

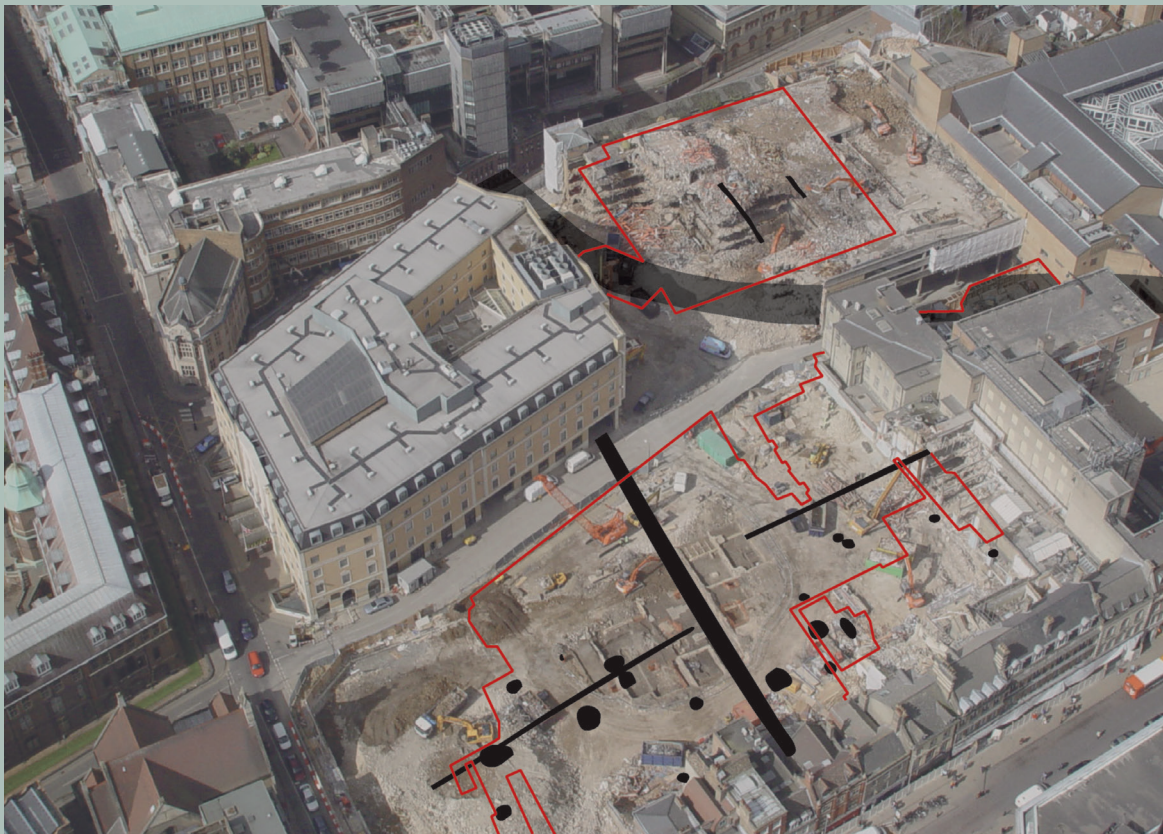


McDONALD INSTITUTE MONOGRAPHS

Medieval to modern suburban material culture and sequence at Grand Arcade, Cambridge

Archaeological investigations of an eleventh-
to twentieth-century suburb and town ditch

Craig Cessford and Alison Dickens



Cambridge Archaeological Unit Urban Archaeology Series
The Archaeology of Cambridge Volume 1

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By Craig Cessford and Alison Dickens

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Cambridge Archaeological Unit Urban Archaeology Series
The Archaeology of Cambridge Volume 1

Published by:

McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge, UK
CB2 3ER
(0)(1223) 339327
eaj31@cam.ac.uk
www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2019

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ISBN: 978-1-902937-95-3

Cover design by Dora Kemp, Andrew Hall and Ben Plumridge.
Typesetting and layout by Ben Plumridge.

On the cover: *Aerial view of Grand Arcade, facing northwest, with outlines of areas of investigation and various features shown. Compare to fig. 1.11E (photograph courtesy of Bovis Lend Lease Ltd.).* On the back cover: *View of the excavation of the main area at Grand Arcade, facing west.*

Edited for the Institute by James Barrett (*Series Editor*).

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Dedication and acknowledgements

This work is dedicated to the memory of two distinguished archaeologists with long standing Cambridge connections who influenced it in very different ways. Tony (Anthony) Paget Baggs (1934–2006) had a long career in architectural recording at the Royal Commission on Historical Monuments for England and the Victoria County History. Following his retirement in 1997 he continued working in a freelance capacity and undertook many projects for the Cambridge Archaeological Unit, including the work at Grand Arcade which he unfortunately did not live to complete. Tony was always generous with his time and immense knowledge, his presence was one of the most enjoyable aspects of the fieldwork at Grand Arcade. This book owes much to him and is undoubtedly the poorer through his demise. John Amyas Alexander (1922–2010) conducted numerous excavations in Britain, Africa and elsewhere. The investigations of the King's Ditch that he directed in 1969–71 only rank amongst his more minor achievements, but it was a great pleasure to be able to show him around our subsequent excavations over three decades later (see Fig. 5.93B). We must also mention two other contributors to this volume who are sadly no longer with us, Richard Darrah and Alan Vince. Richard possessed an unparalleled understanding of woodworking that has greatly enhanced this volume and will be greatly missed. Similarly Alan Vince provided unique specialist knowledge.

First and foremost this work is based upon the dedication, skill and commitment of the Grand Arcade and Christ's Lane excavation teams, although they are too numerous to list particular appreciation goes to Richard Newman and Letty ten Harkel. Alison Dickens managed both projects for the CAU and finds processing was overseen by Norma Challands and later Gladwys Monteil. Both projects were monitored by Andy Thomas, Principal Archaeologist, Land Use Planning, of the County Archaeology Office. The work

in the field also benefited greatly from the work of Rosemary Horrox on documentary sources and the prompt spot-dating of the pottery by David Hall. The main authorship of the volume broadly corresponds to the two principal author's responsibility, with Cessford dealing mainly with the below ground excavated remains and Dickens with the above ground standing buildings although a great deal of cross-over has occurred. The structure of the volume has benefited from input by Chris Evans and Sam Lucy, the latter of whom proof-read the volume, and we are also grateful for the comments of the two anonymous reviewers.

The graphics are primarily the work of Vicki Herring with oversight and input from Andrew Hall. Photographs are principally by Dave Webb, Craig Cessford and member of the excavation team. The timber drawings are largely based upon original drawings by Nigel Randall, with the exception of a number of illustrations supplied by Richard Darrah (Figs. 4.8C, 4.41C, 4.42C, 4.45D, 4.47D, 5.87D). Drawings of stone mouldings are based upon illustrations by Mark Samuel (Figs. 4.34A–H, 4.63C–G, 4.64, 5.11A–D, 5.11G, 5.26, 5.36, 6.15), whilst the leather drawings were informed by sketches by Quita Mould. Images from the digital model of the standing buildings owe much to the work of Marcus Abbott. A number of images are courtesy of the Cambridgeshire Collection, Cambridge Central Library (Figs. 1.10 lower image, 3.24, 5.59, 5.77C–D, 5.78A–B, 5.83, 6.3B, 6.14, 6.17D), and are reproduced thanks to the assistance of Chris Jakes. Aerial photographs of the Grand Arcade site (front cover and Fig. 1.4) are courtesy of Bovis Lend Lease Ltd. and the Cambridge University Collection of Aerial Photographs (Fig. 1.14). The leather jug (Fig. 5.6B) is copyright MOLA, Faith Vardy. Some animal bone photographs are by Lorrain Higbee (Fig. 3.12C, 3.14A–D, 3.25D–E, 4.14E, 4.26B, 4.50B, 4.69) and the fish bone photo (Fig. 4.27B) is by Jen Harland. The portrait of Barnett Leach III on a box lid (Fig. 7.3) is

courtesy of Ric Leach. The pottery from the Fitzwilliam Museum (Fig. 5.34A) although photographed by Craig Cessford is reproduced by permission of the Syndics of The Fitzwilliam Museum, Cambridge, and the pottery from his personal collection (Fig. 7.15) was photographed by Peter Stoivin. The images in Fig. 7.2 are courtesy of Charles French (A–D), Kevin Hayward (E–K) and Alan Vince (L–S). Emmanuel College bottles (Fig. 5.60A–B, 5.60E) are courtesy of Emmanuel College although drawn by Vicki Herring and access to College material was obtained with the assistance of Sarah Bendall, the curator of the Emmanuel College Douglas Finlay Museum of College Life. The 1629 survey of the King’s Ditch is courtesy of the Cambridge Antiquarian Society publication, but we have unfortunately been unable to trace the current owner of the plan (Fig. 3.23). Plans from college archives are reproduced by kind permission of the Master and Fellows of Christ’s College Cambridge (Fig. 6.17B), the Master and Fellows of Emmanuel College Cambridge (Figs. 5.58, 5.63B, 5.70C, 6.13A) and the Master and Fellows of Jesus College Cambridge (Figs. 5.19B–C, 5.79). The plan in Fig. 1.15 is based upon an original in the John Lewis Partnership Archive Collection and Fig. 5.84 (middle) and Fig. 5.88B derive from the same source. The x-rays that are reproduced were undertaken by York Archaeological Trust particularly Ian Panter, Jo Dillon of the Fitzwilliam Museum and English Heritage. Graphs and charts are largely based upon versions supplied by the relevant specialists. For the eBook version of the monograph, figures that incorporate Ordnance Survey data have been altered so they only incorporate Ordnance Survey OpenData products that are permitted under the Open Government Licence. The affected illustrations are Figs. 1.2, 3.1, 3.2, 3.27, 4.55, 4.61, 4.69, 4.70, 5.69, 6.1, 6.6, 6.19 and 6.20.

A number of college archivists responded helpfully to queries concerning documents, maps and other material: Geoffrey T Martin (Christ’s College), Amanda Goode (Emmanuel College), Madeleine Patston (Gonville & Caius College), Frances H. Willmoth (Jesus College), Malcolm Underwood (St John’s College) and John Pollard (Trinity Hall). The radiocarbon dating was undertaken by the Waikato Radiocarbon

Dating Laboratory with the assistance of Fiona Petchey and Alan Hogg. Access to documents and material was assisted by the staff of the Cambridge Records Office, the Cambridgeshire Collection and the Cambridge University Museum of Archaeology and Anthropology, particularly Anne Taylor, while Quinton Carrol arranged for access to archives and material held at the Cambridgeshire Archaeological Store and Julia Poole arranged for access to material held by the Fitzwilliam Museum. Mark Ashton kindly arranged access to St Andrew the Great. Additionally a number of individuals supplied helpful information and insight on a range of topics. These include Peter Addyman (the 1959 investigations), John Alexander (the 1969–71 investigations), Alasdair Brooks (Modern ceramics), Peter Carter (the Eel grig), Joanne Cooper of the Natural History Museum, Tring, (bird bone identification), Peter Kuniholm and Tomasz Wazny from the Malcolm and Carolyn Wiener Laboratory for Aegean and Near Eastern Dendrochronology, Cornell University (the Ottoman barrel), Gavin Lucas (Modern ceramics), Tim Murray (Modern material), Harvey Sheldon (the 1971 investigations). Peter Stovin (college ceramics), Chris Swaysland (the cattle burials), Robin Wood (the European Maple jug), Rachel Wroth (college servants). Conservation of various materials was undertaken by the Museum of London, English Heritage and the York Archaeological Trust.

The work at Grand Arcade would have been impossible without the generous support of John Chesters of Grosvenor Plc on behalf of the Grand Arcade Partnership and Doug Dawes from the principal contractor Bovis Lend Lease Ltd, who acted as archaeological liaison. The Grand Arcade excavations were funded by the Universities Superannuation Scheme and Grosvenor Developments Ltd. as joint funders under the auspices of the Grand Arcade Partnership. The Christ’s Lane excavations were funded by Land Securities Properties Ltd. (now Landsec Securities Group), and undertaken with the assistance of their agents SDC Construction. This publication has been principally funded by the Grand Arcade Partnership, with Land Securities Properties Ltd. funding the Christ’s Lane element.

Foreword

Martin Biddle

From 1956 to 1988 four hundred volunteers and a small band of professionals worked together to save evidence of the original nucleus of prehistoric and Romano-British Cambridge on Castle Hill before it was destroyed by modern development. This was a pioneering and remarkable effort, but with one single exception it was to be some time before any attempt was made to mount a similar programme on the main site of the medieval town on the opposite bank of the Cam.

The single exception was the work of Professor T. McKenny Hughes who between 1873 and 1915 recorded the remains of medieval Cambridge revealed by building operations. No attempt was made to follow his example in the hey-day of Victorian and Edwardian rebuilding or indeed down to the late 1950s, when it appeared that another period of reconstruction was about to begin and that 'the progress of modern development will destroy more and more of the archaeology of the town' Addyman & Biddle 1965, 76).

Some forty years later Peter Addyman and I did what we could mostly in term time 1958–61 on a few sites – Bradwell's Court, Corn Exchange Street, and Post Office Terrace, for example – and warned of coming problems (Addyman & Biddle 1965, especially p. 76):

In a few years the redevelopment of the largest single site ever to be rebuilt in the town in modern times – the Lion Yard – will destroy the archaeology of a large area within the King's Ditch. Its prior excavation on an adequate scale is imperative. The progress of modern development in Cambridge will destroy more and more of the archaeology of the town. The constant observation and systematic recording of this work is necessary if any adequate

picture of the development and topography of early medieval Cambridge is to be achieved. In very few English towns has this need been met, but the recording of medieval Oxford provides an example which Cambridge should follow.

The archaeology of Lion Yard was almost entirely lost and little else was done for the next quarter of a century. Medieval Cambridge was far from the interests of academic archaeology in Cambridge then or for decades to come and it was only with the coming into force of Planning Policy Guidance 16 in 1990 that things began rapidly to change. Much of this welcome new work was, however, done in central Cambridge, within the line of the King's Ditch.

The singular and wholly exceptional achievement of the present volume is that it represents what is probably the largest area of *suburban* development ever investigated in an English or to my knowledge European city:

- throughout time, from the beginnings of settlement to the present day,
- covering every kind of documentary, artefactual and environmental evidence,
- without social bias, from the most simple to the most elevated,
- and closely related in visual and recording to the actual patterns created and, most important, to the elements that will now survive into the future.

The innovative element is the way the archaeological evidence (excavation and standing buildings) is presented together with the evidence of the written sources and with historic images of every kind. And this is not done in the 'traditional' way of separate, usually sequential, sections devoted to each kind of evidence, but rather by the way in which the sources



Figure 0.1. *In the summer of 1959 the earliest feature excavated at Corn Exchange Street was a 13th-century 'ditch', the waterlogged fills of which contained wooden planks, posts, wicker-work, laths and two large circular blocks (Addyman and Biddle 1965, 77–8, 124). 46 years later in 2005 the feature was re-excavated, with the fill of 'clean blue clay' (Addyman and Biddle 1965, 77) and the trench excavated into it in 1959 clearly visible. While the larger exposure meant the feature could now be identified as a substantial pit, unfortunately the fills had almost entirely dried out and c. 2.0m of later sequence had been removed. For all the richness of the archaeology presented in this volume, an elegiac note for what was lost in the 'disastrous failure' of the Lion Yard development (Heighway 1972, 51) is ever present.*

are assembled so that the relevant parts of the evidence are woven together, phase by phase.

