distinction reinforces the ideology of social differentiation by distributing it across the landscape. Spatially constrained activities – processing on the minor road, versus passing by on the major road – are assigned to particular social identities: those with

a certain level of material wealth and those without it, respectively. Through the repeated daily practice of taking the public highway, with the understanding that a more exclusive or processional approach exists, individuals with less access to material wealth are made aware of their exclusion from this social space. While passersby may not have felt subjugated or excluded by the fact that they were taking the public road, or even been aware of it, their taking it would have contributed to a system in which different social positions enjoyed different levels of power. This embodied experience, understanding of social position, and understanding of the world, contribute to the maintenance of the existing relational, hierarchical social structure which defines social classes in the first place.

This is not to say that individuals are enslaved by their spatial constraints; deer parks, considered almost universally to be 'elite' spaces (Cantor 1982; Johnson 2002; Creighton 2009; Creighton & Barry 2012), were commonly broken into by individuals of lower social status, particularly when food was scarce and deer within the lord or earl's private deer park were plenty (see also Chapter Seven). Likewise, non-elite individuals likely would have taken the minor road to come to Ightham Mote for temporary work, by invitation, or potentially to steal food or simply to trespass. However, by entering into what is understood as private space, delineated by the major and minor roads or the simultaneously physical and social boundaries of the park pale, trespassers are aware that their behaviour challenges the power of the landowner. They are not acting outside of the relational social hierarchy in place, but simply challenging it. The spatial segregation of social identities, as illustrated at Ightham Mote, contributes to a hierarchical structure of social relations. This hierarchy, reflected in physical space, reinforces the knowledge that those with less material wealth are socially distinct from and excluded by those with more material wealth.

Conclusion

Our survey and analysis of the Ightham landscape has led to several general conclusions about its form, and whether it can be considered a formal or designed landscape.

First, the present appearance of the landscape at Ightham Mote is probably misleading. The landscape was not designed in that it was tailor made for the house; rather, the house was positioned to fit the lie of the land as it existed and the landscape was modified rather than created.

Second, the 'expression of social status' at Ightham Mote is anything but intangible. The reinforcement of social status is an undoubtedly physical phenomenon in the landscape. Modifications to the landscape reflected and prompted embodied patterns of movement. In this way, the landscape acted upon the bodies of those who moved through it, reinforcing existing social hierarchies and power structures that defined social life in the medieval world.

Finally, the concept of designed landscapes is simultaneously redundant and paradoxical: redundant in that all landscapes that have been modified by human activity, intentional or not, are in some capacity designed and paradoxical in that no landscape can be completely designed in its entirety. Rather than focusing our efforts on identifying *designed* landscapes in the archaeological record, we should search for *modified* landscapes.

Our goal should not be to find out 'for what purpose was this landscape designed', but rather 'how do modifications in the landscape constrain and facilitate human work, movement, and other practices?' Topographical analysis of movement through the landscape, as evidenced at Ightham Mote, has the ability to address more complex questions about the way landscape reflects, reinforces, challenges, and embodies differential power dynamics through experience of the landscape and daily practices inside, around, and within it.

LIVED EXPERIENCE AT BODIAM AND IGHTHAM

Catriona Cooper[1]

Abstract. This chapter explores the theme of 'lived experience' at Bodiam and Ightham, through the lens of digital techniques and a phenomenological approach. It is based on my PhD thesis *The exploration of lived experience in medieval buildings through the use of digital technology* (2015). Phenomenology has initiated a number of discussions concerning how we can think about human experience in the past based on bodily experience in the world. However, it has been rarely applied to medieval studies despite a much richer dataset compared to earlier archaeological periods. In this chapter I present two case studies that demonstrate alternative and complementary techniques to explore the notion and implementation of a digital lived experience of late medieval buildings. My first case study based at Bodiam Castle uses digital visualisation techniques to explore the lived experience of the private apartments. I propose a mixed media approach for the presentation of visualisations. In my second case study I present an assessment of a series of auralisations of Ightham Mote. I demonstrate that digital techniques that work across senses can provide a robust mechanism for exploring the concept of lived experience, and for exploring the lived experience of specific medieval buildings.

Introduction

Successive chapters in this book have introduced the idea of lived experience and explored different dimensions of this concept in relation to the sites and landscapes of Bodiam, Scotney, Knole and Ightham. The aim of this chapter focuses on two case studies at Bodiam and Ightham, exploring how digital technologies can add further depth to this discussion.

From the publication and following critique of Tilley's (1994) *Phenomenology of Landscape* the study of prehistory has focused on exploring everyday life and experience in the past. Medievalists have traditionally held back from the lived experience/phenomenological

way of thinking, instead accessing the study of the day-to-day through historical sources and traditional remains (see Woolgar 2006). However, the medieval dataset is rich in remains and resources which would be well suited to an exploration of this type, an area of research led by Gilchrist (2012).

The use of digital images and computer graphics to visualise scenes is not something new to the study of the past. Digital images in this context have been biased towards aesthetic appraisal, although analytical approaches have also been championed to a fairly limited degree. However, the process of digital creation of these scenes can be used as a method for looking at the experience of life in the past. Multisensory perspectives and experiences of the past only exist, to date, in a limited sense (Tilley 1994; 2004; 2008; Gillings 2005; Hamilton *et al.* 2006) and again they focus overwhelmingly on prehistoric settings (Johnson

2012a). I will take the process a step further; apply the same methodology to the study of the acoustical properties of a space.

In this chapter I present two case studies showing how different methodologies (visualisation and auralisation) can further our understanding of medieval life in a 14th-century secular building.

Phenomenology and the Medieval Past

Lived experience has been discussed in prehistory through a phenomenological approach. Phenomenology emerged as a theoretical approach to address issues of subjectivity and meaning in landscape studies (Hodder 1987; Tilley 1990; Hodder *et al.* 1995; Hodder & Hutson 2003; Johnson 2012a). Research (for example Ingold 1993; Gosden 1994; Tilley 1994; Bender 1998; Cummings 2002; Cosgrove 2006) has explored the subjective understanding of landscape, or rather the understanding of landscape based on bodily experience, and in doing so has moved away from the Cartesian (thinking about space in a geometric; x, y, z coordinate system) or 'objective' way of thinking about space, which when carefully analysed is not really objective at all (Cosgrove 2006; Cosgrove & Daniels 1988, Rose 1993; Massey 1994; Johnson 2011). Lived experience provides a way to think about life focusing on the elements which make people understand the world around them on a multisensory level: how people move, their activities, everyday paths and places and memory. Documentary and physical evidence are not enough, because the living in the past goes beyond these remains, it is a subjective experience of each individual memory: both personal and inherited are important (Johnson 2012a; Hamilakis 2014).

The phenomenological approach has been critiqued at length due, according to its critics, to the lack of empirical, or objective, evaluation often associated with its reflections. This critique has been particularly sharp where it has been applied to prehistory (Gosden 1994; Bender 1998; Pollard & Gillings 1998; Tilley 2004; Brück 2005; Ingold 2005; Fleming 2006; A.M. Jones 2007).

The subject of living in the Middle Ages, approached in a phenomenological way, has to a great extent been avoided by archaeologists, despite the richer dataset and the many books entitled 'Daily/Everyday Life' in the literature. Medieval archaeologists have tended to focus on the abundant material culture and documentary evidence without addressing, at least in any considerable depth, questions on the experience of living (exceptions include Giles 2007; Gies & Gies 2010; Gilchrist 2012

and Johnson 2012b). Historians, although appearing to approach questions of the experience of living, rarely engage with phenomenology in a direct way. An exception is Stephen Murray, who states that [we need to be] 'reconciling our experiential responses with the task of dealing with buildings as entities that can go beyond the written document in providing vital access to the past'. (Murray 2008: 383). Murray's ideas have rarely been applied to medieval sites or buildings. Murray's work also highlights the link between phenomenology and lived experience.

The phenomenological approach has been described as the interrogation of lived experience (Johnson 2012a). It is however just one in several ways to approach the experience of living in the past. By taking the approaches suggested in phenomenology we can begin to move towards lived experience by taking these ideas and supporting them with the quantity and quality of data available from the medieval period.

What is a Medieval Building?

Buildings are the product of human construction and inhabitation (Hillier & Hanson 1989; Parker Pearson & Richards 1994; Steane 2001). Buildings define the spaces (rooms) they create. This is a social process, in that the building is created (like any artefact), according to some previously conceived plan by the builder according to socially conceived ideas about the use of space. Therefore, I suggest that there is a connection between the realm of the social and the organisation of space which can be seen through the study of buildings. Buildings both mediate the space they create as well as being designed according to social concepts about how domestic, ecclesiastical or working space should be ordered (Fig. 9.1).
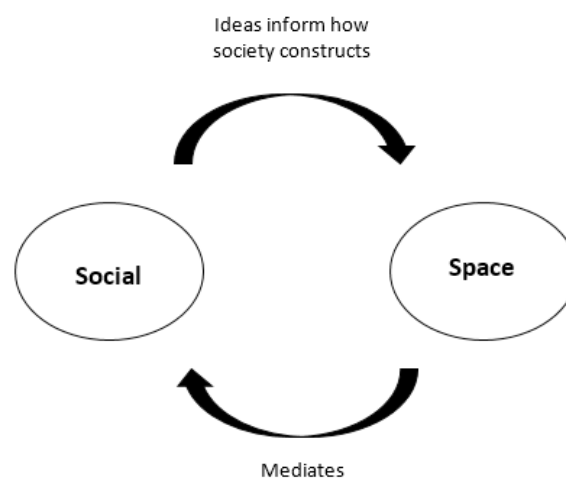

Fig. 9.1: This diagram shows how social ideas are linked to space.

Fig. 9.2: The eastern elevation of Bodiam Castle, taken from the west. Photo by Penny Copeland.

There is an underlying assumption in much of the literature that houses built between the late 14th and early 15th century straddle the gap between the austere castle keeps of the medieval period and the comforts of Tudor palaces and gentry houses (Tipping 1921; Curzon 1926: 10-11; Brown 1970: 144; Platt 1982: 118). For those subscribing to this assumption, buildings of this period are presented as 'transitional' in evolutionary terms. They form an interim phase between two groups of buildings. In so doing, an understanding of these changes and the reasons for them is bypassed (Johnson 2002: 133-4). I suggest that we should move away from considering them in this way and instead think about buildings as agents which stage social interactions and how the use of space defines this. Focusing on the individual elements of buildings allows us to explore the social context within which these buildings were constructed, and to explore builders' intentions in their creations instead of focusing on their position in a timeline (Olsen 2003: 100). We can therefore present a holistic picture of how they were lived in.

Although the subject of living in buildings in the medieval period is not one that has been neglected (Wood 1965; Woolgar 1999; Emery 1996; 2006; Airs & Barnwell 2011) there are remarkably few texts discussing late medieval secular buildings beyond collections which foreground architectural interest or act as gazetteers (Turner & Parker 1859; Nairn & Pevsner 1965; Pearson 1994; Emery 2006a; Woolgar 2006 and Brears 2010 are exceptions). Where social life has been addressed, there has been a particular focus on the study of castles (Hohler 1966; Fairclough 1992; Dixon & Lott 1993; Mathieu 1999; Creighton 2005; Liddiard 2005a). Also underrepresented from the literature is work on buildings of the middling classes and gentry society. Neglecting this category of building

(secular dwelling) during this period means our understanding of the built environment is lacking. The general structure of these buildings has been discussed in detail by first Faulkner (1975) in reference to castles and then by Johnson with a focus on the vernacular (Johnson 2002; 2010). The classic plan develops from early medieval buildings (pre 1200 CE) centring on the hall, with an extension at one end containing a buttery and pantry (services) and passage through to an external kitchen (Wood 1965: 247; Gardiner 2000). This develops to also include a withdrawing chamber, private apartments and chapel; a pattern which is seen across both castles and other secular dwellings.

Space is traditionally explored in plan view, using floor plans. In the earlier chapters of this book we followed this convention by presenting a series of plans of Bodiam Castle to disseminate our research about the building. Elevations were also presented, but these still do not give an impression of how the space exists in three dimensions. By contrast, much phenomenological work has discussed how spaces are experienced in terms of moving through them in the present. However, movement through space can be overlooked and it is even more likely that internal furnishings will not be considered. For example, modern understandings of medieval French cathedrals are of large open spaces, when in fact the buildings in the middle ages would have been divided by screens and encumbered by liturgical furniture and tombs (Murray 2008: 390).

To approach questions focused on living in these buildings I have chosen to explore the social interpretations of Bodiam (a castle) and Ightham (a moated manor house) alongside the physical buildings of Bodiam Castle (Figs 9.2 & 3.1) and Ightham Mote (Figs 8.1, 8.5 & 8.6), their furnishings, fittings and three dimensional construction.

Bodiam Castle

As discussed in Chapter Three most of the literature relating to Bodiam explores the exterior and overall appearance of the building (Grose 1791; Turner & Parker 1859; Blaauw 1861; Savery 1868; Timbs & Gunn 1872; Clark 1884; Mackenzie 1896; Sands 1903; Thompson 1912; Tipping 1921; Braun 1936; Toy 1953; O'Neil 1960; Brown 1970; Harvey 1978; Kenyon 1981; Platt 1982; 2007; Hohler 1966; Turner 1986; Stocker 1992; Saul 1995; Johnson *et al.* 2000; Morris 2003; Creighton 2005; Liddiard 2005a; Creighton & Liddiard 2008). In what follows, I will examine the interior of the building alongside research on medieval interiors and landscape. Visualisation is the perfect tool for this, allowing a range of different datasets to be observed together. The recording of the building (discussed in Chapter Three), detailed research into the furnishings, fittings and decorations of domestic rooms, and an understanding of the use of the rooms, and how this can be interpreted visually, can all be presented in one image. The undertaking of this research is just as important as the final image, or images, as the very nature of this creation process can allow for multiple views of a space to be produced. The images themselves are a stage in an interpretation of the evidence about medieval life. Researching how to create these images requires rigorous questioning and critiquing of a huge range of evidence for each stage of the creation process. Therefore, the final images seen here are not the final product; they can be continually updated and adapted based on new research and further critique.

The digital media approach has, until recently, been mostly concerned with the visualisation of the past through a variety of media. This has mostly been described as 'Reconstruction' and is mostly made up of standalone images, websites, animations or virtual realities. It has met with much criticism from wider areas of the discipline, being understood as expensive, technically demanding and of little interpretive value (see discussion in Goodrick & Earl 2004). The technology was driven by a 'this would be cool' (Kantner 2000) mind set and an experimental approach. The results of this approach have meant that in most cases the focus is on the aesthetics of the models. Further, the models have been produced with the intention of displaying results of data collection rather than as a method for interpretation (Gillings 2005). Exceptions include analysis projects such as those discussed by Wittur (2013).

This situation led to the assumption that display was the only use for computer-generated images in archaeology.

Therefore, the critique of these images has been towards the display of 'results', rather than being part of a process of reflection and revision. Technologically produced visualisations fall into a void between technological products and subjective renderings of archaeological material. They engage elements of both practices but frequently fail in embracing the advantages of both. For example, they do not engage with the ability to change and develop the renderings following presentation of the final image (Bateman 2000).

When produced as a method for displaying results, images of this kind are often incorrectly perceived as being 'self-explanatory and less theory-laden' (Moser 1992: 832). Instead the images need to be approached with the same critical eye that is applied to other areas of archaeological illustration. The process of engaging with images is the beginning; they need to be critiqued, explored and further developed before being presented. They also need to be engaged with in a state beyond the final presentation of results: they can be used to develop an interpretation and as a method for recording.

Presenting multiple interpretations has been a popular suggestion by digital specialists (Fawcett *et al.* 2008; Koerner & Russell 2010: 327; Lozny 2011: vii). Through this method multiple interpretations of the past can be presented though a series of images detailing the development of the simulation. However, this ideal has yet to be fully realised. I believe that this technique can be applied as more than a mechanism for interpretation and engagement but also as a method for exploring space. These images can be used as a method for fostering discussion about the use of space allowing the subjective nature of the creation process to be questioned at every step, encouraging further engagement with the building from the public. The intention is to explore how to engage with the building and respond to it through the use of visualisation to try and understand its lived experience. Instead of presenting a series of images in creation, or completed images, I bring together the final images produced through the 3D model alongside elements of the research which created it (furniture, manuscripts, art).

Presenting multiple images in this way is a phenomenon which has been developed in social media over the last few years. The most popular examples of this can be found on the internet service and company Pinterest. It allows users to create and catalogue collections of visual bookmarks. Catalogues are chosen by the user and the visual bookmarks can be added via upload, searching the internet, other people's boards or through other media content (Pinterest 2014).

I have isolated a small but complicated area of the building to envision, the eastern elevation, focusing on the 'private apartments' (Fig. 9.2; see also Chapter Three, Figs 3.1, 3.7 & 3.33). In my visualisation, the apartments are not only furnished appropriately, they are decorated according to the period and populated in the same manner. The modelling process allows us to consider how the building fulfils the 'spatial grammar of expectation' (Johnson 2002: 20) that govern the layout of late medieval buildings but equally how Bodiam differs from the expected norms associated with such buildings. In essence, it explores how the spaces are both individual and part of a conforming dataset by looking at the building as an artefact of medieval society. The project itself is also concerned with the concept of an interpretative methodology. Creating visualisations is the method for interpretation of the site. A narrative is produced from the observation of the archaeological record through to how the 'real' of the simulated past is perceived. Through the recording of the entire process of creation, an understanding is achieved of how the uncertainty and assumption inherent in the simulation process is important: it can therefore be highlighted and it can be critiqued. Choices made during the recording of Bodiam: research into decoration of medieval chambers, furniture and social uses of space, are all included as part of the creation process. Making these decisions informs the creation of the final image; therefore the decision-making process is embedded in the appearance of the final image and is an important part of the interpretation.

One recent study (Frankland 2012) has suggested that visualisations are not considered as compelling to the public as their creators like to think. It is understood that the final image is an interpretation and viewers are interested in the creation process. 'Mood boards' bring together multiple media to present a single concept or idea. I present the final CGI images which intend to show a particular concept or theme alongside the images that went into creating it (furniture and fittings, illustrations from medieval manuscripts and paintings from the 14th century). In doing so, the images allow the viewer to consider the sources of the visualisation and question them. By being capable of producing a number of images the same space can be considered in a number of ways and further allow the viewer to think about the experience of living in that space.

All of the decisions concerning materials, structure and furnishings inform our understanding of the space, and the parts of my work that are discarded are as important as those used. These issues with uncertainty and subjectivity are unavoidable when using digital technologies: I propose them as a method for engagement and not as an overarching issue.

The models were based on the survey data discussed in Chapter Three. This was done by importing the survey into 3DS MAX, a modelling and rendering software, and using the survey as a guide. The survey methodology informed much of the visualisation process. Putting together the spaces was more complex than just examining the survey data, which only really considers one wall of the suites (see eastern elevation drawing). Decisions concerning the layout of windows, walls and room partitions had to be considered, as well as the nature of the roofing and flooring. Evidence for building materials was drawn from Kathryn Catlin's report on the finds found in Appendix One, in combination with careful examination of the standing remains and comparisons with other contemporary buildings.

Decorations, furnishings and fittings were a different challenge. As Kathryn Catlin's report (Appendix One) suggests, there are remarkably few finds relating directly to Bodiam; although these can inform types of ceramic found within the building they are otherwise limiting. As discussed in Chapter Three, this has led scholars to question whether Bodiam was inhabited for any length of time. The documentary sources are equally as fragmentary, focusing on building construction with no written wills or other ordinances. As such, evidence had to be drawn more generally from other documentary sources such as the Will of Thomas Couen and James Peckham concerning Ightham Mote. More generally, other wills of the period (http://name.umdl.umich.edu/EEWills, accessed 26th April 2016), illustrated manuscripts, and paintings (such as Fig. 9.3) were helpful at visualising and sourcing appropriate items. Extant furnishings, although limited, were possible to find (Fig. 9.4) and recent physical reconstructions (Fig. 9.5) could be used to further envision spaces. Unfortunately, there is not the space here to discuss each decision and each item modelled but as one example I will review some of the evidence for the construction of the bed.

Jude Jones (2007) undertook research into sleeping and the construction of gender between 1350-1750, for which she created a catalogue of beds between those dates. She discussed the presence of two types of bed: the four poster (such as the Great Bed of Ware) and the hung bed. The four poster bed, although first appearing in 1242, did not become popular until the 15th century (Eames 1977: 75). The relative lack of medieval examples has been attributed to the peripatetic nature of medieval elite life. The hung bed provides an elegant

no surviving examples of these beds remaining from the late 14th century (Eames, 1977: 75). However, the bed hangings appear frequently in documents from the end of the 13th century onwards. The textiles were very valuable and appear as part of inventories such as that of John Chelmyswk, Esq of Shropshire (Furnivall 1882) and John Rogerysson of London (Furnivall 1882), and the more popular examples of the Inventory of the Duke of Burgundy from 1404. They are also found in wills, such as The Will of Richard Earl of Arundel in 1392, and the wills of James Peckham and Thomas Couen (of Ightham Mote) which also feature bed hangings. These examples support the argument that beds of this type were not just of the upper classes but also the middling and gentry classes (Eames, 1977: 78-83). There is a quotation from Chaucer's *Book of the Duchess* that reveals how highly valued textiles were in this period:

Fig. 9.3: The Arnolfini Portrait by Jan van Eyck (© Copyright The National Gallery, London 2016). Another hung bed can be seen in the background.

> *I will give him a feather bed of down of pure white doves, arrayed with gold and finely covered in fine black satin from abroad, and many pillows, and every pillowcase of linen from Reynes, to sleep softly he will not need to toss and turn so often. And I will give him everything that belongs to a bedchamber, and all his rooms I will have painted with pure gold and arrayed with many matching tapestries.*

(Chaucer, Book of the Duchess: EChaucer 2011: 269)

bed that can be constructed and taken down easily and taken to the next house, whereas the four poster is not so easily transported (Hunt 1965: 22).

The bed was not totally devoted to nocturnal use. By lifting and tying back the curtains, the bed could be used as part of a living room (Ash 1965: 33). There are

These pieces of evidence discuss the existence of the textiles but do not help much with our understanding of how they appeared. The best resource we have for this is iconography. Paintings by Van der Weyden (1400-1464: Fig. 9.6), van Eyck (1390-1441: Fig. 9.3) and other illuminations such as Fig. 9.7 show hung beds as part of their images.

Fig. 9.4: Medieval chest, Chester Cathedral.

Fig. 9.5: Dover Castle, reconstructed interior. Particularly of interest is the hung bed. For more information on the creation of the furnishings at Dover Castle see Blog Post 'The Making of the Great Tower at Dover Castle' via my blog http://catrionacooper. wordpress.com.

While no beds remain from this period a number of replicas have been produced. The reconstructed Bayleaf at the Weald and Downland Museum, The Medieval Merchant's House in Southampton, and Dover Castle (Fig. 9.5) are just three examples of them. As replicas their construction can be carefully examined to see how they are hung from the ceiling, taken apart and put together, particularly at the Medieval Merchant's house in Southampton.

3DS max allows lighting systems to be built in. These allow sunlight and daylight to be added to a scene according to location. Location is set based on latitude, longitude and direction (north can be set). Implementing this type of lighting system allows a scene

to be lit from the correct angles, and allows movement over time, meaning that they are physically plausible and allow accurate rendering of daylight scenes. I also added lighting from a fire and from candles (that change position and number in the later visualisations), and these effects are also considered here.

I undertook a basic lighting assessment allowing me to see how the lighting conditions changed over the course of the day. In the first instance I used a plain, non-reflective, material to observe how light responded with the geometry, before adding materials and textures appropriate to the space. A few of the images were reproduced to show the changing conditions (Fig. 9.8). From this, I chose to light my spaces later in the day as I

Fig. 9.6: The Annunciation by Rogier van der Weyden. This image is one of the representations of a hung bed from the 14th-15th century (Musee Du Louvre 2014).

Fig. 9.7: Detail of a miniature of the birth of Alexander the Great, at the beginning of Book Five, from the Miroir Historial (translated by Jean de Vignay from Vincent of Beauvais's Speculum Historiale), Netherlands (Bruges), 1479-1480 (British Library, MS Royal).

felt the play of light in the room was more engaging. Fig. 9.9 is an example of one of the final images. I found it particularly frustrating and theoretically difficult to select a lighting condition as my choices were largely aesthetic. Also, once the scene was close to completion, with appropriate decorations and surface textures applied, the scenes appeared particularly dark when printed. It was hard to resist using photographic correction software to increase the brightness and contrast to make the image more aesthetically pleasing and easier to see. However, this added to our understanding of the lived experience of

the visualisation. The images were dark because they were produced using physically accurate lighting techniques, (Figs 9.10 and 9.11 have been included in this printed book to demonstrate the darkness of the images).

From the creation of the model, a series of concepts or themes were selected as the subjects for the mood boards (Figs 9.12 & 9.13). Some of these themes are connected with the use of Bodiam Castle specifically (Business and Status) while others use visuals to try to invoke an idea of the multisensory experience of the past (touch, scent, reverberation). I then selected ten images to represent each concept. These images were a mixture of renders, photographs of the site, photographs of period furniture, photographs of reconstructed domestic interiors and images from medieval manuscripts. Many of these sources were used as references when creating the model.

Some of the mood boards were easier to create than others. Reading (Fig. 9.12) for example drew on a range of images from manuscripts showing people reading, as well as the addition of books and documents that could easily suggest the theme; the more abstract or ephemeral concepts were harder to construct. Sound (Fig. 9.13) had to incorporate images that suggested sound. Chris Woolgar's discussion of the senses in medieval England (2006) was particularly useful in thinking about sound as a sense of the mouth while I could also consider presenting things that created sound.

Lived experience is complex. It brings together so many elements of personal understanding of a space. As a result, it is theoretically and practically difficult to assess whether I have been successful, and what the criteria for 'success' should be. As a research methodology, I felt the creation of the digital model allowed me to bring together a whole range of different resources and material evidence for the use of that space at Bodiam
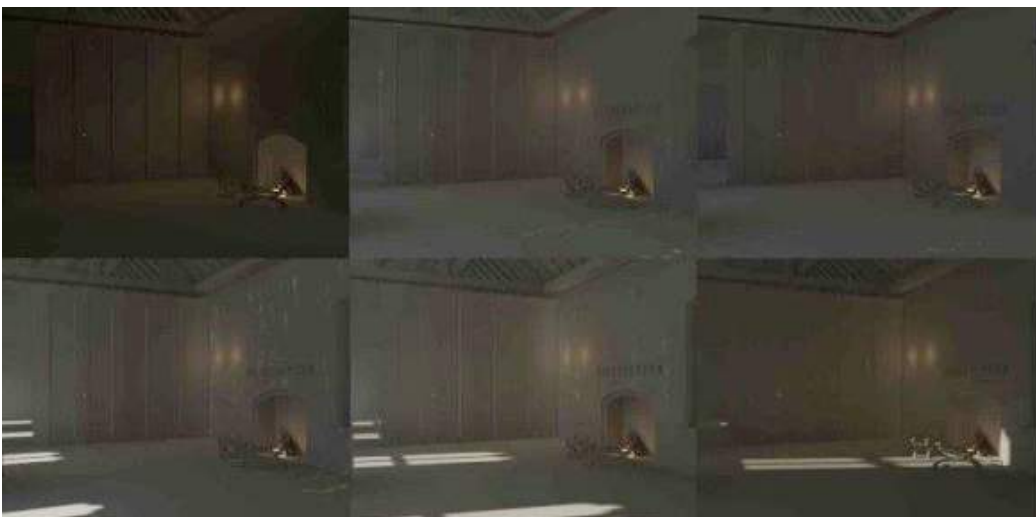
Fig. 9.8: Lighting assessment of the modelled private apartments of Bodiam Castle. The top left image is for lighting conditions of 21st June at 6 a.m. with the bottom right being 21st June 6 p.m.

Fig. 9.9: An example of the modelled space.

Castle in the first instance. Through this I achieved a better understanding of how the space could have been used during the medieval period, and I could question the accepted understanding of its experience. I have also brought together a whole range of different pieces of evidence for the furnishings of late medieval domestic spaces of the gentry.

However, we no longer need to focus on only visualising the past. When creating the mood boards I struggled to find images that presented sound (and for that matter smell, touch and taste). Understanding experience goes beyond visual engagement and is multisensory. Therefore the second case study at Ightham Mote looks at using auralisation as a methodology for understanding the experience of a space.

Ightham Mote

> *general characteristic of contemporary society is our fascination, indeed obsession, with the visual*
> (Moser 2001: 266)

This chapter so far has been primarily concerned with the visual and the visual simulation of the past. To move beyond this visual focus to the study of the past, my work at Ightham Mote has explored acoustical methods. As discussed in Chapter Eight Ightham Mote is a late medieval building which has been latterly developed. I explored how the Great Hall has been understood. The Great Hall here is of a middling size but has a very high ceiling (Figs 9.14 & 9.15). Of particular interest to this study are a number of carved minstrel figures at
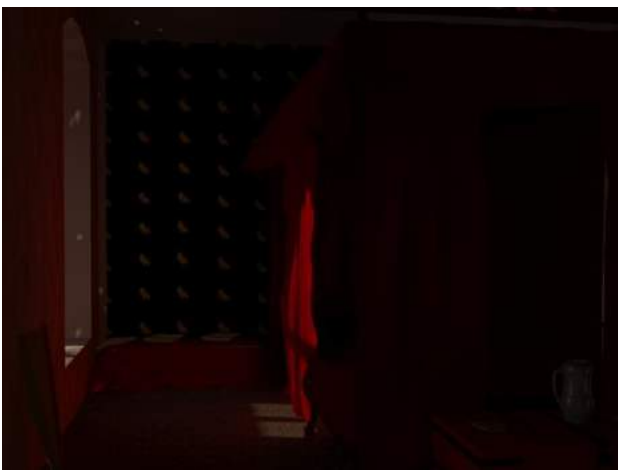
Fig. 9.10: Internal space which appears dark when printed without adjustments for lighting.

Fig. 9.11: The same image lighted for printing.

the base of the beams (Fig. 9.16) who appear to be part of a play, suggesting this as a possible use for the space. More generally there is an abundance of literature referring to Great Halls during this period (James *et al.* 1984; Thompson 1995; Johnson 2012b), and these discussions tend to focus on the appearance and use of the space. Much of our understanding has to do with the different functions of the space: a lord giving judgement, assemblies, mealtimes, music, poetry and conversation. However, how the space sounds and its acoustic properties have rarely been considered.

The visual focus of research is unsurprising. It is estimated that 60% of human mental processing power is devoted to visual processing (Hermon & Fabian 2000); consequently, humans are programmed to experience the world in a primarily visual way (Ray 2008). However, it is not the only way. The first applications of Geographical Information Systems (GIS) were critiqued as being 'primarily visual and distanced', far removed from the way past communities would have engaged with the landscape and environment (Thomas & Jorge 2008: 1). Although visual analysis of the past is the most accessible today, our understanding of the world is based on all of the senses in combination not just one in isolation (Chalmers & Zanyi 2010). This is not the only reason it is a focus in the wider field of archaeology – there is a huge amount of visually engaging material left behind, whereas smells, sounds and tastes have arguably gone (Dawson *et al.* 2007).

Fig. 9.12: Reading mood board.

In the creation of visualisations, without explicit consideration of the other senses, we are creating a past that is 'silent, odourless and intangible' (Mlekuz 2004). We can use visual analysis to explore the other senses, thereby presenting a multisensory past. There has also been a move to try and embrace the study of the senses in archaeology, both as a method for simulating past experiences as well as to explore how the senses were

Fig. 9.13: Sound mood board.

Fig. 9.14: The Great Hall at Ightham Mote from the courtyard.

perceived in the past. When simulating the past through senses other than visual, they are often portrayed with accompanying images, as without the visual they lack the authenticity required to make them believable (Thomas & Jorge 2008). Technological approaches should be complemented by a more human experience of place. When discussing societies whose sensory map is different to our own this becomes particularly relevant.

Fig. 9.15: The Great Hall at Ightham Mote looking towards the upper end of the Hall.

Fig. 9.16: Minstrel carved into the beam ends.

Devereux and Jahn stated that the reason sound has been overlooked in archaeology is 'it is instinctively felt that sound is too immediate and ephemeral to have significance for archaeological investigation' (1996: 665). Unlike the visual or tangible remains of the past, sound does not leave a mark. It has to be studied indirectly through re-creation of soundfields, the soundmakers, or experiences. Since their statement, the study of archaeology has moved towards trying to explore the experience of the past through phenomenological discourse, critiquing its overly visual methods (Hamilakis 2002; Weiss 2008: 15). Through these studies, focusing on the ephemeral or intangible, such as work undertaken by Daisy Abbott of the Glasgow School of Art (discussed in Hamilakis 2011), aspects of the past have become more important to archaeological investigation. These include papers discussing oral histories, echoes, and weather, which also have no method for quantitative enquiry but engage with the lived experience of the past.

I have created a series of auralisations of the Great Hall at Ightham Mote as it stands today to explore its acoustical characteristics and, by inference, the lived experience of the space. I have also modelled the Great Hall as it would have stood in the late medieval period and

created auralisations in that space. In undertaking this, the same issues associated with creating visualisations are still present and become more complicated by using software that is still developing. Therefore, the modelled space of the Great Hall as it stands today has been calibrated using a series of measurements taken in the space: making the technique most appropriate for a space like Ightham which is not ruined. Then, as the development of the space has been traced so carefully, it is possible to take apart and rebuild the same space adjusting for wooden panelling, changes in windows and changes in furnishings. We use a program called CATT-Acoustic to produce these models and as a means to generate numerical values that can also give visual descriptions of these results. Finally, and most importantly for this project, they can present results by auralisation (Vigran 2008: 144).

