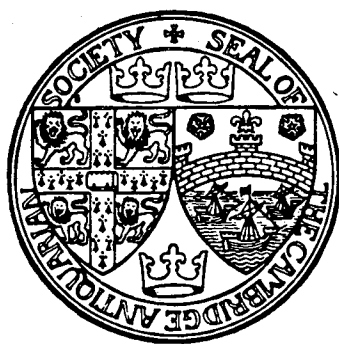


PROCEEDINGS  
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CAMBRIDGE ANTIQUARIAN  
SOCIETY

(INCORPORATING THE CAMBS & HUNTS  
ARCHAEOLOGICAL SOCIETY)



VOLUME LXXII

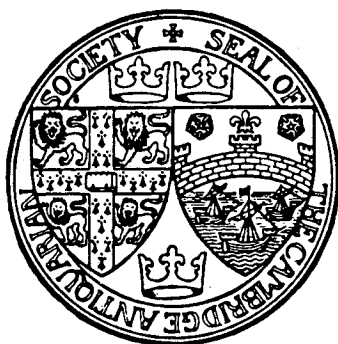
for 1982 and 1983

IMRAY LAURIE NORIE AND WILSON

1984

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# THE DEVELOPMENT AND TOPOGRAPHY OF SAXON CAMBRIDGE<sup>1</sup>

JEREMY HASLAM

## *Introduction*

This paper uses topographical, historical and archaeological evidence to construct a historical model for the origins and development of Cambridge from the coming of the Saxons to the Norman Conquest, and to suggest a hypothesis to explain these developments.<sup>2</sup> This can be stated as follows: the continued development of 'Cambridge' from the Roman through the early and middle Saxon periods was followed by the construction by King Offa in the late eighth century of a burh, guarding a bridge, as both a fortress and a defended trading place. This was taken over in c. 875 by the Danes, who subsequently constructed a new burh straddling the river and bridge. This complex was in turn conquered c. 917 by Edward the Elder as part of his successful campaign against the Danes, the area to the south of the original bridge being developed by him as a defended burh which was also a new urban foundation. The development of Cambridge in the Saxon period thus falls into three principal stages: Mercian, Danish and English, all of which have left their characteristic imprint on its topography.

## *The Mercian Beginnings*

A brief statement of this hypothesis that King Offa created a series of burhs in the late eighth century is given elsewhere (Haslam 1984b) and will be argued in detail at a later date. It is suggested that Cambridge forms one of a series of such burhs, probably fortified urban centres, established by Offa principally to block penetration up the major estuaries and rivers by Viking ships to the Mercian heartland. This was to be achieved by the construction of fortresses associated with bridges, both bridge and burh forming a single military and strategic unit.<sup>3</sup>

It is not possible here to review the evidence for the existence of this system of burhs as a whole. That which suggests that Cambridge formed part of this series, derives from five main aspects: 1. its siting and topography; 2. relevant historical allusions; 3. its place within an established pattern of settlement development; 4. excavated evidence; and 5. inferences which can be drawn from its later development.

1. The factors which have determined the siting of Cambridge, discussed by Gray (1910, 130-3) and Lobel (1974, 1-3) amongst others, have perhaps been most succinctly stated by the RCHM (1959, xxxiii): it is the lowest and easiest crossing point of the Cam before it opens out into the fens, and 'a nodal point of east-west land traffic and one of the chief terminals of water traffic on the Cam-Ouse river system'. The prominent spur of land on the north bank became the site of the Roman fortified town of Durolipons, which was associated with a bridge and causeway carrying a road leading to the south-east (Lobel 1974, 2-3 and Map 2).<sup>4</sup> Given the existence of the series of fortresses in Mercia suggested above, the presence of these ready-made fortifications could not have failed to encourage the construction of a burh by Offa to guard the bridge, as a natural successor to the Roman fortress.

2. The idea that the bridge at Cambridge was the creation of King Offa was first put forward by Gray (1910, 128-9). He has been substantially supported in the most recent survey by Mrs. Lobel (1974, 3) who has asserted that 'the change of name<sup>5</sup> and shift of emphasis from the fortified *castellum* to the bridge are facts of the utmost importance'. That a unit comprising both burh and bridge existed before the arrival of the Danes is further supported by other observations made first by Gray and restated by Lobel (Gray 1905, 12-13, 26-28; Lobel 1974, 3, note 24). Gray pointed out that the medieval records of public duties charged on lands in the county show that the levies of ward pennies and pontage (the successors of the Saxon common obligations of fortress-work and bridge-work) were limited to the eight Hundreds in the southern and western parts of Cambridgeshire, i.e. that area formerly part of Mercian rather than East Anglian territory. If the bridge existed by 875, the invariable association of these dues noted by Brooks (1971) implies not only that the burh must have existed as well, but also that both were created in response to a Mercian initiative.

3. The formation of the burh in the eighth century can be seen both as the beginning of the development of the town of Cambridge, and the culmination of an equally long process whose formative stages were already complete with the growth of the Roman town. The 'remarkable concentration of early cemeteries' around Cambridge (Myres 1969, 76-7) suggests that early Saxon settlement was focussed to an unusual degree around the old walled town and bridge throughout the fifth and sixth centuries (Fox 1923, 237 ff; Lobel 1974, 3 and notes 17-19). Contacts between the cemetery groups of