For the present writer, the whole approach of this remarkable volume is demonstrated by a single exciting photograph (Fig. 2.6). This looks across the excavation towards the standing buildings on

Hadstock Way and shows how the line of an excavated early 12th-century boundary ditch coincides precisely with a property division still in use today.

Martin Biddle
5 December 2018

Summary

Large-scale excavations undertaken by the Cambridge Archaeological Unit in 2005–6 at the Grand Arcade and Christ's Lane sites in Cambridge allowed extensive and intensive investigation of both the town ditch and two street blocks of a suburb lying outside it. The town ditch, known as the King's Ditch, was created in the eleventh or twelfth centuries and was then recut on a number of occasions with a surviving sequence extending until the mid-sixteenth century including a timber bridge, plus some later features. In the suburb dispersed occupation began in the mid-eleventh century with a planned layout following in the early twelfth century. Significant proportions of the backyard areas of 14 plots founded at this time were investigated and their development traced up to the present day, including a detailed programme of standing building recording plus intensive documentary and cartographic analysis. Substantial assemblages of a wide range of artefact types were recovered, including large quantities leather and timber preserved in waterlogged conditions. Major assemblages of pottery, animal bone and stone mouldings were analysed. The material includes a large number of substantial mid-eighteenth to early twentieth-century assemblages of pottery, glass, clay tobacco pipe and other materials that have been analysed in detail. There was also extensive environmen-

tal sampling, including pollen and insect analysis. As well as the scale of the assemblages there were a range of individually significant items including leather and wooden jugs and an imported Ottoman barrel from Greece. A considerable number of distinctive college related ceramic and glass items were also found.

The main feature types were pits, wells, post-holes, beamslots, gullies, animal burials, ovens and ditches. From the eighteenth century onwards there were increased levels of building activity, during the early nineteenth century in particular the area became much more heavily built up and became urban rather than suburban in character. The features of this phase were largely brick built and consisted of walls, floors, wells, cellars and soakaways. Of particular note is the fact that the depth of the development meant that the bases of all but the deepest features were investigated, uncovering the lower portions of features such as wells that are often left in situ by developer funded excavations.

Overall the work presents a detailed picture of the medieval town ditch on a scale that is previously unparalleled in Britain, one of the most comprehensive archaeological pictures of the development of the plots of a medieval and later suburb and treats eighteenth–twentieth-century material culture in a manner unparalleled in a British context.

Chapter 1

Introduction

Craig Cessford and Alison Dickens

'I still hold ... that the suburbs ought to be either glorified by romance and religion or else destroyed by fire from heaven, or even by fire-brands from the earth.'

The Coloured Lands (1938, 108)
by G.K. Chesterton (1874–1936)

At one level this is a book concerned with the excavation of a small portion of the boundary ditch of a particular medieval and later British town and part of a suburb that lay outside it. Whilst the sheer quantity and quality of archaeological remains presented are of inherent interest, this potentially relatively parochial and recent subject matter is of more global and current significance. Although this is in many respects a conventional publication, covering the largest archaeological investigations ever undertaken in Cambridge (Figs. 1.1–1.2), it can also be conceived of as not so much a study of what happened in the past *per se*, but how the present situation was reached. Although it represents the first major archaeological study of this urban centre, it is concerned principally with fringes, peripheries and boundaries and the University for which Cambridge is best known is an ever-present but off-stage entity. It is almost a cliché that just over half the world's current population live in urban areas (53 per cent in 2014), rising to 80 per cent for the United Kingdom. Humankind has in a sense become *Homo Urbanus* and this trend is likely to continue, with estimates that by 2050 70 per cent of the world's population will live in urban areas. This trope is, however, only true if a simplistic urban–rural binary division is adopted. The origins and early development of urbanism have long been a major concern of archaeologists and over the course of the twentieth century more recent urban centres have increasingly attracted significant archaeological attention. This book is concerned principally with a single excavation in a single urban centre, the town being Cambridge and the main time frame starting

in the mid/late eleventh century. As Cambridge is a still thriving urban centre, being granted city status in 1951 for 'exceptional' reasons, as it possessed the only historic British university not located in a city or royal burgh, the archaeological evidence described has many more links with present day urbanism than with the river valleys of Mesopotamia, India, China, and Egypt around 3000 BC where urbanism began. The contribution of this book is therefore one firmly rooted in the present (albeit a present that is in some senses 2005–6 rather than the date of publication) which treats all periods from the site's inception to the 'contemporary past' as equally worthy of archaeological investigation.

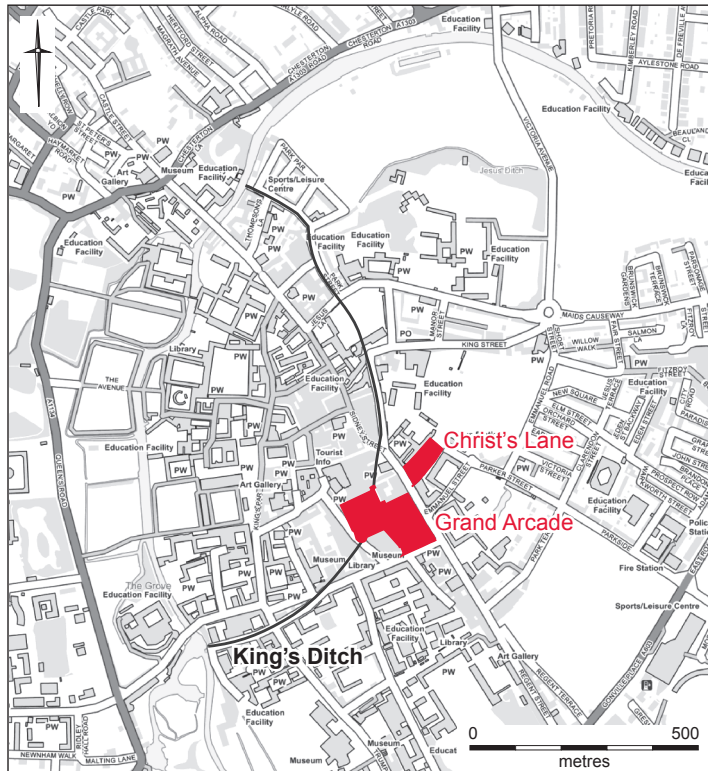
This book is not, however concerned with the urban core of Cambridge, and indeed the fact that the city is still a thriving urban centre means that this area will probably only ever be subject to piecemeal and small-scale investigations, remaining in a sense an off-stage metaphorical 'heart of darkness'. This is, however, in some respects a strength, as the urban–rural dichotomy has never been absolute, as suburbs have been an integral part of most urban centres including ancient Mesopotamian cities (van de Mieroop 1997, 68–72) and Classical Rome (Mandich 2015). Suburbs have formed one of the major foci of Romano-British archaeology in recent decades (Fulford & Holbrook 2015) and the same is true for medieval and later periods. Over 40 per cent of the population of the United Kingdom may be defined as living in suburbs (ITC 2004) and a truer value is almost certainly over 50 per cent. We might therefore modify the idea of *Homo Urbanus* to *Homo Suburbanus*. The modern suburb where such a high proportion of the population live, particularly with its focus upon commuting and association with rail and road infrastructure, is largely a product of the nineteenth and twentieth centuries, albeit one with earlier antecedents. It is these relatively recent suburbs that have formed the principal focus of academic 'suburban studies', with earlier suburbs and



Figure. 1.1. Location map, showing the principal sites discussed in this volume.

archaeology at best playing a peripheral introductory role (Vaughan 2015; see also Kruse & Sugrue 2006). Ironically, although there have been studies of such nineteenth and twentieth century Cambridge suburbs

(e.g. Bryan & Wise 2005), this book is only peripherally part of that particular narrative, as it was at precisely at this time that the area of Cambridge under consideration effectively ceased to be a suburb. It can therefore



1. Fisher Square watching brief, CAU 2007
 2. Corn Exchange Street watching brief, CAU 2007
 3. St. Andrew's Street watching brief, CAU 2007
 4. No. 21 St. Andrew's Street watching brief, CAU 2007
 5. Lion Yard, Alexander 1969-70
 6. Nos. 14-15 Corn Exchange Street, Addyman & Biddle 1959
 7. Masonic Hall, Hughes 1914
 8. Holiday Inn, Malim 1989
 9. McDonald Institute, CAU 1992
 10. Bird Bolt Hotel, Hughes 1905
 11. Emmanuel College, CAU 1993
 12. Bradwell's Court, Addyman & Biddle 1959 and Christ's Lane CAU 2006-7
 13. Post Office Terrace, Addyman & Biddle 1959
 14. St. Andrew the Great, CAU 1992
 15. Lion Yard, Partridge 1973
-
- A. Emmanuel College Kitchen, CAU 1992
 - B. Prudential buildings, Craster 1957
 - C. No. 62 St. Andrew's Street, Hughes 1880
 - D. No. 63-4 St. Andrew's Street, Hughes 1880
 - E. Christ's College Library extension, Hughes 1895
 - F. Downing Place, CAU 1998
 - G. Post Office, Hughes
 - H. Foster's Bank, Hughes 1891
 - I. Hunnybun's premises, Hughes
 - J. Bowling Green, Hughes
 - K. New Museums, Various
 - L. Cork and Child, Hughes
 - M. Falcon Yard, Hughes

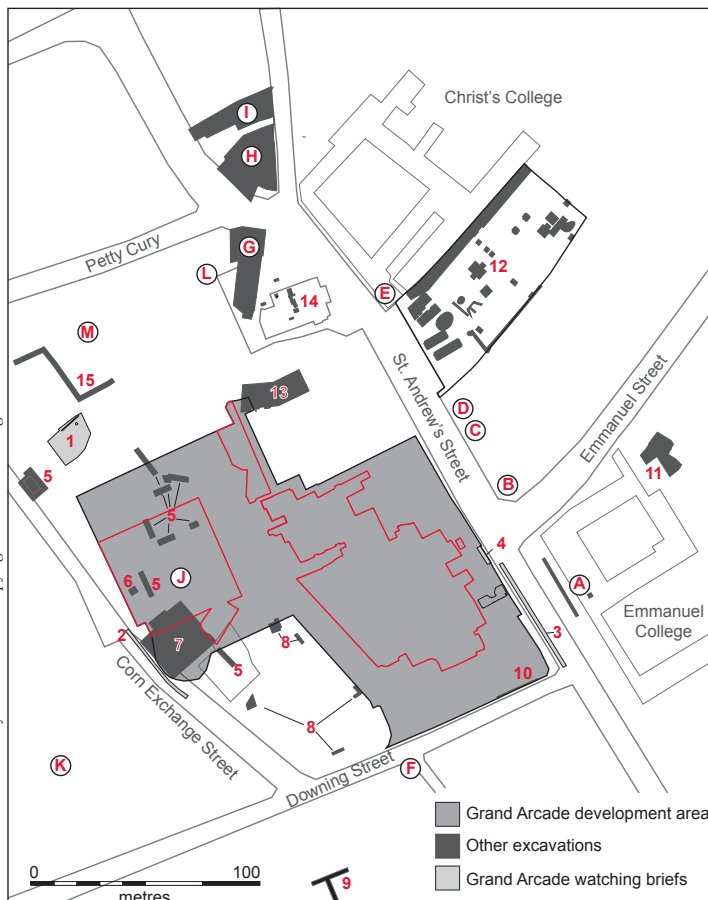


Figure 1.2. Location of Grand Arcade and Christ's Lane within Cambridge, plus King's Ditch (upper), and all archaeological investigations undertaken within the Grand Arcade street block and its immediate vicinity (lower). Major investigations are numbered, whilst minor investigations are lettered.

be conceived of as forming the medieval and later 'prehistory' of the Modern suburb.

Although concerned with one particular place – the Barnwell Gate suburb, one of five suburbs situated around the outskirts of medieval Cambridge – this book deals with a range of themes that are germane to the broader subject of suburbanism as a whole, as well as the medieval, post-medieval and modern archaeology of British towns. At the core of the work lie the results of a substantial open-area excavation that was undertaken by the Cambridge Archaeological Unit (CAU) in advance of the construction of the Grand Arcade shopping centre in 2005–6. Encompassing most of a street block in area, the size of this project permitted the detailed excavation of a large proportion of numerous contiguous suburban properties, as well as a considerable portion of the adjacent town boundary ditch. Important evidence pertaining to the suburb's long-term development, spanning its eleventh-century origins through to the early twenty-first century, was recovered.

Methodologically, the detailed treatment of all remains at the site, up to and including those of the twentieth century – allied with the excavation of the lowest portions of all but the very deepest features, the integration of the below-ground archaeology with extensive standing building recording (Fig. 1.3) and the widespread use of documentary and cartographic evidence – renders this a significant example of 'total archaeology'. Moreover, when combined with the results obtained from additional excavations undertaken within a second, nearby street block – the Christ's Lane development – as well as several other small-scale investigations situated in the immediate vicinity, the scale of this work is such that the Barnwell Gate suburb now represents one of the most intensively and extensively investigated suburbs of any British town. Similarly, the excavation of the town's boundary ditch also represents one of the largest and most detailed examples of its kind yet undertaken.

Lying on the southeastern outskirts of Cambridge, the Barnwell Gate suburb developed along one of the town's principal approach roads. In terms of both its size and composition it was relatively typical of contemporary suburbs located all across England. Unlike some examples, however, it did not serve a particular, specialized role and nor did it contain a significant industrial focus. Instead, its narrative is predominately one of stable, continuous and incrementally expanding domestic and commercial occupation. Although pronounced archaeological changes did occur, these primarily pertained to the dominant feature- and material-types in use altering, rather than anything more profound. Yet such a stable

pattern is in itself relatively atypical. The majority of English towns appear to have undergone much more pronounced cycles of growth and decline, which in certain instances – such as that of Stafford, for example – have been described as an 'extraordinary switchback ride of boom and bust' (Carver 2010, preface). Any broader understanding of the excavated sequence is thus inextricably bound up with that of the town itself.

Throughout the majority of the study-period, Cambridge was a relatively minor English county town. Initially established during Roman times as a small settlement located to the north of the River Cam (Alexander & Pullinger 1999), the town was subsequently to remain an 'economically viable backwater' until the mid-tenth century (Hines 1999, 136). Rapid expansion then followed, both physically and economically. Occupation soon extended to the south of the river, where, between the mid-tenth and early fourteenth centuries, a flourishing inland port developed. Numerous religious institutions were founded and the town quickly emerged as a dominant regional centre. In 1209, further stimulus was provided by the foundation of the University of Cambridge; an institution that was subsequently to become central to Cambridge's growing and changing economy. Topographically, the town gradually expanded until, at the beginning of the nineteenth century, the inclosure of the surrounding open fields facilitated a rapid escalation of its suburban growth.

Overall, the large-scale excavations that have been undertaken within the Barnwell Gate suburb, allied with the integrated methodological approach that was adopted and the extensive material assemblages that were recovered, present an opportunity to examine its growth and development in unparalleled detail. The results of this work are thus of local, national and international significance, and make an important contribution to the larger project of global historical archaeology.