Auralisation is the technique of making audible the acoustical parameters of a specific environment (Kleiner *et al.* 1993). Vigran (2008: 144), when discussing the technique in reference to room design, describes it more succinctly as suggesting the technique '…implies that one may listen to music or speech 'played' in a room at the design stage'. That is, just as architects can model buildings before their construction, acousticians can model the acoustical properties of a space allowing people to listen to their soundfield. Like visualisation this is based on numerical data collected via survey of the specific environment, either acoustically or visually (which will lead to a prediction of the responses). When applied to archaeological environments this gives us the opportunity to interpret soundfields of past

environments. We know we cannot record the response of a space as it stood in the past so we are, therefore, already having to consider how we predict (accurately) the environment we will be working with.

Modelling and recording the acoustical properties of spaces requires information about the physical space (size and shape) and the properties of the building materials. These both affect how sound is reflected and absorbed and therefore dictate the experience of sound within a space. For the standing remains at Bodiam, the space was surveyed using the same methodology we discussed in Chapter Three, with a second survey recording the nature of furnishings and fittings within the space such as tapestries and wooden panelling, plastered walls, and other features. To begin to understand the experience of the space, impulse responses of the space were measured and recorded (with the support of the Institute of Sound and Vibration at the University of Southampton (ISVR); see Fig. 9.17). Impulse Response is in essence the sound pressure recorded at a point in a room following the excitation of the room by a source (ISO 2008). This can be used as a method for obtaining the decay curves (results of the Room Impulse Response, or RIR) needed to calculate a series of measures that can be used to discuss the experience of the space according to numerical values.

I will focus specifically on reverberation time. This value is very useful when determining the reverberation of a space in response to standing noise volume (Vigran 2008: 106). It has also been used as a measure to suggest whether a space is suitable for different types of music,

Fig. 9.17: Undertaking the acoustical survey at Ightham Mote.
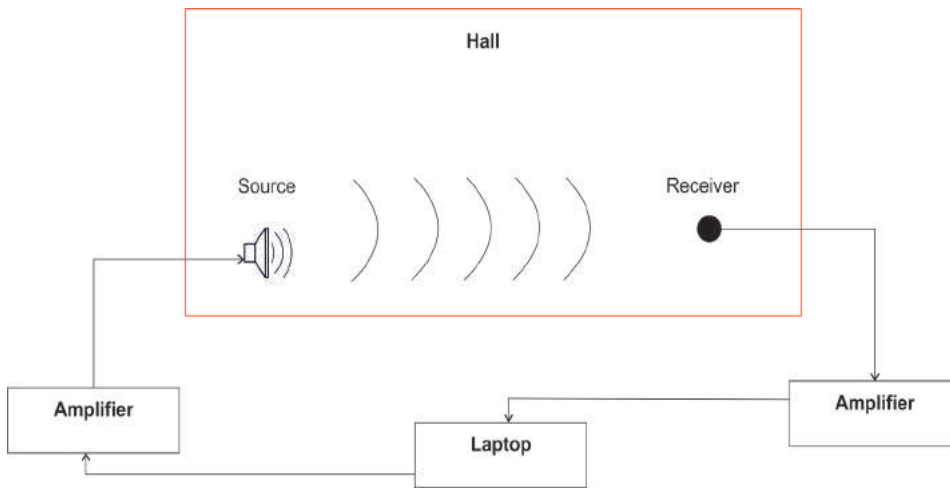
and public or private speaking (Barron 2009: 30). Music written to be played by an organ, for example, sounds best with a long reverberation time as the polyphonic nature of the instrument allows notes to overlap and for pieces written for it to embrace this feature, for example, Bach's *Toccata* and *Fugue in D minor* (MovieMongerHZ 2010). In contrast, early classical music tends to be homophonic with compositions being lighter and clearer without overlapping; a shorter reverberation time is required for this to be clear, but not so short as to sound dry. An example of this is the iconic *Eine kleine Nachtmusik* (Mozart 2011).

Broadly, the methodology for creating auralisations involves estimating the RIR, making the convolution with anechoic audio material, and reproducing the result through a sound reproduction system. This means using a piece of software to model the space (shape, surface properties, position of source and receiver), this can be used to calculate the specified measurements. To create the auralisation one needs a sound file of an anechoic recording (something recorded in a room that does not reverberate) which one will convolute (where the sound signal is adapted to sound like the room that has been modelled) to represent the designated sound and speaker combination (Vigran 2008: 144; Kuttruff 2009: 101).

The basic set up for recording the acoustics of a space can be seen in Fig. 9.18. The laptop sends out a signal noise which is passed through an amplifier to the source which excites the room; the receiver records the response to the source which is sent back through an amplifier to the laptop. By recording the range of frequencies we can look at how noises of different pitch are affected by the space. Frequency is proportional to wavelength which has a significant affect in small spaces.

To help establish the nature of the models that were being compared we recorded myself reading a sentence about Ightham: 'This is the great hall at Ightham Mote near Sevenoaks in Kent. It is one of the oldest areas of the building dating from the 14th century.' This was undertaken in the anechoic chamber in the ISVR at the University of Southampton, and allowed us to not only use it during modelling but also for auralising the recorded characteristics from the survey.

The model is created by defining planes and surface properties of the space. The geometry is taken from the basic building survey discussed above; surface properties of each plane are defined according to their material. This contains information about the scattering and absorption properties of the fabric (see Fig. 9.19: Model of Ightham Mote, each colour represents a different surface property). Information about the physical properties of the materials has been taken from a number of references (Vorländer 2007; Dalenbäck 2011). These can be later adjusted as the model is calibrated using the results taken from the measured recordings of the space.
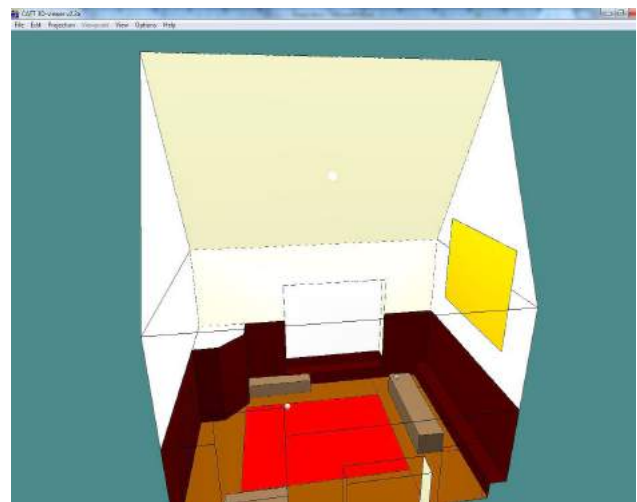
Fig. 9.19: Model of Ightham Mote. Each colour represents a different surface property.
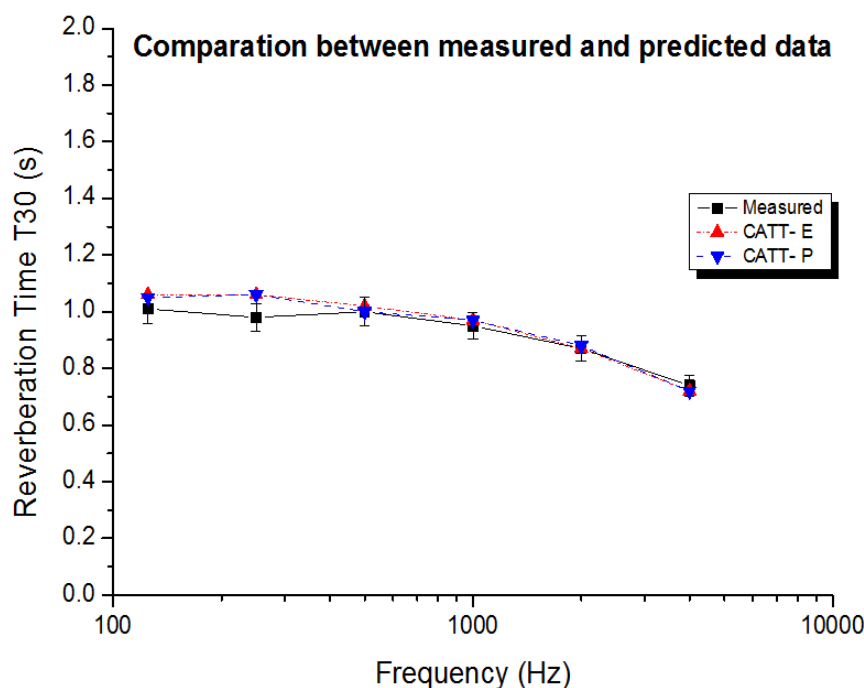
Fig. 9.20: This graph shows the differences between the modelled and simulated Great Halls.

The graph (Fig. 9.20) shows that the final model and measured responses to the Hall were nearly the same, allowing us to assume that we could correctly refurnish the space as it would have stood in the late medieval period.

The numerical results of the modelling show that the reverberation of the space remained fairly consistent despite the changes in furnishing and fittings; this is likely to be a result of the height of the ceiling. The reverberation time was short for such a large space (around one second), suggesting that it is a perfect space for drama and the spoken word (Barron 2009: 452) but not really for music (Barron 2009: 30). This is on the proviso that the measurements were recorded when the space was empty; when full, we can take away 0.2 seconds which would make it even less suitable for music (AV INFO, 1995). The results of this case study lend some support to Woolgar's discussion, based on the documentary evidence, of halls as generally quiet places (Woolgar 2006) allowing the acoustical properties to encourage a ritualised decorum not polluted by excess sound. Ightham Great Hall was perhaps more suited to formal readings and public speeches rather than music. It was perhaps more suited to formal, ritualised dining, akin to an Oxbridge college hall, than the raucous music and boisterous laughter and shouting often associated with the medieval hall.

It was particularly interesting that the reverberation time was constant across the board. This means that the experience of sound was the same for those seated at the lowest and highest ends of the hall. Because of this,

we can assume that the lord did not have any better experience of any of the performances and, therefore, there was no class restriction of the experience of being in the hall. Some forms of church architecture limit sound from reaching the ends of the church building meaning that the experience of the service was different across the classes. These results may have been affected by the size and regularity of the space. It would be interesting to undertake the same analysis in a much larger hall like that at Penshurst.

The print format of this publication does not allow me to share the resulting auralisations with the reader but they can be accessed via the project website at http://sites.northwestern.edu/medieval-buildings/. To assess the results of the auralisations I ran a basic listening test, getting people to listen, compare and contrast the models of the old and new hall. Modelling the old hall and comparing the subjective experience to the new hall suggests that the experience of reverberation was less in the new hall. It was also slightly easier to understand speech in the new hall. This highlighted that in this case it was still not a space in which to listen to music, at least according to my suggestion for the furnishings within the space. However, these are only preliminary investigations.

To summarise: these models allow us to consider the aural experience of Ightham Mote as a space where speeches can be given easily, but music would fall short. The research therefore suggests that Ightham Mote Great Hall may have been an intimate and calm space, particularly well suited for private conversation rather

than entertainment. This interpretation appears at odds with the room decorations; the carved minstrels give the impression of a much less formal space. In this way it is easy to highlight how a great hall can have multiple uses, without it necessarily being particularly well suited to any environment. The experience of sound in the space suggests that while the hall was a place with a variety of functions and activities, it was not the best suited space for music, and the size of the hall not the most well suited for dancing.

Conclusion

The chapter shows how digital techniques can be used to explore lived experience in late medieval buildings. I have presented work at Bodiam and Ightham that implements two different techniques to investigate living within late medieval buildings. This shows the advantages of two separate methodologies for exploring lived experience in late medieval buildings. It provides new ways to think about the experience of a building beyond a written narrative.

It is important to add a caution that these methodologies, taken independently, do not allow us to access the totality of lived experience of a medieval building. Both case studies in fact isolate a single sense when in fact experience is multisensory. To take these first steps further the next stage would be to combine both visualisation and auralisation techniques to explore a range of spaces. By consuming both visual and aural outputs at the same time a more multisensory engagement could be achieved. Undertaking the studies across a range of buildings will allow us to discuss in more depth the commonality and differences in buildings of the period.

10

MOATED SITES IN THE WEALDEN LANDSCAPE

Eric D. Johnson[1]

Abstract. This chapter looks at the general class of moated sites, of which Bodiam, Scotney and Ightham can be considered particularly large and complex examples, in the context of the Wealden landscape of south-east England as a whole. A general discussion of the literature on moated sites is followed by a discussion of 'what do moats do?' in terms of lived experience.

One of the most striking common features of the sites examined in this volume is the way that the flow of water was altered and manipulated in their surrounding landscapes for various purposes. Bodiam, Scotney and Ightham can all be classified as 'moated sites'. Ditches were dug around the main dwelling and filled with water at each site, suggesting that this use of water, for whatever purpose, was an important element of elite identity in the region. (The well drained site of Knole is not suitable for a moat). This common use of water raises a further question, however: how best to understand these sites in the context of the hundreds of other moated sites in the region? If we designate them as 'elite', linking their archaeological signature to the legal or social status of their owners, what does that imply for sites with similar signatures but whose owners may have had different statuses?

In what follows, I examine the broader geographic scope of moated sites in the surrounding region of the Weald. By putting sites like Bodiam, Scotney and Ightham in a wider landscape context through the lens of moated sites, it is clear that they are particular examples of a much wider phenomenon stretching across space, time and social status. Moats, of course, are not the only similarity between the landscapes of the above sites and others in the region, but moats are one of the most common and readily identifiable features found at many different types of sites during the Middle Ages. In addition, thanks to the efforts of previous surveys such as those conducted by the Moated Sites Research Group (MSRG) the presence and location of medieval moated sites in the Weald is relatively well-documented and can be correlated with other spatial variables using Geographical Information Systems (GIS) software.

This chapter contributes in two ways to our understanding of the medieval landscape. First, a comprehensive survey of moated sites in the Weald has not yet been conducted. Examining the similarities and differences between conditions in the Weald and other regions can shed light on the moat-building phenomenon more broadly as well as help us understand individual sites like Bodiam, Scotney and Ightham in a new light. Second, the following analysis seeks to advance our theoretical and interpretive approach to regional analyses of moated sites. Previous studies have contributed greatly to our understanding of 'why moats exist'. This question is usually framed in terms of environmental factors and the functional utility of moated sites (Emery 1962; Taylor 1972; Le Patourel 1973; Aberg 1978; Le Patourel & Roberts 1978; Aberg & Brown 1981; Barry 1981; Verhaeghe 1981; Wilson 1985; Martin, D. 1989; Martin 1990; Jones 1999; Fradley 2005; Platt 2010a). I draw heavily on this body

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of research in order to understand 'why moats exist' in the Weald, but I also seek to understand the effect that moated sites have on the social landscape after they were dug. In short, I also ask 'what do moats do?' when taken collectively as a regional phenomenon (see also Johnson 2015). My discussion is divided into two parts centring on these two questions.

In studying south-eastern England as a unit of analysis, this study recognises that a region is in danger of being

> *inadequately conceptualized in the sense that both its temporal relations (connections with the past and future) and spatial relations (connections with other areas at the same scale and at larger and smaller scales) are unspecified*
>
> (Marquardt & Crumley 1987: 9)

While the moated sites in this survey can be studied at the regional scale *in toto* with certain variables, this approach is also multiscalar and multitemporal, shifting from the household to the parish and back to the region while embracing the past and future of moated sites. The data discussed consist of 257 identified moated

sites from the counties of Kent, Sussex and Surrey gathered from the National Heritage List, English Heritage Archive and from the East Sussex HER held by East Sussex County Council. It should be noted that this is not a complete list of moated sites in south-eastern England; many sites are yet unidentified and undocumented in databases and still others have been lost to the archaeological record. However, it can serve as a general outline for moat-building trends.

I will first briefly outline the history of moated-site studies, highlighting the strengths and limitations of previous approaches. Then, I will present and compare the distribution of moated sites to various environmental, historical and social factors to describe the Weald as a set of affordances related to moat construction in order to understand basic reasons 'why moats exist'. Then, to describe 'what moats do' at the scale of individual experience and meaning, moated case studies are briefly examined as active features of the landscape. In addition to Bodiam and Scotney, I include other pertinent case studies from the immediate area such as The Mote near Iden, Glottenham in Mountfield, and Share Farm in Horsmonden. I discuss
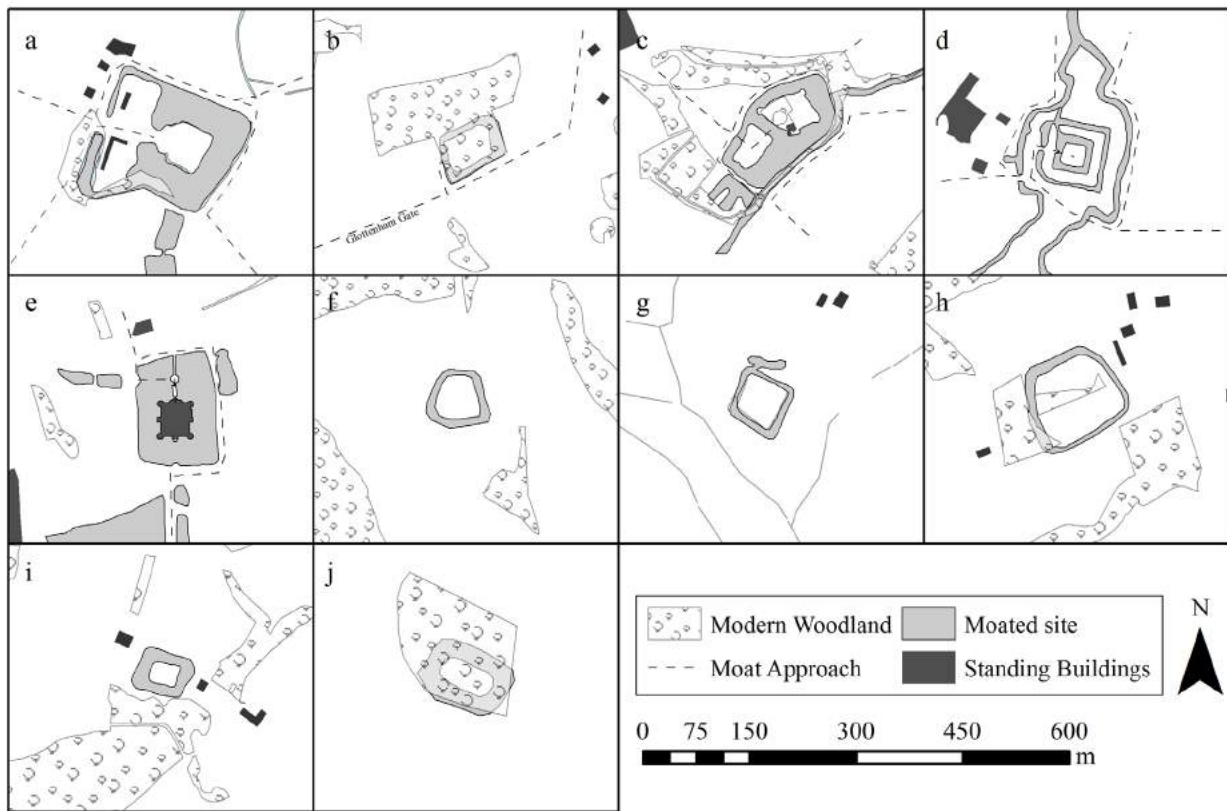
Fig. 10.1: Selection of individual moated sites in south-eastern England. (a) The Mote (East Sussex, TQ 900239), (b) Glottenham (East Sussex, TQ 726221), (c) Scotney (Kent, TQ 689352), (d) Share Farm (Kent, TQ 715392), (e) Bodiam (East Sussex, TQ 785256), (f) Bodiam Homestead (East Sussex, TQ 784264), (g) Lowden (Kent, TQ 854294), (h) Palstre Court (Kent, TQ 882283), (i) Furnace Farm (Kent, TQ 738348), (j) Old Conghurst (Kent, TQ 763280).

Fig. 10.2: Part of the ditch surrounding the moated site at Bodiam (East Sussex, TQ 784264). Photo by Eric Johnson.

specific case studies detailing how the spatial structure of moats actively constitutes authority at the intersection of experienced, perceived and imagined space, an analysis derived from my previous work on the topic (Johnson 2015). In conclusion, my analysis returns to the regional scale to describe how moats result from and may have contributed to a wider distillation of power and authority in the political landscape of the Weald.

History of Moated Sites Research

Moated sites are a well-known archaeological feature of the medieval world (Figs 10.1 & 10.2). In one of the earliest studies in Yorkshire, Jean Le Patourel (1973: 1) defines moated sites as 'islands surrounded by ditches which in antiquity were generally, though not invariably, filled with water'. This definition remains consistent to the present, despite the wide variation in size, shape and character of moated sites (Creighton & Barry 2012). Research in the 1970s and 1980s led to an initial flourishing of documentation, classification and detailed regional studies of moats (Aberg 1978; Aberg & Brown 1981). Since the efforts of the Moated Sites Research Group (later merging with the Deserted Medieval Village Research Group under the new title Medieval Settlement Research Group (MSRG)), the number of moats identified in England has risen to roughly 5,500 and counting (Creighton & Barry 2012: 64). Although the most famous are visible at the high-status castles of the elite, the vast majority of moats are associated with smaller manorial centres or wealthy freeholding peasants. The term 'homestead moat' has been given to the sites that fall under a lower-status category (Taylor 1972; Le Patourel 1973; Aberg 1978; Le Patourel & Roberts 1978; Taylor 1984; Platt 2010a; Creighton & Barry 2012). However, the use of the term 'homestead moat' is ambiguous. It often does not differentiate between what may be a peasant's dwelling place, a lesser manorial centre or even an ecclesiastical centre. While more complex moats often correlate to higher-status sites, only a close examination of a site's context will confirm its feudal association. Some higher-status manorial centres, for example, have simple, shallow moats, and many of course do not have moats at all.

Fewer than 700 moats have been excavated to some extent in England, a sampling which hovers around 12% (Gerrard 2003). Creating an accurate chronology can be problematic (Platt 2010a). Evidence for dating can come in the form of documentary references such as licences to crenellate or dateable finds in archaeological excavations. Licences to crenellate are medieval documents granting permission from the king or higher authority to the holder to fortify their property, but fortifications may have occurred at any point before or after the dated document and therefore provide only speculative evidence for the date of moat construction (see Coulson 1993 and 1994; also Davis 2007). Licences to crenellate are also not found at sites of a lower social status, skewing the data along class lines. Despite these issues, it is generally assumed that the greatest concentration of moat-building took place from 1200-1325 (Le Patourel 1973; Aberg 1978; Taylor 1984; Creighton 2009; Creighton & Barry 2012).

Creighton and Barry (2012: 65) accurately summarise the present state of literature on moated sites, showing how an explanation of the moat-building phenomenon has usually involved balancing perceived functional incentives (drainage; provision of fishponds and water supply; serious military defence/security against lawlessness) with social motivations (emulation of social superiors; status of moat possession; symbolic division from lower social orders). These explanations largely result from past regional econometric studies (Taylor 1972; Le Patourel 1973; Aberg 1978; Aberg & Brown 1981). In accounts of moats as 'one index of capital accumulation and reinvestment in ostentation and security' (Le Patourel & Roberts 1978: 48), or describing 'subsoil' as 'the decisive factor' in moat-building (Le Patourel 1973), econometric studies, as critiqued by Kosiba and Bauer (2013: 3), 'generally describe humans as rational actors who optimize their livelihood by maximizing socioeconomic gains and minimizing socioeconomic costs'.

If we are to advance our understanding of moated sites at a regional scale, these kinds of econometric approaches to regional analysis should be refined but not be jettisoned. It is important to explain the environmental factors that go into building a moated

site or their potential functional or social utility. However, two issues arise if our analysis ends here. First, we run the risk of falling into environmentally or functionally deterministic interpretations. Second, as Ian Hodder (1982: 207) explains, 'material culture does not reflect, it transforms the relationships in other non-material spheres'. We must seek to understand the ways in which moated sites transformed the political landscape in tandem with their production.

The Production of Moated Sites: from 'Cause and Effect' to 'Affordances and Relational Spaces'

In order to explain 'why moats exist' in the Wealden landscape without devolving into environmentally or functionally deterministic explanations, we can consider the Weald as a web of affordances bound up with specific environmental, historical and social contexts. The theoretical concept of affordances has been expanded and redefined (and muddied) along different ecological and anthropological lines (Gibson 1986; Ingold 1992; Llobera 1996; Gillings 2012; Hodder 2012). Clarifying (and perhaps simplifying) our understanding of affordances holds great interpretive advantages.

As I define it here, three factors distinguish an affordance from an environmental constraint or some cost reducing/gain optimising factor. The first benefit of the term affordance is apparent in its semantic realm. *Afford*, as synonymous with 'capable of yielding or providing', comfortably avoids determinism: what something 'allows for the possibility of' does not 'determine the existence of'. Second, as defined by various anthropologists, an affordance is not limited to the objective material world. Ingold (1992: 46), for instance, advocates for affordances 'as directly perceived by an agent in the context of practical action'. Summarising Gibson (1986), Gillings (2012: 604) notes that 'in the direct model of perception, the environment is laden with meaning that animals (like us) extract during the course of our sensory engagement with it'. The Weald, as perceived and experienced by a range of different people, does not consist of physical material reducible to attributes such as geology or elevation. Put another way, the Weald is a *place* as well as a material backdrop: 'personal and cultural identity is bound up with a place', and thus an analysis of landscape 'is one exploring the creation of self-identity through place' (Tilley 1994: 15). A third distinguishing factor of affordances is that they are fundamentally relational; in fact, some consider an affordance itself to be the act of encountering an object rather than the object itself (Gillings 2012). In this light, while affordances provide a specific (and subjective) context favorable

to a particular action such as moat construction, these contextual (and subjective) meanings can be negotiated in turn through this interaction. The transformative, recursive property of the landscape then brings my analysis to a second question: 'what do moats *do*?'.

Adam T. Smith (2003: 32), drawing from Lefebvre (1974), argues that landscapes are

> *encompassing not only specific places and monuments but also the stretches between them: physical, aesthetic, and representational…they are rooted in specific perspectives that advance particular ways of seeing, of living, and of understanding.*

As representations of specific worldviews and social orders, landscapes are cumulative of the spaces produced by individuals holding particular ideologies. Relational spaces define boundaries, arranging subjects, objects and spaces *in relation* to other objects (humans, animals, other structures, materials, etc.) and spaces (inside/outside, safe/hostile, civilised/natural, sacred/profane, warm/cold, etc.) in the physical world. The world of these relations is also anything but static; boundaries engender specific patterns of movement through space by delimiting how (or whether) bodies (both human and material) can ultimately travel from point A to B. When relational spaces are experienced and perceived, political ideologies are then internalised as they are embodied, reifying the social order they display (Hillier & Hanson 1989). However, just as 'ideology *per se* might well be said to consist primarily in a discourse upon social space' (Lefebvre 1974: 44), the cumulative production of new relational spaces can also actively resist, redefine or fragment prevailing political structures depending on the understandings of the producers and others' experience of relational spaces.

Why Do Moats Exist?

Environmental context

The Weald in south-eastern England can be described as an environmental region distinct in topography, geology and vegetation from its neighbours. While on the whole elevation is relatively low (max of 250 m above sea level), the terrain is marked by rapid changes in elevation, creating a constantly changing, hilly terrain. Topographic variability increases as one distinguishes between the Low Weald to the west, south and north wrapping around the High Weald (see Fig. 10.3). The Weald is also a wooded region and would have been even more densely forested at the start of the 13th century (Brandon 1969). By
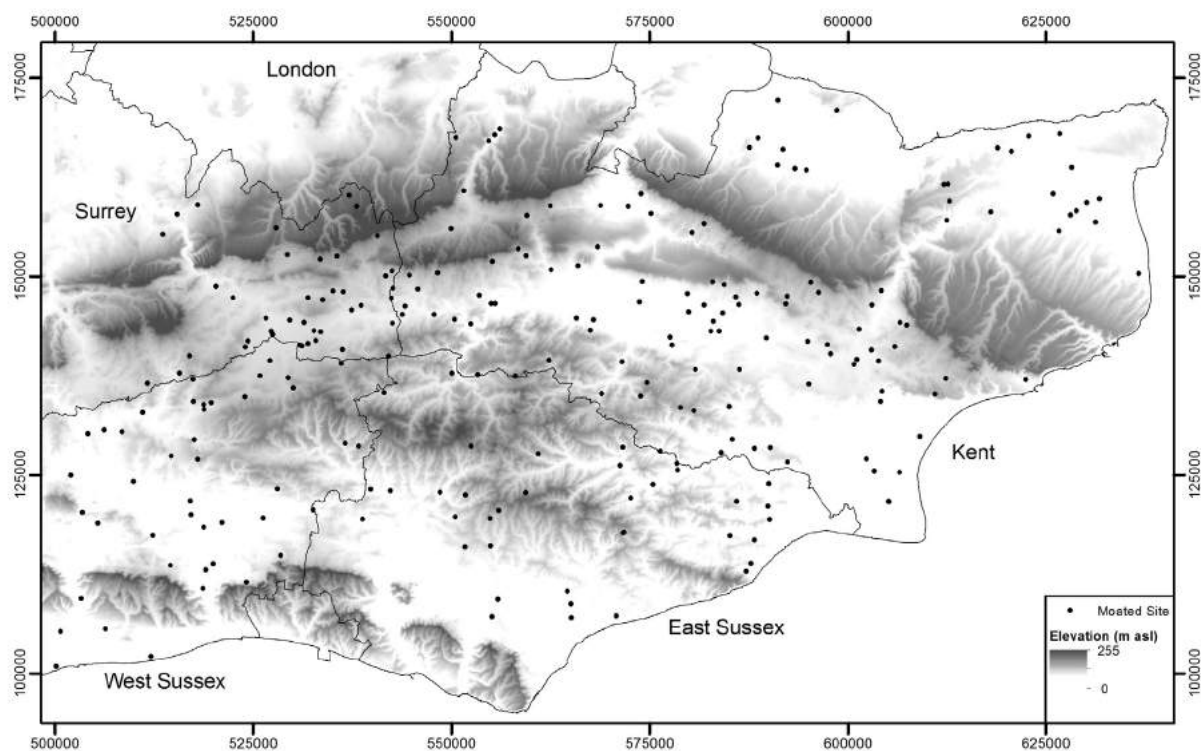
Fig. 10.3: Distribution of moats in south-eastern England, plotted against elevation.

minimising visibility and facilitating a greater degree of visual privacy, these two environmental factors combine to provide the phenomenological context of moat construction; vegetation and topography obstruct wide views normally provided by hilltops. Even today, after medieval clearances and modern agriculture have deforested a percentage of the medieval woodland, many moated sites cannot be seen until they are immediately encountered. The environment makes control over sightlines, seclusion and privacy possible, echoing notions of separateness embodied in the spatial structure of moated sites.

Past regional studies have noted the correlation between moated sites and lowland areas (Taylor 1972; Le Patourel 1973). This correlation holds true in the Weald (Fig.10.3). Approximately 70% of identified moated sites in south-eastern England lie less than 50 m above sea level, and 90% of identified moated sites are less than 88 m above sea level. Lowland areas facilitate the catchment of water flowing from higher elevations; in most cases, moats were fed by natural waterways in the landscape (unless a site was fed by a hilltop spring, as is the case at Glottenham in East Sussex (Martin, D. 1989)).

Geology is another environmental factor related to moat construction (Fig.10.4). Ninety percent of the moated sites in south-eastern England are seated in clay deposits, while only 10% are found in the chalk lands

to the north and south of the Weald. When compared to the total area of clay (60%) and chalk (40%) in the survey, this reveals an association between moated sites and clay geology. Clay is more impermeable to water than other soil types. Therefore, a clay bed for a moat retains water more effectively than chalk, allowing for greater control in constructing watery landscapes.

Social context

As has been implied thus far, the social status of an individual is another context which affords moat construction. The time, effort and labour required to dig moat ditches and manage the flow of water could have only been undertaken by those who had a degree of agency, authority and economic means. Understanding this social context first requires an abbreviated outline of medieval feudalism in relation to moated sites. The largest and most ostentatious moated sites in the Weald are found surrounding the castles and houses of the gentry such as Bodiam, Scotney, Glottenham, The Mote and others. For instance, Edward Dallingridge and Roger Ashburnham, owners of Bodiam and Scotney, were Keepers of the Peace in Sussex in the 1380s, along with William de Etchingham, builder of an important but now destroyed moated house at Etchingham and a relation of Robert de Etchingham, builder of Glottenham (Saul 1986 1-7; Martin *et al.* 2008).

Many moated sites, to judge from their size and general appearance, are found further down on the social scale, and fall into the national category of 'homestead moats'. In other parts of the country, for example Edward Martin's work in Suffolk, these sites would be immediately interpreted as the dwelling places of wealthy freeholding peasants. In the manorial system, a freeholding peasant was distinct from dependent or villein peasants by the labour or monetary debt owed to a manorial centre. A greater degree of agency, authority and accumulation was therefore afforded to the freeholding class, providing the social context for moat construction at the lower end of the social spectrum. Given that in some areas of England actual wealth disparities within the peasant class may not have aligned with freeholding or villein distinctions, Platt (2010: 125-6) suggests that even some wealthy dependent tenants may have dug ditches around their homesteads.

It is important to note that the situation in the Sussex Weald does not appear to correspond to this broader national picture. Unpublished documentary work by Chris Whittick and David and Barbara Martin has established in a very large number of instances that these smaller, less significant moated sites are in fact manorial or sub-manorial centres, however humble their appearance or similarity to homestead moats elsewhere in the country. It may well be the case that the moats found on the Kent side of the border follow a similar pattern.

The authority of an elite and his household was in part constituted by his military role within the feudal ideology. We can observe this process firsthand in medieval documents. For example, in 1318 Sir Edmund de Pashley, lord of the manor of Leigh in Iden, obtained a licence to crenellate his dwelling place of The Mote (Gardiner & Whittick 2011). Fig.10.5 is an illustration of The Mote in the capital letter of the document. This licence to crenellate flowed from a higher authority to Sir Edmund, granting him permission to construct a castle with crenellations at his dwelling place. A licence to crenellate in part produces the authority of the holder, and this production is conceptually linked to the permission to defend embodied by a moat. Of course, this type of formal permission was not required to construct a moat, but notions of 'defensibility' implied by a moated site still appropriate these meanings (Taylor 1972).