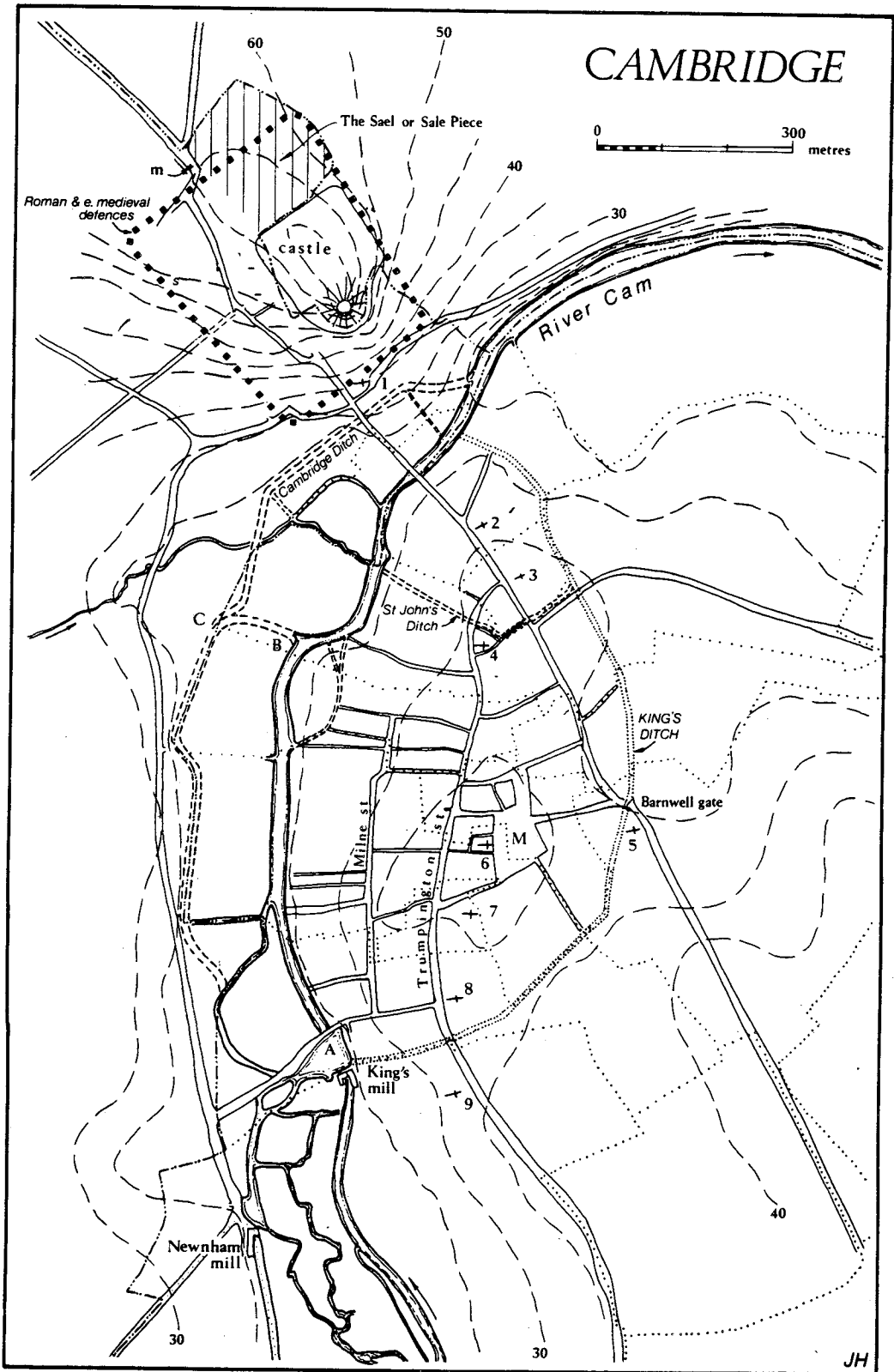


Fig. 1

- |                  |              |                  |
|------------------|--------------|------------------|
| 1 St Giles       | 4 All Saints | 7 St Benet       |
| 2 St Clement     | 5 St Andrew  | 8 St Botolph     |
| 3 Holy Sepulchre | 6 St Edward  | 9 Little St Mary |

Cambridge and Northampton, a similar area of continuing settlement (Williams 1977, 134-41), have suggested to Myres the existence in the sixth century both of a specialised trade and of 'a central market of some kind in Cambridge itself where household goods from the surrounding villages could be exchanged' (Myres 1969, 128). The continuation of such a role as a regional centre of settlement and of trade is suggested by the concentration around Cambridge in the eighth century both of sceatta finds of Aethelbald and of the later pennies of Offa (Metcalf 1977, 91). Similar concentrations around Dorchester-on-Thames, Dunstable, London and eastern Kent are explained by the tendency of coins to accumulate at frontiers or entrepôts, through inter-regional trade at the points of entry (ibid, 94). By the eighth century Cambridge can be considered to be part, or at least on the frontier, of Greater Mercia.

This continuity must however be due as much to social as to geographical forces. The explanation and in a sense the connecting link between the late Roman town and the Mercian burh of the eighth century, is the development of the manor of Chesterton. Professor Cam has made two important observations concerning this land unit (1959, 109): firstly that the two 'halves' of the town fields of Cambridge, together with the vill of Chesterton, form a rough circle surrounding the town (shown in Figure 3); and secondly that this area was probably once an undivided unit, from which the Chesterton segment may have been subtracted on the construction of the castle in the northern town. There are, however, several arguments which suggest that the opposite was probably the case: the area of the town and its fields was subtracted from the vill of Chesterton, which originally comprised the whole of the circle. In Domesday Book Chesterton was one of only seven royal manors of ancient demesne in the county (VCH, i, 350). This implies that the Domesday manor is the direct successor of a 'royal' estate whose existence can legitimately be taken back to the early Saxon period. This royal estate, occupying an area which included the later town fields, completely encircled the Roman town, and thus constituted a direct link with the events surrounding its abandonment in the fifth century and with the concentration of early Saxon cemeteries nearby. Similar and parallel instances of the preservation of discrete estates surrounding Roman towns as at Winchester, Silchester, Gloucester, Cirencester and Dorchester (Dorset) suggest that a royal estate around Cambridge could perpetuate the extent of the former *territorium* around the Roman town.<sup>6</sup>

The remarkable concentration of sixth century cemeteries around Roman Winchester suggests that early Saxon settlement could have developed there and at Cambridge in a similar way, a process involving the substitution for a nucleated urban centre in the Roman period by a dispersed grouping of villages whose existence was dependent upon the town's continuing role as a regional centre for the pursuit of activities which were more than purely agricultural.<sup>7</sup> This change in settlement pattern also provides the context for the shift of focus from the Roman town to Chesterton at an early date and its development as a royal estate.<sup>8</sup>

Given the existence of Offa's burhgal policy in the late eighth century, Cambridge would have been an ideal choice of site. It had ready-made fortifications on a naturally strong site in relation to the river. It was a royal and also a regional administrative centre, and a focus for trade and settlement. The burh in the late eighth century must have been a deliberate royal foundation, in which a large area of the royal estate of Chesterton - the area of the town fields attached to the northern burh<sup>9</sup> - became a royal 'endowment' for the immediate support of a resident population needed to guarantee both the defence and the continued upkeep of the burh defences and the bridge. The conclusion that this resident population had at least a proto-urban character and was more than a mere garrison, can be supported by examining the evidence for early 'urban' institutions and functions which are peculiar to the northern rather than to the southern burh of Cambridge, and which can reasonably be seen as predating the Danish presence in the late ninth century. This evidence falls into four main categories:

a. *Cambridge as a favoured settlement location*

The concentration of eighth century coins in the area demonstrates the geographical advantages of the site as a centre of trade. The evident concern of Offa for healthy trade - his reform of the coinage and his interest in the eastern and south-eastern parts of England - strengthens the possibility that the formation of the burh at Cambridge was as much a measure for the protection of an established trading centre - a direct outlet for Mercian trade to the North Sea<sup>9</sup> - as it was a strategic answer to a purely military need.