Circumstances and background

A century ago the Reverend H.P. Stokes published a slim volume entitled *Outside the Barnwell Gate: another chapter in the intimate history of medieval Cambridge* (Stokes 1915). This work dealt with the medieval and post-medieval development of this suburb, based primarily on documentary and cartographic evidence but also incorporating the results of a small quantity of antiquarian fieldwork. In many respects, therefore, the present book can be regarded as an enlarged and updated reappraisal of Stokes' study. However, the excavations reported on here represent a quantum leap in terms of both the scale and intensity of archaeological

investigation in Cambridge. This can be demonstrated by a simple statistic. The town's medieval core – as defined by its encircling boundary ditch – occupied c. 37.7 ha; the Grand Arcade development alone is equivalent to c. four per cent of this area, or c. three per cent of the overall medieval town when its five suburbs are also included.

In retrospect, Stokes' volume was published at the end of what can now be regarded as the heyday of antiquarian investigation in Cambridge. Beginning around the middle of the nineteenth century, a flourishing – and, in some respects, ground-breaking – tradition of observation and artefact recovery was established. A diverse range of individuals were involved, many of whom were associated with the University, and much of their work was conducted during the extensive range of building projects that were then being undertaken. Foremost amongst these figures was Cambridge's Woodwardian Professor of Geology, Thomas McKenny Hughes (1832–1917), who was actively locally from c. 1873 to 1915. Not only did Hughes undertake a large number of investigations but he also published his results in detail within the Cambridge Antiquarian Society journal. These papers continue to form an important resource, particularly in relation to areas where little subsequent development has occurred.

For much of the succeeding eight decades, Cambridge saw little in the way of sustained archaeological investigation. One notable exception was the work of Dr John Alexander (1922–2010) – lecturer in the Department of Archaeology – who was active locally from 1956 to 1988. Alexander undertook a number of important excavations in the town's Castle Hill area, although these were primarily focused on Roman remains (Alexander & Pullinger 1999). To the south of the river, however, within Cambridge's medieval core, very little work took place. In a few isolated instances, some College fellows undertook investigations while construction work was being conducted at their respective institutions. These individuals included Glyn Daniel (1939), James Graham-Campbell (1968) and Peter Salway (1996). However, the only sustained investigations to have been undertaken within the core of Cambridge during this period were those conducted by two undergraduates – Peter Addyman and Martin Biddle – between 1958 and 1961 (Addyman & Biddle 1965; Biddle 2008), both of whom went on to become major figures in British urban archaeology.

Despite recognition in the early 1970s that Cambridge's archaeological provision was inadequate (Browne 1974, foreword; Heighway 1972, 48), not uncommon at this time, the 'Rescue' boom of the 1970s and 1980s largely bypassed the city. This is perhaps

ironic given the important roles that were played by Martin Biddle at Winchester (Biddle 2005; Biddle 2008; Collis 2011) and Peter Addyman at York (Addyman 1997; Addyman 2005). The dearth of fieldwork may have resulted in part from a lack of support by the Department of Archaeology, at least at a corporate level; it was certainly noted that the department had 'taken no official part in excavations' (Heighway 1972, 48). Yet there were also a number of additional factors. Firstly, the absence of significant Roman, Middle Saxon and Viking remains within the settlement to the south of the river limited potential interest, as these periods were then regarded as the most important for archaeological investigation. Secondly, the majority of attention was focused on larger towns at this time, partly because these were perceived of as more important (Dyer 2003) but also because, at a practical level, it was difficult to sustain the necessary volume of archaeological work in smaller urban centres.

By the early 1970s, around 30 per cent of Cambridge's medieval core had already been redeveloped or was in the process of being built on (Heighway 1972, 48, map 7). By the end of the 1980s this figure had probably exceeded 40 per cent, with perhaps a further 20 per cent rendered permanently inaccessible via the presence of numerous University and College-associated listed buildings. The situation altered somewhat in the 1990s, with the advent of PPG16 and the rise of developer-funded archaeology. Nevertheless, although these changes have led to a marked increase in the frequency of archaeological fieldwork, the majority of town-centre excavations in Cambridge have been limited to some extent by occurring within an urban environment that is still occupied and indeed thriving. Consequently, the majority of such investigations have been both small in scale and trench-based in nature. Despite this, however, a number of significant discoveries have been made and our knowledge of the town continues to increase.

Previous archaeological investigations

As the above account makes clear, the most recent phase of excavations did not occur within an archaeological vacuum and the Barnwell Gate suburb has been subject to investigation in one form or another since the mid-nineteenth century. The quantity of such work, and its scale in relation to the substantial size of the Grand Arcade development, is demonstrated graphically in Figure 1.2. Here, it is apparent that the site is surrounded by a scatter of earlier observations and additional, smaller-scale investigations.

Following on from a limited number of isolated antiquarian observations, made between c. 1840 and 1870, a much more sustained programme of

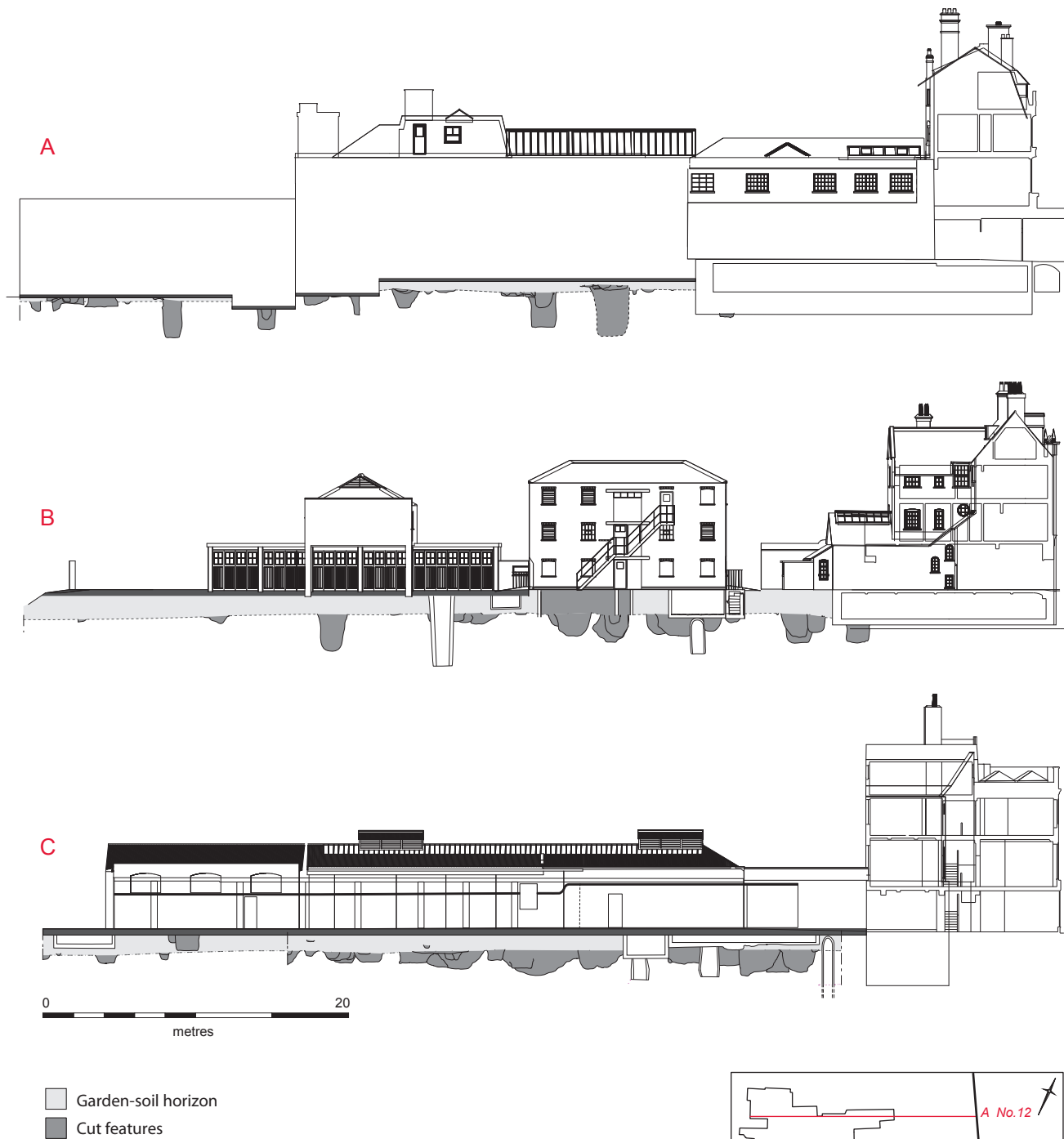


Figure 1.3. Composite sections from Grand Arcade, showing the extent of the complete archaeological sequence ‘from the rooftops down’, including both below-ground features and standing buildings: section (A) is oriented along the axis of Plot VIII, No. 12 St Andrew’s Street; section (B) is oriented along the axis of Plot XIII, No. 21 St Andrew’s Street; section (C) is oriented along the axis of Plot XVII, No. 25 St Andrew’s Street.

investigation was undertaken by Thomas McKenny Hughes from c. 1873 to 1915. Replicating the wider pattern that predominated all across Cambridge, Hughes observed works undertaken at 11 different sites in the vicinity (Fig. 1.2). The most significant of these comprised his investigations at the Birdbolt Inn (Hughes 1907a; Fig. 1.2, no. 10) and Masonic Hall (Hughes 1915a; Fig. 1.2, no. 7). Following Hughes, however, a prolonged hiatus occurred until a series of small-scale investigations were undertaken by Peter Addyman and Martin Biddle in 1958–61. Significant sites that were investigated during this latter period included the courtyard of 14–15 Corn Exchange Street, the Bradwell's Court shopping centre – subsequently to form the focus of the Christ's Lane development – and Post Office Terrace (Addyman & Biddle 1965, 77–82, 85–8; Fig. 1.2, nos. 6, 12, 13).

The succeeding three decades, c. 1960–90, were characterized by a significant dearth of archaeological investigations. This absence is rendered particularly significant because, despite earlier warnings (Addyman & Biddle 1965, 76–7; Hurst 1956, 50), the extensive Lion Yard shopping centre development was undertaken during the 1970s immediately to the north of Grand Arcade. Scant archaeological provision was allocated (Alexander 1970; Alexander 1972; Hurst 1970, 180; Fig. 1.2, nos. 5 and 15) and this development – which resulted in the destruction of an entire medieval street block – was subsequently described as a 'disastrous failure' (Heighway 1972, 51). Throughout the 1970s–1980s, moreover, the situation continued to decline; a series of developments took place without any form of archaeological intervention whatsoever. By the late 1980s things had begun to improve slightly. A small number of extremely limited investigations took place in advance of ongoing development (e.g. Malim 1990, 2; Fig. 1.2, no. 8).

Following the implementation of PPG16 in 1990, the situation altered markedly. Since that time a number of archaeological investigations have been undertaken in the area, principally by the CAU. These initially consisted of small-scale evaluations such as those conducted at St Andrew the Great (Miller 1992; Fig. 1.2, no. 14) and the McDonald Institute (Gdaniec 1992; Fig. 1.2, no. 9). A watching brief was also undertaken at Emmanuel College kitchens in 1992 (Dickens 1992; Fig. 1.2, A), plus an evaluation and subsequent excavation in the Master's forecourt of Emmanuel College in 1993 (Dickens 1993; Dickens 1994; Fig. 1.2, no. 11). More informal recording of works not covered by PPG16 also took place (White & Mortimer 1998; Fig. 1.2, F). Yet with the exception of evidence of a major fourteenth-century building Emmanuel College (Dickens 1999a), none of these investigations produced

particularly notable results. Cumulatively, however, a broader understanding of the archaeological deposits that were present in the area was constructed. Where pertinent, the results of these various investigations have been fully integrated into the following account.

Grand Arcade and related developments

The Grand Arcade development was initially proposed in 1997. A draft planning brief was issued in 1998 and subsequently approved by Cambridge City Council in 2000. From the outset, it was apparent that this 1.5 ha development area represented not only the largest site that had yet been made available for archaeological investigation in the town, but also – due to the difficulties inherent in securing a large contiguous area within a densely occupied, multi-tenanted urban landscape – the largest that was ever likely to occur. Moreover, the fact that the proposed site partially overlapped with the scene of the 'disastrous failure' of the Lion Yard development added to the sense that it represented a unique opportunity. The scale of the resultant excavation is well-demonstrated by an aerial photograph taken partway through (Fig. 1.4).

As part of the initial planning stage of the project a desk-based assessment was undertaken (Dickens 1997a), a brief covering archaeological excavations issued (Kaner 2000) and a statement of archaeological strategy produced (Dickens 2001b). Several phases of preliminary ground investigations were monitored at the site (Dickens 2001; White 1998), whilst two archaeology-specific test pit evaluations were undertaken (Dickens 1999c; Dickens & Cessford 2003). Practical considerations meant that the evaluation phase was restricted to the observation and/or excavation of 37 small holes, with a combined area of c. 27 sq. m. This represented a sample of the site of less than 0.2 per cent, much lower than the 2–5 per cent generally considered appropriate for an evaluation (Hey & Lacey 2001). Nonetheless, the test pits did confirm the survival of *in situ* archaeological deposits, although their nature and extent remained unclear. Following this phase the original desk-based assessment was revised and updated (Dickens 2003) and a written scheme of investigation produced (Dickens 2004).

The Grand Arcade development was jointly funded by the Universities Superannuation Scheme and Grosvenor Developments Ltd under the auspices of the Grand Arcade Partnership, which was formed in December 2002. The CAU was employed as a subcontractor by Grosvenor Developments Ltd in its role as Development and Project Manager. An archaeological presence was first established at the site in November 2004 and the excavations themselves were undertaken between 7 February 2005 and 11 July



Figure 1.4. Aerial view of Grand Arcade, facing southwest, taken in May 2005 partway through the ongoing archaeological investigations. The red line indicates the extent of the development area (photograph courtesy of Bovis Lend Lease Ltd.).

2006, with a short break between mid-December 2005 and early April 2006. The on-site team consisted of a director, two supervisors, a surveyor and up to 25 field archaeologists.

As is common on developer-funded urban excavations, the site was not made available for archaeological investigation as a single, cohesive entity. Instead, the initial scheme of investigation subdivided the site into five areas, which were in turn to be excavated in 10 relatively coherent blocks. In practice, however, the exigencies of the demolition, piling and construction processes meant that the excavation programme was subject to constant amendment and the site was actually partitioned into a much larger number of diminished and less coherent sub-blocks, numbering around 40 in total. For similar reasons, it was rarely possible to excavate the entirety of the below-ground

remains within a particular block in a single, unbroken sequence. Rather, the investigation of such an area typically involved between five and seven stages.