Historical context

Well before the majority of moats were built in England, the Anglo-Saxon Chronicle states that in 1086:

> [The King] *commissioned them to record in writing… 'What, or how much, each man had, who was an occupier of land in England, either in land or in stock, and how much money it were worth'… there was not one single hide, nor a yard of land…not even an ox, nor a cow, nor a swine was there left, that was not set down in his writ.*
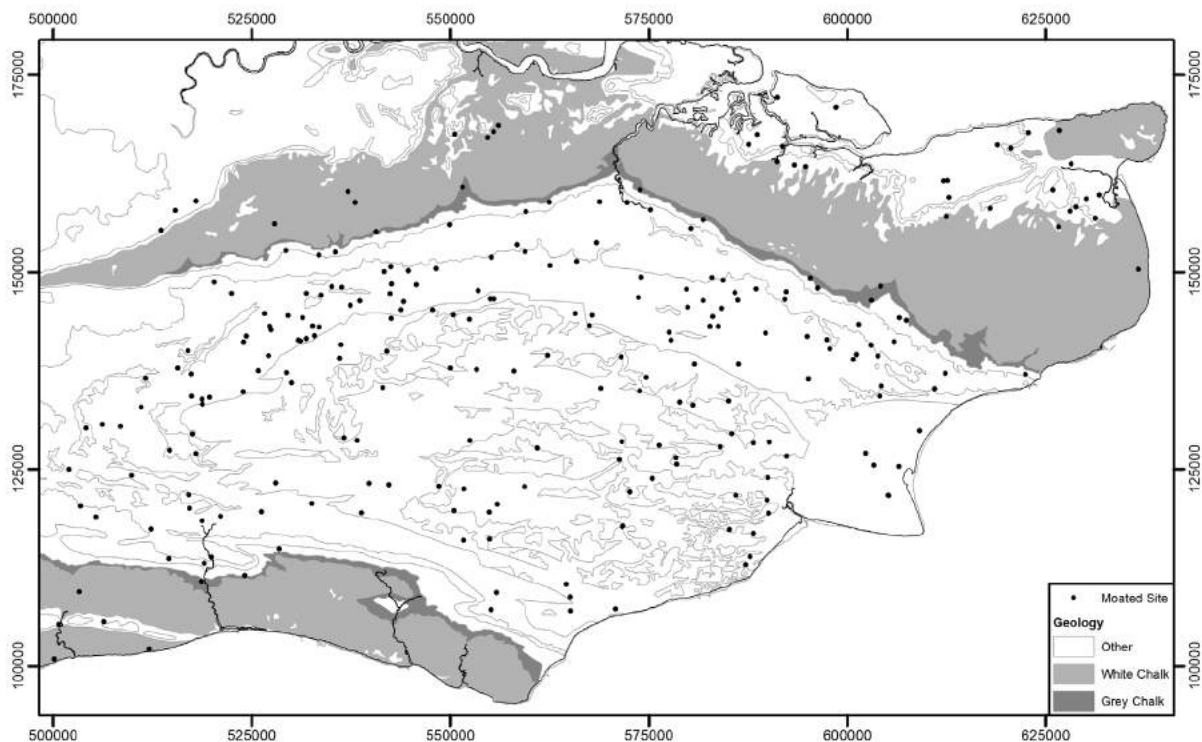
Fig. 10.4: Distribution of moated sites, plotted against underlying geology.

Fig. 10.5: A representation of a moated manor house and park in the initial capital of the licence to crenellate the dwelling place of 'La Mote' granted to Sir Edmund de Pashley in 1318 (ESRO ACC 7001). Source: Gardiner & Whittick 2011, frontispiece.

This record, known as the Domesday Book, defines the territory of the King as a sovereign totality, documenting taxation and population density. As a perceptual space of a burgeoning state, however, it is better described as an attempt to make a population of subjects visible. The places mentioned in Domesday Book are mapped in Fig.10.6. If this map is taken literally, the Weald appears as a relatively uninhabited region in 1086, and this is how previous generations of archaeologists and historians have often interpreted it. Fig.10.6 is a graphic representation of the traditional understanding of the Weald as a place of late colonisation and 'assarting', a symptom of the population rise and economic expansion of the 11th to 13th centuries in Europe (Brandon 2003: 43-52).

When the moated-site distribution is mapped on top of the Domesday record (Fig.10.6), Domesday mentions appear to be inversely correlated with moated-site distributions in the Weald. This apparent contrast has traditionally been interpreted in terms of two historical settlement dynamics in the Weald. First, it has been suggested that, as populations rose in the 12th and 13th centuries, more and more wealthy freeholding peasants began to colonise the less densely populated

woodland of the Weald in both East Sussex (Brandon 1969) and Kent (Mate 2010a: 3). Studies have painted a general picture of increasing population densities, new settlements through assarting (the clearance of woodland for arable) and have cited moated sites as a key piece of evidence for this (Roberts 1964; Taylor 1972; Le Patourel 1973; Aberg 1978; Le Patourel & Roberts 1978; Aberg & Brown 1981). Second, as manors (in this view) expanded their jurisdiction after 1086, previous inhabitants of the Weald (those 'invisible' to the Domesday record) were not absorbed into the demesne lands of manors. Instead, these settlements were also treated as freehold (Witney 1990: 22). Thus, the traditional view has been that homestead moats are one index of a strong contingent of Wealden freeholding tenants. This traditional view, combined with the observation that 'The High Weald was largely the preserve of lesser gentlemen' (Fleming 2010: 222), has resulted in a perception by some scholars of a weaker institutional structure of manorialism when compared with other areas of England.

However, this view needs some qualification, at least for the Sussex Weald. Fig.10.6 should not necessarily be seen as an objective record, but rather as a map of gaps in political knowledge (Hauser 2008) in 1086. It does in fact depict a Wealden landscape that is at least partly populated, but not one that is visible to state authority in a straightforward way. Unpublished documentary work by Chris Whittick and David and Barbara Martin has established that the general pattern in the Sussex Weald is one of fragmented manorial holdings. Manors often had their centres outside or on the margins of the Weald, on the coast or in the river valleys. These manors then also had fragmented holdings within the Weald at some distance from their centres. It is not clear whether these outlying holdings were always disclosed to the Domesday commissioners, but when they were, they appeared under the general heading of the 'parent' manor. Consequently they do not appear on Fig.10.6.

David and Barbara Martin point out that in the Rape of Hastings,

> all 'unclaimed' land was deemed to be demesne of the overlord of Hastings Rape. Where colonisation took place the colonising lord quickly established it as a manor held by him direct of the rape's overlord. Except for pockets of woodland and heath, by the 16th century only residual areas of wasteland remained, but even these were still considered by the overlord to be demesne of the rape and were leased out accordingly, a practice which continued into the 19th century
>
> (David and Barbara Martin, pers. comm.)

The proliferation of moated sites, in this revised view, is not to do with a class of freeholding peasants but is rather an index of the fragmentation of manorial holdings across the Weald; manors are indeed weaker in the Weald, but this is to do with their fragmented and dispersed nature. It should be stressed that

> *this revision does not mean that the Weald was heavily populated at Domesday: it was not, and it certainly experienced higher levels of colonization in post-Conquest years than did the adjacent coastal areas. But it was not as empty of people as previous scholarship has implied, nor were those who did occupy the area free from manorial control: instead the manorial lords of these people resided at a distance, as did the bulk of the manors tenantry*
> (David and Barbara Martin, pers. comm.)

The broader point remains, then, that the agency to construct a moat is, in part, afforded by the Weald as a landscape which historically was one of greater invisibility from state power and therefore greater political autonomy than other areas in England.

The historical context of moat construction also provides a set of symbolic meanings appropriated by a moat. The owners of moats for instance may also be appropriating a (real or imagined) past military function of watery boundaries. After deconstructing the defensive utility of moated sites Christopher Taylor (1972: 246) suggests that 'their origins may lie in the pre-Conquest ringworks which were probably built for protection around the homes of thegns] at a time when defence was a necessity'. In a critique of Taylor, Colin Platt has recently asserted the necessity of moat's defensive function for moat owners (Platt 2010a). While the debate over the conscious intent of moat owners and defensive utility distances us from how moats were perceived and experienced, we cannot ignore the symbolic importance of defence in medieval life: 'The 'militaristic' conceptions of late fourteenth-century warfare were…intimately bound up with… ideas of masculinity, knighthood, and martial valor, ideas that were historically transient' (Johnson 2002: 30). Notions of defence, conceived symbolically, are therefore inextricable from those of status and gender, and the historically transient martial meanings are embedded in moats, regardless of whether the owner consciously built a moat in reaction to 'endemic lawlessness' (Platt 2010a: 128) or with 'the desire to show off his prosperity' (Taylor 1972: 246).

What Do Moats Do?

I have briefly described some of the environmental, historical and social contexts affording the act of moat construction in an effort to better understand 'why moats exist' in south-eastern England, but the life of
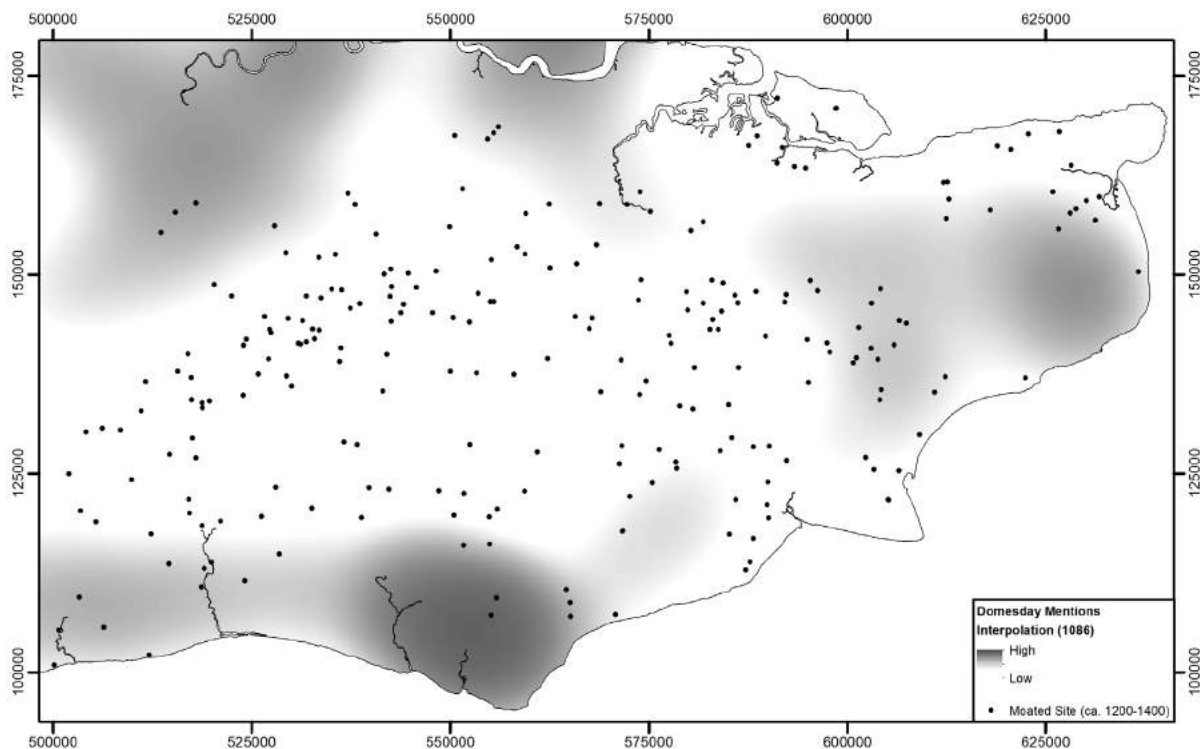
Fig. 10.6: Density of mentions of places in Domesday 1086, plotted against distribution of moated sites.
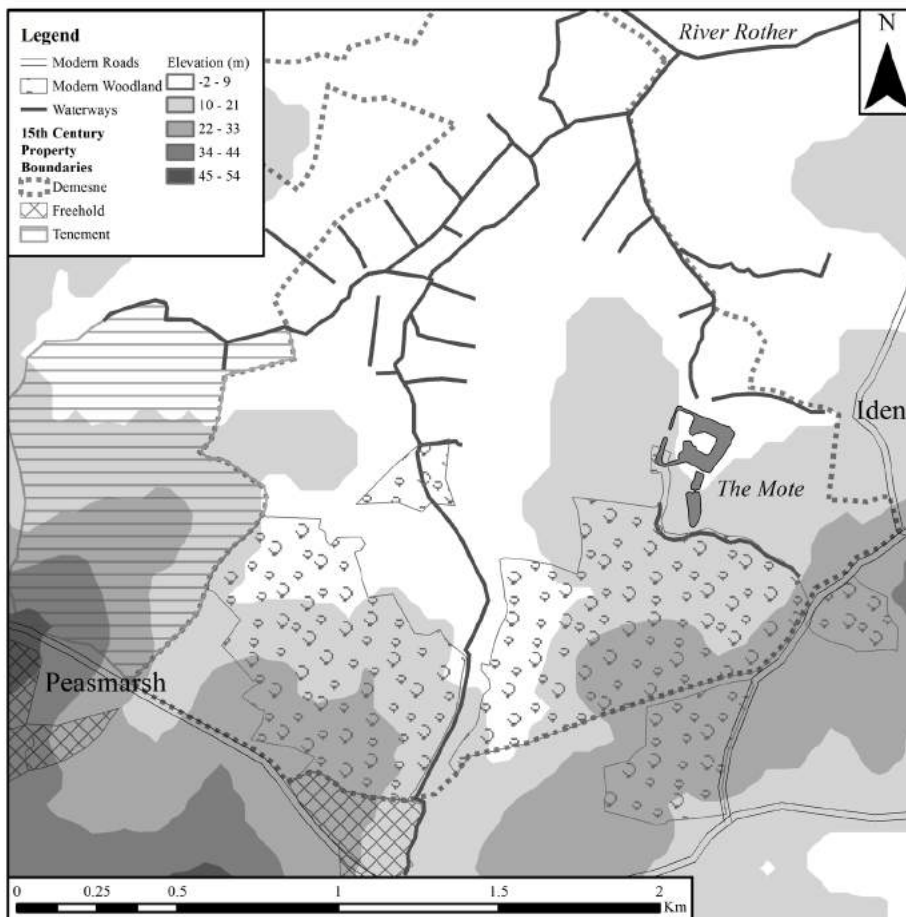
Fig. 10.7: Landscape context of The Mote, near Iden (East Sussex, TQ 900239). Based on work by David and Barbara Martin in Gardiner & Whittick 2011.

a moated site does not end at its inception. Therefore, my analysis continues with the question 'what do moats do' as features in the landscape. Even as authority and agency is afforded to individuals in specific contexts, I argue that moats then actively contribute to the agency and authority of those inhabiting their inner islands. The scale of analysis shifts to individual case studies to examine the recursive constitution of power at the 'intersection of space with experience, perception, and imagination' (Smith 2003: 72-3; see also Lefebvre 1991).

Moats as experienced

Examining survey evidence from The Mote near Iden, we can immediately see similarities between its moat and other elite moated sites such as Bodiam and Scotney. Fig.10.7 illustrates the 17th-century field boundaries reconstructed using historical documents from the manorial centre at The Mote (Gardiner & Whittick 2011). These boundaries have likely remained close to their 14th-century counterparts. The Mote, as the place of court hearings and tax collection, was a locus of authority for Iden and Peasmarsh, a place approached and navigated by a range of people of different social classes, both peasants under the jurisdiction of the manorial household as well as other visiting elite

households. The demesne fields of the manor for instance may have been worked by dependent peasants indebted to The Mote through labour.

Surviving earthworks at The Mote provide evidence for what the moat does as an experienced space (Johnson 2015). Moats increase the time and effort required to travel to the innermost island. Simultaneously, the placid surface of the water flattens the surrounding topography, maximising the visibility of the vicinity surrounding the island. In its present state, the inner island of The Mote is clearly delineated by a partially water-filled ditch, and a single piece of upstanding masonry marks the possible location of the former gatehouse structure. Two subsidiary moat 'arms' branch to the north-west outlining a second space within their boundaries, presumably the outer court. An outer or lower court (sometimes called a base court) is a common feature of moated sites and could have contained subordinate houses for servants, stables, granaries or barns (Rigold 1968). At Iden, in fact, 'a single timber wall of a barn still survives on the outer enclosure, now incorporated into the modern farm buildings. The wall may date to the 1470s', and a 'lower court' is mentioned in account documents from 1480 (Gardiner & Whittick 2011: xlvii). The Mote would have been approached from

either the village of Iden to the east, Peasmarsh to the west, or the River Rother to the north, as suggested by David and Barbara Martin (See Fig.10.7, and see also Gardiner & Whittick 2011: lxxxi).

The boundaries of the spaces produced by a moat are relatively static, but the bodies navigating their spatial layout are in constant motion. The order established by this spatial layout is thus maintained through movement. As to the depth of the inner and outer courts, movement reinforces the spatial and social order with a temporal order: first/posterior/lower court → second/anterior/ upper court. At higher-status sites, an itinerant elite's household would process to the inner court on different occasions. The repeated performative act of entering a castle—drawn out by the moat—helped constitute the status of social actors as the landscape was both stage and reality for social practice (Johnson 2002). This is especially clear at Bodiam Castle where the processional route is tightly delineated and visibly unobstructed across the narrow bridge to the small octagonal island and then turning south to cross a second bridge and pass under the castle gate. For those experiencing the greater or lesser mobility defined by the moat and class, this order is internalised as it is embodied and the authority of those within is actively (re)produced.

Moats as perceived and imagined

According to Adam T. Smith, the perceived dimension of landscape

> *is a space of signs, signals, cues, and codes—the analytical dimension of space where we are no longer simply drones moving through space but sensible creatures aware of spatial form and aesthetics*
> (Smith 2003: 73)

Here moats become laden with meaning and subjectively interpreted by the range of people navigating their boundaries. It must first be noted that moated meanings varied greatly along gender, class, age and literacy lines (Johnson 2002: 29). Therefore, the following suggestions should not be taken as uniform medieval interpretations of moats, but they do provide a context to help us understand broadly how they may have been perceived and understood as their spatial order was experienced. Moated meanings are rooted in the representational spaces of the medieval world such as texts and imagery.

The medieval world was thought to be made up of four basic elements: earth, air, fire and water. In the body, different balances of these substances led to distinct temperaments. In strictly dichotomous gendered discourse, women were associated with water; they were cold and changeable while men were considered hot and dry. Roberta Gilchrist notes that

> *Under the medieval feudal system…the accumulation of property in land required monogamy and inheritance by primogeniture (inheritance through the eldest male). Female fidelity, and its display through the physical confinement of women, became essential to the perpetuation of successful lineages*
> (Gilchrist 1999: 112)

In a patrilineal and patriarchal society, a watery moat may have been a metaphor of sexual seclusion, (explicitly or implicitly) protecting the fidelity of the woman within, thereby cementing the power and authority of the household. It is clear from documents that the medieval elite were concerned with the fidelity of wives, but this was also probably important for freeholding peasants in order to retain their freeholding status.

The image in the capital letter of The Mote's licence to crenellate (Fig.10.5) depicts an idealised manorial complex, complete with hunting grounds for deer and rabbit, a chapel for the pious owner and a curiously interwoven flow of fish in the surrounding moat. It is no surprise that the chapel is the focus of this image; Sir Edmund Pashley had founded the chapel of Leigh in 1304 and transferred it to The Mote in 1320 (Gardiner & Whittick 2011). The interwoven flow of fish in the moat is depicted beneath the chapel centrepiece of the image, reinforcing the religious authority of the site bound up in its moated representation. Power and authority were also associated with production and consumption at a manorial centre. As is clear in the case of carefully regulated medieval deer parks, 'hunting opportunities available to any individual depended…on social rank' (Creighton 2009: 100). The consumption of fish from the moat or associated fishpond was a specifically elite activity.

The social relationships defined by feudal order may have been naturalised by the moat as a feature of the landscape. The water filling these ditches was considered a fundamental element of the medieval world, part of the natural order. Moats appropriate the powerful permanence and barrier qualities of natural waterways for specific social ordering. Much like the elite practice of capturing deer into a deer park with a pale, moats draw the natural world into the cultural. The spatial relationships produced by moats may have been perceived as fundamentally as the medieval conceptions

of earth, air, fire and water and as temporally static as rivers that feed them. Indeed, moats' ubiquity in the archaeological record today is a testament to their lasting physical presence. The naturalising attributes of moats are most obvious at the site near Share Farm in Horsmonden, Kent. Classified as a 'double concentric' moat and bounded by a fork in the river, here the river actually *is* another moat in the sense that the experience of moving across the river boundary is essentially the same as the movement across the 'artificial' boundaries of the double concentric moat. The pattern of movement delineated by the river and moats contributes to the naturalisation of the social order.

All this being said, the meanings of moated sites could easily be manipulated for subverting dominant social relationships and furthering individual agendas. For instance, the historical record of The Mote suggests some doubt as to the legitimacy of Margaret de Basing and Edmund de Pashley's marriage in the early 14th century. Upon Edmund's death, both Margaret de Basing and another woman — Joan of the Greyly family — claimed to be his widow. According to Joan, Margaret murdered Edmund and two of her alleged stepchildren in order to legitimise the inheritance of the Pashley estate to her children of a previous marriage. Despite legal cases brought against Margaret, the manor of Mote passed to her sons in 1341 (Saul 1984; 1986: 86). Margaret's occupation of the manor house and its impressive moat may have been one factor reifying Margaret's bounded sexual relationship with Edmund, bolstering her claim to inheritance over Joan despite its possible illegitimacy (Johnson 2015: 248-9).

The Wealden Political Landscape

I have detailed in part 'why moats exist' and the set of affordances producing the agency of an individual to construct a moat, and I have explained 'what moats do' at the household scale to (re)produce the authority of their owners. In conclusion, I return to the regional scale to ask 'what do moats do' as they constitute the wider political landscape. As a spatial and social discourse, the political ideology of feudalism rigidly defines classes such as gentry, yeoman, freeholder, etc. In reality, however, the political economy of medieval England and its associated identities were more fluid, negotiated in part through marital ties, military service, economic accumulation, and so on. Wealden lesser gentlemen, for instance, often 'led lives not very different from the non-gentle yeomen immediately beneath them' (Fleming 2010: 221). In addition to the freeholding squatters already occupying land in the Weald before the 13th century, some tracts of land were

'opened up by individual enterprise and partitioned into freehold and customary farms' in the 13th century (Brandon 1969: 141). The fragmentation of manorial holdings noted above may have contributed to a more permeable notion of social boundaries. According to some historians of the Weald, peasants may have also had a more comfortable degree of economic autonomy relative to other regions in England:

> [in the late 13th century] *a new wave of pioneers entered the forest in larger numbers…On their small farms they planted fruit trees, grew oats and legumes, and kept animals. They also utilized the resources of the woods around them*
>
> (Mate 2010a: 3)

All of these factors combine to produce a landscape where power and authority was diffused and dispersed across a larger group of people and a relatively 'weaker' institutional structure of manorialism.

I argue that greater concentrations of homestead moats in the Weald – whether owned by freeholding peasants or lesser elite – may be an index of economic and political autonomy diffused to lower classes, as has been more or less argued by others working in different regions (Emery 1962; Le Patourel 1973; Le Patourel & Roberts 1978). As I have shown, the Weald is a specific environmental, historical and social context which affords the agency to construct a moat. However, I also argue that moats, as experienced, perceived and imagined relational spaces transform, and perhaps magnify, afforded authority into normative reality (Johnson 2015). Fig.10.8 illustrates the boundaries of modern parishes (a comparable artefact of medieval parishes) relative to the location of moated sites and topography in the High Weald. Many lower-status sites are situated near the parish boundaries, mirroring Edward Martin's findings in Suffolk (Martin, E. 1989). There is a clear correlation here, though precisely what it means is unclear, as parish boundaries do not equate to manorial boundaries in much of the Weald. It may be that the power of the elite was weaker at the periphery of territorial boundaries, a context (combined with environmental factors such as topography shown in Fig.10.3) affording the act of moat construction. While this political affordance was by no means permanent, moated sites then reified the authority of their owners for the reasons outlined above. Those occupying the inner islands, while perhaps not ideologically defined as members of 'the elite', may have been perceived as having a degree of religious authority, or retaining a monogamous wife and securing a 'free' bloodline, or as having obtained some degree of privilege to defend one's home.
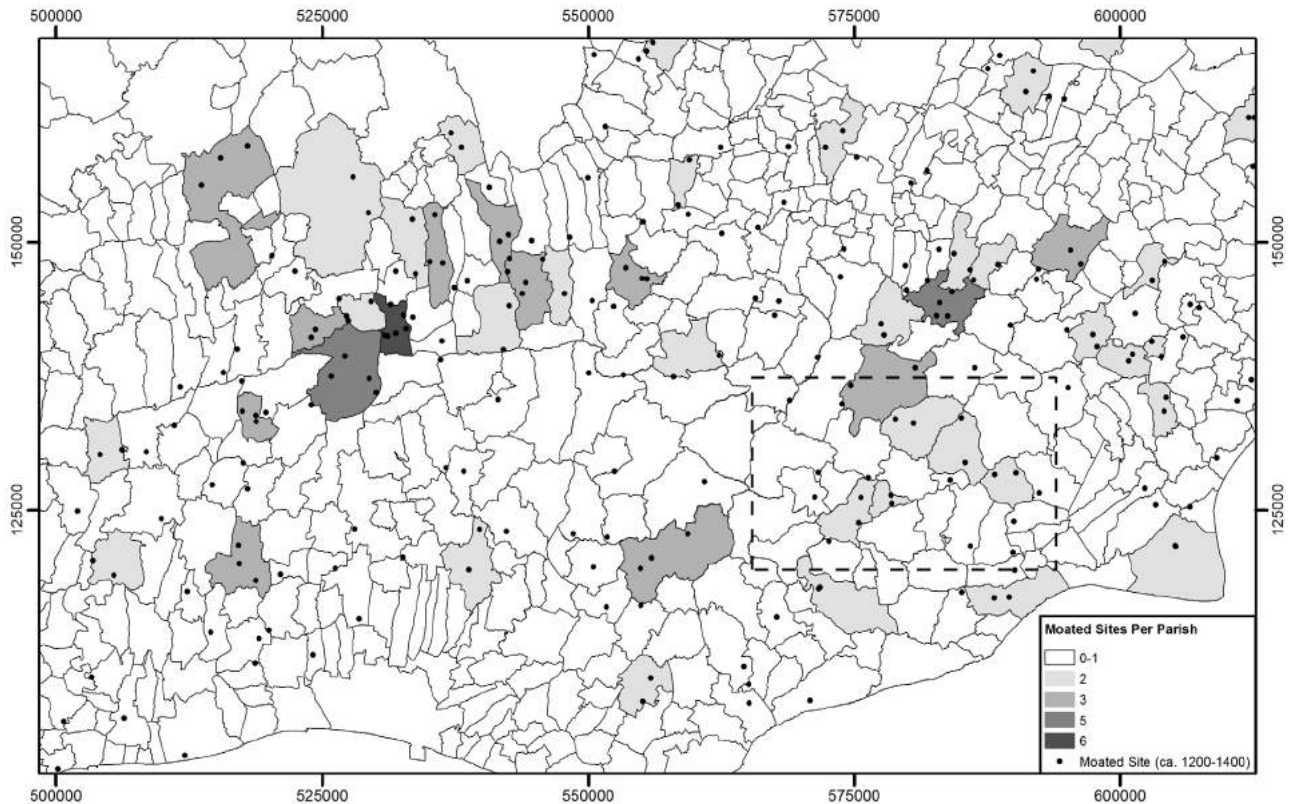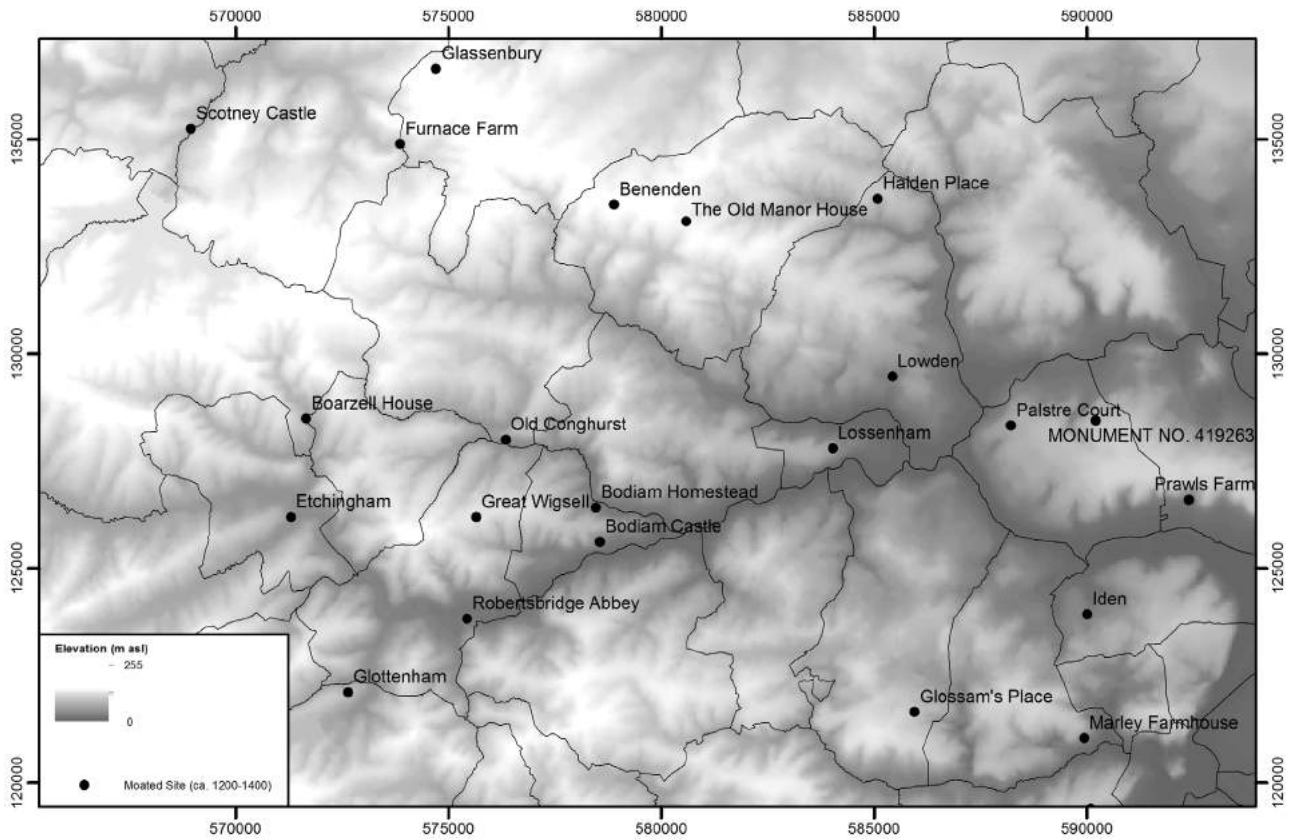
Fig. 10.8: Moated sites in relation to parish boundaries. Above: inset of the Eastern Weald. Below: distribution of moated sites within parish boundaries.

In conclusion, we can compare these parishes to the region as a whole. Fig.10.8 displays the number of moated sites found within each parish. Shaded parishes contain at least one moated site, and darker parishes contain greater concentrations. The exact percentage of non-manorial moated sites in Fig. 10.8 is unknown, but at least some of these moats likely surrounded freeholding peasant's dwellings. The clustering of moated sites of a manorial status indexes the unconsolidated nature of manorial holdings in the Weald. Thus, on both accounts this map suggests the geography of political fragmentation as viewed through the distribution of moated sites. It should be noted that Fig.10.8 does not accurately describe where power was diffuse so much as where moats may have contributed to political diffusion. Nor does this map seek to describe the dynamics of power between parish boundaries, but rather, it reveals possible differential fragmentation *within each parish* as produced by moated sites.

Of course, Fig. 10.8 flattens the dynamic temporality of the Wealden landscape. Hard dating evidence for the vast majority of moated sites is limited; a more accurate picture may not be possible without extensive excavations. Additionally, the Black Death (1348-50),

as a major historical event, signaled a radical change in medieval demographics and slices through the tail end of moated-site chronology displayed here. As others have noted (Le Patourel 1973; Taylor 1984; Platt 2010a), the phenomenon of homestead moat-building sharply declines if not disappears after the mid-14th century. Several of the moated sites discussed here, however, date to the later 14th century. They are certainly not unique in their complex use of water to communicate and reify certain social relationships. It is possible that these 14th-century moats draw on the longer social history of moated-site production in the broader landscape as a claim to authority in the eastern Weald after the dramatic decline in population in 1348.

I have shown using GIS methodology how we can reconstruct the Weald as a set of affordances arising from specific environmental, historical and social contexts. In the process, I have avoided conclusive statements about the intention of individuals at the moment of moat construction in terms of either a symbolic fashion statement or a defensive feature. Rather, an analysis of the experienced, perceived, and imagined moat opens up the discussion to how political ideologies were expressed 'on the ground' and how the landscape then shaped people in the past.

11

PUBLICS, VOLUNTEERS AND COMMUNITIES: PUBLIC ENGAGEMENT AT BODIAM, SCOTNEY, KNOLE AND IGHTHAM

Becky Peacock

Abstract. This chapter discusses the public engagement that took place during the course of the project. The diversity of visitor background and experience, the two-way nature of the engagement, and the different experiences of both visitors and volunteer staff at all four sites are discussed.