b. *Marketing functions*

There is some evidence suggesting that the northern burh had a market outside its northern gate. In the 13th century a cross called Aswykston or Ashwyke cross, situated immediately outside the northern

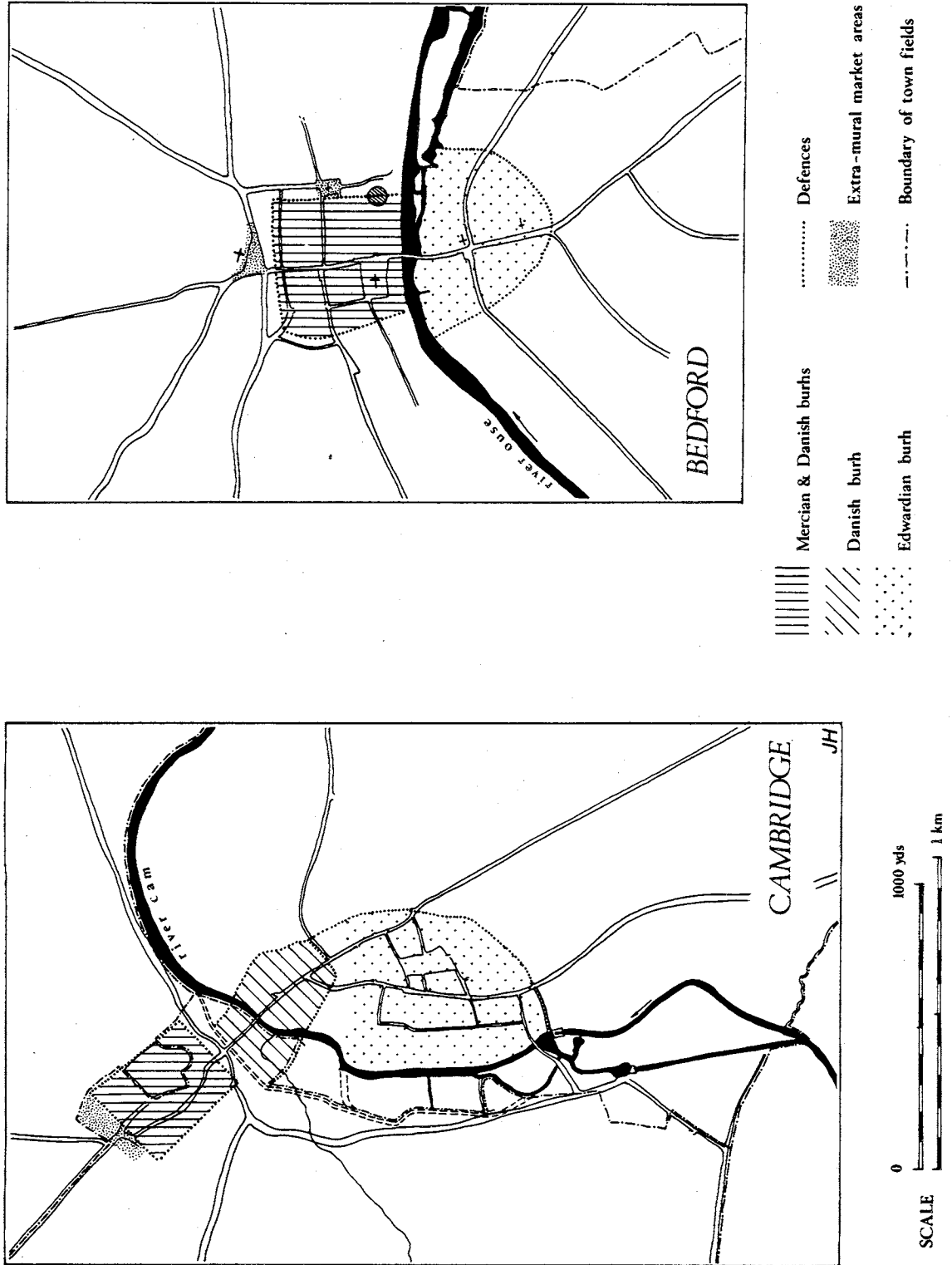


Fig. 2

gateway of the former Roman town (and Mercian burh)<sup>10</sup> was traditionally associated with 'the market of the old town' (i.e. the northern burh) (Gray 1905, 3). Several observations suggest this could be pre-Danish in origin. Except for the later bite taken out by the area of the Norman castle, the boundary between the northern burh and its fields and the manor of Chesterton to its east clearly follows the whole length of the north-eastern side of the burh. However, instead of continuing around the northern corner of the burh walls, this boundary carries on to the north-west, turning to the south-east after about 80m and joining the road about 50m north-west of the original position of the gate (See Figures 1 and 2), defining an area of about one hectare outside the north-western line of the defences.<sup>11</sup> One interpretation is that this was an extra-mural market area, which although outside the defended area of the burh was included with the town lands when the burh and its fields were separated from the manor of Chesterton, arguably by Offa.

A characteristic feature of those Mercian burhs with a suggested eighth century origin is the presence of a market place, usually associated with a church, immediately outside one or more of their gates. Although none of these market places can be shown conclusively to be earlier in origin than the tenth century<sup>12</sup> the existence of such a feature at Cambridge outside the northern gate of the burh (though not a church) provides yet one more instance of a pattern common to other Mercian burhs. Two further considerations suggest that the market area was indeed associated with the Mercian burh. Firstly the boundary line which divides the manor of Chesterton and the borough liberty or town land, and which defines the two sides of this area, is more likely to have assumed its present course when the borough and its lands were carved out of the manor (in the eighth century) than at a later date.<sup>13</sup> Secondly, a market associated with the north gate of the Mercian burh is likely to have been superseded by any market area created nearer the river by the Danes in the formation of their own burh on both sides of the bridge, as well as by the market within the southern part of the town established most probably in the early tenth century.<sup>14</sup>

Similar topographical arguments suggest that the burh might well have been provided with its own wharves. It is not impossible that the area called *Armeswerch* in the thirteenth century (and signifying a fortified place (Lobel 1974, 3), whose surrounding ditches (discussed further below, p. 17) included the Roman channel running parallel to the south-east side of the defences, was created at the time of the formation of the 8th century burh to provide a protected area both for shipping and for the immediate defence of the bridge. Whilst these features cannot be dated with any certainty, these suggestions must be seen in the light of the importance of river-based trade, arguably well established before the arrival of the Danes, and of the possible functions of the eighth century burh as an inland port for Mercian trade.<sup>15</sup>