Prior to the commencement of any demolition works, all extant standing building remains were recorded. Depending on accessibility and survival, a second phase of building recording was sometimes required during the demolition process itself. Any archaeological features that were revealed by the buildings' removal were then subject to controlled excavation. Where present, the underlying garden-soil layer was also subject to test-pit investigation at this stage (Fig. 1.5). This latter material was then mechanically removed under close archaeological supervision, while any discrete remains that were encountered during this process were hand-excavated and recorded. The next stage comprised the excavation of those features

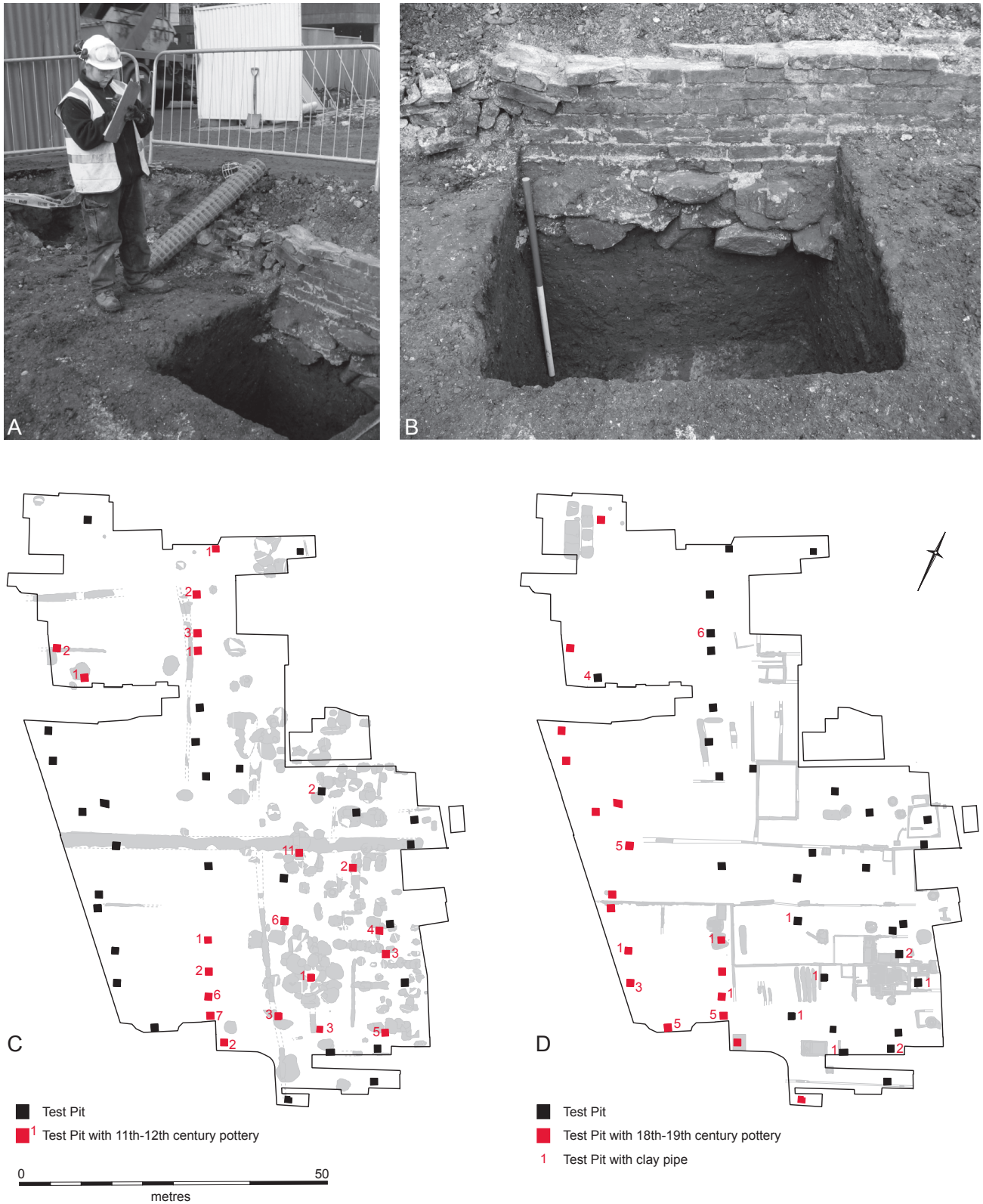


Figure 1.5. Investigating the 'garden soil': (A–B) photographs of Test Pit 4, facing northwest and north; (C) plan of test pits showing distribution of eleventh- to twelfth-century pottery; (D) plan of test pits showing distribution of clay tobacco pipe fragments and eighteenth- to nineteenth-century pottery.

that had been stratigraphically sealed beneath the garden-soil horizon. Finally, the lowest portions of deep features, such as wells, occasionally required an additional stage (or stages) of mechanical excavation in order to ensure continued safe access.

Overall, the Grand Arcade excavations were undertaken in a relatively standard manner and were recorded using a modified version of the Museum of London Archaeology Service single context system (Spence 1994). The principal innovation adopted during the recording process comprised the use of a – then relatively newly available – Leica TPS reflectorless theodolite to facilitate planning. This digital system allowed the numerous horizontal and vertical ‘fault lines’ that had been introduced by the multi-staged excavation process to be repaired during the post-excavation phase. The latter culminated in the production of grey reports covering both the excavations (Cessford 2007) and standing building recording (Baggs & Dickens 2005; Dickens & Baggs 2009). Finally, an updated project design was also produced (Dickens 2007). Much of the specialist analysis was completed during the period 2008–10 and although some updating has taken place this has not been universal.

Very similar methodologies were also adopted at the other sites that have been incorporated into this volume, most notably the Christ’s Lane development (Newman 2007). These sites will be discussed in greater detail in Chapter 6, where information pertaining to their background circumstances will also be presented.

Structure and organization

As stated above, the principal focus of this book comprises the long-term development of the Barnwell Gate suburb, alongside that of the adjacent town boundary – known historically as the King’s Ditch – which defined the perimeter of medieval and later Cambridge. To this end a variety of evidence is employed, a large proportion of which is archaeological in nature; first and foremost are the results from the excavations at Grand Arcade. A large number of archaeological features were encountered (Fig. 1.6), in addition to the extensive material assemblages and the wide variety of standing buildings (see Fig. 1.12). Consequently, a conventionally organized volume – with all results afforded equal weight and discussed at a consistently high level of detail – would be prohibitively lengthy and unwieldy.

To mitigate this issue, a bipartite approach has been adopted. The printed volume forms a self-contained, stand-alone work. Supplementing this, however, is a second digital-only volume archived in the University of Cambridge Repository (<https://www.repository.cam.ac.uk/>), and also available via the McDonald

Institute for Archaeological Research website. The latter includes – but is by no means restricted to – additional detailed feature-specific information, historical sources and artefactual and ecofactual data. It is intended that, whenever additional information is desired or a greater level of detail sought, the two mediums can be used in conjunction. To facilitate this, the same chapter-by-chapter organizational structure has been adopted in both instances. In order to restrict unwarranted repetition and maintain internal cohesion, direct cross-referencing between the two volumes has been kept to a minimum.

Whilst not necessarily ideal, it is felt that this arrangement preserves the integrity of a single volume account whilst also permitting a greater level of detail to be accessed as and when required. Moreover, by placing the additional material online, within the University of Cambridge’s institutional repository, it is rendered both accessible and searchable.

One of the main underlying principles of this publication, which extends to both the print-based and digital-only material, is *integration*. Wherever practicable the available archaeological, artefactual, environmental, architectural, historical and cartographic information has been combined to provide a multi-faceted, diachronic account (Taylor 1974a; Taylor 1974b). In the main, this material has been organized into a broadly chronological narrative. Firstly, Chapters 2–5 present the results that were obtained from the large-scale open-area excavation undertaken at Grand Arcade, beginning with the earliest evidence of pre-suburban activity at the site (Chapter 2). Next, the entire King’s Ditch sequence is explored, from its initial creation to its eventual infilling (Chapter 3). This feature is considered in isolation from the over-arching chronological framework due to its limited stratigraphic overlap with the adjacent suburb, allied with the desire to present a coherent, in-depth analysis of the ditch’s formation, development and usage.

Following this brief temporal disjunction, the narrative returns to a predominately chronological examination of the patterns of medieval (Chapter 4), post-medieval and modern (Chapter 5) development within the Grand Arcade street block. Similarly, the extensive artefactual, economic and environmental remains that relate to these periods are also incorporated on a chapter-by-chapter basis. In Chapter 6, the perspective shifts outwards to an examination of the Barnwell Gate suburb’s wider environs. Here, the results obtained from the nearby Christ’s Lane development are presented, alongside those from the surrounding East Fields and other Cambridge suburbs. Once again, this material is considered out of its position in the temporal sequence, in order to highlight any potential differences between the various sites. Finally, the volume concludes



Figure 1.6. All excavated discrete features at Grand Arcade, excluding standing buildings.

with a series of thematic essays that address some of the wider issues raised within the foregoing text (Chapter 7).

The last chapter is particularly important. It is the inherent tendency of a chronological framework to fracture the narrative into a series of period-specific sub-sections, each of which is effectively discussed in isolation. This in turn serves to marginalize, and

potentially even obfuscate, the impact of long-term processes of change and development as well as general themes (such as the nature of suburbanism) and particular issues (such as the impact of global trade). The thematic essays are thus intended to counteract this imbalance. Moreover, by engaging with issues of local, national and international scale, as well as addressing

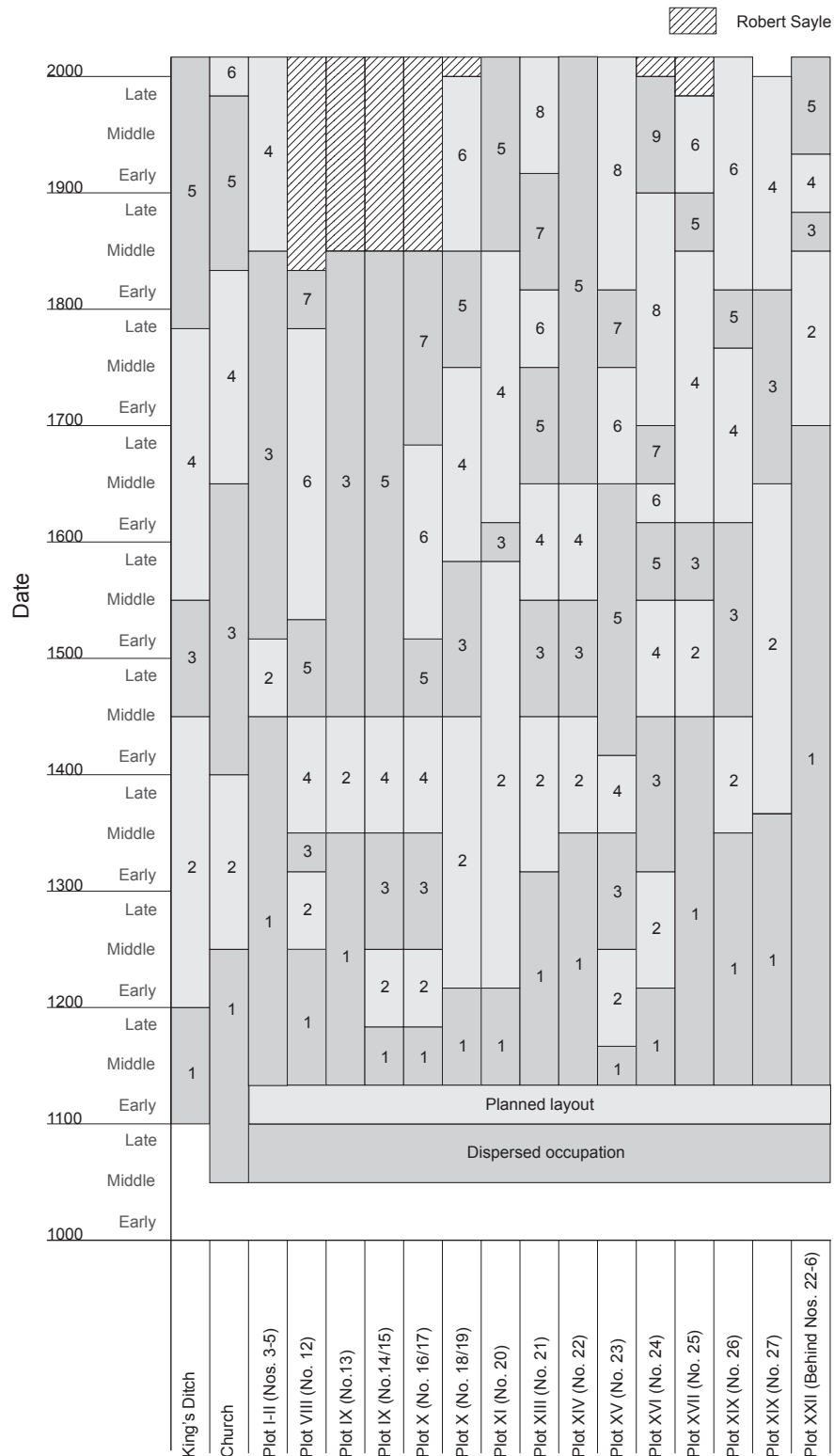


Figure 1.7. Diagrammatic representation of the phasing of the various plots contained within the Grand Arcade street block. Note the diverse trajectories that were followed by the majority of plots, with little evidence of cohesive, site-wide phasing. Individual phase numbers (1, 2, 3, etc.) are entirely plot-specific; they are based upon the particular archaeological sequences that were encountered. For plot locations see Fig. 5.2.

key topics such as the archaeology of modernity, they also serve to contextualize the volume's results in terms of a broader global historical standpoint.

Spatial dimensions are also of significance. Indeed, it would have been equally possible to organize this book according to a predominately spatial as opposed to temporal framework. There are several reasons why this approach has not been adopted. Firstly, up until the early seventeenth century the necessary quantity of documentary, cartographic and closely dated archaeological data is not available. Consequently, the segregation of the material into a series of discrete spatial elements would be an unwarranted imposition. After this date, however, such an approach is not only warranted but is – arguably, at least – desirable. Therefore, this spatial dimension, presented in the form of a series of discrete 'tenement narratives' (see Bowsher *et al.* 2007; Hall & Hunter-Mann 2002), an increasingly important facet of the discussion from that point onwards (Chapter 5). The second reason is that, throughout the majority of the suburb's existence, little or no evidence of classic site-wide phases or 'levels' can be identified.

This situation can be demonstrated graphically via a diagrammatic representation of each identified plot's individual developmental trajectory (Fig. 1.7). By presenting the data recovered from the Grand Arcade street block in this fashion, it becomes apparent that no significant changes occurred across all, or even the majority, of plots either at one single point in time or over a relatively discrete period. Nevertheless, a number of recognizable commonalities are apparent. These generally relate to 'thresholds', whereby particular feature- or material-types became increasingly common and thus effectively achieved the status of a site-wide choice. Such nebulous distinctions do not comprise a suitable basis for the organization of an entire volume, and have not therefore been adopted. Yet it is important that some form of mechanism be provided in order to allow the spatial aspects of the sequence to be adequately incorporated into the accounts presented below. To this end, a terminological distinction has been adopted between *plots*, which are primarily based upon documentary/cartographic evidence, and *properties*, which are primarily based upon archaeological evidence.

For ease of reference, the Grand Arcade street block has been subdivided into 23 plot-units (see Fig. 5.2, Plots I–XXIII; Table 1.1), each of which is based to some degree upon the surviving documentary evidence. Whilst some of these plots relate directly to discrete, self-contained entities, others pertain to larger property holdings owned by a single institution and a final category comprise less well-documented

Table 1.1. Archaeologically investigated plots within the Grand Arcade street block (* = includes part of Plot XII, located to west).