This chapter discusses the public engagement work carried out as part of the University of Southampton and Northwestern University field survey, 2010-2013. Public engagement was conducted by myself throughout the project, although its practice changed slightly over the seasons. The first season (2010) took place solely at Bodiam Castle over a two-week period. The second season (2011) saw work being split between Bodiam and Scotney over a two-week period. The third season (2012) saw the team return to Bodiam concentrating on the wider landscape surrounding the castle, for example Dokes Field and the cricket field. The last field season (2013) saw a change in sites with teams of Southampton and Northwestern students being split between Knole and Ightham.

Public engagement in the UK heritage sector is a process by which heritage organisations aim to engage the general public in their history. Engagement means 'the power associated with 'being and feeling engaged' which is a whole person experience that envelops the senses' (Fear *et al.* 2002). The common purpose of engagement is to let people know about your work (National Co-ordinating Centre for Public Engagement online, retrieved 8th December 2012). There are two major questions surrounding engagement: what is it to

feel engaged and what is it to engage? To be and feel engaged 'is a resonant experience, enabling participants to gain a deeper understanding about themselves, others and their work' (Fear *et al.* 2002: 59). To engage means to involve people in one's work. There are three methods of engaging people. The first is informing; this can take the form of many different actions from communicating engaging presentations to podcasting. Second, consulting, which is any action involving the meeting of outside groups from user groups to online consultation. Lastly, collaborating contains activities ranging from 'communities of practice' to 'participatory research partnerships' (National Co-ordinating Centre for Public Engagement online, retrieved 8th February 2012). The most common forms of engagement within the UK are informing and consulting. However, over the last few years there has been more collaboration.

I have been part of this project from its start in 2010, originally collecting data for my Master's dissertation; *The Role of Bodiam Castle in Popular Memory* (Peacock 2010). The dissertation focused on collecting memories of visitors, staff and volunteers via interviews. The interviews were structured on a questionnaire that covered a set number of criteria. It seemed appropriate

to undertake public engagement at the same time as collecting data for my Masters, as I was already interacting with a variety of people around the site. Since early on in my studies I have been interested in how people interact with heritage and what these hidden aspects can add to our understanding of archaeology and heritage. This was a central theme within *The Role of Bodiam Castle in Popular Memory* and other statements collected became the focus for reflection and discussion within the project, adding to our understanding of the sites. At the end of each season, reports on the public engagement were written and a separate review of the public engagement at Bodiam from 2010-2012 was undertaken. The chapter is based on an amalgamation of these reports and sections of the Masters thesis (Peacock 2010). The chapter is also informed by my recent PhD research. The dissertation is entitled *The Future of Museum Communication: Strategies on Engaging Audiences on Archaeology*. It focuses on museum outreach practices in Hampshire, England and has had a marked impact on this chapter (Peacock 2015; available at https://www-lib.soton.ac.uk/uhtbin/cgisirsi/?ps=73TK1tqM8Y/HARTLEY/252980547/123, accessed 6th May 2016).

It has been a number of years since finishing the public engagement role for this project in 2013. Distance and wider knowledge of engagement practices within the heritage industry in the UK have meant that I have a developing understanding of the interactions and relationships occurring within these sites. The reports I made at the time documented the actions undertaken as part of the public engagement and highlighted a few themes around visitor engagement with the sites. However, there was little cross-comparison between sites and many themes were unexplored. A deeper understanding of engagement practices within the heritage industry has meant that the themes picked up in the previous reports are explored and a wider range of examples for these facets can now be included. Overall, this has meant that this summary of public engagement has become more in-depth.

It was important for the project to undertake public engagement as all the sites are 'public', under the stewardship of the National Trust. The Trust is a charity which was founded in 1895 by Octavia Hill, Hardwicke Rawnsley and Robert Hunter (Weideger 1994: 6). It is 'national in name and function, independent of the Government' (Benson *et al.* 1968: 13). It was established to 'promote the permanent preservation of lands and tenements of beauty or historic interest for the benefit of the nation' (Benson *et al.* 1968: 13; Weideger 1994: 8); at a time of industrial revolution

the Trust aimed 'to offer natural therapy to the benighted urban poor of Victorian Britain' (Weideger 1994: 9; Reynolds 1998). The National Trust came to be associated with elite culture through its developing 20th-century engagement with the management of 'stately homes' and it has been provocatively stated that it is an 'organisation run by toffs for the middle classes' (Hetherington 2006). However, there has been a conscious effort by the organisation to move away from this perception (arguably always unfair) through various initiatives (see Henley 2010; National Trust 2015; Furness 2013).

The open access to these properties (of different kinds at different sites) afforded a high level of interaction with the general public and therefore it was important for the project to answer any visitor questions that might arise from the team's presence. Public engagement provided the best solution to how questions would be answered and brought the project in line with best practice in archaeological research as a whole, as well as more specifically the principles and policies of the University of Southampton, Northwestern University and the National Trust. Public engagement was from the start seen as an essential aspect of the project, but as it developed, the insights gleaned from this engagement came to inform the changing research aims and priorities of the Southampton/Northwestern team.

The aims and objectives of the public engagement were determined by the author of this chapter and the project director, Matthew Johnson, at the start of the first season (in 2010). It was intended to inform visitors, staff, volunteers and interest groups at these sites about the field survey project and any further research being conducted in relation to these sites. However, public engagement is not a one-way process (Morgan & Welton 1994: 32; Cushman 2012; National Co-ordinating Centre for Public Engagement online, retrieved 8th February 2012); and this process of information transfer was integral to furthering our understanding of the site in its modern and historical context. The memories collected for *The Role of Bodiam Castle in Popular Memory* served to increase our understanding of this site from the perspectives of staff, visitors and volunteers (Peacock 2010).

During my initial interactions with people, I employed a questionnaire to collect the data required for my Masters. I then moved on to using a (deliberately) informal and qualitative method that meant that the process of information transfer was in the form of a conversation. This meant that I found out aspects of people's experiences at the sites that would not be gleaned using more formal and quantitative methods such as questionnaires.

People were at ease as they were less focused on what they thought I wanted from the conversation and therefore, I was able to gather more meaningful information. Employing the technique of conversation meant that both parties involved gained information and mutual benefit. The public engagement being completed by the same person throughout the project has been beneficial as experience from previous years influenced the practice in subsequent seasons.

The public engagement was undertaken solely by myself up until 2013; between 2011 and 2013 there were no additional projects running in conjunction with the public engagement. This meant that the nature of the engagement changed slightly over the years. During 2010 interactions with volunteers, staff and visitors were actively sought to fulfil the data requirement for my Masters dissertation. In subsequent years, interactions with these groups were more complex to organise and not as many people were spoken to. In 2010 a set of interview questions were employed to gather information, and after this was completed conversations progressed onto the wider project. Without the use of interview questions, I engaged people in conversations about the activities of the students situated across the sites. This posed some problems as only people that were interested in the work of the team were open to conversing with me. However, it could be countered that the people whom were interviewed in 2010 were open to being interviewed because they were interested in my work and the project. Therefore, there need not be a discrepancy in the number of people interacted with as part of the public engagement.

I employed the same public engagement technique across all of the sites. All of the team were provided with distinctive project T-shirts each season which made them easy to identify in the landscape. While the rest of the team got on with the survey work I wandered around the landscape. At Bodiam this included walking around the interior of the castle as well as outside in the wider environment. It was important to cover all areas as people engaged with the sites in different ways (as will be discussed below). While wandering around the site, I would engage visitors in conversation around the topics of what the team were doing, any results from previous seasons and what the team were hoping to find. After this had been covered the conversation would progress to include any memories they had about the site, why they visited and any other information they wished to share with me.

It should be noted that in addition to my specific responsibilities, all other members of the team regardless their role were instructed to respond fully to visitor queries whatever they were doing at the time, even at the expense of the pace of the work. Further, Matthew Johnson and others gave public lectures to audiences including Trust volunteers, local amateur groups and the general public in a variety of contexts. Local amateur societies made a collective visit to Bodiam in 2010 to see the work and in particular learn about the geophysical techniques being used (Fig. 11.1). Early methods and experiences iteratively informed practices in later years.

Fig. 11.1: Members of local archaeology societies inspect the GPR equipment at Bodiam, April 2010. Professor David Hinton of the University of Southampton looks on (far right). Photo by Matthew Johnson.

Bodiam 2010-2012

Bodiam Castle has been owned and managed by the National Trust since 1926 (Dixon-Scott 1937: 12; Hinton 1990; Johnson 2002). During 2010, as previously stated, the public engagement was undertaken as part of my Masters research (Peacock 2010). Before 2015, the landscape around the castle was freely accessible, with visitors only needing to pay for parking during opening hours and for access to the interior of the castle. Consequently, visitors were free to move around the very large area managed by the Trust in different ways. Time was therefore split between the castle and its surrounding landscape.

Different types of visitors interacted with the site in a variety of ways. Local or return visitors tended to walk in a circuit around the outside of the property, while first time or long distance visitors would go straight into the castle (Peacock 2010). This was attributed to a number of factors. First, local or return visitors used the wider landscape as prior to 2015 it was free to access (parking was £2.00 if not a National Trust member). This made the site for these visitors in essence a park landscape, an area to walk and spend some time without large financial outlay. In particular, the car park and the landscape before the castle opening at 11:00 a.m. saw a large number of local dog walkers (Fig. 11.2).

This frequent use by locals prior to 2015 means that Bodiam is a notable exception to Lynch's statement that 'many symbolic and historic locations…are rarely visited by its inhabitants' (Lynch 1972: 40). The site's use as a 'park' by locals puts the castle within the definition of Lynch's 'historic location' (Lynch 1972: 40). First time or long distance visitors, on the other hand, go straight to the ticket office which at that time was on the northern side of the moat and thence to the castle, as their trip was specifically made to see the castle and therefore they were comfortable with paying for entry as well as parking. It was also more productive for me to split time around the site as the teams of students were dispersed across the surrounding landscape and the castle.

The stories and memories that were collected gave us a perspective on the values and priorities that visitors brought to the site, and a more layered and multivocal perspective, and in so doing added to our understanding of the site both in the present and in the past. Those stories that added to our understanding of the site in the past related mostly to the pillbox constructed as part of home defence in 1940. As discussed in Chapter Four, the Bodiam pillbox was constructed in World War II to guard the bridge at Bodiam. The pillbox is the focus of an annual World War II event at Bodiam Castle. There were a number of local visitors who stated that they knew the person who was tasked to

Fig. 11.2: Becky Peacock interviews a dog walker at Bodiam, April 2010. Photo by Matthew Johnson.

man the pillbox during World War II. Most people simply stated 'I know the person who manned the pillbox' or 'the person who manned the pillbox lives in my street/village'. This was interesting as everyone seemed to know this person, but over and over again when asked for a name they were unable to provide one. Therefore, it seems that many locals 'know' the person who manned the pillbox during World War II but this is more of a local legend than anyone actually knowing this individual. It appeared that being able to state 'I know the person who was stationed here' gave them a direct link to the past, a human connection; which has been seen to be an important sentiment within museum experiences in general (Bailey 1998: 92; DCMS 2001: 8; Little & Zimmerman 2010). It is a shared, empathetic history that is reiterated and affirmed by these statements.

Another aspect of history that was brought up frequently by visitors and locals was the Roman road and whether we found any remnants of Roman occupation of the area. The most memorable recollection I have about the Roman road revolves around the story of a local. They recounted a night they were making their way back from the pub through the field and they encountered the ghost of a Roman soldier. This piece of information was imparted when we were discussing the presence of a linear feature through one of the fields. I believe this was a way for them to suggest that it had to be the Roman road. The location of the Roman road and anything associated with the Romans was a particular focus for the local amateur societies that visited the site in 2010. It is not clear why these groups were so focused on 'the Romans' but it might be tied in part to issues of local identity.

A number of comments were made about the site in relation to the form and appearance of the castle. This ranged from 'it is a fairy tale castle' to 'it is what you imagine a castle to be'. These comments inform us about the way people view the site and castles in particular. The maintained landscape projects a sense of timelessness to the visitor; even as a ruin it appears to be untouched by time. There is a feeling of romanticism about the site which links to this fairy tale image that visitors have about the building and castles. Romanticism is a 'literary and critical movement' (Beiser 2006: 1) and has qualities of 'fantasy and sentimentality' (Beiser 2006: 12; Johnson 2007). Romanticism therefore has a particular relationship to nostalgia and memory. Another issue is the conflation of the real and imagined when visitors comment that the 'castle is real' (Peacock 2010). This can be linked to the image of the castle as presented in film, particularly those produced by the

Fig. 11.3: Cinderella Castle, Magic Kingdom, Tokyo Disneyland. Photo by Matt Wade, CC-BY-SA-3.0/Matt H. Wade at Wikipedia.

Disney Corporation, where 'Disneyfication' takes place with the trivialisation of structures of the past (Samuel 1994; Goodacre & Baldwin 2002: 20). This imitation can be seen in parks such as Disneyland (Fantasyland) and Legoland (Dragon Knights Castle), where the castle image is placed within the realms of fantasy and imagination (Samuel 1994: 242; Fig. 11.3).

Therefore, a real castle which is not completely ruined could be considered by most people to be within the realms of the imaginary. Many castles, apart from those still lived in, are 'ruins' whereas Bodiam has a largely complete external façade, has undergone limited renovations (by Lord Curzon and the National Trust) and has a wide, surviving moat. It has all the ingredients for the fantasy/imaginary castle that people come into contact with through literature and film. It is the romanticism of the site that places this castle within the world of both the imagined and the real (Beiser 2006: 8-9; Prager 2007).

It was interesting to see the strong connections/feelings to this site held by many people. In many cases the site was integral to visitors' memories of both childhood and

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family. Memories work on a scale ranging from individual and family, through group and institutional affiliations, to the national and global. Individual memories are personal, 'made not of disastrous events but rather a weaving together of humdrum but revealing details… with major events that are significant' (Connerton 1989; Conway 1990; Engel 1999: 97; Wrigglesworth 2009). Family memories, on the other hand, are created in a collective setting (Halbuachs 1992), and may be shared. In these memories the individuals may remember themselves to be more central to the past event than they really were (Engel 1999: 8). Frequent visitors use Bodiam to create memories with those they visit with, either consciously or unconsciously. Conscious construction of memories is seen when people choose to bring other people to Bodiam during visits, for example family members being brought during a family visit. Unconscious construction of memories happens at times such as a family day out.

These memories are used within identity construction and inform people where they come from (geographically) and the family they belong to. There were many cases of 'local' visitors bringing family members from other countries to the site (Peacock 2010, appendix 1 & appendix 2). During these visits the 'local' family members would recall previous visits to the site for those 'outside' family members. This process of recollection was part of a conscious construction of memory, where the 'local' family members chose this location to bring 'outside' family members as part of a process of inclusion. This site had significance to the 'local' family members and was the setting for many of their family memories. Including the 'outside' family members in these memories, the 'local' members are not just recalling memories but reconstructing them to include the 'new' members of the family. This ongoing process reaffirms the family group and ties between the members whether they were participants in the original remembered events or not.

There were also cases where older family members brought younger members to the site to share in their recollections. In one case a visitor recalled that their mother brought them to the site as a child. She had a number of her own memories of the site as she had been a hop picker in the area (Peacock 2010, appendix 1). These visits would include not only the new construction of memory but the sharing of older memories with younger generations.

Trust staff and volunteers feel a strong sense of ownership over the site. This is seen in a statement made by one member of Trust staff who stated: 'I live on the Marina

and people say to me, don't you miss a garden and I say no because look what I have got (Bodiam Castle) it's enough garden!'. In this case Bodiam Castle is a substitute for the lack of garden at home, and this staff member views it as their own. This shows the sense of ownership that volunteers and staff feel towards the site. All these different types of memory show the complex nature of people's relationship to the castle and their sense of ownership over the site.

In 2011, with the completion of my research in the previous year, I decided to utilise a number of activities already organised by the National Trust with an input from the team to increase public engagement. There were information boards displaying information about the Southampton/Northwestern project as well as Trust-organised children's activities revolving around the archaeology of the site (Fig. 11.4). A local archaeological group also displayed some objects that they had found relating to the medieval period. All these activities increased the visitors' awareness of the archaeology of the property and the project. Visual and hands-on aids such as these attract the public's attention, and therefore it seemed more appropriate to concentrate the engagement inside the castle where these were housed. Centring on these activities allowed for easier interaction with families as children were entertained while the parents were able to find out more about our survey work. In the previous year it had been noted how

Fig. 11.4: Charlotte and Davy Allen dig for artefacts at Bodiam; operations directed by Sarah Johnson. Photo by Matthew Johnson.

difficult it was to engage with families. Children became bored quickly as the adults conversed and this ended interactions with families prematurely. Therefore, the activities drew in a group that were otherwise difficult to engage with in normal circumstances.

During all the field work seasons (2010-2012) the public engagement at Bodiam received positive feedback from visitors, staff and volunteers. Many people had some familiarity with the resistivity and magnetometry equipment being used from watching archaeological programmes on TV such as *Time Team*. Therefore, it was useful to work from this basis and explain why these methods were being used. The local amateur societies were also interested in the equipment that the team was employing. The public engagement throughout increased people's knowledge of the practices employed within archaeology. It also highlighted the importance of exploring the wider landscape around an existing historical building to understand what has happened before, during and after a property's construction. It served to highlight that landscapes are palimpsests (Hoskins 1955, Whyte 2009: 8); that they are forever changing and the pristine surroundings now apparent are not how they would have been in the past. The feedback from 2011 was even more positive as there were survey results from the previous year which we had printed out and laminated to show people rather than just discussing the project in the abstract. Viewing these results allowed visitors to see the evidence of previous occupation, other uses of the site and why the project is important to the broadening of our understanding of the property. In 2012 interaction with visitors was more difficult as students were not as visible as they had been previously. Student visibility was not a factor in engagement with staff and volunteers; however it was a factor in visitor engagement.

Scotney 2011

Scotney is an interesting site from the point of view of public engagement as it has two different buildings within the grounds; a 14th-century moated castle and a Victorian country house. The project focused on the surroundings of the 14th-century castle as seen across the surrounding parkland. This presented me with a similar working set up as seen at Bodiam where my time was split around the site in order to maximise public engagement. The level of engagement with visitors however was much lower than at Bodiam. First, at the time, the site was only open Wednesday to Sunday. Second, the very large extent of the surrounding parkland landscape of the site and the consequent very wide dispersal of the students around

the landscape also meant that interactions with visitors were limited as visitors were less immediately aware of any work being carried out. Therefore, as noted at Bodiam the visibility of the students affected the level of engagement with visitors. However, at this property it was the interactions with the volunteers that were most informative. When I first arrived at the site I believed the situation to be similar to the one that I had found at Bodiam. This turned out not to be the case. It quickly became clear that there was a more marked segregation between the volunteers who worked in the house and those that worked in the gardens/parkland. This was definitely not the case at Bodiam where everyone worked together whether maintaining the landscape or working in the castle. Through interacting with volunteers around the site it became clear that the house and the garden/parklands were much more distinct both in terms of the teams that worked in them and the way they were viewed.

This distinctiveness came to the fore when I went round the Victorian house with a number of students. I was stopped by a volunteer and asked what the project was about. When I said that we were surveying the 14th-century moated castle and surrounding landscape the volunteer stated 'why would you want to focus on that it isn't very interesting, it is just a ruin, and this house is much more interesting'. I found this perception surprising as I had never had anyone question why we had chosen a site, but then the castle of Bodiam had no other buildings to compete with it. The view articulated here was that the Victorian house was more interesting to people as it was complete, was lived in and they could look at things; whereas the 14th-century castle was 'just a ruin'. This perception that surveying the castle and the parklands would not provide us with any more knowledge on these buildings seemed to be related to perceptions of the importance of furnishing and occupation; the 14th-century castle is unoccupied and largely unfurnished compared to the Victorian house.

It would appear that some volunteers are drawn to Scotney for very different reasons; for some it is the furnished Victorian house, for others it is the landscape and gardens. According to one informant, the different groups of volunteers tended to work in one or other area. In general, those working within the gardens/parklands were more interested in our work and findings than those situated in the house. We had further confirmation of this impression when at the invitation of Trust staff, the project put on a guided tour for the volunteers; only the garden volunteers attended.

In summary, the site of Scotney is different to Bodiam because there are two different types of buildings (one medieval and one more recent). The furnishings and sense of occupation of the Victorian house adds a different level to the visitor experience compared to Bodiam. If the house was not occupied, then this dynamic would not be present.

Knole 2013

Knole is a very large English country house situated within a surviving medieval deer park, located adjacent to the town of Sevenoaks in West Kent (Figs 7.1 & 7.2). Knole occupies an important place in national culture; as the family home of the Sackvilles over more than four centuries, it is associated with figures such as the writer and garden designer Vita Sackville-West and her circle. In particular, Knole is famous as the setting for *Orlando*, a novel written by Virginia Woolf, one of Sackville-West's lovers. As a place, then, Knole has a rather different cultural profile from the other three sites.

Only a small part of the landscape between the entrance and the house itself is managed by the National Trust. The rest is owned/managed by Lord Sackville and there is even a golf course on the site (Fig. 7.4). The house itself is also divided between publicly accessible areas managed by the Trust and the private residence of the Sackvilles. The nature of visitor use is interesting as entrance to the park by walkers was possible at any time and was free. However, this has not always been the case; there is a long history at this site of battles over access (as access was restricted in the past and this did not go down well with the local visitors (as was discussed in Chapter Seven; Fig. 7.23). Cars could enter the property between the hours of 10.00 a.m. and 6.00 p.m.; parking cost £4 per car. The only other charge to visitors was to enter the house, which was not open all the time.

It was noted that visitors used the site in different ways, as previously discussed at Bodiam. Many visitors used the park rather than going into the house and these users were mainly families who brought toys and picnics, spending a proportion of the day within the landscape. This could be the case for a number of reasons. First, Knole is used more as a local 'park' for the people of Sevenoaks rather than as a 'normal' National Trust attraction. (The National Trust has identified this in its planning for the site which aims to address this with different 'kinds' of visits to the property available in the future). Second, for some families, Knole House is viewed by them as a 'typical National Trust' property that requires a certain behaviour within it and therefore they choose to use the surrounding parkland rather than

enter the house. It is unclear if either of these factors fully explains the visitor use of the site but each has been documented at other properties. Other visitors went into the property and then spent some time wandering around the park. These visitors could be seen to be long distance and were of a smaller number than those that visited just for the use of the park.

It has been observed in previous seasons that the process of engagement benefited from the visibility of the students, and from high visitor traffic. Knole was no different, at times when the students were not visible to the general public, engagement declined considerably. In some circumstances when the students were in full view of the public many people did not ask about the work, although I often observed that they were clearly intrigued by the activities of the students and would discuss amongst themselves. It is clear that in many cases people are curious about the work but will not actively seek the information they require and feel that they are hindering work if they do. This is where the public engagement came into play as I could interact with these people without them feeling they had interrupted work.

Interactions with volunteers were relatively few as most were located within the house and gardens rather than outside in the landscape. This was partly due to the divided nature of ownership of the site. Only a small proportion of the site is owned by the National Trust with the rest of it still owned by Knole Estates. The volunteers that were spoken to divulged knowledge about the house and its surrounding landscape. This mainly referred to the presence of a bowling green at the front of the property, and to other archaeological work ongoing both in the house and in the surrounding landscape. Other information included a World War II story referencing Knole's location within 'Bomb Alley', a corridor of land between London and the English Channel where German aircraft were liable to jettison bomb loads when under attack. The story was of a bomb being dropped outside the front of the house, smashing the windows and destroying a tree.

When the first results from the fieldwork were available and printed out, perhaps a week after fieldwork had started, interactions with volunteers became more focused. One example of this is when evidence for an original entrance to the house and possible gardens at the front of the property was printed out. This led volunteers to mention that there was a drawing in the house that showed formal gardens outside the property. Another transfer of information occurred when it was mentioned that Ground Penetrating

Radar (GPR) was being used within the Stone Court. This led the volunteer to state that there was a water cistern underneath the court and that there had been a diver sent down into it. Other pieces of information passed on were about the possible evidence of a glass production site on the property. Volunteers during these interactions liked to divulge information that we might not know about the site and, therefore aid in the interpretation of the results. It was their way of being actively involved in the fieldwork without actually being an active participant in the work.

Engagements with visitors had the same two-way transfer of information in some cases. One visitor referred to a supposed article about the Sackville family and the mention of a child stating 'why do people always visit my house?' This story foregrounds the perspective of the Sackville family, rather than the National Trust, its visitors and the site. It is interesting that this is what the visitor chose to pass on about the site and highlights the interest and identification the local population has with the Sackville family. Other people enquired about specifics on the fieldwork, such as availability of the results and specifics on the geophysical methods. Many questions revolved around whether there would be any excavation of the site if the survey brought up any interesting results. We responded that an excavation was not the aim of the project and that these non-intrusive techniques could inform us about the site. It is clear that many see archaeology as coterminous with excavation and many were surprised to find out that we can glean knowledge about a site through other methods. One visitor did enquire about what it was like to work with the National Trust. They related that they had been to many of the Trust's properties and found varying levels of friendliness of the volunteers from site to site (English Heritage 2014; Heritage Lottery Fund 2015). These different modes of engagement with visitors were also seen at Scotney between volunteers in the gardens and the house.

The public engagement at Knole met with varying degrees of success dependent on the visibility of the students during their fieldwork activities. The process of dissemination of information was more diffuse and widespread than at other sites; it could be either from one member of a group to others or from volunteers to visitors. Therefore, knowledge about the project was more widespread than just those that I spoke to directly. At Knole, there was a process of word-of-mouth dissemination which I have seen in other contexts; most notably in outreach projects frequented by families (see Peacock 2015).

Ightham Mote 2013

Ightham Mote is a 14th-century manor house surrounded by a garden (see Chapter Eight). The nature of the site is much more occluded, with visitor routes around the houses being quite narrow and the landscape as a whole being smaller in scale. It therefore presents more logistical problems for the Trust in terms of visitor movements than the wide landscapes of the other three sites. Therefore, visitors have only a few ways to move around the property. All visitors enter through the same entrance and move around the house in the same direction. Visitors can move through the gardens differently as there are a number of paths to take around the landscape. There were a number of talks and guided tours provided around the site for visitors and this showed a more structured information dispersal system. The public engagement was again dependent on the visibility of the students within the property. The project deployed a smaller team than at the other sites, and they were often less visible in the Ightham landscape given the greater number of walls, hedges and other divisions, combined with the greater tree cover, and also when they were engaged in survey work around the mill pond where there is no visitor access. However, the lack of visibility did not hinder interaction with volunteers who had been informed of the students' presence on the site, and were actively interested in the project.

The volunteers were very enthusiastic about the work of the students. Many of them enquired about the project and the techniques that the students were using. A number of the volunteers enquired about whether the techniques were similar to those used on archaeology TV programmes. One volunteer did state that there was little information about what we were doing passed on to them although this does not seem to be generally true of the relationship between staff and volunteers at this site.

Visitor interaction occurred more frequently during the times when students were more visible at the site. Many visitor enquiries related to what the students were doing and the equipment being used. Some visitors related the work to their own experience with archaeology and the archaeology display within the house. Also, as at Knole, a number of people enquired whether there would be any excavation after the survey work had been finished and asked why a survey would be completed if there was to be no excavation. It is apparent people associate excavation with archaeological investigation, but do not believe that non-invasive techniques can tell us as much about the history of the site. In other respects, the interactions at this site were very different

from those at the other National Trust properties involved in this project. There was little to no two-way information transfer as visitors, staff and volunteers appeared to be happy with just being informed about the project without any input. This is very different to the other sites where most if not all interactions included two-way information transfer. There are a few possible explanations as to why this occurred at this site but these are mainly based on the difference in the logistical issues and affordances of the management of the properties. Ightham, as stated earlier, controls the movement of visitors both around the landscape and house, as well as into the site. This control of visitors as well as the lack of access into the site without paying full entrance fee may have affected the level of interaction. The atmosphere at this site was less like the atmosphere of a public park as observed at other properties. Visitors may have not been as interested in the work being carried out as they had paid to enter the property and wanted to experience it without any distractions. Also there were guided walks at regular times around the garden and onto the roof which meant the visitors' experience was more organised than at the other properties. The lack of conversational anecdotes imparted by the volunteers is very interesting as within most National Trust properties volunteers have a sense of 'ownership' (English Heritage 2014; Heritage Lottery Fund 2015) and are very free to share information.

The volunteers were actively interested in the work of the students and the team had more contact with the volunteers on a daily basis as they used the staff/volunteer room for breaks. Visitors were interested in the work of the students but not to the same degree as we experienced at other sites. In certain locations in the landscape the work of the students affected the movement of the visitors. This happened most notably when work was carried out in the orchard, causing visitors to walk through areas of the orchard that they would not have done naturally in order to avoid being in the way. Therefore, the work in certain cases did have an impact on the visitor experience of the site. At this site the visitor's movement is more controlled and there is no access to the site without payment. Therefore, there is less variation in how a visitor engages with the site compared to the multiple ways documented at the other properties.

Discussion

Even though each of the sites is different there are a number of themes that have been highlighted by the public engagement. The most notable theme has been the different types of visitors and their differing uses of the sites. This is not surprising as heritage organisations have always had different visitors and they all use the services in different ways (Bailey 1998: 92; DCMS 2001: 8; Little & Zimmerman 2010). However, in the cases of Bodiam (until 2015), Scotney and Knole where there is access to the site by locals for free there is a considerable difference in use to paying visitors. Local visitors use these sites as 'parks', they are a place to walk the dog and go for picnics. Therefore, they do not arrive at the site with the intention of entering the properties but utilise the surrounding landscape. As such the site is a different kind of space for these visitors. The properties are at the centre of a landscape that is habitually used by this group, but its historic character is not foregrounded for them (Lynch 1972: 40). Other visitors pay to enter the properties but will not spend as much time exploring the wider landscape. For them the property itself is important rather than the surrounding environment because of their fleeting engagement with the site. However, this difference in visitor use is only applicable at sites where there is access to the landscape for free or a minimal charge for parking. Ightham has restricted visitor access to the site and this results in only one type of visitor and use. The fact that all visitors have to pay to enter the site means that it cannot be used as a 'park' by locals; therefore it is solely a visitor attraction. The site's control of visitor movement and the structured activities available means that the visitor experience is more controlled compared to the other sites.

A second theme has been the experiences of the volunteers on these sites. Volunteers as with most heritage organisations are an integral part to the maintenance and running of a site. However, it became clear at Scotney that volunteers can develop separate identities based on the area that they are involved in, for example house or garden. The separation between volunteer groups was not documented at any other sites. It could be safe to say that the reason for this separation at Scotney is based on the spatial separation between the house and the gardens/parklands. However, this separation could also be due to a sense of occupation. The house is an occupied site, whereas the central focus to the gardens, the 14th-century castle, is not. At Ightham, though volunteers were friendly and helpful, there was little information input which was different from the other sites where volunteers had been very forthcoming with ideas and information that they thought could aid in the project. It is still unclear why this is the case. The readiness of volunteers to impart their knowledge about these sites is linked to their view of ownership or stewardship over these properties. Volunteers put in a number of person hours

at these sites and are proud of the work that they do at them. This instils a level of ownership over the property as it becomes their site (English Heritage 2014; Heritage Lottery Fund 2015). There was relatively little interaction with volunteers at Knole and I attribute this to the nature of ownership over the site. The split ownership means that volunteers' activities focused on the house and courtyard. There was only one team of students surveying in the courtyard with the others surveying the wider landscape (see Figs 7.9 & A2.10). Therefore, my time spent within this area was limited compared to the time I spent within the inside of the other buildings in this project. I did engage with some volunteers but these were not as frequent as at other sites and in set locations, particularly the entrance and courtyard. Each site moulds its visitor experience through layout and structure but it also has the same effect on the volunteers of these sites.

A third theme is the information transfer process witnessed during this public engagement. The information transfer was very much a two-way process. I provided people with information about the project, while, in most cases they divulged something about the site or their relationship to it. The information provided helped us in understanding the site in terms of diverse viewpoints and perspectives, a theme that will be returned to in Chapter Thirteen. However, it also opened our eyes to the hidden world of each site. The memories and stories that only certain groups are privy to added another layer of understanding to the sites. It was not just about the history of each site in the past but the importance of the buildings to the modern population using them. These stories and memories informed us not just about how the site was viewed and used in the present day; but also about the historical narratives that people chose to associate with. All these aspects add another layer to each site that can be utilised in the interpretation and presentation of each of these sites.

Conclusion

Within this chapter I have tried to summarise the main findings from the public engagement. All these sites have produced interesting details about the properties, how visitors use them, the volunteers and staff, and the visitor's memories. The public engagements main aim was to increase visitor, staff, volunteer and interest group knowledge in the project and this central aim was achieved. Engagement was not a one-way process of information transfer and the knowledge that volunteers, staff and visitors imparted about these sites was integral to our understanding of the site both in the past and the present.

In my view the public engagement highlighted throughout all the sites the complex relationships that visitors, locals, staff and volunteers have with them. My understanding of these sites is heavily biased towards Bodiam but this is down to the number of seasons that the team spent at this location.

One critical lesson learned was the importance of time depth to successful public engagement. I tried within the time limitations to understand the other sites in as much depth as I could but this was difficult to do in the space of a single three-week field season. The first step I had to undertake at each site was a qualitative and patient exploration or 'excavation' of hidden meanings, meanings that are important and that vary between select groups; be they volunteers, locals, families or individuals. My role started off as one of public engagement, where I disseminated information and I tried to glean something from my recipients about their relationship to the site. However, my role and identity changed during the process of engagement; I ended up being a chameleon. In order to get people to open up to me about their memories and relationships with the sites I had to become one of the select group. In most cases this had to be done very quickly, I had what could be a 10-minute conversation in which to convince them to trust me with these hidden stories. In recalling these memories people were consciously constructing memories with me. I straddled the world of 'insider' and 'outsider'; able to understand the terms and references but simultaneously deconstructing them. The process is much harder to do when you have to undertake this learning within a period of two to three weeks. At Bodiam although I was there a short space of time each season, I could build on previous knowledge and reflect upon my experiences from the previous year to gain a deeper understanding.