### c. *Minster church*

Although its exact position is not known the minster church of Cambridge may have been situated in the northern burh, and it was probably destroyed by the building of the castle in 1079. Its presence is suggested both by the fine series of gravestones found underneath the castle ramparts (RCHM 1959, 1xvii), and by the foundation of St. Giles church in 1092 as a priory of the Canons Regular, whose houses 'often succeeded and took over the properties and duties of the Saxon minsters of secular priests' (ibid).<sup>16</sup> This is quoted by Addyman and Biddle (1965, 96) as suggesting the pre-Conquest origin of St. Giles itself. It is quite clear, however, that the statements of the RCHM imply that St. Giles was refounded to replace a minster church formerly in existence, and by inference destroyed by the castle. Although there is no direct supporting evidence for the date of origin of the minster church, its position within the early royal estate of Chesterton, itself the centre of a probably well-populated area throughout the Saxon period, would fit more naturally into the late seventh or early eighth century, rather than the tenth, and would thus predate the establishment of the burh in the late eighth. The minster church of St. Peter in Northampton, arguably also a late eighth century burh (above), has been shown by excavation to have been originally built in the early eighth century (Williams 1977, 150). This church is also seen as the centre of a royal estate at this period (ibid, 141; Williams 1981), thus strengthening the case for a similar date and context for the church at Cambridge.

Further, the parish of St. Giles is exactly coterminous with the whole of the western fields of Cambridge, including the northern burh.<sup>18</sup> Since it has already been argued that the town fields were separated with the town itself from the royal estate in the eighth century, it seems reasonable to conclude that the same area, forming the later parish of its principal church, was an ecclesiastical as well as an economic unit.

#### d. *Royal control*

The case for royal control of the burh from its probable foundation in the late eighth century, carved out of the original royal manor of Chesterton, has already been argued. Both the creation of the burh and the control of all its functions must be conceived as an exercise in the proper function of royal authority. That this authority was exercised within the burh, by inference from the time of its foundation, is suggested by Lobel's observation that an area in the north-east corner of the northern burh, called *Le Sale* in the twelfth century (see Fig 1) may have been the site of the residence of the King's reeve or alderman (1974, 5), whose presence may also be signified in the field name *Aldermannes Hill* in the west fields (Maitland 1898, 123; Hall and Ravensdale 1974-5, 45). This area was defined by a ditch in the twelfth century (ibid, 61) which suggests at least the possibility that this could have been the successor of an 'Aldermanbury' of Cambridge, a private burh within a public burh, whose function would have precisely paralleled the Aldermanbury in Saxon London. It may also be significant that this area is immediately adjacent to the area outside the defences already suggested as an extramural market. In view of the well-known royal control of trading transactions in towns of the later Saxon period, the proximity of these two features suggests that both could have resulted from the formation of the burh by royal initiative in the eighth century.

While few of these features can be related with any certainty to the period before the Danish presence in the late ninth century, their association in and around the northern rather than the southern burh is particularly suggestive. Together they supply nearly all those social elements which a Saxon burh of royal foundation would be expected to possess: a reeve, as representative of the royal interests within the burh; a public meeting place or portmoot outside the walls;<sup>18</sup> a public market place, in this case outside the gate; and lastly, but by no means least, a burh church.<sup>19</sup>

4. In spite of the existence of these apparently urban characteristics, the archaeological evidence for any actual community settled within the old Roman town before the late Saxon period is slight. The only positive evidence for settlement in the middle Saxon period is the existence at Ridgeons' Garden of two ditched enclosures, of which one, at least 12m in length, was cut into the ubiquitous dark earth layer overlying a Roman street. However, the Roman defences, the fronting walls of which were 3 m in width at their base, would have needed comparatively little work to recreate the fortifications of the eighth century burh.<sup>20</sup> The west gate continued to be used during the Saxon period, since the Roman street surfaces were found to have been worn into a hollow way 1 m in depth and 9.3m in width, with the result that the central pier of the gateway had been removed. Dr. Alexander has also suggested that the kink in the medieval street by the site of the north gate could have been caused by the passage of traffic around a collapsed gateway.<sup>21</sup> The absence of all but the sparsest evidence of middle Saxon occupation from the northern burh at Cambridge does however contrast with the situation in for instance Northampton and Bedford, where recent excavations have produced quantities of both finds and structures of this period (Williams 1977, 140-7; Baker et al. 1979).

#### *Conclusion*

The various lines of evidence discussed above suggest that by the end of the eighth century Cambridge was in many respects an urban place, and the administrative centre of a large part of the later shire. It was supervised by a royal reeve, and was the probable possessor of a burh church, a market place and wharves, as well as being the guardian of a bridge and the meeting point of river and road communication lines. It is suggested that these 'urban' features were already forming as a consequence of the long established function of 'Cambridge' as a 'central place', an inland port for Mercian trade, its assumed relative prosperity at least in part dependent upon high levels of production and consumption created by the existence of the royal estate which surrounded it. The formation of the burh would therefore merely have given these functions a formalised structure and a topographical identity.

#### *The Danish Occupation*

The arrival of the Danish army at Cambridge in 875, and the Danish settlement there from c. 886 (Lobel 1974, 3) mark a new phase in Cambridge's history. It is inconceivable that the Danes would not have appreciated the strategic value of its position, and at least have refurbished it and adapted its physical, social and economic elements to suit their needs.<sup>22</sup> However, there is some evidence to suggest

that the growth of settlement subsequent to the military occupation shifted to the area around and to the south of the river and bridge, which was at some time during this period fortified with ditches, and which can thus be legitimately described as a burh.

There are several lines of evidence which suggest that this burh comprised the parishes of St. Clement and St. Sepulchre. Gray has already pointed out (1905, 21-23) that this area was surrounded by a ditch, which he called the St. John's Ditch. However, the course of this ditch as suggested by Gray is incorrect, and it appears that neither he nor subsequent writers have appreciated its true significance. Its existence and course were first demonstrated by Hughes, who observed that a deep ditch filled with black silt 'suggestive of original low ground' ran along the north side of All Saints' churchyard, crossing the street in front of St. John's Chapel and running under St. John's College (1898, 378; 1907, 411, 422). Gray, however, suggested that the ditch followed the line of the present parish boundary along St. John's Back Lane to the north-east of St. John's College (1905, 21 and Map opp. p. 22). It seems more reasonable to follow the observations of Hughes and accept the course of this ditch as forming a straight line northwestwards from the north-west corner of All Saints' churchyard (see Figure 1).<sup>23</sup> It can also be assumed that the ditch was probably followed by the original parish boundaries. If this is so, then the south-east boundary of St. Sepulchre's parish is likely to mark the line of the ditch across the tip of the gravel spur from All Saints' churchyard eastwards to the line of the later King's Ditch (Gray 1905, 22; Lobel 1974, Map 6). From this point, it seems more likely that it followed the course later taken by the King's Ditch northwards to the river, rather than the wider course to the east suggested by Gray (*ibid*), thus following the line of the 'central depression' (Lobel 1974, Map 2) whose natural origin is argued below.