Plot	Equivalent street number (1870s onwards)	Area excavated (m ²)	Overall percentage excavated
I–II	Nos 3–5 St Andrew's Street	125	4
III	No. 6 St Andrew's Street	-	-
IV	No. 7 St Andrew's Street	-	-
V	No. 8 St Andrew's Street	-	-
VI	No. 9 St Andrew's Street	-	-
VII	Nos 10–11 St Andrew's Street	75	15
VIII	No. 12 St Andrew's Street	420	49
IX*	Nos 13–15 St Andrew's Street	560	33
X*	Nos 16–19 St Andrew's Street	990	45
XI*	No. 20 St Andrew's Street	610	59
XIII	No. 21 St Andrew's Street	530	50
XIV	No. 22 St Andrew's Street	180	72
XV	No. 23 St Andrew's Street	165	66
XVI	No. 24 St Andrew's Street	210	74
XVII	No. 25 St Andrew's Street	155	65
XVIII	No. 26 St Andrew's Street	145	60
XIX	Nos 27–29 St Andrew's Street	135	15
XX	No. 30 St Andrew's Street	-	-
XXI	Nos 13–14 Downing St	-	-
XXII	Behind Nos 22–26 St Andrew's Street	360	22
XXIII	North of St Andrew's Hill	-	-

units of uncertain attribution. It is important to note that the static numbering system employed here – and maintained consistently throughout the volume – does not necessarily imply the absolute stability of these plots' boundaries, or an unbroken continuity to their sequence. A system which took account of all known and potential changes would be so complex and unwieldy, running to several hundred spatio-temporal entities, as to be rendered unusable for all intents and purposes. Given the much more restricted scale of the archaeological investigations undertaken within the Christ's Lane street block, a less complex spatial framework has been adopted in Chapter 6.

It should also be noted that the relationship between the various different sources employed in this volume is often rather problematic; not because one is more or less correct than another, but because each operates on different spatial and temporal scales. At a spatial level, for example, the archaeological remains principally comprise individual features, such as pits and wells, whilst the documentary evidence relates



Figure 1.8. Photographs of the initial clearance of part of the main Grand Arcade area, facing southeast (upper) and excavations ongoing within part of the main Grand Arcade area, facing west (lower).

mainly to larger, grouped entities such as plots. While the archaeological features certainly fell within properties, the precise relationship between the two is often unclear, especially during the earlier medieval period.

At a temporal level documentary sources can often be dated very precisely, to a particular year or even day, whilst archaeological evidence is rarely more precise than half a century (although there are some notable

exceptions). Therefore, it is often impossible to correlate a particular feature to a documented property and even when this can be done, it may not be possible to link the feature to a specific, documentarily attested owner or

lessee. This issue also has broader implications, since historians are increasingly examining short, nuanced periods of a few years in duration; periods that can very rarely be distinguished in the archaeological record.



Figure 1.9. *Photograph of excavations ongoing within part of the main Grand Arcade area, facing southeast.*

Some doorways and windows to the past

This inset is effectively a ‘greatest hits’ medley of one of the plots excavated at Grand Arcade. In urban archaeology sequence is all, although if life and history are just ‘one damn thing after another’ urban archaeology is frequently lots of things happening at the same time, or at least with overlapping temporalities. Although sequence is crucial, this need not constitute a simplistic linear narrative, or narratives. Indeed it is often the resonances – be they temporal, spatial, social, economic etc. – of the sequence that are most informative. Archaeology is often defined as the study of the material remains of the past, but it also deals with the contemporary and the future, especially if the ‘archaeological present’ in this context is defined as 2005–6 when the Grand Arcade excavations took place.

Some of the frontage buildings on St Andrew’s Street have been retained, one of which is No. 21 (Plot XIII), which since it re-opened in 2009 has housed Chocolat Chocolat (Fig. 1.10). The website for the business notes states:

Cambridge has one of the oldest universities in the world and is a city full of tradition, within a few short steps you can peak into the glorious spires of King’s, the quadrangles of Christ’s College, Trinity and many more each steeped in over 800 years of tradition. Voted Cambridge’s favourite chocolate shop Chocolat Chocolat is found in [the] historic centre of the city opposite Emmanuel College and just around the corner from Downing College in a nineteenth century building. Since it opened in 2009 Chocolat Chocolat can’t claim to have the same long history as the rest of the city, but the shop and its range of luxury chocolates are steeped in the traditions of the independent chocolatier.

(<http://www.chocolatchocolat.co.uk/about/>
accessed 7 April 2016)

Although the Chocolat Chocolat website refers to the heritage and tradition of Cambridge, it is the grand narrative of the University rather than the particular story of the property that it occupies. Indeed the one particular fact it mentions, that the building is nineteenth-century, is incorrect. The evidence in this volume demonstrates that this property, like the others investigated, possesses a tradition that exceeds the 800 years of the University.

The current building was constructed c. 1912–13 and is in the Queen Anne revival style, which was popular c. 1875–1920 but harks back to the English Baroque architectural style of approximately the

reign of Queen Anne (1702–14) (Fig. 1.10). Also prominently displayed is a stone sign that reads EMMANUEL/THE CHALICE, depicting the college coat of arms above a chalice (see Fig 5.77B). Emmanuel College acquired the property at the time of its foundation in 1584, and the property was the Chalice Inn by 1578 and until 1616/37. By the early twentieth century the plot had not been known as the Chalice for over 250 years. When the current building was constructed the history of the Barnwell Gate suburb was being assiduously researched by the Reverend H.P. Stokes (1915) and in 1910–12 one of the occupants was the Reverend Fredrick George Walker (c. 1858–1936), secretary to the Cambridge Antiquarian Society. This suggests that the sign is a self-consciously antiquarian statement, which may have been inspired by Walker who excavated at Godmanchester and elsewhere in Cambridgeshire before becoming organizing secretary and editor of the Egypt Exploration Society in 1913. Whilst living at the premises Walker donated a post-medieval iron key with a cusped bow, piped stem and flat ‘S’-shaped web ‘found in yard, at the back of Flack and Judge, St Andrew’s Street’ to the Cambridge Museum of Archaeology in 1907.

When the property stopped being the Chalice in c. 1616/37 the property was occupied by a sequence of chandlers, grocers and wine merchants for c. 370–90 years until 2005, with a remarkable degree of retailing continuity spanning around a dozen generations of occupants and which effectively still continues today. While many of these occupants have left little discernible archaeological trace of their presence, the five sets of initials linked to the household of the grocer Edward Jay that mark Standing Building 70 constructed in 1845 communicate particularly eloquently of a moment in time (see Figs. 5.47–5.50). The best evidence relates to the Headley family of tallow chandlers and grocers, who resided there for around 90 years c. 1723–1815 and who can be linked to two assemblages that speak vividly of their domestic material culture (*Pit 57* c. 1760–80 and *Soakaway 2* c. 1813–23; see Figs. 5.27 and 5.46). These contain many intriguing items, such as a soup bowl from Trinity College from *Soakaway 2* (see Fig. 5.46E) when there is no evidence for a connection to that college and at a time when soup had to be ordered as an extra. The Headley family were also probably responsible for the construction of *Well 45* in the 1720s. This had a baseplate of Norwegian Scots pine felled after 1714

and a lining of reused stone that included blocks from two domestic windows of c. 1570–1640 (see Figs. 5.24–5.26). In all likelihood these windows had previously graced the frontage building of the property, but one itself incorporated reused stone from a window of c. 1200–70. One potential origin for this stone is a window of the Dominican Friary founded c. 1221–38, which later became the site of Emmanuel College.

The period when the property was the Chalice Inn c. 1578–1616/37 is archaeologically attested most vividly by the construction and later backfilling of *Cesspit 16*, probably linked to the commencement and cessation of the property being an inn (see Figs. 4.37B, 4.43 and 5.5–5.6). The discarded material, which is likely to derive from the inn, includes some elements of timber-framing that were being removed from a building and some unused poor-quality small wooden pegs, intended to be used in a door or window. More personal items include an exceptional near-complete moulded leather drinking vessel (see Figs. 4.37B and 5.6B), wooden spoons (see Fig. 5.5G–H), a bone apple or cheese scoop, leather shoes (see Fig. 5.6A) and parts of some wooden boxes or drawers (see Fig. 5.5A–E), whilst amongst the waterlogged plant remains were seeds of cucumber and grains-of-paradise. The presence of the latter of these, a West African member of the ginger family used as a spice, provides indirect testimony to the rise of the Second Atlantic slave trade in the 1620s.

Prior to the mid-sixteenth century documentary evidence directly relating to this property is lacking and all that survive are a few passing references in leases of adjacent properties. We are therefore almost wholly reliant on the archaeological evidence, which suggests three phases of occupation spanning the mid-fifteenth–mid-sixteenth, early fourteenth–mid-fifteenth and mid-twelfth–early fourteenth centuries. Continuing our progression backwards through time, the defining feature of the mid-fifteenth–mid-sixteenth century phase is cask-lined *Well 39* (see Fig. 4.35), but perhaps the most striking elements are two large water filled features *WFF 14–15* both of which had upright ladders left in them when they were backfilled (see Figs. 4.46 and 4.48). Such abandonment of ladders is unparalleled in Cambridge and extremely rare nationally. The preceding mid-fourteenth–mid-fifteenth century is defined by wattle-lined *Well 29* and also has two large water filled features *WFF 6–7*, possibly used for soaking cattle horns or retting flax (see

Fig. 4.18). Probably associated with this phase, although it could be earlier, was *Pit 22*. This was just one of many such pits dug to extract gravel and is typical in its form and size. When it was backfilled 3400 bones – but very little other material – were dumped in it. This rapidly deposited animal bone represents c. 700kg of meat or c. 2,550 person days of consumption, suggesting some kind of major feasting event at a level much greater than a single household. The earliest mid-twelfth–early fourteenth-century main occupational phase also has a wattle-lined well (*Well 13*), plus *Cesspit 10* – which lay within a timber building – and *Cesspit 11*. The mixed composition of the wood used to construct the two wattle-lined wells, with both utilizing the dominant willow but with significant quantities of ash (*Well 13*) and hazel (*Well 29*), suggests that it was acquired non-commercially as ‘cut-it-yourself’ wood. This potentially relates to the fact that woodland was relatively easily accessible from a suburban locale.

Although the mid-twelfth century marks the beginning of the main suburban sequence, the northern boundary of this plot was defined by a slightly earlier *Ditch 1*. *Ditch 1* was the most significant element of the early twelfth-century planned layout and its location still marked a boundary until the early twenty-first century (see Fig. 2.6). Additionally from the mid/late eleventh century this area had been occupied with evidence for a well (*Well 1*), cesspit (*Cesspit 1*) and timber building (*Building 1*) (see Fig. 2.3). *Cesspit 1* in particular produced some semi-complete pottery vessels, plus timber boards probably from a building. These boards come from an oak tree felled in 1029, which began to grow in 802 taking us back to the Middle Saxon period before the conquest of the area by the Kingdom of Wessex (917) and the Danelaw (875–917), to a period when the area was on the boundary between the kingdoms of Mercia and East Anglia. In the early ninth century there is no evidence of an urban settlement at Cambridge, or even that it fulfilled any central place functions. What little we know of the period suggests scattered rural settlements, plus a ford across the river Cam and an abandoned Roman ‘city’ or ‘camp’ still visible because of its fourth-century stone walls. Finally, in archaeological terms, what would later be this plot was crossed by a Middle Iron Age (350–50 BC) gully (see Fig. 2.1). By this point any meaningful connection has of course been lost, as demonstrated by the radically different alignment of this feature.



Ignoring the Middle Iron Age gully and the Middle Saxon oak tree, as preludes that relate to 'space' rather than meaningful 'place', the true beginning of the sequence dates to the mid/late eleventh century or the mid-twelfth century depending upon definition. This 850–950 year sequence probably represents 30–35 familial generations. Whilst many fundamental aspects of human existence have remained effectively unchanged during this period, a staggering amount of social, economic, political, technological and other change has taken place. Archaeologically this is expressed in many ways, two obvious examples due to their archaeological visibility being ceramics and water supply. In terms of ceramics, the backfilling of *Cesspit 1* in the early twelfth century contained four unglazed Thetford-type ware and St Neots type-ware jars and bowls, and it is possible that these represent a significant proportion of the pottery owned by one household (see Fig. 2.3A–D). In contrast when material was deposited in *Pit 57* in c. 1760–80 by the Headley family, the 18 items would only have represented a small proportion of ceramics that they owned (see Fig. 5.27). Although many of the ceramics were manufactured in England there were vessels from Westerwald in Germany and China (see Figs. 5.27H–I). These vessels indicate the consumption of global products, including tea from China and coffee from Central or South America, whilst a clay pipe (see Fig. 5.27K) demonstrates the smoking of tobacco from North America. The Headley family probably sold all these products from their grocery shop – several of which were slave grown products and can therefore be linked albeit indirectly to that phenomenon as can the earlier grains-of-paradise. Whilst there is no direct evidence for the drinking of chocolate it is likely that they also sold this; other contemporary assemblages from Cambridge include chocolate cups (Cessford *et. al.* 2017, fig. 20), providing a link to the current occupants Chocolat Chocolat. Even the relatively utilitarian chamberpot from Westerwald provides

a counterpoint to the sanitary conditions associated with *Cesspit 1*, in which the early twelfth-century pottery was deposited. The exoticism of the global should not, however, obscure the local and some of the pottery deposited in c. 1760–80 was produced in Ely, which is closer to Cambridge than the likely sources for the twelfth-century Thetford-type and St Neots-type wares. Additionally the North American tobacco was smoked in a pipe produced by Samuel Wilkinson at 11 Sidney Street, less than five minutes' walk away.

Water is one of the most fundamental human necessities and wells are amongst the most visible archaeological features, creating a potent interpretative combination. The earliest occupants obtained water from a series of wattle-lined wells located in the middle of the plot for around 300 years (*Wells 1, 13, 29*; see Fig. 2.3G). In the mid-fifteenth century they switched to a cask-lined well (*Well 39*; see Fig. 4.35), which in the mid-sixteenth century was apparently replaced by a well of unknown type located at the rear of the property. In the 1720s a stone-lined well was constructed at the front of the property (*Well 45*; see Figs. 5.24–5.26). In 1845 this well was supplemented by two brick-lined wells; one was located in the middle of the property (*Well 52*; see Fig. 5.49), while the other was sealed under a warehouse (*Well 53*). Both supplied water to pumps via lead pipes rather than being directly accessed via buckets. Sometime between 1862 and 1880 the mid-sixteenth-century stone-lined well was backfilled; this probably corresponds with the property being connected to the mains water supply. Other wells continued in use, however, and there is even evidence that a further brick-lined well was constructed inside a building at the rear of the property in 1885 (*Well M1*). The brick-lined wells eventually went out of use, for example *Well 53* was backfilled c. 1908–26, but it was only in the 1970s that water was obtained solely via mains supply. Whilst the changes in well linings from wattle to stone to brick are undoubtedly significant material transitions, the inhabitants of the property still essentially obtained their water from a single well. It was really only in the 1840s, when the number of wells rose to three and water was obtained from pumps, and then in the 1860s or 1870s when mains water was provided that fundamental change occurred.

It is something of a cliché to view archaeology as a metaphorical doorway or window to the past,

Figure 1.10. Past (early twentieth century), present (2005) and future (2016) frontages of Plot XIII (No. 21 St Andrew's Street), plus Harris matrix-style depiction of water supply and general timeline (lower image courtesy of the Cambridgeshire Collection, Cambridge Central Library).

yet it is perhaps acceptable in the case of Grand Arcade, as buildings such as No. 21 still possess historic doorways and windows and copious evidence for older stone and timber doorways and windows was incorporated into the linings of various features. The property that ultimately became No. 21 has probably had dozens of doorways and windows that numerous generations of occupants have walked and looked through. A few still survive *in situ* and a few more have left distinctive archaeological traces, but most have disappeared without trace. In contrast some of the doorways and

windows that were recovered through excavation never actually fulfilled their primary function at the site. Similarly this whistle-stop highlights tour of the past, present and future of one of the investigated properties at Grand Arcade has included a range of themes central to the whole book, which are based on a variety of partial types of evidence. These include the nature of suburban and property tail archaeology, change in a particular locale over a period approaching a millennium, modernity, the local and the global and connections to the Colleges of the University.