Highlighting the relationship and memories of the staff/volunteers, visitors and locals to the sites not only helps our interpretation of the site. It can highlight areas of the site that have importance to these groups which may not be visually significant, for example the role of the wider landscape as a 'park'. It creates a map of hidden importance that only select people are privy to and people are introduced to through inclusion in the site and memories. The memories of visitors, locals and staff/volunteers can be used as another aspect of interpretation present at sites. At the time of writing, I am exploring the use of memories in relation to the Watercress Line (a heritage steam railway located in Hampshire, UK: www.watercressline.co.uk) to increase visitor experience. Many visitors have expressed a need to have a more human element to the interpretation

and memories are a good way to add this to the interpretation materials. It also introduces the visitor into the world of the locals, staff and volunteers, making them part of that group.

I hope that this chapter has demonstrated the importance of public engagement on these projects, and the struggles that can be faced trying to undertake engagement in changing circumstances over a number of sites. There is interesting information that can be gleaned from locals, visitors, staff and volunteers that can be hidden to outsiders. That information, and the different perspectives and world-views that go along with it, adds to our understanding of the site both in the past and at the current time. These insights should not just be confined to assisting the research process, but should also play a wider role and dimension within all aspects of on-site and public interpretation.

12

DISCUSSION: ELITE SITES, POLITICAL LANDSCAPES AND LIVED EXPERIENCE IN THE LATER MIDDLE AGES

Matthew Johnson

Abstract. This concluding discussion draws together themes discussed through the volume, and tries to place them in a larger framework. This larger framework engages with the context of the sites within the Weald and in turn within the British Isles as a whole. It uses the approaches of lived experience to present a fresh understanding of the four sites in human terms, and situates the sites in a broader frame of changing landscapes and environments in south-east England and beyond.

In this concluding discussion, I want to try to draw together some of the strands running through previous chapters, and set them within a larger framework. There are three governing themes to this chapter. First, all four of the sites that are the subject of this volume need to be placed in their landscape and regional context, with reference to their long-term geological and environmental history. Second, we need to tie this wider history in to the agencies and lived experience of each place. In other words, we need to understand each place in human terms. Thirdly, and finally, we will broaden the canvas to make some general comments on cultural process and transformation in south-east England in the later Middle Ages and beyond.

Geology and Landscape

I take as my starting point the underlying geology of south-east England. I invite the reader to look carefully at a map of the geology of Britain, and look at the place of what are now the south-eastern counties of Kent and Sussex within that geology (Fig. 12.1).

The geology of Britain as a whole has a distinctive pattern: the layers of rock that make it up are tilted, in such a way that older and harder rocks are close to the surface in the north and west, while the south and east have a surface geology of younger and softer rocks (Fig. 12.2). Consequently, as any visitor to or inhabitant of Britain will have noted, the physical landscape of the south and east is softer, less rugged and mountainous than the hills and mountain ranges of western and northern England, Wales and Scotland. This distinctive pattern has been hugely significant in many different ways in British and world history. For economic historians, it determined the presence and distribution of raw materials (coal, iron ore) needed for the Industrial Revolution. For intellectual historians, the observation and developing understanding of this geological pattern framed the 19th-century intellectual understanding of geological time and its implications for evolutionary process (Winchester 2001; Weiss 2011). For historical geographers and landscape historians and archaeologists, it was and remains central in the powerful and continuing perception of distinctive and contrasting Highland and Lowland Zones in the 'personality of Britain' (Fox 1938).
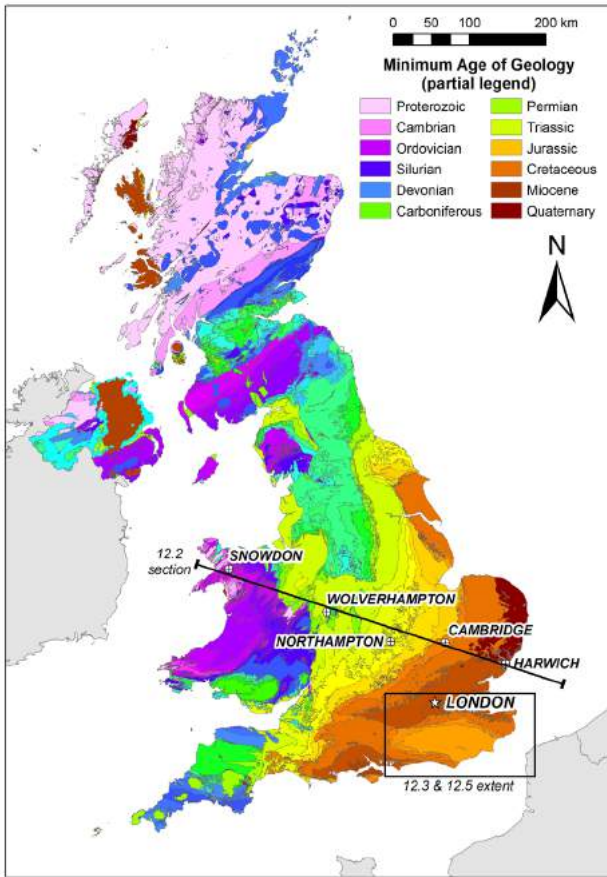
Fig. 12.1: Geology of Britain, with position of section 12.2 indicated. Based upon DiGMap625 layer from BGS, with the permission of the British Geological Survey.

The area south and east of the Thames Valley lies firmly within what the great Cyril Fox called the 'lowland zone'; its geological makeup is distinctive (Figs 12.3 & 12.4; Fox 1938). Millions of years ago, the layers of chalk and sandstone that underlie the area that is now south and east of London formed a dome or 'anticline'. Glacial action shaved off the top of this dome, exposing the tilted geological layers beneath: the topmost layer of chalk, and underlying layers of sandstone and clay.

These layers then eroded differentially, creating the chalk ridges we know today as the North and South Downs, and further bands of sandstone running within

those ridges. Within the semicircle formed by these ridges, post-glacial deposits of gravel and particularly clay formed. Today we know these central areas, within the great chalk and sandstone crescent, as the Sussex and Kentish Weald.

Thus, someone who travels from north to south from London to the south coast, across the Sussex and Kentish Weald, moves first backward and then forward in geological time. Crossing first the high chalk ridges of the North Downs, they come down onto a ridge of greensand. Descending this in turn, they come to the claylands of the Low Weald. Rising up then to the sandstones of the High Weald and Ashdown Forest, they drop down again before coming finally to the chalklands of the South Downs and to the famous chalk cliffs of the coast.

The land was affected by glacial action during the Ice Age. The glaciers left gravel deposits in their wake. The land was also cut by the action of rivers, creating river valleys that in some cases, for example the valley of the Rother, were much more pronounced than they are today. We have seen how at Bodiam, there are at least 10 m of alluvial deposit on the floodplain; if we were to form a mental picture of the Rother Valley some thousands of years ago, before these deposits were laid down and with the surrounding hills a little higher before erosion, we would see a landscape that was much sharper, less soft, even rugged. These valleys became flat floodplains and, where they met the sea, extensive areas of tidal estuary and marshland developed.

One of the results of this distinctive set of geological processes is a set of places that exhibit great ecological diversity within a very few kilometres of each other, and which consequently have been of the first importance in the history of science. The naturalist Gilbert White's observations of the natural history of Selborne, in the county of Hampshire close to the Sussex border, were significant in part because of Selborne's position at the western extremity of this geological formation, where chalk, greensand and clayland meet. Charles Darwin's
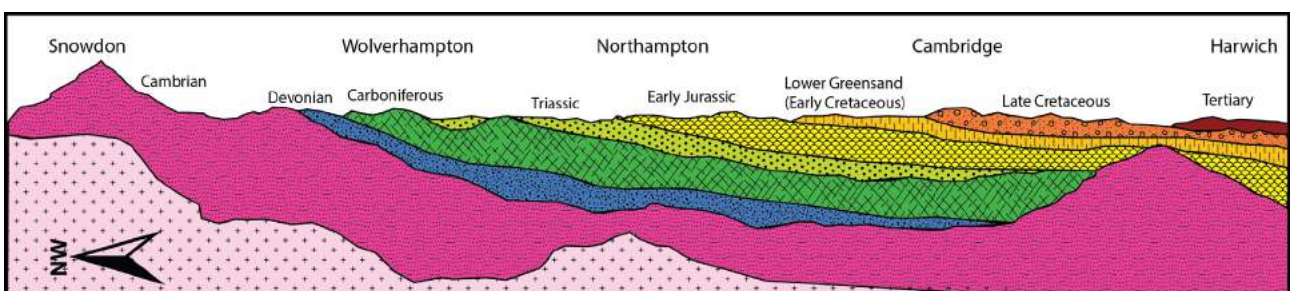
Fig. 12.2: Simplified section through the geology of Britain from Snowdon to Harwich, with vertical scale exaggerated.

Geological Groups of Kent and Sussex: Name and Lithology

Lambeth — Clay, Silt, Sand, Gravel	**White Chalk**	**Wealden** — Mudstone, Siltstone, Sandstone
Thames — Clay, Silt, Sand, Gravel	**Grey Chalk**	**Wealden** — Sandstone, Siltstone Interbedded
Bracklesham and Barton — Sand, Silt, Clay	**Gault and Upper Greensand** — Mudstone, Sandstone, Limestone	**Purbeck Limestone** — Limestone, Mudstone Interbedded
Thanet Sand — Sand, Silt, Clay	**Lower Greensand** — Sandstone, Mudstone	

Fig. 12.3: Geology of the Weald.

home on the North Downs, at Down House 14 km north-west of Knole, meant again that he was able to observe a particularly diverse ecology and landscape on his famous Sunday walks while his family were attending church. Standing on the Downs and looking across the Weald, Darwin observed how the great dome had eroded away and estimated the length of time that it must have taken to do so at hundreds of millions of years (Johnson 2010c; Weiss 2011). More infamous are the post-glacial gravel deposits at Piltdown, 30 km south-east of Scotney, which in all probability afforded Charles Dawson the opportunity to plant his forged remains of early humans (Russell 2004).

Human Landscapes: Second Nature

The physical landscape created by these geological processes afforded different kinds of human landscape in its turn. The historical geographer William Cronon calls such landscapes 'second nature' (Cronon 1991: 56). What Cronon means by this is that these landscapes appear 'natural' to the observer – the field patterns, areas of woodland and forest, roads and communications are external and 'given' to the modern person, whether local or a visitor. At first sight, they are natural, just the way things are, and

this 'natural' impression is deepened when the fields, woods, roads and communications are used and experienced on a daily, quotidian basis. However, all these elements were and are in fact products of human agency. Field patterns, areas of woodland, roads and communications may have been laid down hundreds or even thousands of years ago. Human responses may have been determined to a greater or lesser extent by factors such as geology or climate, but they were and are nevertheless products of human agency, of women and men making their own history.

The light soils of the chalk downs afforded open landscapes, relatively easy for prehistoric settlers to clear of woodland and to farm but not as potentially fertile as the heavier claylands. The central sandstone ridge of the High Weald had heathland which became medieval 'forest'. In between, the claylands of the Weald had a variety of soils including heavy claylands that were potentially fertile, but poorly drained. These heavy soils were difficult to work before the advent of mechanised agriculture, and they could also be difficult for travellers to get across, particularly in cold or wet conditions. The famous 17th-century writer of early agricultural and other how-to manuals, Gervase Markham, devoted an entire book to the problems of farming in the Weald (Markham 1625).

In the first half of the 20th century, archaeologists and historians told a distinctive story about how the Wealden landscape developed, as part of a wider story about prehistoric Britain as a whole. In his classic *The Personality of Britain,* Cyril Fox painted a powerful national picture across the British Isles (Fox 1938). As we have seen, Fox divided the British Isles as a whole into a Highland Zone to the north and west, and a Lowland Zone to the south and east. The differences between the two zones were not simply ones of physical geography and climate; they were also related, in Fox's vision, to relative proximity to Continental Europe and the consequent ease of what he called 'penetration' of peoples and ideas.

Within the Lowland Zone, Fox suggested that the chalk ridges were cleared of woodland first by incoming prehistoric settlers, and that these ridges, for example the North Downs or Cambridgeshire south-east of the Fenlands, became important zones of movement and communication between different regions. He noted the existence of ancient trackways running along these ridges. Alongside and below these routeways running along the downlands, Fox assumed that there were large tracts of dense, impenetrable forest, with, he believed, little evidence of human settlement to be found therein. Fox noted the distribution of burial mounds and archaeological features as known to him, which in their concentration upon the ridge, appeared to confirm his picture (Fox 1922, maps 1-5).

In the vision of Fox and his earlier 20th-century contemporaries, the Weald and other areas of lowland below the downs and ridges were seen as a particularly dense mass of impenetrable forest. It was this forest that Anglo-Saxon and medieval settlers penetrated and

settled. Early medieval documentary records appeared to confirm this picture. Scholars working with early charters and other texts found few specific references to early settlement inside the Weald.

More recent work has heavily qualified this picture: the distribution of prehistoric and Roman settlement at a national scale has been reassessed (Bradley & Fulford 2008; Bradley 2014). For Cyril Fox and his generation, archaeological sites did appear to concentrate on the chalk downlands, but over fifty years later, we can see that this distribution is more apparent than real: there is plenty of archaeological evidence for early human settlement away from these areas, but it is more difficult to see and to map given variation in terrain and underlying soil.

At the same time, the underlying vision driving Fox's model, with Anglo-Saxon settlers clearing the hitherto untamed forest and making a home, has to modern eyes a decidedly colonial ring to it. It echoes the subjective experiences of settler colonists in different contexts, in North America, Africa and elsewhere. In other words, it seems to say more about the cultural values of earlier 20th-century Britain and British perception of settlement in her colonies around the world than it does about the prehistoric past.

It was certainly a view which held and continues to hold great cultural resonance, from the dark forests in Sir Walter Scott's *Ivanhoe* to JRR Tolkein's *Wild Wood* to WG Hoskins's embrace of this vision in his classic *The Making of the English Landscape* where he wrote, referring to the Anglo-Saxon period, of 'the first men [*sic*] to break into a virgin landscape' (Hoskins 1955: 18; discussed further in Johnson 2007). Sir Arthur
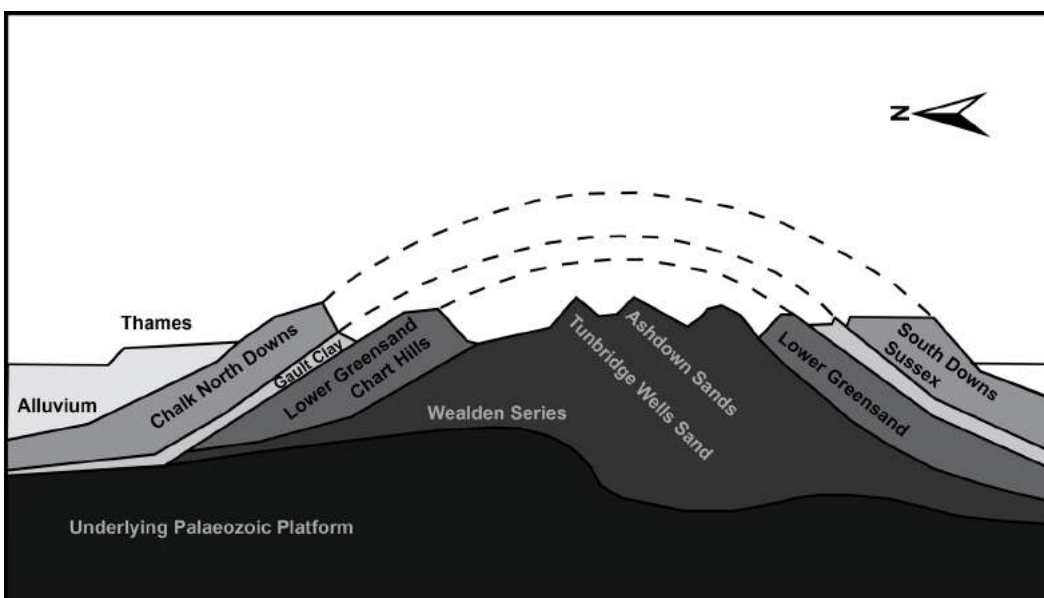
Fig. 12.4: Simplified section through the geology of the Weald, with vertical axis exaggerated.

Conan Doyle made the Weald the dark, forbidding backdrop to several Sherlock Holmes stories, though he gave it an industrial twist:

> *Alighting from the small wayside station, we drove for some miles through the remains of widespread woods, which were once part of that great forest which for so long held the Saxon invaders at bay – the impenetrable 'weald', for sixty years the bulwark of Britain. Vast sections of it have been cleared, for this is the seat of the first iron-works of the country, and the trees have been felled to smelt the ore…*

(Sir Arthur Conan Doyle, *The Adventure of Black Peter*; Conan Doyle 1981 [1904]: 563-4)

The early medieval Weald was seen in this earlier view to be gradually cleared and brought under cultivation in a piecemeal process some centuries after the end of the Roman period, starting with the creation of north-south drove roads from the higher and more open chalklands into the Wealden forest for the pasturing of livestock. Cattle and sheep were moved seasonally, in this view, to summer pastures in Wealden clearances in the woodlands, and then back to the older estate centres based on the downlands and coastal areas to the north and south. This pattern of transhumance meant that as manorial estates defined by these movements became formalised, they had a tendency to be fragmented, combining lands inside and outside the Weald often quite a distance apart. Many Wealden settlements may have originated as summer sheilings or 'dens', linked to these older estate centres (hence the frequency of the –den place-name: Tenterden, Newenden, Iden).

Settlement expansion continued, in this earlier account, with the process known as 'assarting', a term taken from medieval documentary records (Brandon 1969; Witney 1976). This process of 'colonization' (as it is habitually termed by local and landscape historians and archaeologists: cf. Everitt 1986) was deemed to have unfolded in the centuries before 1300. The governing view of medieval colonisation of primordial forest was also derived in part from a scholarly methodology giving priority to documentary evidence, in which the first documented reference to a location such as a farmstead or hamlet was equated with the creation of that farmstead or hamlet. Since many individual farmsteads and settlements in the Weald first appear in tax records of the 11th, 12th and 13th centuries, these first recorded dates were sometimes taken as indicative of 11th-, 12th- and 13th- century colonisation (cf. Brandon & Short 1990: 49-55; Mate 2010a). Much colonisation may well have taken place centuries earlier

in the middle Saxon period, before feudal record-keeping, and much of the land colonised had been under cultivation in earlier periods of climatic optimum in the Roman and prehistoric periods.

More recent scholarship has not entirely overturned this picture: clearance of land, and patterns of transhumance, clearly played an important role in the creation of the landscape and in the formation of the second nature of Kent and Sussex. However, the picture has been heavily qualified and reframed. Assarting was an important process in medieval Europe generally; documentary references to assarting or its equivalent are found in the 11th to 13th centuries across England and much of the rest of Europe; and assarting did involve the bringing of uncultivated land under arable cultivation. In this sense, the settlement of the Weald of Kent and Sussex is one small variation on the theme that runs across medieval Europe in the centuries up to c. 1250, of a climatic warm period, of population rise, of greater social complexity with the emergence of 'feudalism' however defined, and of settlement and agricultural intensification (Hatcher & Bailey 2001; Graham-Campbell & Valor 2007).

There was no such thing as an original primeval forest; medieval woodlands were characteristically heavily managed throughout their history, through coppicing, pollarding and other practices, and were also the focus of different kinds of property and use rights, for example pannage (the right to graze pigs or other animals in a wood) or rights to collect firewood (Rackham 1990). These rights were often referred to by people in the Middle Ages as 'customary' and ascribed to tradition, and their emergence into the documentary record does not have a straightforward relationship to their prior existence. In other words, the first documentary reference does not necessarily equate to a date of origin. When the documentary record, then, shows us a more populated landscape in the Weald as the Middle Ages advanced, it is not necessarily indicating expansion of settlers into uncultivated primordial forest, but rather a more complex picture of an evolving property and agricultural regime, in which social practices of settlement and agriculture were being drawn more and more into the net of legal relations which were written down as part of feudal record-keeping. Michael Clanchy (1979) discusses the wider cultural context within which more and more documents were being generated in the centuries before 1300.

Given that documentary traces are very often in the form of tax records, the first documentary reference to

a place, then, has more to do with its first inclusion within a system of extraction of rent, rather than first settlement as such. In other words, assarting as it is discussed by documentary and landscape historians can be seen as not simply or only the colonisation of virgin forest or uncleared land, but rather the bringing of this land under an organised feudal regime of the organised extraction of rent. Assarting, then, is about changing and intensifying regimes of property and power as well as agricultural expansion.

The eventual outcome of this process was an earlier 14th-century Wealden landscape that was quite distinctive compared to other areas of England and north-western Europe, in the form both of its physical landscape and the affordances of that landscape, and its social relations. The heavy claylands were suitable for the raising of cattle and sheep; however, arable was also an important element of the economy (as indicated by the pollen evidence discussed in Chapter Four, and also by the presence of a number of substantial barns that survive: Martin & Martin 2006: 36). The legal conditions of many manors, as they had evolved through the process of assarting and through the fragmentation of holdings, gave many tenants considerable independence. This meant that after the demographic contraction of the Black Death, they were able to accumulate land under relatively 'free' conditions of tenure. In other words, rents paid by peasants to the manorial lord were not as onerous as in other areas, and tenants enjoyed relative security of possession; they could not easily be evicted or have their rents arbitrarily raised. These 'yeoman' tenants often lived in isolated locations of individual farmsteads and small hamlets away from churches and village centres, and their houses were surrounded not by open fields or by common land, but rather by enclosed fields and woodlands.

After the Black Death, many hundreds of the post-1348 farmhouses built by these relatively independent, prosperous and secure farmers were substantially built in timber framing and still survive today as occupied 'vernacular' houses and farmsteads (Everitt 1986: 55; Pearson 1994; Martin & Martin 2006); many of these vernacular houses can be observed in the settlements and landscapes around Bodiam, Scotney and Ightham. Their occupants were frequently engaged in market relations; the sheep and cows they kept produced dairy products and wool for sale. Many households in the region were also engaged in industrial production. This industrial production included charcoal burning, the production of pig iron, and glass (Cleere & Crossley 1985). All of these activities used large quantities of wood, which was in good local supply.

However they were created, areas like the Weald continue to be highly distinctive today. First, as Conan Doyle observed, they are areas with much woodland. Second, nucleated villages are relatively rarely found within them or are of more recent origin. Churches are often isolated, and farmsteads are either in isolated locations, cluster in small hamlets, or are strung out along routes that run along ridges (such as the east-west ridge of Ewhurst Green, just south of Bodiam). This dispersed pattern contrasts strongly with the classic nucleated English village (Rippon 2008; Roberts 2008). Third, also absent are the large 18th- or 19th-century fields that replaced the open field systems of the sort seen in the English Midlands and northern France; instead, patchworks of smaller, enclosed 'ancient' fields are the norm. Fourth, travel and communication across this landscape in the Middle Ages was via narrow, winding and often sunken lanes (making waterborne transport, whether along rivers or around the Kent and Sussex coast, all the more important). These routeways either run north-south, with possible origins in early medieval transhumance as drove roads, or east-west, along the tops of the gentle ridges of the High Weald.

Bordering the Weald to the north were the greensand (sandstone) ridges. These ridges were less potentially fertile than the Weald itself, but more open. Many areas of the greensand were particularly suitable for the development of parkland and 'forest'. Medieval forests should not be thought of as natural woodland: rather, they were often composed of heath, pasture and woodland, subject to distinctive forms of medieval 'forest law' (Rackham 1990). Forests and parklands were managed for the grazing and hunting of deer, as well as for the production of other resources such as wood and timber, as discussed at Knole in Chapter Seven. As such, they were a particular and contested focus for class conflict, between lord and peasant over who had rights (to collect firewood, to graze pigs on the acorns from oak trees, to hunt or to poach…).

The areas of tidal estuary, coast and marsh formed another distinctive zone. They were open on the one hand to schemes for draining, and on the other hand, they were especially vulnerable to climate change, weather extremes and changes in sea level and currents. At different points in the Middle Ages, both Pevensey and Romney Marshes (Fig. 2.1) had areas that were drained and turned into farmland through a variety of collective and individual efforts, only for sea walls to be breached and land return to marsh or to the sea itself during the adverse climatic changes of the 14th century that marked the onset of the 'Little Ice Age' (Grove 1988; Mate 2010b). Sea walls required large inputs

of labour, which was in short supply after the Black Death. This 'precarious fertility' (Everitt 1986: 60) was exploited by corporate institutions acting as landlords such as Christ Church Canterbury, institutions centred in other parts of the region, who grazed large flocks of sheep on the reclaimed land. The most notable artefacts of these changes are the position of the old ports of Rye and Winchelsea. Both were important ports in the 12th and 13th centuries whose merchants traded via the English Channel with the North Sea and Baltic in one direction and France and the Atlantic in the other. The site of Winchelsea was moved after the older site had to be abandoned; the harbours of both sites silted up after the 14th century and both towns now sit 1 to 3 km inland (Martin & Martin 2004; Long *et al.* 2007).

Elite Sites in the Landscape

If we want to engage with the sites of Bodiam, Scotney, Ightham and Knole, this very distinctive landscape context, a combination of what William Cronon would call first and second natures, is the first fact to be considered. Of the four sites, the location of three is very striking in terms of the junction of different landscapes. Bodiam is at the junction of Weald and marsh; Knole and Ightham are at the junction of Weald and sandstone ridge. Scotney sits in the middle of the Weald, but is itself in an isolated location, and like Bodiam, sits very close to the Sussex/Kent border.

All four sites sit within the interstices of the geography of medieval lordship and administration. Most obviously, the boundary between the counties of Kent and Sussex runs through the middle of the Weald. Settlement in the Sussex Weald tends to be linked to settlement further south on the Sussex coast and downlands; conversely, settlement in the Kentish Weald links northwards to the North Downs and river valleys of northern Kent (Everitt 1986). Subdivisions within the counties make this picture still more complex and fragmented (Fig. 12.5). In the Middle Ages, Sussex was divided into six 'rapes', or feudal lordships. The origins of this division lie before the Norman Conquest, but the lordships were at the very least modified by William the Conqueror after 1066. Now each lordship was set up with a distinctive set of elements: a chief castle and town (Chichester, Arundel, Bramber, Lewes, Pevensey, Hastings), access to the coast and coastal resources, corn-producing villages on the downlands, areas of parkland suitable for hunting, areas of the Weald for grazing and other resources… the political boundaries of the rapes, then, with the partial exception of Hastings, run in a ladder-like form across the grain of the landscape as defined through geological zones, with the boundaries running north-south across the east-west lie of the landscape.

The sites of Bodiam and Scotney Castles arose and developed as places of importance in the later Middle Ages, within the interstices of this system, at a social level below that of the great lordships. Knole and Ightham, in Kent, had a different set of antecedents, but in their origins were also below the very highest level. At Knole in the mid-15th century, James Fiennes was in the process of building a double-courtyard house before his execution, and the great family who came to own Knole, the Sackvilles, started as a more modest Sussex gentry family in the later Middle Ages (Saul 1986). It is part of the popular image and identity of Ightham that its successive owners never aspired to build a house or castle of the first rank. In Chapter Ten, Eric Johnson explored how moated sites in the Weald could be understood as a general phenomenon; part of
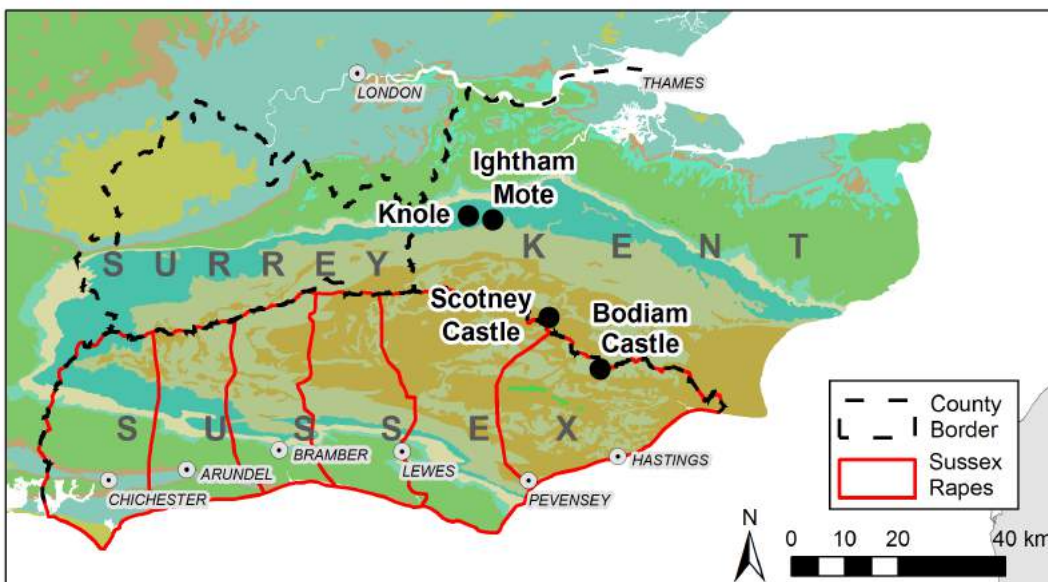
Fig. 12.5: Bodiam, Scotney, Knole and Ightham, mapped against the underlying geology and the boundaries of Kent, Sussex and the rapes of Sussex.

understanding Bodiam, Scotney and Ightham is to see them as examples of this wider class of monuments, albeit particularly large and impressive ones.

So far, this discussion has emphasised the importance of placing all four sites in the context of the long term and of the regional landscape of south-east England. I will now turn to each site in turn to make more particular comments about their position in terms of region, landscape and long-term development.

Weald, Marsh and Greensand

An understanding of Bodiam Castle as a site should start, if not before, then at the outset of the Bronze Age and with the environmental record. The results of coring and excavation (Chapter Five) have shown that this was the point at which peat formation came to an end, and alluvial deposits began to build up in the river valley. It was at this point that the distinctive form and rhythm of the Bodiam landscape was created. Before this moment, the Rother Valley was quite rugged; now it developed as a valley that was from time to time under water or a tidal estuary, alternating with drier and warmer climatic periods when it reverted to river and floodplain. This rhythm at Bodiam between water and land continues. If the River Rother was tidal estuary or marsh up until and beyond the end of the Middle Ages, it was drained in the post-medieval period and used as the fertile plain it is today (Eddison 1985; 1993). However, if climate change continues, it is very possible that the Rother Valley at least up to Bodiam will revert to being tidal or even be permanently under water within a century or so.

The 'Bodiam' place-name, as recorded in the Middle Ages, refers directly to this position between land and water. It connects the Old English personal name Boda with –ham indicating a settlement; the form Bodihamme, which is recorded in 1259, probably indicates 'land hemmed in by water' (Mawer *et al.* 1929-30: 518).

The location of Bodiam, at the head of a tidal estuary in the later Middle Ages, has been seen as a defence against the French. This volume deliberately refuses to take a view on this proposition, as the whole thrust of what we have been trying to do in this project is to get beyond the false, misleading choice of a 'military versus status' opposition. It may be worth noting that there is a more obvious point in the landscape to construct a defence against an invading or raiding force up the estuary, at the end of the peninsula projecting into Romney Marsh, at the site now known as Castle Toll (Fig. 2.1).

Indeed, here, there is a 12th/13th-century motte-and-bailey castle, itself placed within an earthwork identified as the possibly unfinished defences of an Anglo-Saxon burh (Davison 1972). This site was excavated in 1965 and again in 1971 (King 1983: 232).

The riverine location of Bodiam links in one direction with Romney Marsh, the ports of Rye and Winchelsea, and the English Channel beyond. From Rye and Winchelsea, goods including grain, timber and especially fish were transported, not just up and down the Channel, but around the coastline of Kent to London – the impassable nature of the Weald making this a more economical route to the capital. Goods also flowed inwards; wine and fish were imported from a range of French Atlantic ports (Martin & Martin 2004: 8); the fish would be destined especially for Battle and Robertsbridge abbeys.

Romney Marsh was transformed in the period after 1348-9. First, as we have seen, climatic deterioration led to destruction of sea barriers and a return of much of the marsh to its former state. Second, much of the highly fertile land on the marsh, formerly controlled by landowners such as the great institutions of Canterbury Cathedral Priory, was now leased out. Peasant landholders could now accumulate substantial holdings by taking advantage of the post-1348 demographic decline and also this leasing-out (Draper 1998), though much of this engrossing and formation of substantial farms, often seen in a wider context by economic historians as proto-capitalist, did not fully unfold until the late 15th century (Gardiner 1998).

However, the River Rother and its floodplain also links Bodiam in the other direction. Upriver is the Cistercian abbey of Robertsbridge, founded in the 1170s and with eight monks in 1418 (Page 1907: 71-4). Edward Dallingridge, his son John, and his wife Elizabeth Wardedieu, were all buried at Robertsbridge. Part of John Dallingridge's tomb effigy still survives, and is on display at Bodiam Castle; it has been misidentified in the past as Edward's (Fig. 12.6). The Dallingridge family were patrons of Robertsbridge. The patronage of the Dallingridge family flowed up the river, while water flowed both down the Rother and also along the artificial leat that Dallingridge constructed to feed the mill pond.

Where Bodiam sits at the junction of Weald and marsh, Knole and Ightham sit at the junction of Weald and greensand. Both sites should be understood in this context. Knole stands on top of the greensand ridge; its park, the largest surviving medieval deer park in England, overlooks the clayland of the Weald to the south. As

Fig. 12.6: Mutilated tomb effigy of Sir John Dallingridge, on display at Bodiam Castle.

Chapter Seven has shown, the decision by Archbishop Bourchier and before him James Fiennes to develop the site of Knole was tied up with the creation and expansion of a deer park of immense size. The landscape of the greensand ridge, with its light soils and heathland, was particularly appropriate for such a deer park.