The entire area of St. Clement's and St. Sepulchre's parishes (except for an area of the former to the north-east, which appears to be an addition) was therefore originally defined by a ditch, which at least on its south-west side was observed to be substantial. This area was, furthermore, reflected by a similar but smaller area on the other side of the river, which Gray argued (1898; 1910, 138) was also surrounded by ditches. One of these, running parallel to the south-east side of the Roman walls, variously called Cambridge Ditch or King's Ditch (Gray 1898, 67; Addyman and Biddle 1965, 93) has been suggested by W.H. Johns as being Roman in origin (Lobel 1974, 2 and note 14); it was however clearly open until the thirteenth century, and acted therefore as a major topographical control for a long period. The north-eastern arm connecting the Cambridge Ditch and the river has been located by Gray (1898, 68), its exit into the river lying very near that of the northern arm of the St. John's Ditch (here followed by the southern King's Ditch) into the river. The other arm, to the southwest of the area<sup>24</sup> is probably that followed by the common parish boundaries of St. Peter and All Saints.<sup>25</sup> This continues on the other side of the river the line of the St. John's Ditch, which was also originally followed by a parish boundary.

There is further evidence to suggest that the links between these areas on either side of the river, both of them surrounded by ditches, are temporal as well as spatial. The area to the north-west of the bridge bounded by these ditches was by the thirteenth century called *Armeswerch*, a name implying the existence here of a pre-Conquest fortified place (Gray 1908, 109-15; Smith 1956, i, 12; Lobel 1974, 3). Both this area, and that bounded by the St. John's Ditch, are also variously described in medieval documents as *Hulumum* or *in Hulmo* (Lobel 1974, 4 and note 36; 9, 12 and note 13). The Old Danish origin of this word, which means an island, or in its cognate form *Homr* in the Danelaw, 'higher dry ground amidst the marshes' (Smith 1956, i, 258-9, 268), not only precisely describes its topographical situation, but also suggests that the ditches defining these areas could have had a Danish origin.

This suggestion is strengthened by the topography of the parishes and their boundaries. As already noted, the area enclosed by these ditches is occupied by the parishes of St. Sepulchre's, St. Clement's and St. Peter's (See Figure 1). St. Sepulchre's, was only created in *c* 1130 (Brooke and Keir 1975, 144); the topography of its parish suggests that it was carved out of the original area of the parish of St. Clement's. It appears, moreover, that the south-western boundary of the latter parish, which now runs along the north-eastern side of St. John's college, must have originally followed the line of the St. John's ditch which ran underneath the college (see above), to be diverted from this line probably on the foundation of St. John's hospital around 1200 on waste ground on the line of the ditch (*VCH Cambs* ii, 313-4). This being so, the area of the original St. Clement's parish was, except for an extension on the north-east side, precisely defined by ditches which appear to have had a Danish origin.<sup>26</sup>

It has already been suggested by Lobel (1974, 4, note 36) that the dedication to St. Clement is probably Danish. This seems to be supported by the remarkable correspondence of parishes of St. Clement with

low-lying ground around bridges or early routes apparently representing an expansion of pre-Danish urban areas. Examples can be found in London (St. Clement Danes), Sandwich, Ipswich, Stamford and (surprisingly) Worcester, all of which might be expected to have attracted Viking settlement. St. Clement's at Norwich occupies the central part of a low-lying area surrounded, as at Cambridge, by defensive ditches; an excavation on this site has produced a C<sup>14</sup> date of the late ninth century (A. Carter, personal communication). Furthermore, the low-lying area at Cambridge around the bridge between the river to the south and the Cambridge ditch to the north, which is referred to as *Armeswerch* and *Hulmum* (above) is largely occupied by a detached portion of St. Peter's parish. The situation of St. Peter's church in the northern burh, together with several detached portions of the parish (their boundaries defined in part by the defences of the burh) suggests further Danish associations of the area.

There are thus strong grounds for suggesting that these areas, now almost precisely defined by St. Peter's, St. Clement's and St. Sepulchre's parishes, formed what was in effect a fortified Danish settlement or burh.<sup>27</sup> This provides an explanation for the fact that St. Clement's had the highest proportion of any parish of properties paying hawgavel rents at the time of Domesday (Maitland 1898, 142; Cam 1959, 47-9; RCHM 1959, xliv).<sup>28</sup> The situation of this settlement around the ancient bridge, on both banks of the river, rather than within the earlier fortified area a little further up the hill, suggests that it was not merely a fortress or an administrative centre, but rather a fortified trading centre. Its focus was the river, and it must have functioned, therefore, as an inland port.

### *The Saxon Reconquest*

The reconquest of Danish Cambridge by Edward the Elder in 917 (*Anglo-Saxon Chronicle, sub anno*) must have played a not inconsiderable part in his successful campaign against the Danes. It has been suggested that this event was marked by the creation of a new burh (Addyman and Biddle 1965, 100; Lobel 1974, 5; Biddle 1976a, 136-7), which was defended by the King's Ditch to the south of the river in order to fortify the southern approaches to the bridge. Although there is no evidence to date precisely either the King's Ditch or any other element in the topography, it can be argued that these features owe their origin to the creation by Edward of a burh which was also an urban foundation on a larger scale than so far realised.

The topography of the King's Ditch, which encloses this burh on two sides, lends itself to certain conclusions which have not hitherto been brought out. Professor Hughes has suggested that the course of the King's Ditch was determined largely by natural features, following a belt of alluvium around the gravel spur (1907, 412, 417-21 and plate xxviii).<sup>29</sup> Its southern section followed 'lower ground between the churches of St. Mary the less and St. Bene't...without the necessity of making any considerable excavation except close to St. Mary's (ibid, 411). These observations suggest that the occupation on the gravel spur on the south bank of the river cannot have been extensive enough to have influenced its alignment.<sup>30</sup> Indeed, the main consideration governing its course appears to have been the inclusion of as much as possible of the frontage of the eastern bank of the river, as well as the immediate approaches to the bridge. It follows therefore that the King's Ditch was set out with the intention of creating a defended space in which subsequent development could be encouraged and controlled; its construction was thus the direct result of a deliberate act of urban foundation.

This conclusion is supported by two other lines of evidence: firstly the parallels to this plan in other recaptured burhs of the former Danelaw; and secondly, several features of the subsequent development of the town in the tenth and eleventh centuries.