Finally, some mention should be made of the terminology that is employed within the following account. In general, the archaeological remains are discussed in terms of features as opposed to contexts. Although contexts were utilized as the primary units during the initial recording process, they often proved to be less meaningful interpretively; hence, such labels have only been retained where they have been thought particularly significant. Arbitrary feature numbers were assigned during the excavation and

post-excavation phases. For publication purposes, these have largely been renumbered into individual sequences based instead on feature-type, using a number of abbreviations and acronyms (Table 1.2). As far as possible, the different numbering sequences have been organized chronologically by period and then spatially from north to south. Features that were previously identified during earlier investigations are denoted by a site-specific prefix (Table 1.2).

Table 1.2. Table of concordance, detailing the abbreviations and acronyms used and the contexts in which they appear.

Abbreviation	Meaning	Context
AB	Addyman & Biddle's 1959 excavations	All contexts
ADP	Animal Disposal Pit	Plans only
AL	Alexander's 1969–71 excavations	All contexts
B	Building	Plans only
C	Cesspit	Plans only
CAU	Cambridge Archaeological Unit	All contexts
Ce	Cellar	Plans only
D	Ditch	Plans only
E	Elite	Tables only
EC	Emmanuel College	Tables only
F	Flesh side of leather	Figures only
G	Grain side of leather	Figures only
M	Malim's 1989 excavations	All contexts
MNBU	Minimum Number of Butchery Units	All contexts
MNI	Minimum Number of Individuals or Items	All contexts
MSW	Mean Sherd Weight	All contexts
NISP	Number of specimens Identified to SPecies	All contexts

Abbreviation	Meaning	Context
NS	Not Studied	Table only
O	Oven	Plans only
PB	Planting Bed	All contexts
PF	Percolation Fill	Tables only
PH	Planting Hole	All contexts
POSAC	Parts Of Skeleton Always Counted	Tables only
R	Rural	Tables only
RF	Redundant Feature	Tables only
S	Surface	Plans only
SB	Standing Building	Plans only
So	Soakaway	Plans only
SP	Specialized Pit	All contexts
St.And.St	St Andrew's Street	Tables only
Su	Suburban	Tables only
U	Urban	Tables only
VSA	Vessels in Studied Assemblages	Text only
W	Well	Plans only
Wa	Wall	Plans only
WFF	Water-Filled Feature	All contexts

Site sequence

The predominately chronological framework that has been adopted to present the archaeological results in this volume conveys a number of significant strengths. Yet it also serves to fracture the overall sequence into a series of discrete, period-specific chapters. Whilst this has a relatively limited impact on the more minor sites that are discussed – as these were often fragmented in turn by the limited, piecemeal nature of their investigation – it is a particular drawback in relation to the large, open-area excavation that was conducted at Grand Arcade. Here, an intimate and nuanced view of a substantial proportion of a suburban street block has been obtained. Therefore, the opportunity will be taken to present a brief synopsis of the principal phases of activity at this site prior to their detailed, chapter-by-chapter analysis. The following account is centred on a series of simplified, schematic plans that outline the distribution of the most significant features related to each respective phase (Fig. 1.11).

In the first instance – following on from scattered evidence of occasional, non-domestic activity during the later prehistoric to early medieval periods (Fig. 1.11A) – an initial mid–late eleventh-century pattern of dispersed occupation was present (Fig. 1.11B; Chapter 2). This was succeeded during the early twelfth century by a planned initiative consisting of a large-scale imposed layout (Fig. 1.11C). At this time, a number of rectilinear plots were established, aligned perpendicular to the main Hadstock Way frontage, which comprised part of a newly emergent ribbon development situated on the outskirts of the town (Chapter 2). Shortly thereafter, the new layout was profoundly impacted by the early/mid-twelfth-century creation of the King's Ditch (Fig. 1.11D). A substantial and imposing boundary, the creation of this feature effectively created the suburb by formally demarcating the division between *within* and *without* the urban core (Chapter 3).

Subsequently, throughout the remainder of the twelfth century, the street block developed as part of a relatively thriving, densely occupied suburb (Fig. 1.11E). Numerous properties were established, within which large numbers of features and material assemblages were encountered (Chapter 4). The succeeding thirteenth–mid-fifteenth centuries then appear to represent a broadly consistent period of stability and continuity (Fig. 1.11F–G). Occupation continued, and may well have increased in intensity, while distinctions began to emerge between larger properties – which possessed extensive, spacious backlands – and smaller properties, wherein a comparable number of features were present in much denser profusion (Chapter 4). Throughout this period, the King's Ditch remained

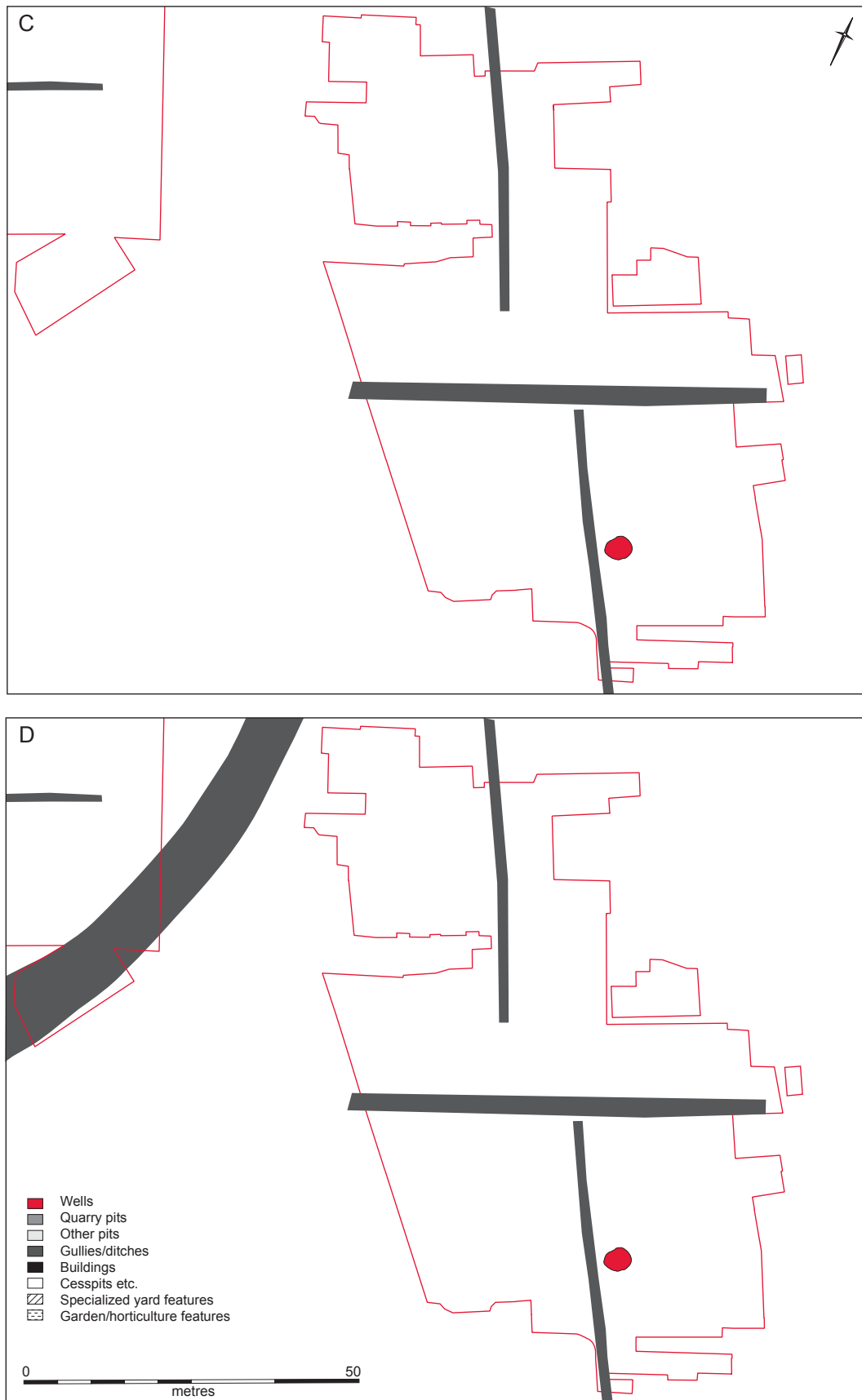
a significant, well-maintained presence. This pattern of relative stability is consistent with the ranking of Cambridge as around the twentieth most important English town during this period (see Dyer 2000).

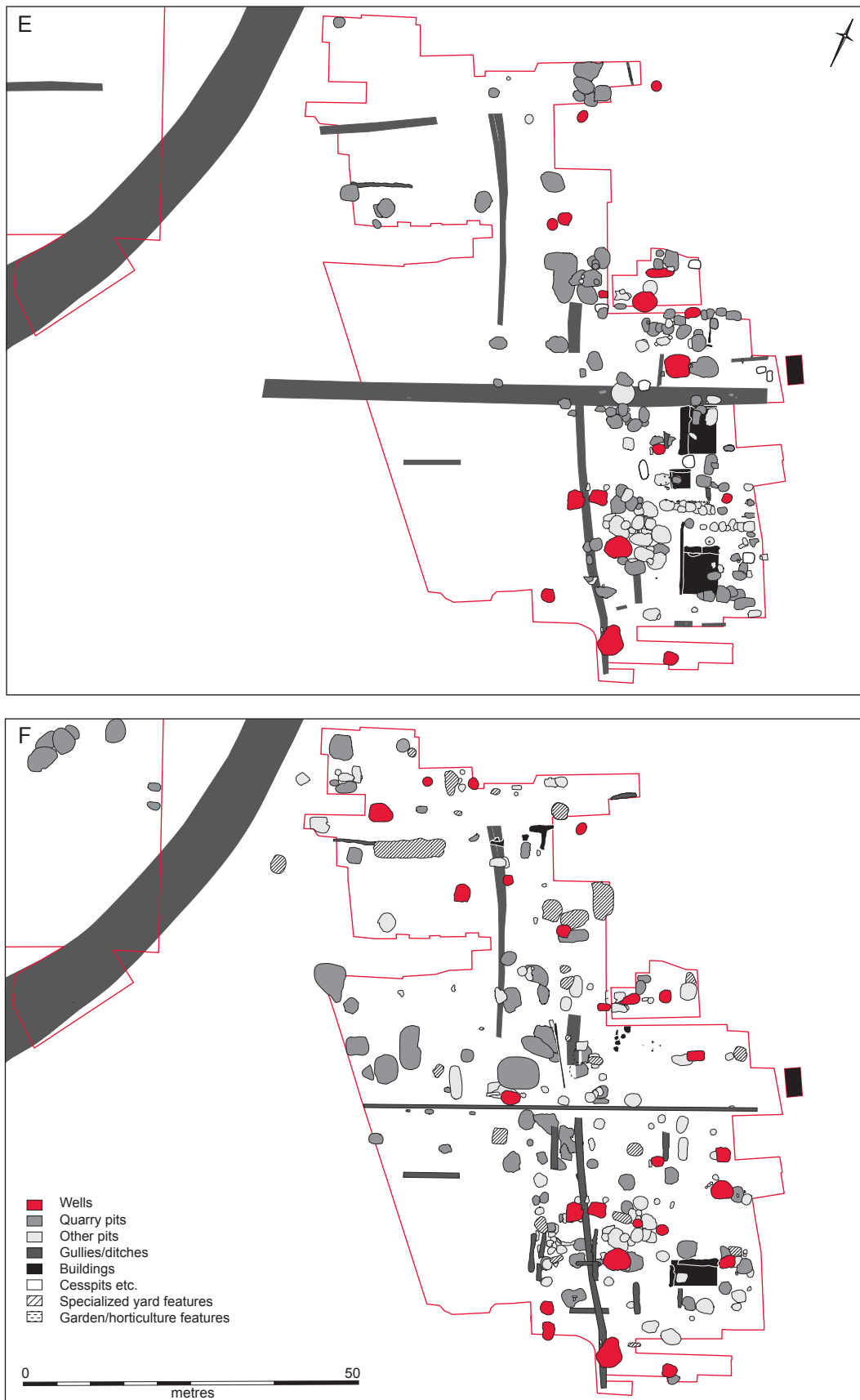
Between the mid-fifteenth and mid-sixteenth centuries, the overall level of archaeological activity appears to have declined (Fig. 1.11G) as does its intensity of occupation, based upon the lower number of wells that were now being created (Chapter 4). Whilst it does not appear that any of the properties were 'abandoned' in the strictest sense, some may have ceased to be used for domestic occupation. This was a gradual process, which in particular instances may later have been reversed. Similarly, at roughly the same time the King's Ditch was less well-maintained; although it was recut much more frequently, it was also increasingly utilized for refuse disposal. This pattern of apparent decline is somewhat counteracted by the evidence provided by contemporary material culture, which suggests that any diminution in the levels of occupation and activity at the site coincided with a rise in living standards and increased material prosperity.