The understanding of Knole is also tied up with the complementary nature of the site to the nearby archbishop's palace at Otford. To the casual observer, the proximity of the two archiepiscopal palaces of Otford and Knole is surprising. Otford is a large double-courtyard house, built by Archbishop Warham in the earlier 15th century, only 6 km to the north of Knole (Fig. 12.7). Little remains of Otford Palace above ground save part of a gatehouse, a tower, and fragments of the intervening range, now reused as a row of private houses. Otford is in many respects very similar to the house that Bourchier constructed at Knole. However, its placing in the landscape is very different.

Alden Gregory (2010) suggests that the two houses of Otford and Knole need to be understood in terms of complementary functions. In his view Otford was the administrative and 'public' centre, while Knole was intended to be a 'private' place for the Archbishop's

repose. Again, this suggestion has great merit, but it has a geographical and landscape component that lies behind the expression of Archbishop Bourchier's personal preferences. Otford sits astride east-west travel and communication routes, most obviously the Pilgrims Way to Canterbury, and was part of the very earliest phase of post-Roman settlement of the Kentish landscape. By contrast, Knole and the associated small town of Sevenoaks sit in an elevated location astride north-south routes; the unusual place-name Sevenoaks suggests it may have originated in the pre-Conquest period as a meeting-place by seven oak trees, at the intersection of a north-south drove road and an east-west ridgeway (Everitt 1986: 209, 269). Contemporaries commented on this more elevated location and in particular the marshy and less salubrious nature of Otford.

As discussed in Chapter Eight, Ightham sits at the bottom of a small north-south valley, again carved out of the greensand ridge. It is the carving-out of this particularly small and occluded landscape that gave the opportunity to furnish a moat for the house, and at that point or later, create a series of ponds or water features, including the mill pond. A few hundred metres south of the house, the ground falls to the claylands of the Weald. While the house is situated at the bottom of the valley, numerous surrounding points in the immediate landscape offer panoramic views east and south over the Weald (Fig. 12.8). The development of settlement at Ightham up to the early 14th century, including the creation of the original moated site, is not at all clear. However, the house is sited on the main route southwards from Ightham church that leads into the heart of the Weald, very possibly another north-south drove road in origin.

Fig. 12.7: The north-west tower and part of the surviving north range of Oftord Palace, Kent. Photo by Matthew Johnson.

Fig.12.8: View south over the Weald, as seen from the top of the greensand ridge between Knole and Ightham. Photo by Matthew Johnson.

Scotney (Chapter Six) can be seen as the exception within these four sites. It stands well within the boundaries of the Weald, with no clear connection or intersection with other kinds of landscape. Scotney does sit in a boundary location, very close to the Kent/Sussex border and at the intersection of lands belonging to several different manors. The early owners of Scotney are missing from the Sussex Lay Subsidy Returns, which suggests that they may have been living across the border in Kent in the early 14th century. Scotney also has no associated village; the settlement of Lamberhurst is over a kilometre away to the north-east. It is difficult now to mentally reconstruct the medieval context of Scotney, after its 19th-century re-landscaping and the creation of the artificial reservoir of Bewl Water to the south, but the overall impression is of quite an isolated location away from the key nodes and routeways of political power and economic flows.

Scotney's owner in the 1370s, and the builder of the tower and other features on site, was Roger Ashburnham. Ashburnham was not a knight. He, Dallingridge and Etchingham could be seen as three key players in local politics, often named together in documents of the time. Again, Ashburnham's social and political networks certainly reached beyond the Weald into south-east England as a whole: Ashburnham was Commissioner for Walls and Dykes on Romney Marsh (Martin *et al.* 2011: 323), and the place-names Scotney Marsh and Scotney Court Lodge testify to links between Scotney and Romney Marshes (Spencer & Woodland 2002). Knole was owned by Roger Ashburnham in the 1360s, at a time when, prior to the building of Fiennes and Bourchier, it may have looked like Old Soar Manor (Gregory 2010: 11), or like the kitchen-hall-solar block at Ightham before it was extended into a full courtyard.

Agency and Lived Experience

So far, in this discussion, I have moved from the very large-scale in terms of time and space, from geological time and the British Isles as a whole, down to regions, second nature and down to human landscapes and the role of our four sites as nodes in particular kinds of networks. I now want to move in the other direction, upwards from the ordinary experiences of individuals.

All four sites are traditionally explained in terms of the agency of elite men. The term 'agency' refers to the aims and goals of individual social actors, and the practical strategies and actions taken to achieve those aims and goals. The broader terms of this agency are clear. All four sites are witnesses to the biographies of men of the later medieval gentry or knightly classes, seeking to materialise the rise of their position in society. Men like Dallingridge, Ashburnham, and Couen have been variously described by traditional historians as upwardly mobile, new men, ambitious, engaging in conspicuous consumption. They were not quite from the upper aristocracy, but the next rung down. They acquired political power and cultural capital through participation in the practice of war, advantageous marriages, shifting political alliances both local and national, and service to the King; and they framed their identities and self-image around contemporary values of elite masculinity, for example ideas of honour and the defence of honour (Radelescu & Truelove 2005; Neal 2008).

Honour was a concept that brought together ideas of status, of martial valour, of prowess in activities like hunting and jousting. Honour was a concept that articulated a structured set of symbols, which were expressed for example through violence. Defence of honour, of one's family and lineage, one's community and one's position at the head of it, was fundamental to the self-image of these men. Elite buildings, among other things, expressed and materialised a powerful idea of honour and defence of that honour, from landscape setting to heraldry to battlements to location and orientation. As I argued in my book *Behind the Castle Gate*, castles and houses acted as stage settings against which elite identities were played out (Johnson 2002).

We can extend this discussion, and give it a landscape context, by relating it back to region and place, by thinking about the networks created and maintained by these elite men, and the role of the four sites as key nodes in those networks, places that maintained their power and framed their social identities. Most obviously, all four sites are within 80 km of London and the political opportunities afforded by the court. At a deeper level,

we have seen how the fragmented landscape of the Weald offered opportunities for aggrandisement below the level of the great feudal lords, and this is what we see at our four sites.

At Ightham, Thomas Couen pursued a strategy of social aggrandisement by working an intersection of national, regional and local scales. His family came from the west Midlands, where he spent his earlier life. Through his participation in the system of raising troops to fight in the French wars, he came to have a house and a network of contacts in London. We will never know the precise reasons for his decision to purchase the manor of Ightham, but it represented a shift of Couen interests from the west Midlands to the Kentish Weald, a region he probably first visited *en route* to the coastal ports and embarkation for French expeditions (Minihan 2015). Greater proximity to London may also have been a factor. The purchase of Ightham seems to have been part of a larger intention to settle in that area, only interrupted by his death; one might have expected someone of his background and stature to go on to rebuild the modest manorial structure at Ightham.

It may well be that the reason Ightham was not rebuilt by Couen as a more impressive structure, another Bodiam or perhaps more realistically another Scotney, is to do with the contingencies of inheritance and life cycle. Members of late medieval elites made decisions to build at key moments, often just after an advantageous marriage, at the conclusion of successful military career, or after a death and ensuing inheritance. Thomas Couen died in 1372, of natural causes, on board a ship at Winchelsea waiting to go to war in France; he was buried in Ightham church, where his fine alabaster effigy still survives below a stained glass window he also commissioned (Fig. 12.9). Ashburnham and Dallingridge, on the other hand, lived to a relatively advanced age by the standards of the time and built or rebuilt at a relatively late stage in their careers and lives.

At Knole, Chapter Seven discussed how Archbishop Bourchier's post-1456 building campaign was prefigured by construction on the site initiated by Sir James Fiennes after his purchase of the site in 1445. Fiennes came from a family with origins in the gentry classes. His main seat was at Hever, in the middle of the Weald, 15 km south-west of Knole (Hever was later to attain popular fame as the seat of the Boleyn family). He represented Kent as a Member of Parliament before promotion to the House of Lords in 1457; he became an important national figure and member of the King's inner circle, and a steward of the archbishop' estates, before being caught and executed by Jack Cade and his fellow rebels

in 1450. Fiennes also owned estates in Romney Marsh, allegedly acquired through bullying and intimidation (Nigota 2004; Grummitt 2010: 242-7). His brother Roger built Herstmonceux, a quadrangular moated castle in brick often compared to Bodiam, which sits on the edge of the Weald west of Hastings. Herstmonceux was again located at a junction of landscapes, with a now drained tidal inlet of Pevensey Bay to its south-west, and had a deer park (Martin & Martin 2006: 13). However, like Couen, Fiennes never completed a great house: his building campaign at Knole was brought to an abrupt halt by his death.

Dallingridge's personal biography is well known and has been told and re-told in narrative terms several times; the most complete account has been given most recently by Dan Spencer. His career and biography illustrate the intersection between war and violence, structures of political power and authority, and personal and dynastic wealth through landholding. Dallingridge did military service from 1360 onwards, that is from about age thirteen, in France, and possibly also in Ireland and Italy (Spencer 2014: 84). He went to Scotland as part of Richard II's expedition in 1385; and was appointed captain of Brest 1388-9. His military activities probably ended with the French truce of 1389.

Dallingridge's political and administrative appointments show him working between the local community on the one hand, and national politics on the other. In 1380 he was appointed to oversee defences of New Winchelsea; he was wounded in this year during one of the French attacks. He also served as a commissioner of array in 1377, 1385, 1386 and 1392, and as Member of Parliament in nine of the thirteen parliaments held between 1379 and 1388. He was responsible for enforcing the oaths of the Merciless Parliament in
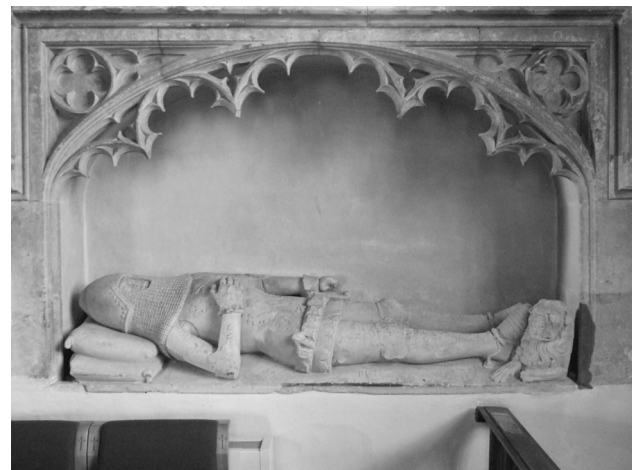
Fig.12.9: Tomb and effigy of Thomas Couen, died 1372, Ightham church. Photo by Matthew Johnson.

1388, and led a group of chamber knights in regularly attending the King's Council in 1389-90 and 1392-3 (these are the periods for which we have records; he may have filled this role at other times; Saul 1997: 267-8). He also switched allegiance from Arundel to the King at a critical moment: he may have been active militarily on behalf of the Appellant lord Arundel in 1387 but came over to Richard in 1389. His rise meant that Arundel's influence was reduced in the eastern part of Sussex (Saul 1997: 267-8, 372).

The listing of this string of appointments conceals a complex and changing political strategy. From 1377 onwards, Dallingridge engaged in his campaign against the great magnate and King's uncle Gaunt, leading to prison in 1384. One view of the location of Bodiam has been suggested by John Goodall, following a suggestion by Charles Coulson (Coulson 1992: 105-6; Goodall 2011: 314; see also Walker 1983). Dallingridge's grandfather was from Ashdown Forest, in the High Weald to the west of Bodiam and Dallingridge's earlier career had one focus in the political disputes in the area. Ashdown Forest was a key arena in Dallingridge's political manoeuvrings of the 1370s. It was the location where Dallingridge chose to commit trespass against John of Gaunt, and murder one of his foresters, in a calculated move to confront Gaunt's power in the area. Goodall suggests that the subsequent imprisonment and trial of Dallingridge, and eventual reconciliation with Gaunt, afforded a political settlement in which Dallingridge remained a force in the area but built his seat some distance away from Ashdown Forest, at Bodiam, on the Kent/Sussex border. Goodall writes that 'Bodiam looks suspiciously like the physical product of this reconciliation' (Goodall 2011: 314).

Goodall's suggestion is a good one, but again, I draw attention to the underlying social, cultural and landscape factors at play in this political game. Ashdown Forest is part of the High Weald, an area subject to the forms of forest law discussed above. The move away from Ashdown Forest was also a move into a different kind of local economy and landscape. More generally, we observed above how Bodiam was one of a class of sites that sit within the interstices of the feudal system of Sussex rapes. It is unusual in that, as discussed in Chapter Two, it was a manor that was not divided between spatially disparate holdings; the distinctive form of the manor, and the weekly market and annual fair, marked out the site as a key 'bottleneck'. Comparative anthropology has identified bottlenecks of this kind as key nodes in the negotiation of cultural and economic power (Earle 2011).

At Bodiam, the decision to build seems to be correlated with particular moments in the life cycle. In 1377 his father-in-law died, and his estates, including Bodiam, passed to Dallingridge; in 1380 his own father died, leaving him with a huge increase in wealth. Dallingridge sold various Midlands estates in 1382, possibly to fund his building campaign.

Spencer looks at the famous licence to crenellate in context: licences of this kind were mostly awarded to gentry and lesser peerage. The wording is distinctive, authorising him to

> strengthen with a wall of stone and lime and crenellate and construct and make into a castle his manor house at Bodyham, near the sea in the county of Sussex, for defence of the adjacent county and resistance to our enemies
>
> (cited in Spencer 2014: 81)

The wording may be to do with his changing relationship with Arundel: Dallingridge wanted to portray himself as leader and protector of the local community at an historical moment when Arundel was unable to do so.

The heraldry above the north and south gates at Bodiam references Dallingridge's political alliances and networks across the political landscape and can be seen as a self-conscious visual expression of those networks (Figs 12.10 & 12.11). Heraldry, by the later 14th century, was a complex visual system expressing and differentiating between different noble and gentry families; its use was closely tied up with elite values of

Fig.12.10: Heraldry above the south gate, Bodiam Castle. Dallingridge's helm above; below, two shields now blank, and between them the arms of Sir Robert Knollys Dallingridge's war captain in France and owner of Derval. Knollys' arms are couché *or tilted (i.e. as carried by a mounted knight).*

Fig.12.11: Heraldry above the north gate, Bodiam Castle. Dallingridge's helm above; below, his arms flanked by those of Wardedieu (the family of his wife Elizabeth) and Radynden (the family of his mother Alice).

honour and identity. Dallingridge was without doubt intensely aware of the importance of heraldic symbols in the maintenance of political identities. He testified in the famous Scrope *versus* Grosvenor case, lasting for five years and involving hundreds of witnesses, fighting over who had the right to display the arms *Azure a Bend Or* (Spencer 2014: 84). For Edward's son John Dallingridge, heraldry was a matter of honour serious enough for him to offer to settle a dispute over coats of arms by combat (Saul, Mackman & Whittick 2011).

Above the north gate, then – facing into the Weald – Dallingridge's own arms and helmet were juxtaposed with those of the Wardedieu family from whom he inherited Bodiam, and the local family Radynden; the southern gate – facing towards the river valley, the port, mill and mill pond – again bore Dallingridge's helmet, above the arms of Knollys, his war captain in France.

Elites and Commoners

So far, this discussion has focused on the agency of elite men. However, buildings and landscapes are the product and outcome of the practices of women, men and children of all social classes and identities. Archaeologists and historians often forget this very simple fact, talking of who owned that manor or who built this building.

Commoners most obviously intrude into the documentary narrative told by historians through the narratives of peasant revolts. Sussex and especially Kent were areas that were particularly politically conscious and prone to revolt in the later Middle Ages. Historians have generally attributed this record of disruption to

the presence in this area of classes of commoners, in particular relatively affluent and assertive peasants, craftsmen and tradesmen. After the demographic collapse of 1348-9, these commoners took advantage of the shifting balance between the supply of and demand for land and labour. They became much more affluent and politically assertive, seeking to throw off feudal shackles and assert rights that they claimed as customary.

The most famous of these uprisings is the Peasant's Revolt of 1381, in which peasants from Kent and Essex marched on London. The immediate causes of the revolt were various, and it was eventually suppressed; but the peasants' demands included the abolition of serfdom (the unfree status of some peasants), and the revolt is now celebrated as a key event in popular and radical history. The radical cleric John Ball famously preached to the rebels:

> *When Adam dalf, and Eve span, who was thanne a gentilman? From the beginning all men were created equal by nature, and that servitude had been introduced by the unjust and evil oppression of men, against the will of God, who, if it had pleased Him to create serfs, surely in the beginning of the world would have appointed who should be a serf and who a lord*

(Thomas Walsingham, *Historia Anglicana,* cited in Dobson 1970: 375)

In 1381, after the Peasant's Revolt, Dallingridge played an active part in its suppression and in later commissions to punish those involved (Spencer 2014: 57). Almost as famous is Jack Cade's rebellion of 1450 (most famously, if quite inaccurately, depicted in Shakespeare's Henry VI, in which Cade is eventually killed by the Kentish yeoman Alexander Iden at the Sussex village of Heathfield: Johnson 2010b: 127-8). The Cade rebellion was directed in part at unpopular advisers to the King, of whom Sir James Fiennes was one; he was seized by Cade's followers following their entry into London, given a brief trial, and summarily beheaded, leaving his house at Knole unfinished. Bodiam and Knole, then, were directly involved in the class antagonism of the later Middle Ages; more broadly, all four sites were centres of elite power and authority.

However, these particularly sharp intrusions of commoners into the affairs of elite political history are only the tip of the iceberg. In the Introduction, and in a number of the following chapters, we talked about the idea of lived experience. The theoretical literature

behind this concept is vast, and the related concept of phenomenology and its application to landscape archaeology has been highly controversial (a few points in a vast literature are: Tilley 1994; 2004; 2008; Thomas 1999; 2001; Bradley 2000; Ingold 2000; 2010; Brück 2005; Hamilton *et al.* 2006 and Bender *et al.* 2007; for critical assessment see Fleming 2006; Johnson 2007; 2011 and Barrett & Ko 2009).

In the Introduction, we defined lived experience as being about:

• A focus on the everyday – the ordinary routines of work, how people moved around and acted upon landscapes and buildings on a day-to-day basis.
• A focus on the local context – the immediate and regional landscapes around the different sites.
• Meaning as about the subjective experience of different individuals and groups, both elite and commoner, women and men.
• A focus on practice – how the experience of places is bound up with what people do at those places.
• A focus on the senses: how places were experienced through the body.
• Cultural biography and the long term: how buildings and landscapes change through time, at a series of scales, from the daily, weekly, seasonal, to change over millennia.

It is worth pausing for a moment to review why, in the view of this project, understanding lived experience is so important to the study of late medieval buildings and of archaeology generally (see also Johnson 2007; 2010; 2013). One of the key developments in archaeology in the last generation is that it is necessary to explore questions of mentality and of meaning – 'their' view of 'their' world. The problem is that such a project is very difficult. How do we know what is going on between the ears of the person sitting next to us, let alone someone who has been dead for hundreds of years?

A particular problem is the recovery of meaning for different social groups – different classes, different genders, different ages. What the landscape of Scotney may have 'meant' will vary, according to whether one is talking about Roger Ashburnham, a medieval monk, a peasant woman, a visitor from France, one of Ashburnham's children, a household servant…. Each will have had their own view, a viewpoint conditioned by, among other things, their social position, whether and to what degree they were literate, their different experience of Scotney as a place of leisure, a working landscape, or both, and so on.

A second problem has been that an emphasis on lived experience has often been presented, or interpreted by others, as an alternative to an emphasis on environment and ecology. Those advocating a lived-experience approach have often sharply denounced what they see as an inhuman environmental determinism. Conversely, those stressing the environment have seen lived-experience approaches as unduly subjective and disconnected from the 'real world'. Subjective and objective, ideal and material, culture and environment – these are often presented as either/or oppositions. This binary opposition is misleading and unhelpful, just as the military/status opposition has been shown to be misleading and unhelpful.

A third problem: much of the literature has made the misleading claim that lived experience involves a rejection of evidential criteria, that lived experience approaches represent an unwarranted push beyond what can be directly observed. In fact, it represents a return to elements that are more directly observable, particularly if as archaeologists we play to our strengths and take care to think in material, archaeological terms. We can never see 'status' or 'conspicuous consumption', but we can and do see fields, hedges, fences, and the paths and routeways between them.

I reviewed much of this theoretical literature a few years ago (Johnson 2012b), and went on to discuss its application to medieval buildings (Johnson 2012a). One of my conclusions was that new digital technologies offered exciting ways of exploring lived experience, as Catriona Cooper demonstrated in Chapter Nine. A second conclusion was that ideas of lived experience and a stress on economy and ecology in the landscape were often presented as competing, contradictory ideas, but in fact they are complementary. On the one hand, human experience of the landscape is immediately and undeniably subjective. Medieval peasants did not respond to the graphs of climatic deterioration so lovingly compiled by modern historians of climate; they responded to the weather, and to their subjective perception of the weather. On the other hand, the daily routeways and practices of people of all social classes were not somehow ethereal or ritual; they were predominantly those of work, bound up with the hard practical necessities of making a living, often in conditions of great poverty and hardship.

At all four sites, and in the study of medieval buildings more generally, there are particularly good reasons why we should think about lived experience. First, as I observed in the Introduction, much of the debate about medieval buildings has hitherto been unanswerable,

in part because it has focused on issues of intention. What did Dallingridge really intend when he built Bodiam? Arguably, we will never know the answer to this question, because 'intention' is a very difficult thing to observe directly. We will never be able to see what was between Dallingridge's ears; his intentions and priorities are unlikely to have remained the same over a ten-year building campaign; and 'intentions' can be unconscious or semi-conscious in nature.

Second, the building and rebuilding of these sites and landscapes was not carried out by single individuals. Bodiam was not, strictly speaking, built by Dallingridge; Knole was not built by Bourchier; all four buildings and landscapes were constructed by a team of skilled and unskilled workers. Anyone who has participated in a major building project, whether as patron, architect, client, craftsman or unskilled labourer, knows that the final result is not so much the product of a single individual volition, and much more a complex and ongoing negotiation between architect, different specialist builders and clients (a point that is brought out well through the interactions of the different craftsmen recorded by the *Time Team* special on the Ightham Mote restoration: https://www.youtube.com/watch?v=4B9WPT5gyNk, accessed 9th May 2016). Major building projects in medieval and early modern England were even more so (Salzman 1952; Airs 1995). The modern idea of architect was a development of the Renaissance, and individual craftsmen brought their own agency and signature to the building, literally so in the case of the more than twelve masons' marks at Bodiam, and more broadly so in terms of the variation in treatment of stylistic and decorative details at all four sites.

Third, all these buildings and landscapes were built and rebuilt, used and reused through time. The later medieval phases of all four sites were structured and constrained by material elements from the deep past, ranging from the natural topography through the traces of several millennia of human settlement, to the presence of earlier buildings on or near the site. Conversely, all four sites were maintained, extended, reused in different ways from the later 14th century onwards. They have a distinctive cultural biography and derive their character, in part, from the reuse and patina of the ages.

Women, Men and Children

We can start by considering the daily paths and practices of different people at Bodiam. These can be mapped out, as they have been in Fig. 12.12, building on the survey results outlined in Chapter Four. We can start with the mill. The precise location of the mill itself was discussed earlier; there is no documentary reference to the identity of the miller but the normative expectation would be that, like most professions in the Middle Ages, he would be male and would live with his family on the site of the mill (Holt 1988). The mill leat, or artificial stream that fed the mill pond, ran for some kilometres to the west, being diverted from the river on the lands of the Abbey of Robertsbridge a few kilometres upstream of Bodiam. Robertsbridge was reached by boat or barge up the river; water flowed from Robertsbridge to power the mill, while patronage from the Dallingridge household flowed in the other direction, as did their deceased bodies destined for burial at the abbey.

The residents of Bodiam village brought their corn here to be ground into flour for bread, but a proportion of the ground flour would be held back for the lord's use, in accordance with manorial sanction and custom. The mill was one way, in classical feudal theory, of extracting rent in the form of flour from tenants (White 1962). Careful analysis of documentary references to milling indicates a great deal of variation around this norm, and a degree of conflict between peasant and lord (Holt 1988: 36-54). So we can visualise women and men carrying sacks of wheat and flour back and forth along the tightly defined causeways to the south of the castle between mill pond and harbour next to the diverted course of the River Rother, and we need to visualise the castle as it was viewed from the south-east not as it is today, sitting in splendid isolation, but as having a watermill in the foreground, either of stone or more likely of timber-framed construction. It must be remembered that a mill was not just a machine – it was a symbol of manorial lordship, prosperity and harmony (as it is presented for example in the Luttrell Psalter: Camille 1998: 212-3) and of a variety of theological and symbolic meanings (Worthen 2006).

Some of these sacks of corn and flour may then have been loaded on to barges and boats at the wharf. Again, the normative expectation would be that harbour masters and manorial officials at the wharf would be men, but the everyday labour may well have been mixed. The wharf was also the nexus of other flows of goods. Fish were probably transported inland from the coast. Iron working took place to the north and quantities of pig iron were probably carried on horses, mules and carts down this Roman road running north-south before being shipped out to the coastal ports of Rye, Winchelsea and the English Channel (Crossley 1981, fig. 29; Cleere & Crossley 1985).
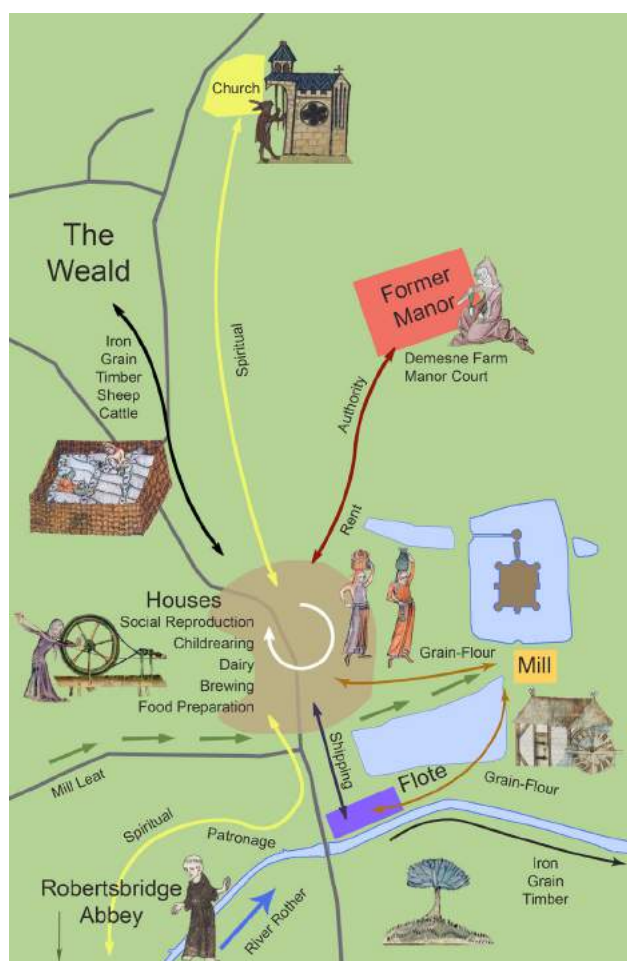
Fig. 12.12: Schematic representation of some of the activities and flows around Bodiam Castle. All images from the Luttrell Psalter (1325-40), © The British Library Board MS42130, apart from the church (Walters Ms. W. 102, Book of Hours, http://creativecommons.org/licenses/by-sa/3.0/legalcode) and monk (MS. Bodl. 264, fol. 22r; The Bodleian Libraries, The University of Oxford).

A third site of work lies at the summit of the slope north of the castle courtyard: the earthworks famously interpreted as a 'viewing platform' overlooking the castle from the north. We have seen that while Dallingridge built the castle, the manorial buildings remained in use as a cluster of farm buildings, and possibly also as stables serving the castle. Most elite buildings of this period have two courts, upper and lower, and here at Bodiam this earlier site had the functions of a lower court, with barn, byre and other buildings. Manorial courts also continued to be held here, at which the officials and the heads of household within the manor would gather to make legal and administrative decisions (Johnson *et al.* 2000: 32).

A fourth site of work was the 'village' itself. As noted in previous chapters, this was more a small row of peasant houses than a typical medieval village. The ladder-like arrangement of property boundaries implied a

division into front space and back space – though on this orientation, the houses faced towards the road and turned their backs on the castle. Only one of this row of houses survives from the Middle Ages, the early 16th-century house at the top of the row, a typical house for its time. Its name, 'Ellen Archer's', is likely to be of post-medieval date. These houses acted as nodes that drew in different materials from across the landscape, and then transformed those materials through gendered labour. The Weald was a relatively affluent area in this period, due to the production not just of corn but also dairy products – butter, milk, cheese – also wool and meat from sheep and cattle -- and of course iron. Dairy and industrial products were extracted from the surrounding fields, orchards, and woodlands through the work of women and men, gathered and brought into these households, and there processed. As with the milling and iron production, we have no direct evidence of who participated in such production at Bodiam, but the normative expectation would be that household production of this kind was women's work (Goldberg 1997; Graham 1997). So these houses themselves acted as gendered micro-landscapes, within which women did the cultural work of transforming nature into food and other products for the table and the market.

This discussion has two critical implications for the way we see Bodiam. First, the 'castle' itself appears rather detached from the bulk of this activity. Peasants worked in the fields and in the village, women and men took corn to and from the mill, barges were loaded and unloaded… with the castle itself rather detached, rather like a hole in a doughnut. All of this east-west and north-south activity and movement, the back-and-forth of human bodies, beasts of burden, the carts they were pulling and the goods they were carrying could be monitored from the walls of the castle, but the castle itself, and the elite household inside its walls, could be argued to observe but also to be set apart from this landscape of work.

Rather than seeing Bodiam as a series of facades within a designed, ornamental landscape, I am sketching out for the reader a place where the castle courtyard and towers sat perhaps somewhat in isolation within a busy set of flows of people and goods that moved around their perimeters. The castle is in this sense a set of resources to be drawn upon – the numerous lodgings were probably never fully occupied.

The second implication is that when we start to think about the place in terms of lived experience, it is not at all clear what the term 'the castle' might refer to at Bodiam. The term is generally used to refer to the

courtyard, towers and gatehouses, but we have seen that the curtain walls and what they contain may be best seen as an inner court, with stables and other ancillary buildings elsewhere, perhaps up with the manor court on the hill. What is generally termed 'the castle' might be better seen as a kind of large 'gloriette', detached and set off from everyday activities by its moat and elaborate and circuitous entrance arrangements.

We can make very similar observations about later medieval Scotney. We can trace daily paths and practices at Scotney with less confidence, given the very extensive 19th-century re-landscaping and the more ruinous nature of the castle itself. Scotney is also a more difficult and complex landscape to understand given the lack of an adjacent village or settlement; the village of Lamberhurst is a kilometre away. Chapter Seven showed how there are nevertheless traces of water features and the site of a mill in the river valley, and it established the boundaries of a deer park on the ground above and to the west of the castle; and the outer court at Scotney has a collection of farm and other ancillary buildings.

The common denominator at all these sites is that by refocusing comments away from specific institutions often designated through documentary references (manor, demesne, mill), and thinking instead about movements, flows and work practices between these sites, we bring human beings more closely into focus. We see the landscape in dynamic terms, or as what the anthropologist Tim Ingold would call 'taskscapes', rather than simply or only as a series of static institutions (Ingold 2000; Edgeworth 2011). It is also a view of the landscape which resonates strongly with, for example, the idealised image of the medieval estate presented in the Luttrell Psalter, made some decades earlier (Camille 1998).

Designed Landscapes?

Seeing landscapes in terms of lived experience in this way makes a significant contribution to the ongoing debate over the presence and nature of 'designed landscapes' in the late medieval countryside.

If buildings are actually produced through a complex process of collaboration and agency, the same is also true of landscapes. What this means is that, in a sense, all medieval landscapes are designed. Village layouts, field systems, routeways, fishponds and other hydraulic features, are all created, maintained and inhabited through conscious human agency and practice. There is no *a priori* distinction to be drawn between

vernacular, working landscapes on the one hand, and polite, 'aesthetic' landscapes on the other. Indeed, one could go further and suggest that modern conceptual divisions of this kind are an historic creation, in part of the Renaissance, in part of the 18th century (Johnson 2007), and as such cannot be meaningfully applied to medieval conceptions of landscape.

In this sense, all four sites sit at the centre of a designed landscape – a designed landscape that is also a working landscape. However, a consideration of lived experience suggests that there were important and subtle differences in the ways landscapes were experienced and understood at different places. Most obviously, the experience of the deer park at Knole was bound up with its association with the world of the Church, as argued in Chapter Seven. The landscape at Ightham, discussed in Chapter Eight, has a complex series of water features, but these may well have been created in a piecemeal fashion, in line with the development by alteration and accretion of the house itself.

Afterlife

The first part of this chapter engaged with the long-term and the way the landscape was structured in terms of geological time and in prehistory – it is equally important to consider the life of all four sites after the later Middle Ages. These are all sites that continued to be inhabited through time, right up to their present role and identity as National Trust properties. As a general theme, long-term cultural biography is an important element of the overall heading of lived experience. In other words, if we are interested in people's embodied understandings of and practices around places, we also need to think about how these understandings and practices changed generation by generation, as different people brought different ideas into dialogue with a place. The process, over the decades and centuries, produced new meanings for any given place – manor house to castle, castle to Renaissance palace, house to Romantic ruin, palace to tourist attraction.

Lived experience also implies maintenance. If places now have well-preserved medieval remains, it is, in part, because they were carefully maintained that way in the centuries after the Middle Ages. At Scotney, Ightham and Bodiam, the water features, left to themselves, would have partially or totally silted up over time. Maintenance of this kind is itself a meaningful action, implying a sense of memory and continuity and, of course, necessitating substantial financial and labour input. Again, at Knole, the medieval deer park survives and continues to be maintained, albeit in a heavily modified form.