The parallels with other burhs of Edward the Elder will be discussed in detail at a later date. These fortifications, constructed in the period 911 and 919 have been briefly surveyed by Biddle (1976a, 135-7) who has said that '...we may suspect that their size reflected...the intention to establish places whose future, on the model of the larger Wessex burhs..., was intended to be secured by the very fact of their being relatively populous places' (ibid, 136).

One of the most illuminating comparisons is provided by the double burh at Bedford, whose southern burh is also a creation of Edward the Elder (*Anglo-Saxon Chronicle sub anno* 913; Hassall and Baker 1974, 79). This has many features in common with the southern burh at Cambridge. It guards the southern approaches to a bridge which was already in existence in the early tenth century (Haslam 1984b); its defences, also called the King's Ditch, enclose a large area which includes a considerable length of the river frontage; and it is possible that roads formerly leading to the bridge were realigned on its construction to meet at a central crossroads. These observations suggest that this new burh of Edward

at Bedford was, like that at Cambridge, also a deliberate act of urban foundation, designed to provide the already long established bridge over the Ouse with an extra defended enclosure whose upkeep and whose continued existence was to be guaranteed by a permanent population.

The hypothesis of a deliberate urban creation south of the river in Cambridge is also supported by many aspects of its subsequent history and its built topography. The evidence of the medieval burghage rents, discussed by several earlier writers from Maitland onwards (Maitland 1898, 180-2; Cam 1933, 47-9; RCHM 1959, xlv; Lobel 1974, 5 and note 43), shows that at the time of Domesday there was a concentration of settlement around the market place in the southern burh, distinct both from the parishes of St. Clement and St. Sepulchre (argued above as comprising the extent of the Danish burh), and also from the parishes in the northern burh. This southern nucleus was separated from St. Clement's and St. Sepulchre's parishes by the so-called 'green belt' which comprised the parish of All Saints, which it has been suggested was built up only by the later thirteenth century (RCHM 1959, xlv). This situation seems likely to have been the result not of a gradual shift of the centre of settlement southwards from the area around the bridge, but rather of the deliberate creation of a separate urban nucleus at a time well before the first record of this pattern by Domesday. By the reign of Edgar (956-75) the possession by Cambridge of a mint (Dolley 1970, 25) and a market (Lobel 1974, 3) must imply that this development was already well underway by the mid tenth century, and thus it likely to have been the direct consequence of the phase of urban creation initiated by Edward soon after 917. Such factors as the importance of the river to the economy of Cambridge in later periods (Lobel 1974, 1-3), the presence of the low-lying Danish fortified trading place around the bridge, as well as the presence of Viking traders in the tenth century<sup>31</sup>, suggest further that it was the possibilities of water-borne trade which encouraged Edward to plan for urban growth on such an adventurous scale.

The topography of the southern burh perhaps most strongly bears out this deduction. One of its most significant features is the canalisation of the river from a point below the King's mill and the Mill Pool, from the west to the east side of the alluvial belt, a process first suggested by Gray (1905, 18-20). Both the date and the extent of this change in course are still a matter for debate. Of particular importance for this discussion is the spatial coincidence of the southern end of the King's Ditch, the site of the King's Mill, and the point from which the canalisation of the river begins. The two mills, the Newnham and the King's were in existence at the time of Domesday (Lobel 1974, 4) and could well be earlier; and the King's Ditch has been argued as the creation of Edward the Elder c. 917. Perhaps the relationship of these three features can best be seen as resulting directly from the establishment of the southern burh in the early tenth century;<sup>32</sup> the canalisation of the river was thus undertaken because its relocation nearer the eastern side of the valley was recognised as being a necessary part of the proper functioning of the town as a river-based trading centre or inland port.<sup>33</sup>

Armed with this concept, it is possible to be more precise about the extent of this canalisation. Gray first suggested (1905, 18) that the whole length of the river between the King's Mill to the south and the bridge to the north represented a recanalisation of an earlier course of the river on the western side of the valley, a line which is marked for most of its length by the boundaries of the present parishes and also of the western and eastern town fields. This idea is followed by later writers (Cam 1933, 42, Map 2; RCHM 1959, xlvii; Addyman and Biddle 1965, 99, Fig. 13). It will be observed however that the river is straight only from the mill pool (point A in Figure 1) northwards to point B and is also embanked only along this stretch; the present unembanked course of the river downstream has all the appearance of natural sinuosity. It is suggested that the original (say immediately pre-Roman) river followed a course on the west of the alluvial belt to point B. The subsequent canalisation of the river can thus be reconstructed as occurring in two stages; the first, from point C to a point beyond (north-east of) the bridge, which can be assigned (following Lobel 1974, 2) to the Roman period; the second, from the mill pool to point B, which can be attributed to the time of the foundation of the Edwardian burh in the early tenth century. That the second phase of canalisation of the river was only made between points A and B, and that it was an integral part of the burh formation is also suggested by the coincidence of this stretch of the river with the bank of that part of the burh which was the most densely populated by the time of Domesday.<sup>34</sup>

There are various other topographical considerations which suggest that the riverside was from the beginning the focus of the town's commercial activity. The early primacy in the life of the burh of Trumpington Street, which runs parallel to the river, over the old Roman road is shown by the concentration of pre-Conquest churches along its length (Addyman and Biddle 1965, 99, Fig. 13c) and by the fact that the market place is placed centrally in relation to its length. It thus appears to have