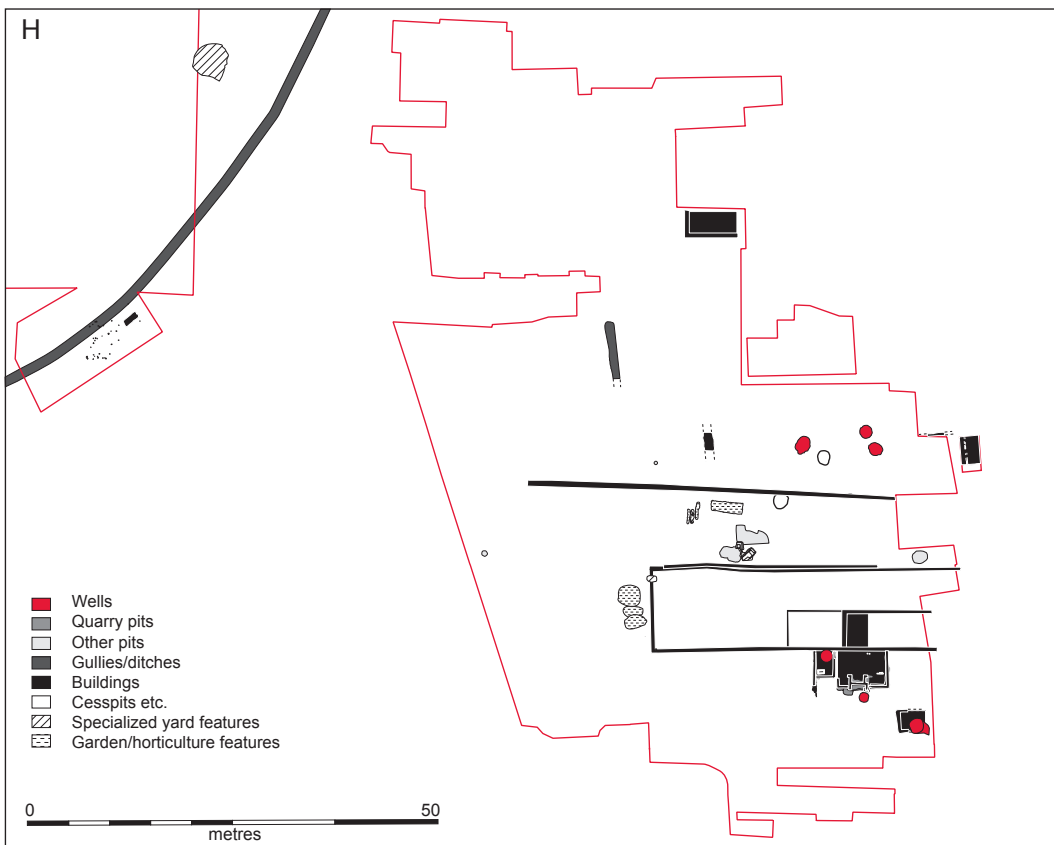
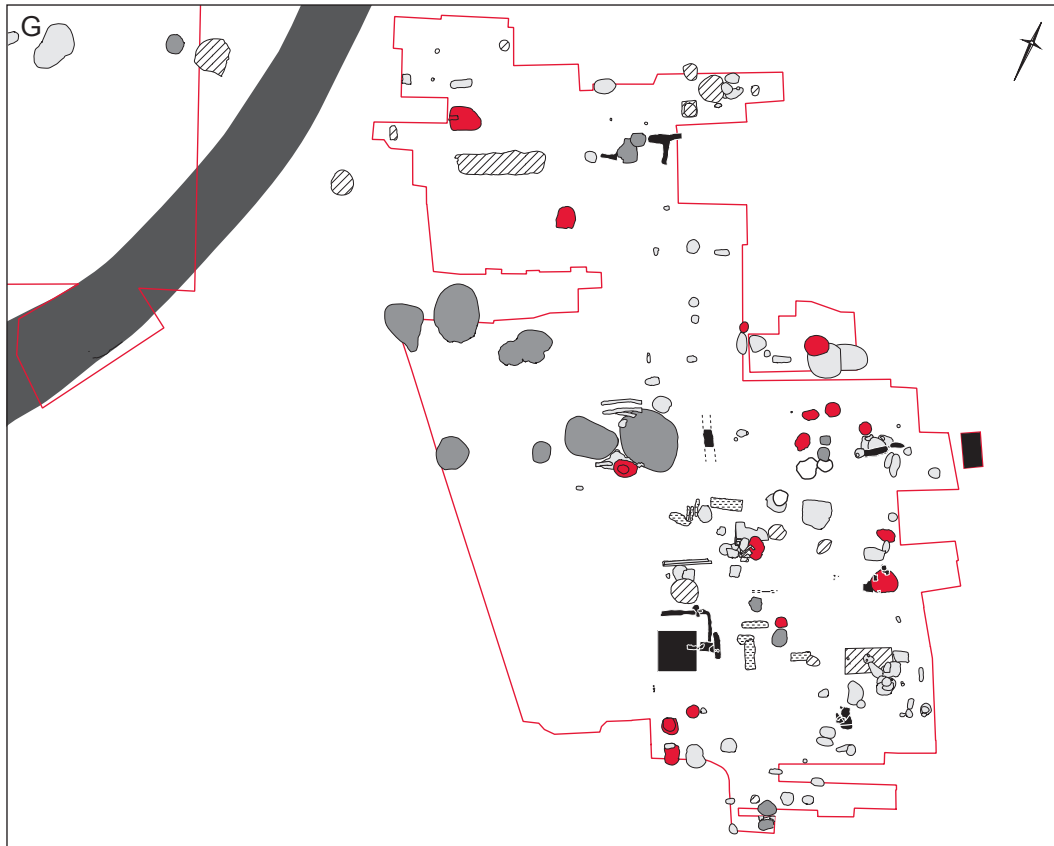
Between the mid-sixteenth and early seventeenth centuries, a period of archaeological 'invisibility' predominated. This is perhaps best interpreted as evidence of a further period of relative stability. Subsequently, however, the mid-seventeenth–early eighteenth centuries witnessed a period of growth (Fig. 1.11H), as evinced by a considerable investment in certain properties at particular points in time (Chapter 5). Archaeologically, there is then evidence for a substantial increase in occupational and commercial activity during the eighteenth century (Fig. 1.11I); effectively marking the rise of the modern period and the commencement of many of the processes that were to continue throughout the succeeding centuries. A large number of frontage buildings were substantially rebuilt in brick, while the building coverage – the relative

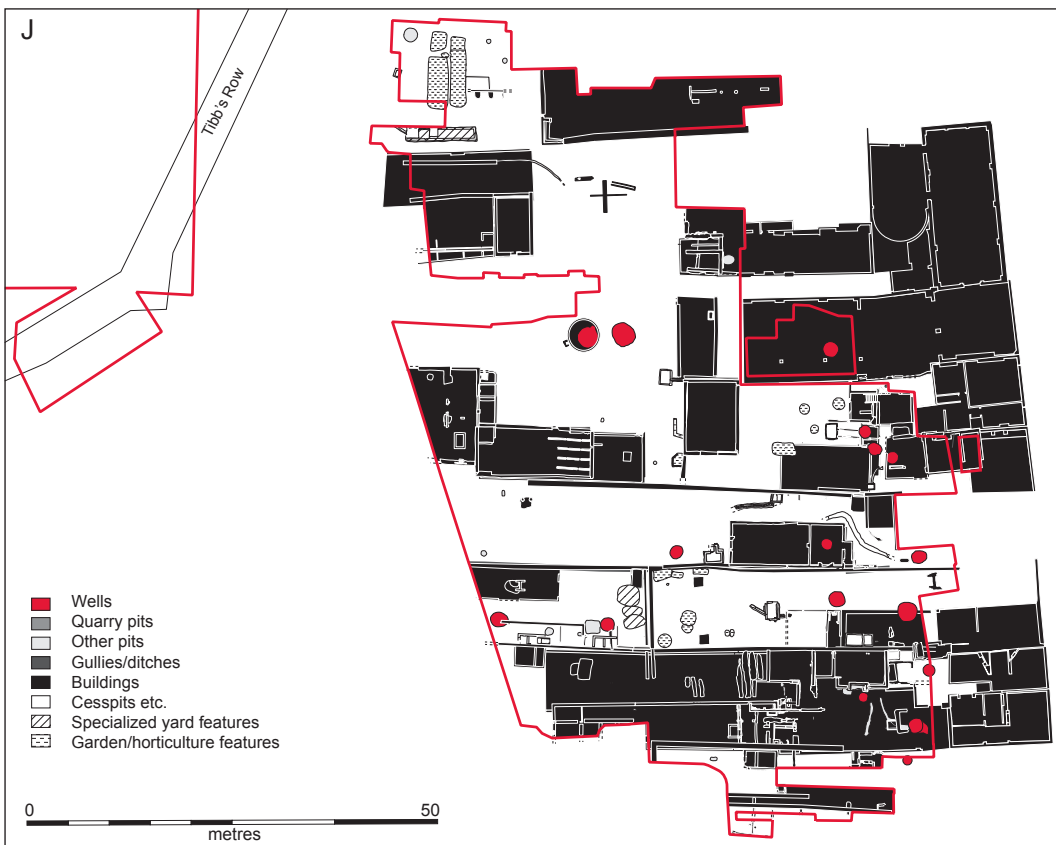
Figure 1.11 (following six pages). Simplified, schematic plans of the core investigation area at Grand Arcade over time, including: (A) Middle Iron Age gully; (B) mid/late eleventh-century dispersed occupation, including the distribution of identifiably eleventh-century pottery; (C) early twelfth-century planned layout; (D) initial, mid-twelfth-century layout of the King's Ditch; (E) mid–late twelfth-century occupation; (F) thirteenth–fourteenth-century occupation; (G) fifteenth–sixteenth-century occupation; (H) seventeenth-century occupation; (I) eighteenth-century occupation; (J) nineteenth-century occupation; (K) twentieth-century occupation; (L) early twenty-first-century redevelopment as the Grand Arcade shopping centre.













percentage of individual properties covered by buildings – increased, although a substantial proportion of the street block remained open space. Similarly, the material culture in use expanded markedly, in both range and quantity, from the mid-eighteenth century onwards (Chapter 5). Attitudes to such material also changed, as exemplified by the deposition of large ‘feature group’ assemblages on a hitherto unprecedented scale.

During the nineteenth century, the character of the street block changed significantly. The degree of building coverage escalated rapidly, doubling or quadrupling on most properties. For the first time, therefore, open space comprised a minor component of the site’s topography (Fig. 1.11J). Several areas were developed into densely packed slum-like courts while, contrastingly, a substantial area was developed as a relatively unified entity by the Robert Sayle department store (Chapter 5). The range of material culture in use also continued to expand. Commercial activities now predominated, although a strong residential component was retained. This led to a frequent separation between the businessmen who utilized premises for commercial purposes and the householders who resided at the site, often leading to property fragmentation. Subsequently, during the twentieth century, the area effectively became a ‘non-place’ (see Augé 1995) that was almost entirely commercial in nature (Fig. 1.11K; Chapter 5). This in turn led to the early twenty-first-century shopping ‘experience’ of Grand Arcade – and, to a lesser extent, Christ’s Lane – which, for good or ill, is emblematic of contemporary society.

The Grand Arcade development itself removed a significant proportion of the street block’s former layout (Fig. 1.11L). In many respects, therefore, this most recent phase represents a form of ‘year zero’ for the area that is unparalleled since its early twelfth-century planned layout. One way in which this change can be articulated is via an examination of the fluctuating levels of population within the street block. During the late twelfth–fourteenth centuries, for example, the estimated population comprised *c.* 100–120 individuals. This fell to *c.* 80 during the sixteenth century before rising again to *c.* 120 in the late seventeenth century, climbing finally to 351 in 1881. The level then declined sharply over the course of the twentieth century, eventually falling to zero if the definition is restricted to permanent residents alone. At a more significant level, however, the Grand Arcade development can be seen as a direct continuation of broader trends in commoditization, retailing and capitalism that can be traced back to the eighteenth and more especially nineteenth centuries; particularly the rise of the Robert Sayle department store.

Starting at the end

Before proceeding to the chronological, chapter-by-chapter narrative it is worthwhile to ‘begin at the end’. By so doing, several of the overarching themes that are to arise at points throughout this book can be introduced well before their nominal position in the sequence. Moreover, such a starting point also provides an opportunity to present a practical demonstration of the theoretical framework that is to underpin much of the following account. From the outset, the Grand Arcade project was conceived of as being, as far as was practicably feasible, a ‘total’ investigation. Below ground the proposed basements, extended car park and road alterations were to remove any and all surviving remains to a depth of 6–8m; for all intents and purposes, 100 per cent of the site’s archaeological remains. Moreover, this level of destruction equally extended to most of the above-ground structures, which up to early 2005 filled the space now occupied by the Grand Arcade shopping centre. The necessity for the recording of these structures, unhindered by presumption of ‘worth’, was embodied in the conditions placed on planning, combined with the Listed Building Consent required for 22–25 St Andrew’s Street (Plots XIV–XVII; for plot locations see Fig. 5.2).

In combination, these conditions required a record to be made of all structures erected both before and after 1939 (the extent of which are shown in Figs. 1.12–1.13). Much of this phase of work was carried out during the three to four months between the closure of the Robert Sayle department store and the commencement of the subsequent demolition phase, but continued for much longer within the buildings that were retained along the St Andrew’s Street frontage. In practical terms, the standing building record consisted of three main elements: photography (in excess of 3000 film and digital images were taken); ‘traditional’ building recording in the form of notes, measured sketches *etc.*; and a full 3D model of the exterior, which was constructed using a Leica TKS 1200 reflectorless theodolite. The latter captured a particular point in time, November/December 2004, into virtual space within around three weeks.

Whilst this short preamble introduces the practical necessities of the building recording it is, perhaps, more important to reflect on the broader vision involved. Very early in the fieldwork phase of the project, the local press seized upon the throwaway comment that this project comprised ‘archaeology from the rooftops down’. Whilst on the one hand a shorthand remark intended for the general public, this phrase does encapsulate the philosophy behind the approach. The buildings and the uppermost layers of stratigraphy are

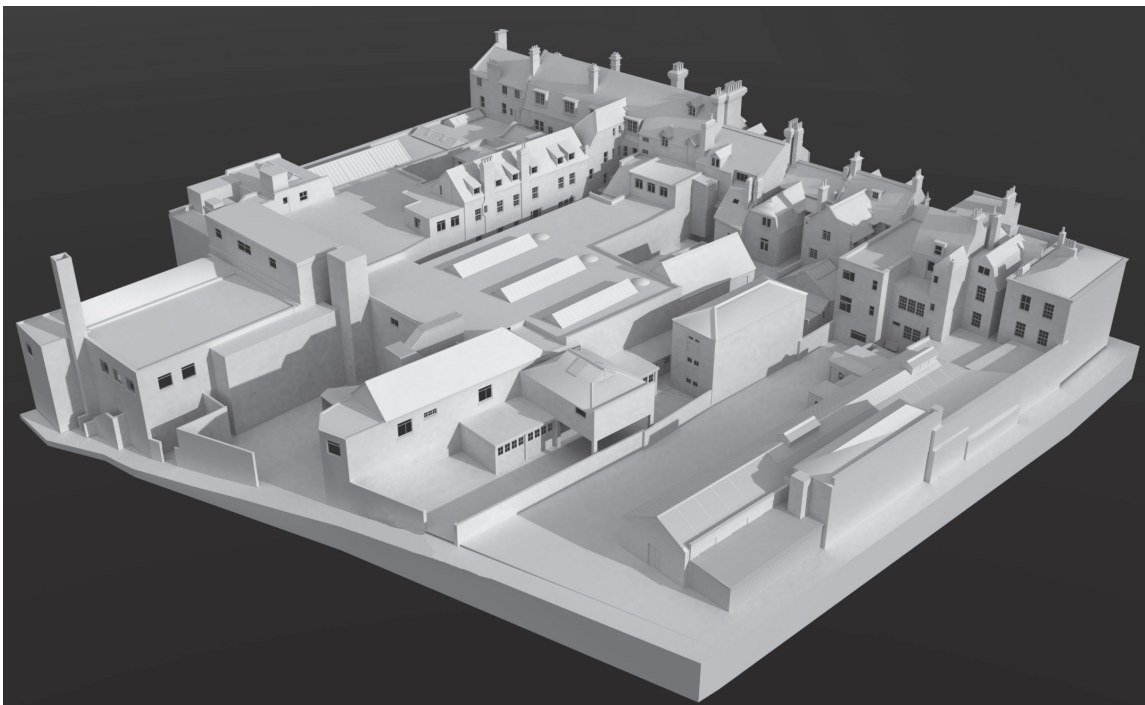
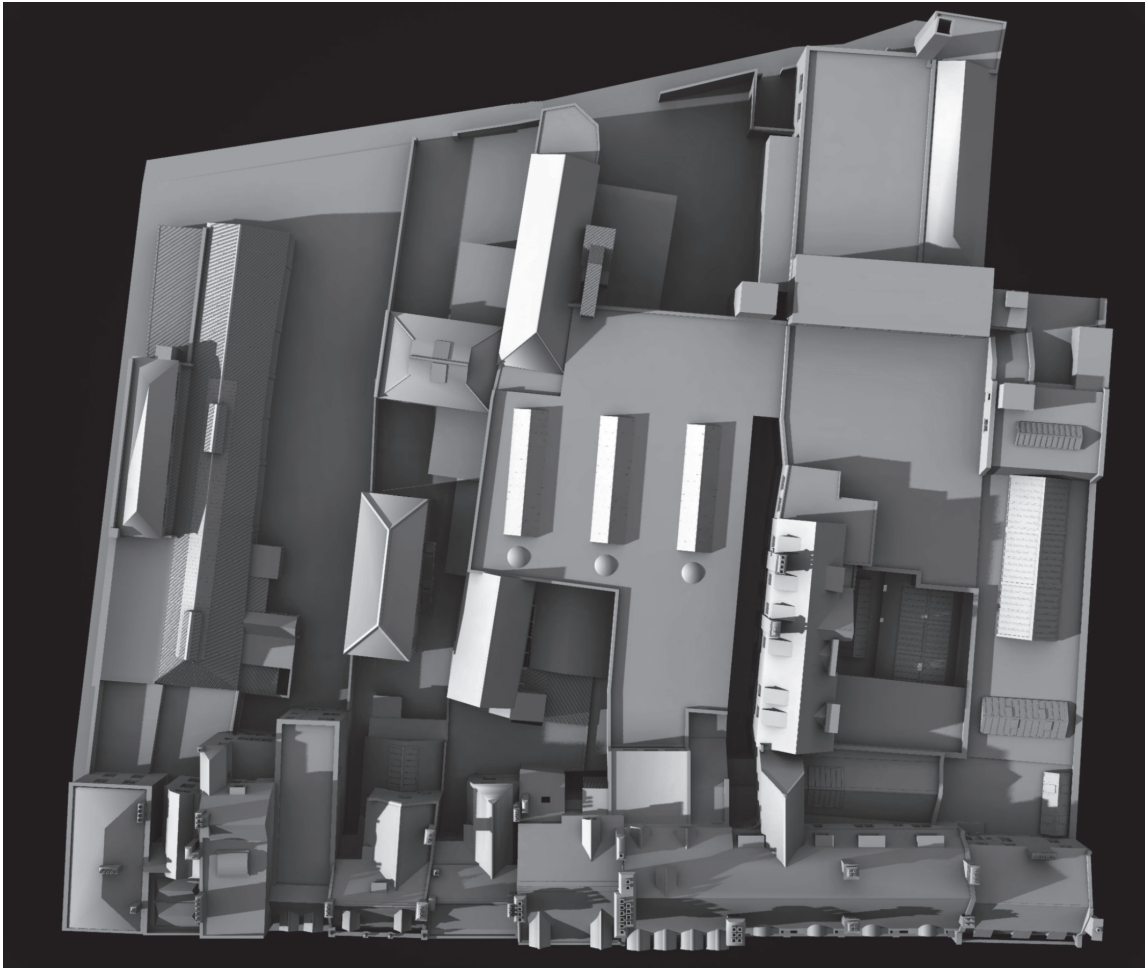