Ightham is a place with a strong image of continuity: guidebooks and popular accounts see this as a place where little happened. This perception is linked to its isolated location and lack of ambitious owners, a place that each generation has rebuilt and reformed, without the site undergoing a radical transformation. The discussion in Chapter Seven implies that this is not the whole story at Ightham. First, the medieval landscape should not necessarily be seen in terms of the isolated and secluded setting that we see today, with its dominant tree cover. The 3D topographical reconstruction showed us that different approach routes, both along the east side and the west side of the valley, may well have commanded important views at critical points in the landscape, Second, the house was significantly expanded towards the end of the 15th century when it acquired an outer courtyard; the main approach to the house was altered by these new buildings and there is the possibility that this major transformation was accompanied by changes in the surrounding watery landscape.

Scotney was transformed from a castle/fortified house in the 1630s by the wholesale rebuilding of the central range into a Classically-proportioned building (Martin *et al.* 2011; 2012). This building was never finished, leaving Scotney for some centuries as a collection of fragments. With the laying-out of the 'picturesque' landscape of Scotney, and the building of the New House, the old castle became an element of that landscape. The modern visitor to Scotney descends from the New House into this secluded area, tucked away and partially hidden by trees, and accompanied now by a Henry Moore statue on the adjacent island.

Bodiam appears, at first sight, to be a classic single-phase site. However, we saw in Chapter Three how the building itself may well have been occupied into the earlier 17th century, and went through several significant phases of restoration. The castle is covered with thousands of graffiti. The graffiti are important markers of identity in their own right; they include a member of the Shelley family, and a Canadian soldier from the first world war (Cooper 2010).

The successive restorations and alterations of all four sites from the 18th century onwards tie all four sites in to a much wider set of colonial and national relations. Bodiam was restored in the 1830s and again in the 1920s. In 1829, it was saved from destruction and purchased by John 'Mad Jack' Fuller. Some of Fuller's accounts survive; they indicate that he made a substantial financial input into the restoration of the castle and the re-landscaping of its setting, though the

specifics of the work that he financed are difficult to trace with certainty on the ground (Holland 2011). Fuller owned the nearby estate at Brightling, where he built a series of follies. The Fuller family's wealth came from a combination of interests in gun manufacture and in plantations in Jamaica (Crossley & Saville 1991); Fuller owned 44 slaves at the St Catherine and 209 slaves at the St Thomas-in-the-Vale estates (https://www.ucl.ac.uk/lbs/search/, accessed 11th June 2015). Fuller was Member of Parliament for Sussex and spoke in the House of Commons against the abolition of slavery, making the claim that many slaves in the Caribbean lived in better conditions that 'were equal, nay superior, to the condition of the labouring poor of this country' (http://www.oxforddnb.com/view/article/39364?docPos=4, accessed 11th August 2015). Fuller was known as an 'eccentric' and continues to attract a cult following, with a local Morris dancing team named after him.

The restoration of Bodiam by Lord Curzon can also be argued to tie into global and colonial themes. Curzon was Viceroy of India between 1899 and 1906. At the end of his tenure, Curzon returned to British politics as a Conservative and Unionist; the restoration work at Bodiam in the 1920s unfolded while he was a key player in national politics, a senior figure in the Tory party and the House of Lords. Curzon restored a series of 'national monuments', including Walmer, Bodiam, Tattershall, Kedleston and Montacute House; the latter four he bequeathed to the National Trust.

At this time of his viceroyship, British colonial administration in India expressed itself culturally through 'ornamentalism', including architectural references to castles and other medieval monuments (Cannadine 2001). Curzon passed an Ancient Monuments Bill providing for the restoration of the Taj Mahal and other monuments, and creating the post of Director-General of Archaeology, subsequently and famously occupied by Sir Mortimer Wheeler. David Cannadine argues that British imperial administrators saw their colonial subjects not as exotic or 'other', but rather in the same terms as the British lower classes. There is certainly a hint of paternalistic imperialism in Curzon's comments on his attempted drainage of the 'tiltyard' (actually mill pond) and his desire to bring the civilising game of cricket to the Bodiam villagers:

> *The Tilt Yard gave a good deal more trouble… Cherishing the innocent belief that this piece of ground, if drained and levelled and turfed, would provide an excellent cricket ground or recreation ground for the village, I set about its reclamation.*

The result was a disastrous failure… my praiseworthy desires for the recreation of my fellow-parishioners at Bodiam have proved altogether abortive…

(Curzon 1926: 100-1)

Scotney and Ightham were also heavily re-landscaped in the 19th century. In all three cases, re-landscaping along 'picturesque' principles involved the creation of expanses of grassland, areas of woodland, the careful setting of the building at the centres of views, and the layout of pathways and carriage drives designed to show off the site and landscape sequentially and to best effect. The landscapes created appear natural, but are in fact the product of human artifice. Given that this is the case, it is not surprising that scholars visiting these sites – Bodiam in particular -- have been immediately attracted to ideas of carefully manipulated views and contrived settings.

Knole is the exception here; its landscape does not have the appearance of being transformed in the 19th century. Such a statement does need to be heavily qualified: there are a number of buildings, paths and routeways that have been laid out, much of the estate now has a substantial estate wall, and the inner area of the gardens has been subject to continual transformation over the

centuries. Knole's relative lack of transformation in terms of both its landscape and the building itself after the early 17th century is, of course, part of the identity of the place, most famously celebrated in Virginia Woolf's *Orlando: A Biography* (Woolf 1928), routinely cited as a feminist and modernist classic, in which the eponymous hero(ine) is seemingly blessed with immortality but who changes from a man to a woman part way through the book. Knole is Orlando's country seat and is the central and defining place in the novel; at times, the 'biography' in the title seems to refer as much to the place as to Orlando him/herself.

Bodiam, Scotney, Knole and Ightham should be thought about in terms of their key and distinctive location in the landscape; their nature as landscapes of work and of movement of a diversity of social classes and identities; and their change and persistence over the long term, and at a series of scales. The survey results from all four sites, when combined with the 'grey literature' and our understanding of the wider landscape, paint a compelling picture of these elite sites in terms of their lived experience. It only remains in the Conclusion to make some comments about the wider theoretical parameters within which this understanding should be set.

13

CONCLUSION

Matthew Johnson

Abstract. This chapter presents some concluding thoughts on the main themes addressed in this volume, and intellectual background and context of the project. The main themes of the volume are reviewed and their implications for the study of buildings and landscape enumerated, with particular attention to the way a diversity of viewpoints informed the research process. Finally, I make some suggestions for future thought and research.

The programme of research reported on in this volume had the initial aim of conducting archaeological survey at four high-status later medieval buildings and landscapes in south-east England, all owned and managed by the National Trust. As it has developed, the intellectual themes of the project have broadened and deepened. Themes we have explored in this volume have been gathered together under the umbrella term 'lived experience', and include the following:

First, the landscapes of work, of practice, and of everyday activity and life (Robin 2013; Overholtzer & Robin 2015). We have moved beyond the discussion of individual intentions of elite owners and builders, to focus on how landscapes were implicated in the activities and patterns of cultural life of people of different social classes and identities. We see these landscapes as being 'vernacular' as well as 'polite', that is, as created and coming into being through the everyday actions of different groups of people as much as through the conscious design of elite individuals. In the process, our work has come to engage with some of the issues of definition behind the term 'designed landscapes' (Liddiard & Williamson 2008; Creighton 2009). Collaborative discussion of our findings, over the years of the project, has led us to stress how landscapes should not be seen as either aesthetic or functional, either designed or everyday, just as castles should not be seen as either defensive or symbolic.

Second, the long-term history of these places: their antecedents and other properties of the landscape that structured how they were experienced and modified, stretching back to the geological history of the Weald and adjacent areas. We see these places as having certain enduring characteristics, particular forms of first and second nature. These characteristics afforded and enableed particular kinds of livelihoods, political structures and social strategies to develop and persist.

Third, the landscape settings of all four sites, their local and regional geography and sets of affordances. We suggest that the Weald and adjacent areas should be seen not just as different kinds of region, but also bound together by this difference and the complementarities of that difference, between Weald and marsh, greensand and chalk downs. Wider understanding of places within a regional context and pattern enables us to understand them comparatively. In other words, it helps us grasp their similarities and differences one to another, and move beyond telling particular just-so stories about particular places to draw comparisons on a wider canvas, with later medieval buildings and landscapes across Britain and Europe, and with elite sites across the world.

As outlined in Chapter Twelve what links these three themes together is an understanding of scale. We have come to see scale is an important means of linking

different insights together. Our analysis has run from the very small scale (the minute actions of washing one's hands in the Bodiam chapel piscina, different details of the building process) through the immediate landscape and regional setting of each building, to its place within a national and international setting. Chapter Twelve set the landscape of south-east England within an understanding of the British Isles as a whole.

As outlined in the Introduction, the project began its intellectual life around 2008-2009 in more narrow terms, as part of a desire to move the scholarly understanding of Bodiam Castle forward, beyond the rather stale and tired debates over defence versus status. In this sense, the project started as an exploration of some of the ideas outlined in *Behind the Castle Gate* (Johnson 2002). As the study developed, and moved beyond Bodiam to encompass the sites and landscapes of Scotney, Knole and Ightham, our engagement with the evidence increasingly addressed propositions and ideas posited in *Ideas of Landscape* (Johnson 2007), most specifically the later chapters of that book where I argue for the application of ideas of practice, lived experience and a comparative approach to the landscape archaeology and history of medieval and historic England. One intellectual thread of this project, then, has been to revisit the theoretical perspectives outlined in that earlier work and to feed forward lessons learned into a fully fledged and large-scale programme of empirical research.

However, to present the work in this way is to underplay the degree to which the project as it developed has been a collaborative and team effort. It has evolved mainly through the fieldwork, research activities and collaborations, and formal and informal conversations between scholars of different ages, backgrounds and institutional affiliations. It is therefore appropriate to end this book with a few thoughts about the ways in which our collaborative working practices impacted on the intellectual vision underpinning the original project work plan and suggest some implications for archaeological theory and interpretation as a whole.

The first observation I offer is that the progress and intellectual development of our project from 2009 onwards can be understood as an exercise in pragmatism. I do not mean here the popular or colloquial use of the term 'pragmatism'; rather, I am referring to the philosophical framework developed by Charles Sanders Pierce, John Dewey and others in North America. Pragmatism as a philosophy holds that the first principle in evaluating an argument is to ask about its practical consequences. In its modern form, as applied to programmes of research, pragmatism tends to foreground the importance of a diversity of approaches and knowledge claims, to be suspicious of grand claims of an absolute Truth, and to advocate collaborative and engaged approaches in which different stakeholders contribute to the process (Baert 2005; Preucel & Mrozowski 2010).

The project can be seen as an exercise in pragmatism in various ways. First, an important element in the development of the project was the diversity of stakeholders, and the importance of listening to and reflecting on the views and opinions of a variety of voices. In Chapter Two, for example, the work of local archaeologists and historians from a diversity of backgrounds and orientations was central in forging a new understanding of Bodiam by drawing on the 'grey literature' before 2010. In Chapter Eleven, Becky Peacock discussed how public engagement was built into the project from the start, and how amateur and other groups played a role, including local societies and National Trust staff and volunteers. These views were critical to a developing engagement with place and region as it was and is understood within a local context.

Referencing grey literature and talking to the authors of that literature has informed both the interpretation and understanding of our results. For those readers unfamiliar with this term, examples of the grey literature can be found posted on our project website at http://sites.northwestern.edu/medieval-buildings/. The grey literature consists of studies produced in the context of conservation management plans, reports on small-scale excavations in advance of development work, 'watching briefs' in which archaeologists observe the digging of features like sewer and building trenches. Such reports are characteristically commissioned by the 'client', in the case of the material dealt with in this volume the National Trust, on a contractual or freelance basis.

This grey literature was not simply or only an objective recording of evidence; it told a complex and intimate story of different individuals' very deep and often passionate engagement with the buildings and landscapes that were the subject of the reports. Reports were often researched and written by local scholars, who had a stake in the results that was far more than simply professional or contractual obligation. Consequently, the grey literature often went far beyond its brief and presented a great deal of high-quality research and scholarly insight. With it came a personal narrative of enquiry and debate.

The quality of the grey literature, and the compelling nature of the story it had to tell, is perhaps most evocatively illustrated by an example from Ightham. Restoration work that led to Ightham being dubbed the 'ten million pound house' generated a series of volumes lovingly prepared by Peter Leach (Leach n.d., a-f) before his untimely death. These volumes presented an incredibly detailed, minute enquiry into every nook and cranny of the old house that was a labour of love. Grey literature produced a few years later showed that analysis of the garden and surrounding landscape was the subject of a lively debate between Peter Rumley and the great landscape archaeologist Christopher Taylor, with the latter pouring a large bucket of cold water on arguments for a 'designed landscape' and deer park at Ightham (Ford & Rutherford 2009, appendix 10). Reading through the grey literature in the archives at Ightham, being witness to the passions and enthusiasms of different engaged scholars, in an attic high up in the warren of rooms that comprise the building, was one of the most memorable experiences of the whole project.

In this and other ways, our project also illustrated the argument made by many archaeologists that survey and recording methods are not neutral techniques that deliver sets of objective data; each is bound up with a particular way of seeing, engaging with and 'understanding' the landscape (Gillings & Pollard 1998; Bowden 2000; Lucas 2012). One of the most rewarding aspects of the project from my perspective was the opportunity to bring together students, professionals and academics from across Britain and North America. As such, the project was a case study in the ways in which archaeologists from different educational backgrounds and archaeological traditions interpret survey techniques and methods used by different researchers who come to these places. These particular ways of seeing are partly subjective, partly culturally framed – either way the interplay between them is particularly productive of new insights.

One such insight occurred, for example, around the production and viewing of the hachured plan (the paradigmatic example being Fig. 1.2), and the different topographical and geophysical surveys that have formed the core of this volume. The hachured plan mode is characteristic of much of British landscape archaeology's way of seeing. Researchers look at and engage with a landscape analytically before making a judgement about where the hachures begin and end, and making a judgement, however preliminary, about the overall interpretation of the site. Consequently, this way of seeing and mapping is capable of very nuanced and subtle judgements about what is in the landscape, but it arguably

puts the 'interpretation' first and the recording second. Further, the interpretation tends to consist of identification of features whose morphology is recognisable and capable of being placed in a typology (this must be a lynchet, that must be a terrace, this is a tenement boundary, etc.; discussed further in Johnson 2007: 93-5).

Some of my North American collaborators were quite sceptical of the very slight humps and bumps that some archaeologists from outside the team working in the British tradition claimed to be seeing, and that are quintessentially expressed in Fig. 1.2. Conversely, outside observers of our work sometimes expressed the view that while our results were invaluable at a larger scale, some of the very subtle breaks in slope that others were interested in might not be picked up through the necessarily coarse resolution of large-scale topographic survey. These differences in perspective, stemming in part from different national training, have a very direct influence on what people 'see' in the landscape, and even on 'what everybody knows' about it. Others have explored this observation as it applied to different national traditions in excavation techniques (Edgeworth 2006; Leighton 2015).

New views of castles and other elite sites have sometimes been termed 'revisionist' (Platt 2007). My experience of working with an international team led me to reflect more fully on the term 'revisionism', and to conclude that the term as applied to castle studies is misleading. Revisionism is a term often used in documentary history, and generally applied to the development of different views or interpretations of specific historical episodes (for example on the battle of Agincourt by Anne Curry: Curry 2005, or the English Civil War by John Morrill and others: Morrill 1984). As such, revisionism is a term that denotes a changing or sharply opposing historical view, but within an accepted framing or paradigm of historical explanation. In other words, apparent controversies nevertheless reflect an underlying consensus on method, on what constitutes legitimate evidence or accepted modes of argument.

Our view of medieval buildings and landscapes, for better or worse, is much more than revisionist. The four buildings and landscapes that we have studied offer an understanding of the complexity, subtlety, and difference of the past. Their fascination for us derives not just from their aesthetic properties, or their offer of an intellectual puzzle, but from the capacity of these places to challenge accepted understandings and to prompt new ways of thinking, from the long-term histories behind a castle landscape to the aural qualities of a medieval hall to the question of 'what do moated sites do?'.

One of the main goals of this project was to develop an evidence-based understanding of medieval sites and their contexts in terms that might bring different elements of current landscape approaches together in a sustained and rigorous way. In the opening chapter I identified political economy and ecology as a method to work through, an intellectual complement to lived experience. Political ecology is a set of approaches which thinks about how the landscape is the product of both human and natural processes, and seeks to question how both are defined in respect to each other. It sees nature not as some pre-existing 'given' to which human respond, but rather as humanly constructed in its turn. As befits its title, political ecology gives particular prominence to issues of power and inequality, and the relationship of environmental and landscape change to different political processes. Like 'lived experience', political ecology can be a fuzzy concept, set of ideas or even seen as a particular kind of argument (Robbins 2012: xii). Political ecology has been defined by Robbins as:

> ... *not a method nor theory, nor even a single perspective. Rather… political ecology is an urgent kind of argument or text… that examines winners and losers, is narrated using dialectics, begins and/or ends in a contradiction, and surveys both the status of nature and stories about the status of nature*
>
> (2012: vii)

Other writers in this tradition highlight the importance of bringing together different scales of analysis, both through time and across space.

In this volume, while we have been attentive to different kinds of building, landscape and environmental evidence, and to the need to tie those strands of evidence together, a full and complete account of the interaction and implications of each approach is still a work in progress. Indeed, viewed retrospectively, this volume has barely begun to scratch the surface of what a political ecology of south-east England in the later Middle Ages might look like. By focusing on 'elite sites', for example, our volume could be argued to examine only the 'winners'. By definition, issues of the diversity of social classes and of social contestation are refracted through the legacy managed for us by the National Trust at all four places – it is a challenge for us, as archaeologists and heritage managers, to see beyond this. Whilst we start the process of sampling the landscape and environment and revisiting the multiple relationships between humans and nature over time, our study cannot really be called 'dialectical' in the full philosophical sense of that term, and the 'status of nature' was not interrogated in any sustained theoretical fashion. One might console oneself with the thought that others have yet to bring all these strands together.

The constituent elements are all there: the comparative archaeology of political landscape is a well-developed field (Ashmore & Knapp 1999; Smith 2003). Studies of landscape and settlement in medieval England represent a huge empirical achievement (Roberts & Wrathmell 2002; Rippon 2008; Roberts 2008). There has been close attention to changes in the environment, and a vigorous debate over 'social versus environmental' explanations of medieval rural settlement (Williamson 2004; Jones & Page 2006; Williamson *et al.* 2013). Interpretations of medieval buildings have moved away from the aesthetic value judgments of traditional art-historical models and towards a fuller grasp of their place within medieval society and culture (Johnson 2010b). The political ecology of modern capitalist societies and colonial contexts is well developed (Robbins 2012).

A sustained theoretical project of this kind is an exciting prospect, but it is for the future. The fieldwork we have completed and reported on here will inform and sustain such a project. The next step requires a sustained intellectual endeavour to generate a theoretically informed understanding of medieval buildings, an understanding fully integrated into changing landscapes of human practice and experience, environmental change, and political inequality.

If Bodiam, Scotney, Knole and Ightham have taught us anything, it is that there is so much more to learn.

APPENDIX 1

SUMMARY AND GUIDE TO ARCHAEOLOGICAL FINDS FROM BODIAM CASTLE

Kathryn A. Catlin

Excavations at Bodiam

The finds from Bodiam have been collected under various circumstances, formal and informal, over the 20th and 21st centuries. Excavations, survey, and collecting can be divided roughly into two phases: excavations that occurred prior to 1994, when the Scheduled Ancient Monument boundary was extended to include the landscape setting and grounds (Johnson *et al.* 2000, appendix four), and those that have occurred in the years since, most of which comprise watching briefs, mitigation activities, and geophysical survey. The total artefact collection also includes miscellaneous, largely unprovenanced finds made by individuals over the last three centuries, including tenants and property owners of the Bodiam estate.

The finds and their current locations are summarised in Table A1.A. For additional information about where the finds are currently held, the interested reader is referred to an earlier version of this chapter that was submitted to the National Trust in 2015 in the form of an unpublished report (Catlin 2015).

18th- and 19th-century collection

It is probable that numerous artefacts were collected prior to Curzon's excavations. No specific record of such early finds is known aside from, first, the cannon or field piece that has come to be known as the 'Bodiam Bombard' and second an oak dug-out canoe that was found in the river Rother near Bodiam Bridge in 1836 (Drury & Copeman 2016: 25).

Curzon's 1926 report on his excavation and survey work at Bodiam includes reference to a 'stone-throwing mortar' that was found in the moat prior to 1824, while the Websters held the land (1723-1829) (Curzon 1926: 95). Nineteenth-century references to this object are somewhat scattered and contradictory, but it was certainly at Bodiam prior to an 1825 publication, and resided in the Great Hall at Battle Abbey by the 1840s (Smith & Brown 1989). In 1862 it was purchased by the Woolwich Rotunda Museum (now the Royal Artillery Museum), where it is currently on display (Fig. A1.1).

The gun, which has been referred to either as the 'Bodiam Bombard' or the 'Bodiam Mortar', was constructed of both wrought and cast iron, a combination which may reflect early experimentation with casting: a 'missing link' between wrought and cast iron (Smith & Brown 1989: 16). It is likely that the mortar was constructed in Sussex, perhaps as late as the 16th century, though there is some disagreement as to the date and the provenance; some scholars have suggested that it could have been made on the Continent, and perhaps as early as c. 1350 (Smith & Brown 1989; Les Smith, pers. comm. 2015; Dan Spencer, pers. comm. 2015). A battle at Bodiam makes a compelling story, and indeed, the castle was briefly the site of action in 1483, during the Wars of the Roses. Though it could have been present at the siege, examination of the mortar has suggested it was most probably never fired (Smith & Brown 1989).

A canoe found in the river Rother in 1836 was likely associated with the underlying Bronze Age peat deposits. It disintegrated almost as soon as it was removed. The

Table A1.A: Excavations, finds, and archived locations as of 2015.

Date	Excavator	Finds	Dates	Location	Citation
18th-19th century	Websters?	Bombard, possibly other finds	c. 15th century	Firepower Royal Artillery Museum	Curzon 1926: 95; Smith & Brown 1989
1836	Fuller?	Bronze Age canoe from the river Rother	Bronze Age	No longer extant	Drury & Copeman 2016: 25, 157
1902	unknown	Pre-Roman cinerary urns (1 survives)	50 BCE-ACE 50	Bodiam Castle	Johnson et al. 2000: 26; Whistler 1940
1919-1920	Curzon & Weir	Building materials; metals (iron, lead, pewter, copper, coins); leather; stone tracery; glass; coins; assorted pottery; faunals; tobacco pipes; cannon balls	13th-20th century	Bodiam Castle	Curzon 1926; Gardiner et al. 1994; Myres 1935
1959-1960	Wingrove Payne	Roman finds	Roman	Battle Museum (probable)	Anonymous 1959-60; Cornwell et al. 2010; Priestley-Bell & Pope 2009: 4
1959-1960	Lemmon & Darrell Hill	Roman finds	Roman	Battle Museum (probable)	Lemmon & Darrell Hill 1966
1960	Puckle & Oliver	Roman road	Roman	Hastings Museum (probable)	Puckle 1960; Walling pers. comm. 2013
1961-1966?	Darrell Hill	Unknown finds from Gun Garden	unknown	Battle Museum (probable)	Darrell Hill 1960-61; Johnson 2002: 26; Taylor et al. 1990: 157
1970	David Martin	Building materials; metals (keys, nails, copper, pewter, iron); stone (tracery, whetstone); assorted pottery; faunals; tobacco pipes; wood	13th-19th century	Bodiam Castle	Gardiner et al. 1994; Martin 1973
1970s	Gwen Jones	Roman and medieval pottery	unknown	unknown	James & Whittick 2008
1990	David Martin	Finds from the moated homestead site	13th-14th century	Hastings Museum (probable)	Martin 1990; Walling pers. comm. 2013
1995	Archaeology South-East (ASE)	Pottery; tile; flint; coin	Mesolithic-20th century	unknown	Barber 2007b; Stevens 1995; 1999
1998	ASE	Assorted pottery; building materials (tile, brick); iron; glass; faunals; ballast flint	13th-19th century	Bodiam Castle	Barber 1998
2005	ASE	Portcullis sample	1280-1410	Bodiam Castle	Martin & Martin 2005; Thackray & Bailey 2007
2007	ASE	Roman tiles; assorted pottery; building materials; tile; glass	14th-20th century	unknown; initially stored at ASE Ditchling	Barber 2007a; b
2009	ASE	Assorted pottery; tiles; faunals; leather and timber (6th century)	13th-20th century	unknown; ASE Portslade?	Priestley-Bell & Pope 2009
2009	ASE	Assorted pottery; building materials (tile, brick)	16th-19th century	unknown; ASE Portslade?	Grant et al. 2009
2010	Hastings Area Archaeological Research Group (HAARG)	Roman iron; Mesolithic flint; tile; ceramic	Mesolithic-14th century	East Sussex County Archaeology Office	Cornwell et al. 2010

Fig. A1.1: Bodiam mortar, on a modern carriage at the Royal Artillery Museum. Image courtesy of the Royal Artillery Historical Trust. Photo by L. Smith 2015.

remains were on display at the castle for several years but no trace now remains (Drury & Copeman 2016: 25, 157).

Early 20th century

Several cremation burials were found behind the Old Rectory in 1902, dated to between 50 BCE and CE 50 or possibly a little later (Whistler 1940; Johnson *et al.* 2000: 26; Thackray & Bailey 2007: 5-6; Cornwell *et al.* 2010: 3-4). Only one urn survives; it is part of the permanent Bodiam collection.

Lord Curzon's excavations during 1919/1920 led to some of the most varied finds from the site, including several coins; keys, spurs, and other metal objects; assorted pottery; shoes; and numerous other finds dating from the medieval period and later (Fig. A1.2; Curzon 1926: 157-9; Myres 1935).

1960s-1980s

Several archaeological investigations occurred in the Bodiam landscape between 1959 and 1966. Numerous Romano-British finds were collected from the vicinity of the Roman road, mostly on the floodplain to the south of the castle at Frerens Meade (the field acquired by the Trust in 2006, sometimes known as The Saltings) (Fig. A1.3; anonymous 1959-60; Puckle 1960; Lemmon & Darrell Hill 1966). Additional excavations were carried out south of Court Lodge, exposing finds of Roman, medieval, and later origin (Darrell Hill 1960-61; Lemmon 1960-61; Taylor *et al.* 1990: 157; M.H. Johnson 2002: 26). The moated site north of the castle was partially excavated in 1964 and 1970 (Martin 1990: 89).

In 1970, the National Trust contracted with South Eastern Archaeological Services (now Archaeology South-East) to drain the moat and conduct an excavation of the bridge and abutments under David Martin's direction (Martin 1973). The project led to detailed publications on the construction of the moat and bridges as well as some finds. Later in the 1970s, Gwen Jones carried out some field walking at Freren Meade and collected a small amount of Romano-British and medieval pottery (James & Whittick 2008: 4).

Several survey projects through the 1980s did not result in any recorded artefact finds (Taylor *et al.* 1990; James & Whittick 2008: 4; Holland 2011: 6).

1990s and 2000s

The last 25 years have seen a series of watching briefs, mitigation projects, survey reports, and geophysical prospection within the property at Bodiam. Most of

Fig. A1.2: Selection of pottery finds from Curzon's excavations. Reproduced from Myres (1935: 224).

Fig. A1.3: Selection of Roman-period finds, now held at the Battle Museum. Image courtesy of Battle Museum,. Photo by Kathryn Catlin.

these have been undertaken by Archaeology South-East (ASE), with the exception of a recent geophysical survey carried out by the University of Southampton/ Northwestern University (this volume). Watching briefs in 1995 (Priestley-Bell), 1996 (Speed), 1999 (Johnson), 2002 (C. Johnson), and 2003 (Johnson) do not appear to have resulted in any finds.

In 1995, ASE sectioned part of the moat bank in order to describe its stratigraphy prior to alterations to the bank and visitor pathways (Stevens 1999). Limited finds dated from the Mesolithic (one flint core) to the 20th century (one 1936 penny).

A 1998 (Barber) watching brief on the installation of a new sewage treatment plant near the car park resulted in a relatively large collection of finds, mostly from the 18th and 19th centuries, but some tile, earthenware, and other artefacts most probably date to the late 15th or 16th century. A single pottery sherd dates to the late 13th century.

A 2007 (Barber 2007a) watching brief on drainage works recovered some Roman tiles, 14th-15th-century pottery and some 17th-century debris (Priestley-Bell & Pope 2009).

A further 2007 watching brief (Barber 2007b) followed the collapse of a portion of the moat bank and the loss of several trees during a storm. At the same time, the interior of the hall of the castle was partially excavated in advance of laying a new gravel surface to support visitor traffic. Small amounts of pottery, tile, glass, and other finds from the 17th-20th centuries were recovered.

In 2009 ASE carried out an evaluation of the Rose Garden (the two lots to the north of the modern tea room) prior to additional drainage and sewage works. Finds ranged from the 6th to the 20th century, including timbers and leather dated to the 6th century, and assorted pottery and tiles (Priestley-Bell & Pope 2009: 17).

A second watching brief in 2009 related to the extension of the car park (Grant *et al.* 2009) resulted in a small box of finds, mostly from the 16th-19th centuries.

Some surface finds were collected during an independent geophysical survey of the Roman road through Dokes Field in 2010 by the Hastings Area Archaeological Research Group (Cornwell *et al.* 2010). These included Roman iron, a Mesolithic flint, and some 14th-century ceramics.

Find Locations

The majority of finds are in storage or on display at Bodiam Castle. These include the majority of Curzon's finds, finds from the 1970 moat excavation, assorted individual finds from the property and wider landscape, and finds from the 1998 sewage project. Also at the castle are a collection of Roman finds, the pre-Roman urn discovered in 1902, and a large collection of tiles. The castle's collection may also include finds from earlier excavations that have been merged with those of Lord Curzon, as well as finds from recent Archaeology South-East projects that have been remitted to the National Trust. Records stored at the castle include a finds catalogue compiled by Gardiner and Barber in 1994 and four boxes of accession cards and photos, documenting both finds and paper archival records as of c. 1989.

Battle Museum of Local History holds numerous Romano-British finds from the 1960s excavations at Bodiam.

Hastings Museum and Art Gallery holds a box of finds from the Bodiam Moated Homestead site (Martin 1990), as well as some finds from excavations in the 1960s, from the Roman road and/or medieval features (e.g. anonymous 1959-60; Lemmon 1960-61; Lemmon & Darrell Hill 1966; Puckle 1960; Walling pers. comm. 12th August 2013). It may also hold at least one of Fuller's fundraising medallions (Bailey pers. comm. 7th August 2013).

The Royal Artillery Museum houses the mortar that was found in the moat at Bodiam during the early 18th century.

Collections from several excavations and watching briefs between 1990 and 2010 may be held at the ASE archives or at a local museum (e.g. Grant *et al.* 2009: 8).

The Finds in Context

Each individual component of the finds collection is small. This is typical of sites like Bodiam, where excavation and artefact collection have largely occurred on an as-needed basis. Taken together, the assemblage comprises an invaluable resource for developing a narrative of the lives, occupations, and priorities of those who lived in and around Bodiam over the past two millennia. The finds provide a potential glimpse into the minutiae of day-to-day, ordinary encounters with objects, and can therefore serve as a fundamentally material way to address the long-term rhythms and cycles of work across the landscape of Bodiam.

The scope of the project reported in this volume did not include an in-depth analysis of the finds. However, several possible future projects might incorporate the finds into an integrated analysis of Bodiam's history and landscape. The finds have the potential to expand and enrich what is known about the history of Bodiam and its landscape, including the importance of the river Rother to the Roman period settlement and trade, the economics and practicalities of daily life on a medieval English manor, and the recent history of the site's excavation and its use as a popular destination for tourism, recreation, and education.

Together with published environmental and landscape reconstructions of the Rother Valley and the Bodiam property (this volume; Burrin & Scaife 1988; Waller *et al.* 1988; Pope *et al.* 2009; Priestley-Bell & Pope 2009; Barker *et al.* 2012), the finds enrich the existing narrative of environmental and social change to build a more complete picture of the combined social and environmental landscapes of Bodiam. The finds include a variety of items from around the world, marking medieval Bodiam as a site of international commerce. The pottery and tiles may hold particular potential, if they can be sourced stylistically, chemically, or by thin-section analysis. Were the tiles imported from a significant distance? Or were they perhaps produced on site during the construction of the castle? Excavation to the south-west of the castle might suggest whether there is any connection between the tiles and the magnetic dipolar anomalies seen in the geophysics (this volume; Barker *et al.* 2012). Finds from excavations in the Roman harbour and the medieval flote could show how trade and consumer behaviour changed over time, likewise shedding light on the changing connections between Bodiam and the rest of the world. The post-medieval finds may suggest the extent of Bodiam's involvement with the Atlantic trade, and can bring to light the experiences of those who worked upon and enjoyed the picturesque landscape in the 19th and early 20th centuries before the National Trust's stewardship began.

Examinations of individual faunal assemblages have so far concluded that each collection is too small to be of interest (e.g. Priestley-Bell & Pope 2009: 21). If the collections were taken together, an examination of the combined faunal assemblage might show illuminating instances of butchery marks or presence of certain species at a particular time even if minimum counts or statistical analyses are not feasible. If available, a comparison with the finds collections of another estate of similar size and date, such as Scotney or Iden, would help to contextualise Bodiam's place within the social world of medieval East Sussex and Kent.