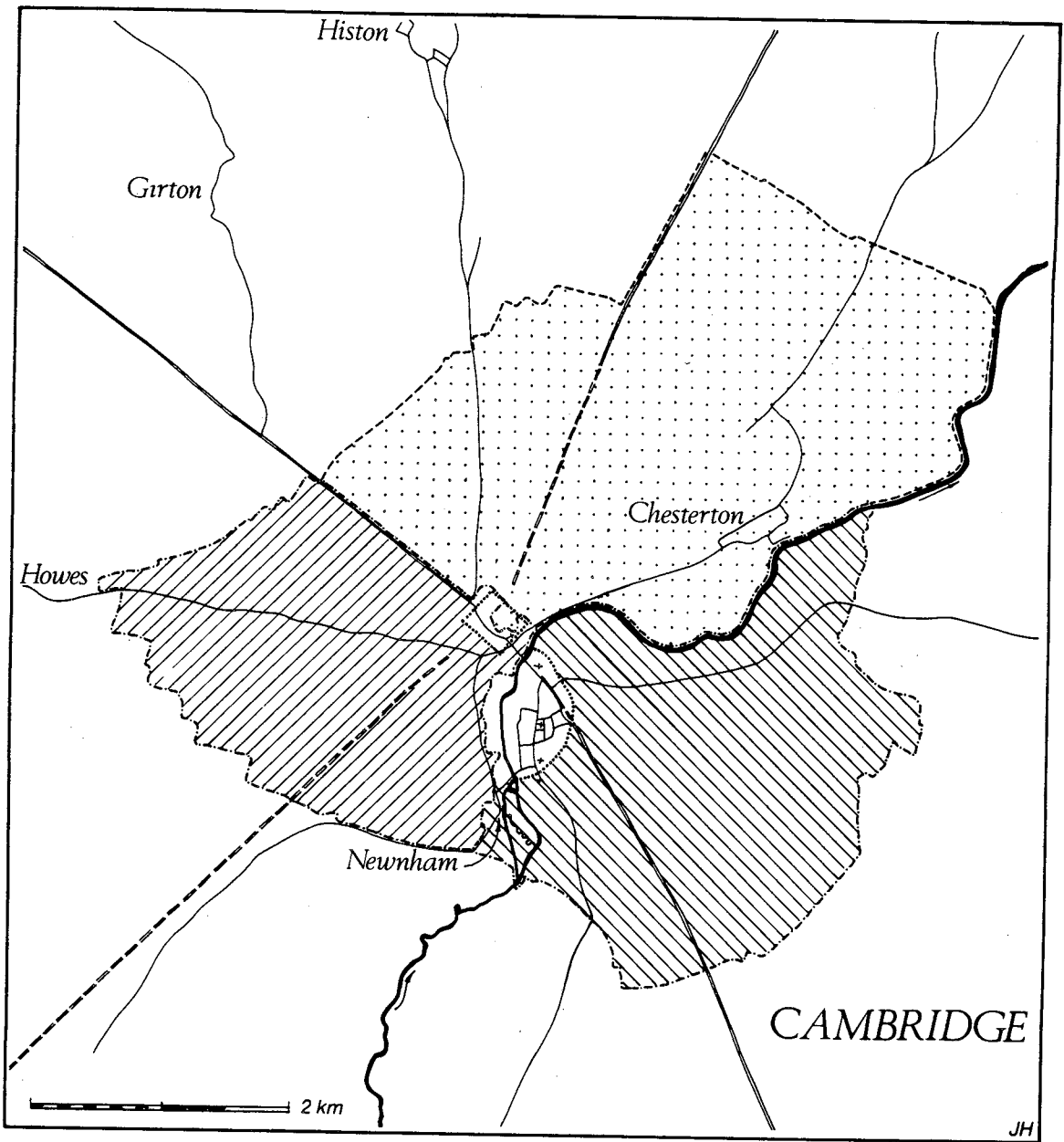


Fig. 3

formed the axial street of the new town.<sup>35</sup> Furthermore, there is both archaeological and historical evidence that Milne Street, which ran between Trumpington Street and the river and parallel to both, also formed an element in the original layout of the Edwardian burh. The observation by Professor Hughes in 1907 (1908, 135) of a section across this street leaves no doubt that it was in existence before the area was extensively occupied. In commenting on this observation, Addyman and Biddle (1965, 103) deduce that it was the constant digging of pits on either side of a street already in existence which defined the ridge of gravel underneath it, and that this was the 'result of the intense occupation of the site during a long period'. 'It was not the taking into use of made ground that led to the development of the Milne Street area, but the development of the area which made the ground'.

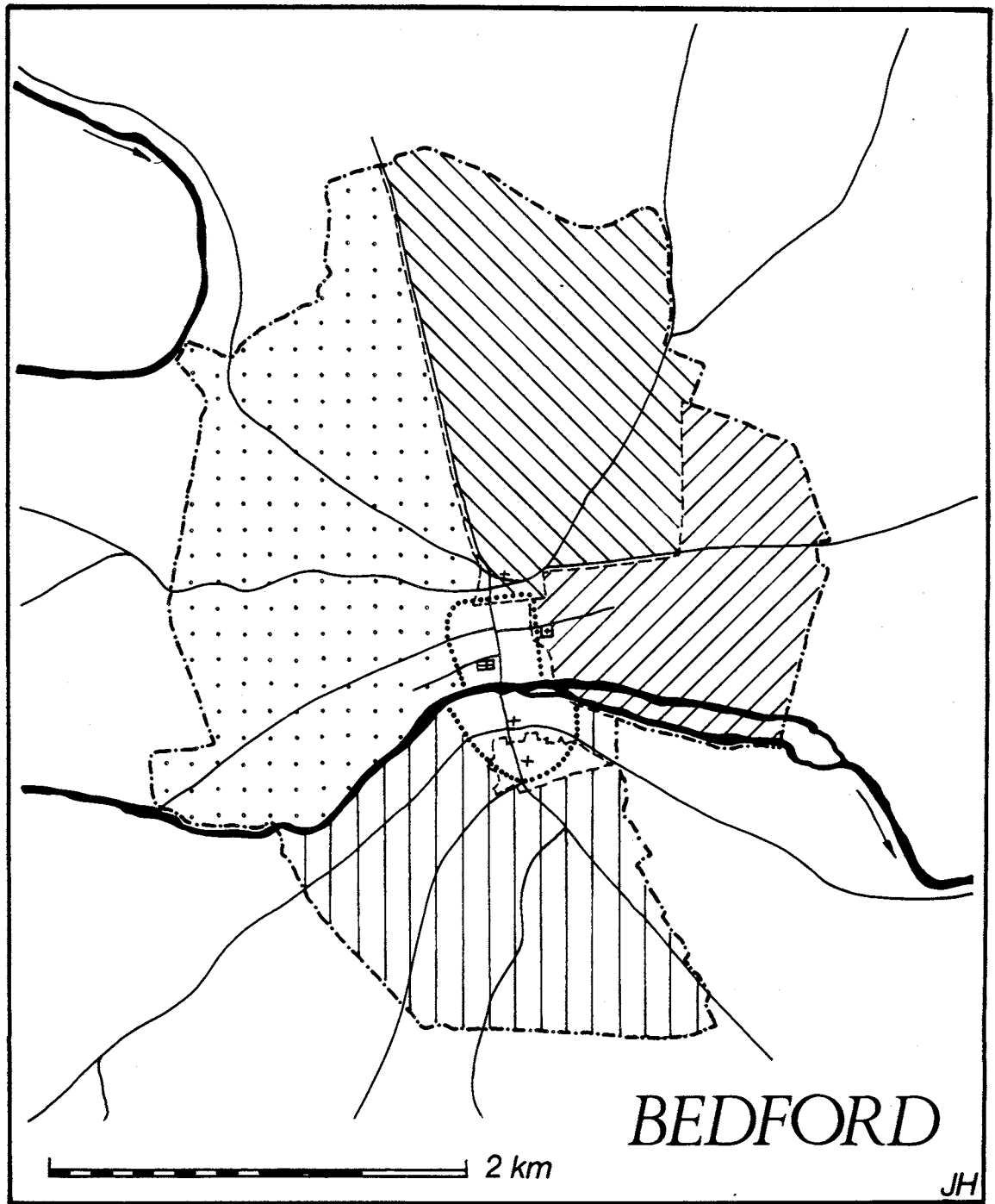
This conclusion is strengthened by the historical evidence. It is clear that the present colleges in the area of the river are the direct successors of student hostels which in the later medieval period took over many of the large merchants' houses along Milne Street (Lobel 1974, 15 and Map 5). As Lobel herself states, this series of developments caused the town to become 'divorced from the river trade which had once been its life blood' (ibid).<sup>36</sup> The amount of documentary evidence confirming the importance of this trade, especially in the twelfth and thirteenth centuries, is considerable (ibid, 8), and includes the charter of Henry I forbidding ships to discharge at any hythe in the Shire other than Cambridge (Maitland 1898, 40, 213). Many of the medieval merchants' houses were also provided with hythes and warehouses approached by lanes leading from Milne Street (Lobel 1974, 10 and note 90, 14-15).