Figure 1.12. All surviving eighteenth–twentieth-century standing buildings at Grand Arcade, as they stood at the site in November 2004.

not merely an impediment to be removed in order to reach the below-ground archaeology, but themselves comprise an inherent part of the narrative. In some recent publications, the built elements of archaeological sites – extant or otherwise – have been given due recognition; most notably, perhaps, in the London Guildhall volume with its detailed reconstructions and extensive study of documentary sources (Bowsher *et al.* 2007).

At Grand Arcade it was felt that the standing buildings component, although it should certainly be addressed at the appropriate point in the chronological

sequence (Chapter 5), does not form the inevitable ‘conclusion’ of that story: hence, starting at the end. Of course, inherent in this approach is the perennial problem of how to integrate the above-ground building recording with the below-ground archaeological record. Although conceived of as a seamless continuum, the buildings were recorded at a different time, and using a different methodology, to the archaeological remains. A further issue is embodied by the observation that, although a particular building may be constructed at one fixed point in time it could subsequently remain in use, with relatively few alterations,



for decades if not centuries. Thus, any given building may represent a palimpsest and aggregation of numerous actions undertaken by the individuals and groups that were associated with it over time. The same is also true of long-lived below-ground features, such as wells, which sometimes remained in use for several centuries. Consequently, the long-term sequences of many such elements can potentially be fragmented by the volume's predominately chronological structure.

In the broadest terms, the standing frontage structures have their roots in the medieval origins of the suburb outside the town ditch. Based on the results of the archaeological investigations, the earliest evidence of occupation dates to the mid/late eleventh century, while the area became increasingly organized and densely occupied from the early twelfth century onwards. Within the buildings as they stood in November 2004, however, no fabric earlier than the early eighteenth century was evident. Figure 1.12 summarizes the pattern of the standing buildings' survival and indicates the general dates of their construction (see also Figs. 1.13–1.14). Elements of 20 and 22–25 St Andrew's Street (Plots XI and XIV–XVII) partially or substantially retained eighteenth-century fabric, with the most complete buildings on the site being *Standing Buildings* 42/65, which dated to the later eighteenth century.

Lengths of surviving eighteenth-century boundary or garden wall were also recorded, while others were incorporated into later *Standing Buildings* 94 and 96. Overall, this period represents about seven per cent of the standing structures, with 33 per cent being nineteenth-century and 60 per cent twentieth-century in origin. Figure 1.12 also demonstrates the proportion of land that was built on as opposed to being open. In some plots, noticeably behind Nos. 22–23 (Plots XIV–XV), the yard area was less covered-over than it had been in the aerial photograph of 1968, whereas behind Nos. 12–20 the only areas open to the sky comprised a short length of the former alleyway between Nos. 15–16 (Plots IX–X) and the service yard on Tibb's Row. Both areas are reflections of the changes that were brought about by the realignment of Tibb's Row during the early 1970s.

To the average Cambridge inhabitant, prior to 2004 the Robert Sayle department store *was* this street block (see Chapter 5). Although even the later story of this city block is not just that of a department store, indeed far from it, the development of this one store has had a significant impact on the area and the way in which parts of it developed and altered; the topic of most significance to this present discussion. Robert Sayle opened his shop at 12 St Andrew's Street (Victoria House, Plot VIII) in 1840. Over the next 164 years the store developed and expanded until by the time it was removed, temporarily, to Burleigh Street in September 2004, it occupied Nos. 12–17, 18/19, part of 24 and 25 St Andrew's Street (parts of Plots VIII, IX, X, XVI, XVII) as well as much of the ground and buildings between them and Tibb's Row. In some instances this had involved major structural alteration and rebuilding and in other places almost none at all.

The Robert Sayle department store retained the name of its founder for 167 years until the move back to St Andrew's Street in November 2007 when, in keeping with national policy, all John Lewis stores lost their local names and the store reopened as John

Lewis, Cambridge. In those intervening years the store had several owners. From 1840 until his death in 1883 Robert Sayle was the sole proprietor. Then, from early 1884, ownership was transferred to Robert Sayle & Co. with three individual partners. Subsequently, in August 1919, the business became a private company, Robert Sayle & Co Ltd., while in November 1934 it was sold to Selfridges' Provincial Stores who sold it on in turn to the John Lewis Partnership in February 1940 (Sieveking 2004, 123). Each of these different ownerships had an impact on the fabric of the store. Before 1979, non-Robert Sayle department store-related structures occupied 33 per cent of the ground between Nos. 12–25 St Andrew's Street (Plots VIII–XVII) and the re-aligned Tibb's Row, although by 1988 that had shrunk to only 17 per cent. The more important distinction; however, is between the structures of the main store to the rear of 12–17 St Andrew's Street (parts of Plots VIII–X; almost 59 per cent of the area), which were the focus of the realization of the Robert Sayle department store as a purpose-built retail entity.

By 1877, and probably a little earlier, the Robert Sayle department store occupied most of the No. 12 plot (Plot VIII) apart from its rearmost area, all of Nos. 13–17 and the areas to their rear, as well as the rear of Nos. 18–19 (Plots IX–X). A series of plans, part of the leasehold record for the properties held by Jesus College (see Fig. 5.79), show the development from individual house/shops to a purpose-built retail establishment, with its ancillary and support structures, over a period of about 40 years. Unfortunately, although No. 12 (Plot VIII) is just as much part of this story, it belonged to Emmanuel College, and so does not appear on the plans until the one drawn up by Selfridges' Provincial Stores in 1938 (Fig. 1.15). As time passed the space closer to Tibb's Row was gradually infilled, most noticeably in c. 1862–89. Sitting amongst these newer buildings, however, was *Standing Building* 42, which had been constructed during the late eighteenth century. It appears that this and the attached *Standing Building* 65 were the only buildings on the 1862 leasehold plan that were still standing intact in 2004.

According to Lintonbon (2006) two main models of retailing emerged towards the end of the nineteenth century. One endeavoured to create an architecture integral to the development of sales; the other was more concerned with the concentration of retail identity within a branded business where the architecture of the shop building mattered less than its signage and fittings. The late nineteenth–early twentieth-century redevelopment of the Robert Sayle department store would seem to express the former rather than the latter. When Robert Sayle opened his first shop in 1840 the retail world was at a point of change. Rather than selling only the component materials for clothing, new manufacturing techniques and an awareness of fashion was paving the way for a readymade clothing market. This, coupled with the arrival of the railway and the telegraph, allowed goods to be ordered, dispatched and handled with much greater efficiency than ever before. Lintonbon, following other writers (e.g. Laermans 1993), identifies another trend, particularly observed in the drapery trades, which was to 'departmentalize' businesses. This allowed such businesses to benefit from economies in increased buying power and had the attraction for customers of finding many related goods conveniently within one shop. The Bon Marché shop in Paris, completed c. 1865, is sometimes considered to be the world's first department store, although this is disputed.

Departmentalization, however, had obvious spatial implications because of the need for additional display space and the requirements of handling and storing large quantities of goods. By adopting these newer sales methods, Robert Sayle in effect created the situation whereby the business had to change physically to cope with the increasing demands on an infrastructure that had ceased to be fit for purpose. This provides the context for the store's initial phase of redevelopment starting in 1876, during which the entire standing fabric of the store (excepting *Standing Buildings* 42 and 65 and some minor structures since removed) was demolished and rebuilt. The demands of modern selling methods led to the use of

Figure 1.13 (opposite). Views from the digital model constructed of the standing buildings: overhead view of roofscape (upper) and general view of area from the southwest (lower).



Figure 1.14. Views from the digital model constructed of the standing buildings: the main Robert Sayle buildings from the southwest (upper) and rear view of Nos 12 to 25 St. Andrew's Street (lower).

the most modern construction methods, iron and steel girder frames, to create the spaces in which to carry them out. In Cambridge this change was further boosted in 1882 when University academics were allowed to marry for the first time, creating a whole new potential customer base right on the Robert Sayle's department store doorstep.

This event roughly coincides with the second phase of the store's redevelopment, involving chiefly Nos. 16–17 (part of Plot X). This seems most likely to be the point at which the classical decorative scheme across the main shop floor areas was established, the main sweeping staircase installed and the intricate moulded plaster and wood embellishments added. A further six or so years later No. 12 (Plot VIII) was itself rebuilt in an entirely different style

externally, although inside the decorative scheme was extended, at least in part. In this instance, in the absence of evidence to the contrary, it seems likely that the wishes of the landlord – Emmanuel College – overrode any unifying desires of the lessee. Yet even this was something of a compromise, as no breakthrough between Nos. 12 and 13 (Plots VIII–IX) took place until Selfridges' ownership during the 1930s.

Even within its new, purpose-built shell, space was at a premium throughout the Robert Sayle department store's history. Storage space became shop floor, workshops became stores, bedrooms became stores and offices and the footprint occupied by buildings was increased, though only significantly in the later years



Figure 1.15. 1938 plan of the Robert Sayle department store, as recorded by Selfridges' Provincial Stores (redrawn from an original held in the John Lewis Partnership Archive Collection) (upper) and drawing of the Robert Sayle frontage as it existed in 2005 (lower).

of the twentieth century. While the outer shell remained relatively intact, the interior was altered to suit changing needs and fashions. This is seen in part in the contrast between interior photographs of 1933–35 where the long dark wooden counters of the Victorian shop are replaced by the lighter, more open units of the twentieth century. The shop is also more open, following the breakthrough between Nos. 12 and 13 (Plots VIII–IX).

Selfridges only owned the department store from 1934–40, but the changes made at that time strongly influenced the shape of the next 65 years. The light and the more open aspect, however, did little to alleviate the need for more selling and storage space. Every available nook and cranny was in use, and most design decisions had the need for more space behind them. An arcaded front was created for more window space, but was removed in 1970 to expand the shop floor (*i.e.* the selling area). The area to the rear became more crowded, hugely exacerbated by the loss of about a fifth of the site under compulsory purchase when Tibb's Row was realigned as part of the Lion Yard development in 1971. Whilst this did allow for some expansion back towards Tibb's Row, the discussions in the early 1970s focused more on moving

the store to a new location as opposed to expanding its own site (Gooch 2004, 135).

Although it was a true, purpose-built retail establishment, the Robert Sayle department store in Cambridge – however forward looking – was not conceived of on a sufficiently large scale to outlast changing times and the limitations of its own physical containment. The space given to the very first department store, Bon Marché, with its sky-lighted interior courts, or to other broadly contemporary English constructions such as the Walsh's store built in Sheffield in 1896 (five storeys high plus attic, with 3½ acres of floor space and frontages onto each thoroughfare of 200ft and 172ft), Lewis's in Liverpool and Manchester and Selfridges in Oxford Street, all dwarfed the Robert Sayle department store in terms of both scale and conception. Robert Sayle, both the man and the company, were nevertheless pioneers in their own area. The Cambridge store, begun in 1840 and remodelled on modern lines during the 1870s and 1880s, outlived all its local rivals; such as Laurie and McConnal in Fitzroy Street (1883–1977), Eaden Lilley on Market Street (1750–1999), Joshua Taylor in Sidney Street (1860–1991) and Mitcham's on Chesterton Road (1909–77).



Medieval to modern suburban material culture and sequence at Grand Arcade, Cambridge

This is the first volume describing the results of the CAUs excavations in Cambridge and it is also the first monograph ever published on the archaeology of the town. At 1.5 hectares the Grand Arcade investigations represent the largest archaeological excavation ever undertaken in Cambridge, significantly enhanced by detailed standing building recording and documentary research. It includes one of the most comprehensive studies of the suburb of a British town, with fourteen investigated plots of the mid/late eleventh to twentieth centuries, and the most detailed investigation of a British town ditch ever undertaken, spanning the early/mid-twelfth to eighteenth centuries. Major artefactual assemblages of many material types were recovered, with extensive waterlogged preservation of wood and leather plus environmental sampling, including pollen and insects. The volume treats the copious eighteenth–twentieth-century material culture in a manner unparalleled in a British context, including a considerable number of college related items that attest to the town's distinctive role as a university centre.

This is an important book, and the scale of the investigations and the richness of the archaeology make it a major contribution to studies of British town suburbs and boundaries in particular and urban archaeology more generally. The ground-breaking commitment to the archaeology of the eighteenth–twentieth-centuries is particularly important, as Cambridge was one of the key intellectual hubs of the foremost global power for much of the period.

*Published by the McDonald Institute for Archaeological Research,
University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.*

Cover design by Dora Kemp, Ben Plumridge and Andrew Hall.

ISBN: 978-1-902937-95-3