The excavation, distribution, and organisation of the finds over the last hundred years adds a modern component to the biographies of the objects in the collection. The history of the collections tells an interesting story about the changes in archaeological and curatorial practice over the course of the 20th century, both in terms of scientific methodologies and the kinds of artefacts and other evidence that have been deemed sufficiently interesting and informative to keep, store, and display, as well as the research priorities of the various supporting institutions. Numerous individuals who have worked with the Bodiam material, including for example Curzon and J.N.L. Myres, are significant figures in the development of medieval archaeology over the course of the 20th century.

The existing finds hold significant potential for the development of a multi-faceted research project that would explore medieval economies and practices, changes in the perception of the landscape over time, and the changing nature of archaeological and curatorial practices in the 20th century. Additional finds that might result from future excavation would add to the research potential of the collection, whether necessary watching briefs or more extensive archaeological investigation (see Drury & Copeman 2016).

APPENDIX 2

A LAYPERSON'S ACCOUNT OF SURVEY TECHNIQUES

Kathryn A. Catlin, Kristian Strutt[1]

A number of different survey techniques can be applied by archaeologists to record the signatures of surface and sub-surface archaeological structures, remains, and features. The survey work reported on in this volume included both topographic and geophysical survey tied to high accuracy Global Positioning System measurements. Geophysics included magnetometry, earth resistance, and Ground Penetrating Radar techniques, all explained below. These techniques were variously carried out at all four primary research sites, and the results are described in Chapters Three and Four (Bodiam), Six (Scotney), Seven (Knole), and Eight (Ightham Mote).

The different techniques described below each have their strengths and weaknesses. Each is particularly suitable for picking up certain kinds of features. Consequently, archaeologists often prefer to use a range of different methods in combination.

Magnetometer survey is generally chosen as a relatively time-saving and efficient survey technique (Gaffney *et al.* 1991: 6), suitable for detecting kilns, hearths, ovens and ditches. Magnetometry can also detect walls,

especially when ceramic material (tiles, bricks) has been used in construction. In areas of modern disturbance, the technique is limited by distribution of modern ferrous (iron-rich) material. Earth resistance survey (sometimes termed resistivity survey), while more time consuming, is generally successful at locating walls, ditches, paved areas, and banks. The application of resistivity tomography allows such features to be recorded at various depths along a linear transect. In addition Ground Penetrating Radar (GPR) is useful for surveying material where sufficient change in the 'permittivity' (resistance to an electric field) of different features provides contrast, including walls, banks, ditches, pits and other types of archaeological feature.

In this work, we also undertook close contour topographic survey over areas of prospection, to record any important archaeological features that are apparent in the present land surface, and also to provide vital information on variations in the ground surface to aid analysis of the geophysical prospection results.

Survey work is generally carried out by archaeologists as part of an integrated survey strategy, designed to affiliate all the results of the geophysical survey techniques to the same grid system. Surveys are normally based on an arbitrary grid coordinate system, tied into a national system or to a series of hard points on the ground corresponding to points on a map. A set of 30 m grids are then set out in which to carry out the magnetometry, earth resistance, and other survey techniques such as fieldwalking and geochemical sampling. The topographic and geophysical data were processed in the

Fig. A2.1: Kristian Strutt engaged in topographic survey using RTK GPS at Bodiam Castle in 2010. Photo by Timothy Sly.

software packages Geoplot, GPR Slice, and Res2DInv, and imported into the Geographical Information Systems software ArcGIS for analysis. For technical details of the processing, see Barker *et al.* (2012).

Topographic Survey

The modern surface topography – humps and bumps on the ground surface, often more or less visible in different light conditions and from different heights and angles -- contains important information on the conditions and nature of an archaeological site or landscape, and can suggest the presence and location of structures or other features buried beneath the soil (Bowden 1999). The changes in topography can also have a great influence on interpretation of anomalies and features observed in a geophysical survey. Therefore it is often vital as a first step to produce a detailed and complete topographic survey as part of the field survey of any given site. This generally entails the recording of elevations across a grid of certain resolution, for instance 5 or 10 m intervals, but also the recording of points on known breaks of slope, to emphasis archaeological features in the landscape.

To record the survey points, we used a Real Time Kinetic (RTK) Global Positioning System (GPS) with a rover and base station (Fig. A2.1) as well as a Leica TC 307 total station (Fig. A2.2). Readings were taken every 5 m, and also on the breaks of slope of important topographical features. Computer software (ArcGIS) was then used to produce Digital Elevation Models (DEMs) of the results.

Earth Resistance (Resistivity) Survey

Earth resistance survey is based on the ability of sub-surface materials to conduct an electrical current passed through them. All materials will conduct electricity to a greater or lesser extent. Differences in the structural and chemical make-up of soils mean that there are varying degrees of ground resistance to an electrical current (Scollar 1990; Clark 1996: 27). Resistance meters pass an electrical current through the ground, and compare the resistivity at point locations in the grid with that of a distant background reading between two potential probes to measure variations in resistance over a survey area (Figs A2.3 & A2.4). Resistance is measured in ohms (Ω), whereas resistivity, the resistance in a given volume of earth, is measured in ohm-metres (Ω m). Electrical profiling usually employs two current and two potential probes (Gaffney *et al.* 1991: 2). We used a Geoscan Research RM15 Resistance Meter in twin electrode probe formation. This array represents the most popular configuration used in British archaeology, usually undertaken with a 0.5 m separation between mobile probes (Gaffney *et al.* 1991; Clark 1996).

Features picked up in this manner can be close to the ground surface. A twin probe array of 0.5 m spacing will rarely recognise features below a depth of 0.75 m (Gaffney *et al.* 1991). More substantial features may

Fig. A2.2: Peter Harris, Ceri Bridgeford, and Patrick Thewlis conduct topographic survey using a Leica TotalStation at Ightham Mote in 2013. Photo by Timothy Sly.

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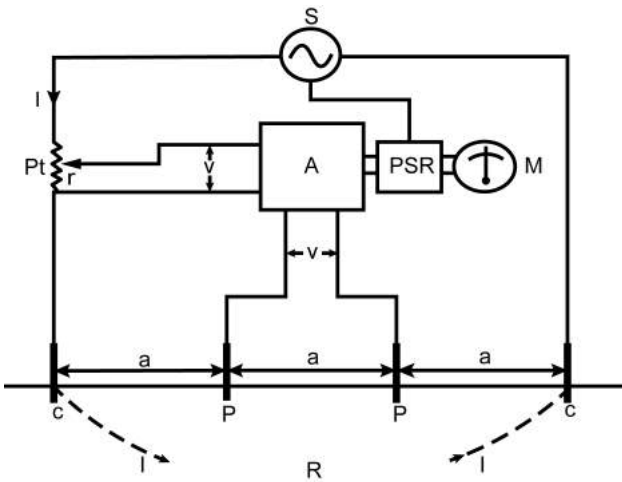
Fig. A2.3: The basic four probe circuit of a resistance meter (after Clark 1996: 27). Current (I) is produced at the AC source (S), passes through the potentiometer (Pt) and is introduced to the ground at electrodes C. The potential gradient is sampled between electrodes P, and the voltage (V) between them is applied to the amplifier (A) and displayed on the meter (M) along with the resistance (R). The phase-sensitive rectifier (PSR) reduces interference between the internal power sources and the signal being measured.

register up to a depth of 1 m. The earth resistance survey in this volume was done to a resolution of 1 or 0.1 Ω , with readings every metre or half metre. For this project, data were collected bi-directionally in 30 m grids at 0.5 m intervals with a transect spacing of 0.5 m.

In general, higher resistance features are interpreted as structures which have a limited moisture content, for example walls, mounds, voids, rubble filled pits, and paved or cobbled areas. Lower resistance anomalies usually represent buried ditches, foundation trenches, pits and gullies. A number of factors may affect interpretation of twin probe survey results, including the nature and depth of structures, soil type, terrain,

Fig. A2.4: Dominic Barker supervises earth resistance survey at Bodiam Castle in 2010. Photo by Timothy Sly.

and localised climatic conditions. Changes in the moisture content of the soil, as well as variations in temperature, can affect the form of anomalies present in earth resistance survey results. Non-archaeological features are also detected by resistance meters, which can complicate the interpretation of results.

Electrical Resistivity Tomography

Electrical Resistivity Tomography (ERT) measures the resistivity of the soil matrix and buried materials. It works in a similar manner to the RM15 Resistance Meter discussed above, except that it employs multiple probes. Readings are recorded along a single transect in successively deeper traverses, enabling the device to sense features that are much more deeply buried. The result is a profile view of soil resistivity at multiple depths along a single transect (Figs A2.5 & A2.6). The ERT survey at Bodiam employed an Allied Associates Tigre 64-probe system, with probes spaced at either 1, 2, or 3 m intervals depending on the particular context of the transect. This allowed us to measure resistivity to nearly 20 m below the ground surface along a linear distance of approximately 550 m.
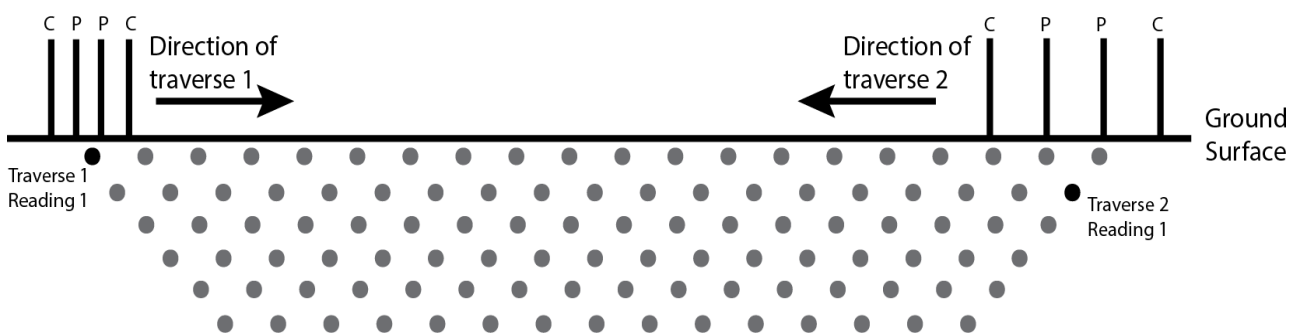
Fig. A2.5: Diagram of an Electrical Resistivity Tomography (ERT) survey. As in Fig. A2.3, the current is introduced to the ground at electrodes C and the voltage potential is measured at electrodes P. See also Fig. 4.6, this volume.

Fig. A2.7: The effect of the earth's magnetic field (straight lines) and the local magnetic field generated by buried material (curved lines), measured during magnetometer survey (after Clark 1996, fig. 50).

Fig. A2.6: ERT survey in progress at Bodiam in 2010. Photo by Matthew Johnson.

Magnetic Survey

Magnetic prospection of soils is based on the measurement of differences in magnitudes of the earth's magnetic field at points over a specific area. The iron content of a soil provides the principal basis for its magnetic properties. The presence of magnetite, maghemite and haematite iron oxides all affect the magnetic properties of soils. The overall strength of the earth's magnetic field is around 48,000 nanoTeslas (nT). Variations in the earth's magnetic field which are associated with archaeological features are relatively weak in comparison, but they can be detected using specific instruments (Gaffney *et al.* 1991; Fig. A2.7).

The work reported on in this volume used a dual sensor Bartington Instruments 601-2 fluxgate gradiometer (Fig. A2.8). The instrument measures changes in the Earth's magnetic field by comparing the strength of the magnetic field induced in two highly permeable nickel iron alloy cores held at a vertical separation of 0.5 m. The nickel iron cores are magnetised by the earth's magnetic field, together with an alternating field applied via a primary winding (Scollar 1990: 456). Due to the

fluxgate's directional method of functioning, a single fluxgate cannot be utilised on its own, as it cannot be held at a constant angle to the earth's magnetic field. Gradiometers therefore have two fluxgates positioned vertically to one another on a rigid staff. This reduces the effects of instrument orientation on readings. Fluxgate gradiometers are sensitive to 0.5 nT or below depending on the instrument. They can rarely detect features which are located deeper than 1 m below the surface of the ground.

Magnetometry is best at detecting metallic objects, as well as non-metallic features that have been exposed to high enough temperatures that molecular bonds begin to relax, allowing the magnetic moment of any ferrous content to realign to magnetic North. This includes bricks and other burnt features such as hearths and

Fig. A2.8: Eric Johnson and Meya Kellala conduct magnetometer survey in Dokes Field at Bodiam Castle in 2012. Photo by Kathryn A Catlin.
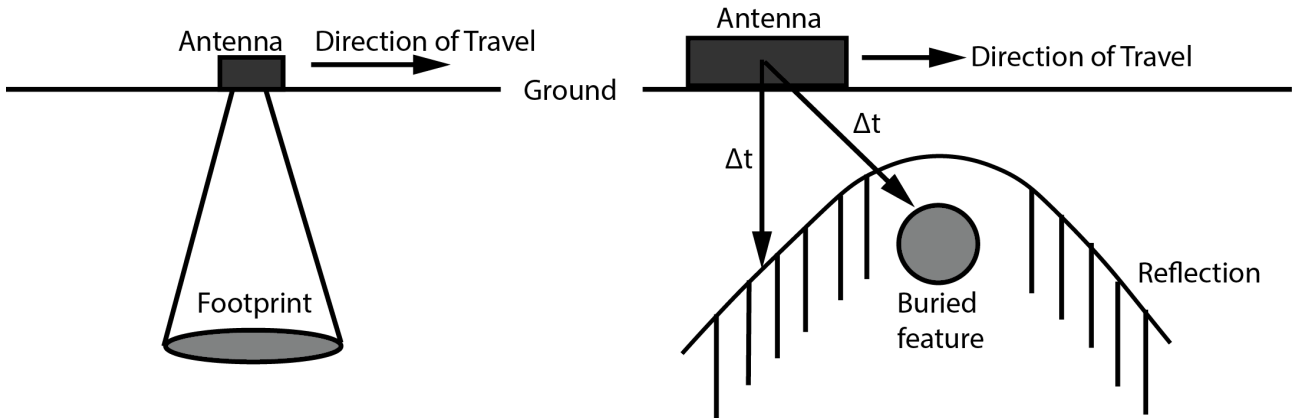
Fig. A2.9: Diagram showing the footprint of a GPR antenna as the radar wave propagates through the ground, and the reflection caused by a circular or oval body located below the surface of the ground as the antenna passes over it.

kilns. Gradiometers also detect the enhanced magnetic susceptibility of anthrosols (topsoils that have gained ferrous material via proximity to human habitation). Buried pits and ditches, where topsoil has infilled a trench dug into less magnetically susceptible subsoil, are therefore also readily detectable by magnetometry techniques under the proper conditions (Aspinall *et al.* 2008). Results are extremely dependent on the geology of the particular area, and whether the archaeological remains are derived from the same materials. Because gradiometers detect magnetic fields, they are particularly sensitive to iron and other metals in the survey area. It can be difficult to distinguish between archaeological materials, modern disturbances or refuse, and naturally occurring iron-rich deposits, such as the peat encountered during our Bodiam survey. Magnetometry data was collected bi-directionally in 30 m grids at 0.25 m intervals with a transect spacing of 0.5 m.

Magnetic Susceptibility Survey

Magnetic susceptibility surveys ('mag sus') were carried out with a Bartington Instruments MS-2 on a 10 m grid. Magnetic susceptibility meters create an alternating magnetic field at a point location and measure the resulting flux density, similar to a metal detector. Susceptibility surveys were intended to supplement the gradiometer data and train students in the technique.

Ground Penetrating Radar Survey

Ground Penetrating Radar (GPR) survey is based on the use of electromagnetic waves propagated through the soil to detect changes in density and composition, including the presence of buried objects. Interfaces between buried materials of different density and dielectric permittivity cause a portion

Fig. A2.10: Katie Fuller and Helena Glover conduct GPR survey in the Green Court at Knole in 2013 using a 500 MHz Sensors and Software Noggin Plus. Photo by Matthew Johnson.

Fig. A2.11: Ivan Yeh, Emily Pierce-Goldberg and Chen Xiaowen conduct GPR survey in 2012 at the Bodiam cricket field using a 200 MHz GSSI instrument. Photo by Kathryn A Catlin.

of the energy to reflect. Energy that reflects off of deeper buried reflectors will take more time to return to the instrument. The time between the generation of the radar wave at the antenna and the return of its reflection to the receiver is measured in nanoseconds (ns) and once the signal velocity is calculated this can be translated into depth (Fig. A2.9). GPR is therefore able to produce a three-dimensional model of buried objects and features of differing density from the soil matrix. Rocks, walls, pits, pathways, and buried solid objects are good targets for GPR prospection.

Lower frequency antennas have higher energy and can penetrate deeper into the ground, depending on soil conditions. A 500 MHz sensor can penetrate up to a few metres, depending on the soil conditions, while a 200 MHz sensor is better at detecting deeper materials and bedrock formations. GPR surveys primarily employed a 500 MHz Sensors & Software Noggin Plus with a SmartCart frame and console, along 0.5 m uni-directional transects (Fig. A2.10). The 2012 GPR survey on the Bodiam cricket field used a 200 MHz GSSI sensor, bi-directionally with 0.5 m transects (Fig. A2.11).

APPENDIX 3

FURTHER DETAILS OF ENVIRONMENTAL METHODS

Kathryn A. Catlin, Penny Copeland, Rob Scaife[1]

Chapter Five discusses the long-term environmental history at Bodiam, and Chapter Twelve discusses environment, ecology and human habitation more generally. The evidence discussed in Chapter Five came from a series of soil cores taken around the Bodiam landscape.

Once extracted and in the laboratory, cores can be analysed in various ways. They can be examined visually to look for particular kinds of sediment of other material. Different materials such as humic peat can be observed, or the traces of made-up ground or old land surfaces can be apparent. Any organic material such as peat or charcoal can be used for radiocarbon dating. Pollen can be extracted from the core by chemical treatment of soil samples, and the different species, types and proportions of pollen suggest what plant species were growing in the locality. Different species, of course, thrive in different conditions, so this information in turn can be used to infer different local conditions (wet, dry) or different climatic regimes (warm, cold).

Several sediment cores were extracted from the grounds at Bodiam Castle for stratigraphic and palynological analysis to reconstruct the changing environmental context of the Bodiam landscape through the Holocene. The results of the analysis are described in Chapter Five. On 8th May 2013, seven profiles were extracted by a University of Southampton team consisting of Dominic Barker, Penny Copeland and James Miles,

along with Victoria Stephenson of University College London. The cores were located within the castle (A1 & A2), in the fill of an adjacent pond (F), sediment underlying the moat bank (D), the car park (B) and the east yard (C1 & C2; see Fig. 5.1). Coring samples were obtained from A1, A2, B, C1, C2, and D using a Cobra two-stroke pneumatic power corer with 1 m tubes; the diameter of the core tapers from 8 to 40 mm, decreasing with depth. All Cobra samples except A1 employed a plastic sleeve to transport the section to the wet laboratory at the Department of Archaeology, University of Southampton for further description and analysis. The pond sample, site F, was obtained using a 0.5 m diameter Russian/Jowsey peat corer due to the very wet nature of the soils (Fig. 5.11), and these samples were chill stored in half sectioned plastic drain pipes prior to sediment description and sampling in the laboratory.

Two radiocarbon samples were dated by Beta Analytic Inc. We planned to investigate a further location (E) corresponding to the Roman road through Dokes Field, but due to time constraints, were unable to do so.

Sediment Analysis

A range of sediment types was recovered, including humic peat and sediment with clear potential for pollen analysis, palaeoenvironmental reconstruction, and radiocarbon dating. Made ground and old land surfaces were also observed, the latter also sampled for pollen analysis to provide a picture of the vegetation and possible land use on and very near the site. The

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1   This appendix was prepared by Kathryn A Catlin, from original text by Rob Scaife and Penny Copeland.

characteristics of these profiles are detailed in Tables 5.B-5.G, including colour descriptions as standard Munsell in natural light.

Pollen Analysis

Standard pollen extraction techniques were used on sub-samples of 2 ml volume (Moore & Webb 1978; Moore *et al.* 1991). A sum of 400-500 pollen grains, including dry land taxa plus extant marginal and aquatic taxa, fern spores and miscellaneous palynomorphs, were identified and counted for each sample level. Chemical preparation procedures were carried out in the Palaeoecology Laboratory of the School of Geography, University of Southampton and identification and counting was carried out using an Olympus biological microscope fitted with Leitz optics. Standard pollen diagrams (see Chapter Five) were constructed using Tilia and Tilia Graph.

Pollen percentages were calculated for the sum and sub-groups as follows:

Sum	=	% total dry land pollen (tdlp)
Marsh/aquatic herbs	=	% tdlp + sum of marsh/aquatics
Ferns	=	% tdlp + sum of ferns
Misc	=	% tdlp + sum of misc. taxa (Sphagnum moss, pre-Quaternary palynomorphs and other micro-fossils).

Alnus has been excluded from the pollen sum because of its high pollen productivity (and consequent abundance) and growth on or near the site, which tends to distort the percentage representation of other taxa within the pollen sum (Janssen 1969). Consequently, the percentages of alder have been incorporated within the fen/marsh group of which it is botanically a part. Because *Salix* may be associated with this fen carr taxon/habitat, it was also included in this calculation. Taxonomy, in general, follows that of Moore & Webb (1978) modified according to Bennett *et al.* (1994) for pollen types and Stace (1992) for plant descriptions.

Scientific and Common Names of Observed Taxa

Acer	Maple
Alisma plantago-aquatica	Water plantains
Alnus glutinosa	Alder
Asteraceae	Daisy (aster) family
A. Bidens	Beggarticks
A. Anthemis	Chamomile
A. Artemisia	Wormwood genus
Betula	Birch
Caltha palustris	Marsh marigold
Cannabis sativa	Hemp
Carpinus betulus	Hornbeam
Caryophyllaceae	Carnation family
C. cerastium	Chickweed
C. dianthus	Carnation genus
Centaurea	Knapweeds
Chenopodiaceae	Goosefoot family
Corylus avellana	Hazel
Cyperaceae	Sedges
Dryopteris	Wood fern
Erica	Heather/heath
Euonymous	Spindle
Fagus sylvatica	Beech
Frangula alnus	Alder buckthorn
Fraxinus	Ash
Hedera helix	Ivy
Ilex	Holly
Iris	Iris
Juglans regia	Walnut
Lactucoideae	Dandelion subfamily
Lysimachia	Loosestrife
Nymphaea alba	White water lily
Osmunda regalis	Royal fern
Pediastrum	Algae
Picea	Spruce
Pinus	Pine
Poaceae	Grasses
Polypodium vulgare	Polypody fern
Plantago lanceolata	Ribwort plantain
Pteridium aquilinum	Eagle fern (bracken)
Quercus	Oak
Ranunculaceae	Buttercup family
Rhamnus cathartica	Buckthorn
Secale cereal	Rye
Salix	Willow
Sinapus	Mustard
Sparganium	Bur-reed
Sphagnum	Peat moss
Succisa	Succisa
Tilia cordata	Lime (linden)
Typha angustifolia	Cattail/reed mace
Ulmus	Elm
Viburnum	Viburnum

Glossary

We have included here a variety of scientific, theoretical and technical specialist terms; a number of acronyms; and a few cases where an English term may not be familiar or have a different meaning to a North American audience, or vice versa. For specialist terms relating to topographical and geophysical survey, a layperson's account is given in Appendix Two.

Affordance: a relation between an object or environment and an organism that enhances the opportunity to perform an action, but does not directly determine it. For example, a doorknob affords twisting; heavy clay soil affords the construction of moats

Alluvium: a deposit made up of materials left by the action of flowing water

Anaerobic: lacking in oxygen

Anthropogenic: caused by human activity

Arable: of farming that involved ploughing, tilling, raising of crops

Archiepiscopal: belonging to the Archbishop

Ashlar: stone that is faced and squared

Assarting: the clearing of trees and bushes from land, in order to cultivate it

BCE: before the Common Era (also referred to as BC, Before Christ)

Berm: the strip of ground between the bottom of the curtain wall and the moat or ditch

BP: before present (often defined as 1950 CE)

Brickearth: a term used to describe superficial windblown deposits in southern England

Bronze Age: a period of prehistory characterised by the use of bronze implements, c. 2500 to 800 BCE

Buttery: a service room used for storing ale, beer and other liquour

Carr: waterlogged wooded terrain

CE: the Common Era (also referred to as AD, Anno Domini)

Cell: unit of a house or other building, often corresponding to bay and room divisions

Chamber: a room, though sometimes used to designate its upper floor counterpart: thus the 'hall chamber' can be the room over the hall

Chamfer: the planing away of the corner of the profile of arch, door, window or other recess. A 'chamfer-stop' is the carved end to a chamfer

Coppice: a tree is coppiced when its trunk is cut off near the base, so that young shoots grow quickly from the stump that remains

Corn: in British-English usage, wheat and oats

Cottage: though often used today to refer to smaller vernacular houses indiscriminately, the more precise term refers to the dwellings of those holding little or no land, usually labourers, often built and owned by the landlord from the 18th century onwards

Crenellation: battlement of merlons and embrasures. See also licence to crenellate

Cross-passage: the area between two opposed doors at the lower end of a medieval hall. Where the area is separated by a screen, it is called a 'screens passage'

Crown-post: a post resting on a tie supporting a collar purlin and collar, and often braced to these

Cupboard: either a table upon which items were placed, or similar to a sideboard

Dais: raised platform at the upper end of a hall

Demesne: part of the lord's estate; in the classical feudal model, a 'demesne farm' was worked using the labour services of peasants given as a form of rent, though this practice had largely died out in England by the later 14th century

Dendrochronology: dating by use of tree rings

Detrital: composed of loose fragments or grains that have been broken or worn away from rock

Dipole: a term used in magnetic survey to refer to a point location showing both strong positive and negative readings, usually indicating buried ferric (iron) material

Embrasure: opening

Empiricism: Popularly, the belief that the data will 'speak for themselves' without the need for intervening theories. In its more sophisticated form, as developed in 17th-century philosophy, empiricism rests on a conceptual division between 'things' or 'the real world' on the one hand, 'words' or 'concepts' on the other, and the prioritisation of the former

Episcopal: belonging to a Bishop

Evapotranspiration: the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants

Fen: a low, marshy area of land, liable to floods

Feudal: in this volume, used loosely of medieval society, in which ties of lordship and ownership of land were central to political power

Gentry: members of the elite though below the aristocracy, typically leaders of the local community

Gley: a sticky waterlogged soil lacking in oxygen

Global Positioning System (GPS): a satellite-based navigation system that uses triangulation of radio signals between four or more satellites and a user's GPS device to calculate the precise location of the device anywhere on Earth with a clear view of the sky. The most accurate GPS devices can determine position to within a centimetre

Gloriette: a term used in the context of medieval castles to refer to a building surrounded by water, set apart from the adjacent courtyard and landscape (as at Leeds in Kent, or Hesdin in France)

Grey literature: a colloquial term referring to reports, generally on small-scale excavations, survey, or other archaeological and historical research, for example in connection with conservation management plans, that has been 'written up' and archived but not fully published in the conventional sense. Grey literature is often commissioned by a public body such as the National Trust to a specific brief, and researched and written by freelance individuals or professional organisations such as Archaeology South-East (https://www.ucl. ac.uk/archaeologyse). In the UK, 'grey literature' is very often archived and freely available to download at the Archaeology Data Service (http://archaeologydataservice.ac.uk/). Increasingly, PhDs are also available to download in electronic form from university libraries

Ha-ha: a ditch with bank or fence constructed in such a way as to give an illusion of unfenced, open country; popular in the 18th/19th centuries

Holocene: the period from the end of the last Ice Age, c. 10,000 years BP

Horizon: a specialist term referring to a distinctive soil layer

Humus: the organic component of soil

Hydrology: the scientific study of water, particularly its flow in relation to land

Ideology: a set of overt or implicit beliefs or views of the world. According to Marxists, ideology serves to legitimate or mask the 'real' state of social relations

Indigenous: of a people inhabiting a region with which they have the earliest known historical connection, often alongside later immigrants; a term whose definition is much debated, and therefore often used with a capital I

Iron Age: in Britain, roughly c. 800 BCE to the start of the Roman period

Lacustrine: spring-fed

Laminated: created by pressing together thin layers of material

Leat: an artificial water channel

Licence to crenellate: a medieval document giving royal permission to fortify a place, which some have argued, at Bodiam and other sites, is largely honorific in nature

LiDAR: derived from Light Detection and Ranging. A survey technology that measures distance with a laser light, often from a drone or aircraft

Lime: In North American usage, linden

Lintel: a horizontal timber or stone over a door, fireplace or other opening

Livery: forms of dress or of badges, signifying allegiance to a feudal lord

Lynchets: earthen terraces in a hillside, often the remains of past cultivation

Machicolations: the projecting parapet of a battlement, enabling defenders to drop missiles or water on those below

Manor: the district over which a lord had domain (the manor house being the lord's residence, from which domain was exercised; see also demesne)

Maps:
Ordnance Survey (OS): maps prepared by the national mapping agency for Great Britain; first edition OS maps generally date to the 1800s
Tithe: maps prepared in the wake of the Tithe Commutation Act of 1836, for the purpose of replacing tithes with an allocation of land to the Church

Marl: rock or soil consisting of clay or lime

Merlon: the upright part of a battlemented parapet, between two openings or embrasures

Mesolithic: the Middle Stone Age, in Britain roughly c. 10,000 to c. 6,000 BP

Methodology: the techniques and methods used to collect and interpret archaeological data

Mortice: socket in a wall or piece of timber

Moulding: the carved profile of a timber or masonry feature

Mullion: an upright dividing a window into lights

Murder-hole: opening in the vaulted ceiling of a gate passageway, to use against attackers passing below, though can also be decorative

NanoTesla (nT): unit of measure of the strength of a magnetic field. A standard refrigerator magnet produces a field of about 0.005 Tesla, or 5 million nT. Variations in the earth's magnetic field due to archaeological features often measure only fractions of a nanoTesla

Neolithic: the New Stone Age, in Britain c. 4000 to c. 2500 BCE

Newel: of a circular staircase that winds round a central pillar or 'newel post'

Oast: a drying kiln, for example for hops, malt or tobacco

Oriel window: a projecting window, often found at the upper end of a hall

Over: on the floor above

Oxidised: combined chemically with oxygen

Pale: boundary, for example of a park

Palynology: the study of pollen grains

Parapet: a wall, usually battlemented in castles, protecting the wall-walk and any roof behind

Particularise: to explain or understand something in terms of its peculiar qualities

Pastoral: of farming centred on the raising of cattle and sheep

Peat: partially decayed vegetable matter, characteristic of bogs and other anaerobic and acidic environments

Peer: great lord or baron

Peripatetic: moving periodically from place to place (a term often used in the context of great medieval households)

Permittivity: the measure of resistance that is encountered when forming an electric field in a medium

Phenomenology: the study of human experience and consciousness in everyday life

Pig joint: a straight joint for a limited length, usually indicating a break in building and/or the work of two masons meeting

Polite: of architecture that is large in scale and national or international in scope and influence (contra vernacular)

Pollard: as with coppicing, the cutting-off of a tree trunk to encourage the growth of shoots from the stump, but pollarding is done at a sufficient height to stop animals grazing on the shoots

Post: any vertical timber forming part of the main frame

Postern: rear or secondary gate

Practice: A term closely linked to agency, associated with Bourdieu rather than Giddens, referring to everyday actions and their relationship to structure

Pragmatism: A philosophy originally developed by Charles Peirce and others proposing that the meaning of an idea or a proposition lies in its observable practical consequences

Puddled: lined, as with clay or chalk in the base and sides of a hole

Quaternary: most recent geological era, from 2.6 million years BP, subdivided into Pleistocene and Holocene

Quoin: dressed stone at the angle of a building

Radiocarbon dating (C14 dating): scientific means of determining the age of an organic object, based on analysis of the ratios of carbon-12 atoms to carbon-14 atoms

Range: a series of rooms in line in a building. Thus a rectangular building arranged around a courtyard has four ranges

Reify: to convert something abstract into a concrete thing; thus a moat could be argued to 'reify' social status

Rendering: covering, for example of plaster and/or of lime

Sacristy: a room in a church where a priest prepares for a service, and where vestments and other things used in worship are kept

Sheiling: a pasture used for the grazing of cattle in summer

Sill: the lower member of a window frame, or the rail at the foot of the frame

Silt: fine sand or clay carried by water and deposited in fine layers

Soffit: the underside of a lintel or arch

Solar: private chamber, usually at upper end of a hall

Spore: a tiny organism or single cell that is able to grow and is resistant to adverse environments

Stratigraphy: the analysis of the order and position of layers of archaeological remains

String course: a horizontal line of projecting ashlar

Taxonomy: the branch of science concerned with classification, especially of plants and animals

Tenement: a piece of land held by an owner

Tenure: form of landholding, of various forms and degrees of security (for example freehold and copyhold tenure)

Terminus post quem (TPQ): refers to a date on or after a given point: thus an archaeological layer with a single coin dating to 1400 CE has a TPQ of that date – the layer could have been deposited at that date, or any date subsequently

Thegn: Member of the Anglo-Saxon elite, below the level of Earl

Tie-beam or tie: the horizontal timber of a truss at wall-plate level connecting the tops of the posts

Toft: the farmyard around the medieval peasant house, often defined by a bank and ditch

Triangulated Irregular Network (TIN): A representation of a surface as a network of irregularly distributed, non-overlapping triangles. Generated from topographic data

Undershot: of a mill wheel, turned by water flowing under it

Vernacular: of regional, local traditions of art, architecture, and culture, for example ordinary farmhouses

Voussoir: a wedge-shaped stone used in building an arch

Water table: the level below which soil or rock is saturated with water

Weald: an area of Sussex and Kent characterised by heavy clay soil, areas of woodland, and dispersed settlement

Wealden: of a particular type of open-hall house with both upper and lower ends jettied to the front. The wall-plate over the jetties continues over the front of the unjettied hall, creating an overhang. 'Wealdens' are found in (but not confined to) the Weald of Kent and Sussex

Yeomen: a socially middling class of tenant farmers of reasonable security and wealth

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