This picture of 'dense urban life' (Addyman and Biddle 1965, 103) along the river, which is deduced from the archaeological evidence and the former existence of merchants' houses and wharves on the bank is therefore quite in keeping with the hypothesis put forward earlier of the primacy of the river frontage in the layout of the Saxon burh. It contradicts the long held view of the riverside as a marshy wasteland, occupied only after it had been built up by dumping of rubbish.<sup>37</sup> The long occupation in this area, taken with the conclusions already derived from the topographical evidence for the development of the early burh, suggest that Milne Street functioned as an axial street, serving hythes and warehouses at the waterfront, from probably the earliest days of the growth of the town east of the river. The construction of the King's Ditch, the canalisation of the river and the placing of a mill or mills above this point; the early importance of Trumpington Street and the close physical - and indeed symmetrical - relationship to it of the market, of Milne Street and of the canalised river; - all of these reflect the functional primacy of the river bank. The inter-relationship of these various elements forms a strong argument for the conclusion that their layout is a direct consequence of the deliberate creation of the new burh of Edward the Elder as a new town and an inland port.

### *The Town Fields*

The creation of the two 'English' burhs, the first in the late eighth century and the second in the early tenth, provides an explanation for the formation of the well known double field system of Cambridge, a phenomenon which was examined in detail by both Maitland (1898) and Gray (1905). Since the existence of these double fields provides further topographical evidence for the conclusions argued in this paper, they deserve closer attention. Simply stated, the system is one in which the western or Cambridge fields, occupying an area coterminous with the parish of St. Giles, are attached to the northern town to its west and south. The eastern or Barnwell fields are attached to the southern town, occupying an area to its east (see Figure 3).<sup>38</sup> Each set of fields originally comprised an area of very nearly 1200 acres, excluding the area of the defended burhs (Maitland 1898, 54). The western fields tithed to both St. Giles and to St. Clement's churches (the suggested Mercian and Danish burhs) whilst the eastern fields tithed only to the churches in the southern town (the burgh of Edward the Elder) (ibid, 183). The dividing line between these two sets of fields coincided for some of its length with the western, and earlier, channel of the river (Figures 1 and 2), and, as both Gray and Cam have pointed out (Gray 1905, 18; Cam 1933, 44), with the line of St. John's Ditch.

Maitland (1898, 52) and Gray (1905, 2-4) have already observed that these fields thus represent two distinct agricultural units, and it is this consideration which led Gray to his theory of the dual origin of Cambridge. The arguments in this paper have suggested that the existence of these fields can best be understood in the light of the separate creation at different stages of Maitland's 'two economically distinct communities': the first step comprised the formation of the burh in the late eighth century with the separation of a large slice of land from the royal estate of Chesterton, originally encircling Cambridge, as its vill or land unit, this unit becoming the parish of the burh church; precisely the same



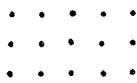
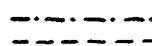
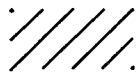


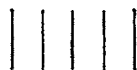
- |   |                         |   |                          |
|---|-------------------------|---|--------------------------|
|  | <i>St Paul's parish</i> |  | <i>parish boundaries</i> |
|  | <i>St Cuthbert's "</i>  |  | <i>roads</i>             |
|  | <i>St Peter's "</i>     |   |                          |
|  | <i>St Mary's "</i>      |   |                          |

Fig. 4

process occurred on the formation of the new burh to the south of the river by Edward the Elder in 917. Both urban units are thus seen as originating as royal creations endowed with lands carved from a royal estate, though their inception is separated by over a century; Saxon Cambridge still therefore has a 'dual origin'.

It should be noted, however, that this conclusion runs counter to that arrived at recently by Hall and Ravensdale (1974-5, 60). They suggest that the pattern of fields radiating from Castle Hill is contemporary with an 'ancient Lordship' based on the northern town and in particular on the five acre plot of land called 'Sale Piece'. They see the establishment of the common boundary between Chesterton and the western fields, running along Huntingdon Road (see Figure 3), as being subsequent to the existence of the lands of this Lordship at their fullest extent. The imposition of this boundary, which was finally fixed on the setting up of a 'new feudal structure' with the building of the Norman Castle, had the effect of truncating the lands of this Lordship, which was in consequence 'almost squeezed out of existence'. The physical remnants of this process comprise the area of Sale Piece, which they suggest constitute 'the remains of the homestead of the pre-Conquest Lord'. They also affirm that the vill of Chesterton has an origin no earlier than Edward the Elder's reorganisation of the burh and shire of Cambridge, and that at this time it became separated as a royal vill, a parish and a Hundred.

These arguments are of interest primarily in that they are the first to provide a logical explanation for the incongruous behaviour of the borough boundaries at this point, and for the inclusion within the town boundaries of the discrete area of the Sale Piece. There are, however, several considerations which suggest they must be found wanting as an explanatory hypothesis for the development of the area. Firstly, they are based on the underlying assumption that the Chesterton vill or estate was detached from an area which originally comprised a larger unit of land attached to the northern township. It has been argued above that on the contrary this estate was only part of a larger whole which has an early Saxon if not Roman ancestry. Its two major internal divisions - the two field systems of the northern and southern townships - are thus subsequent to it and were defined in relation to it. Secondly, the hypothesis of Hall and Ravensdale makes no allowance for the relationship of Sale Piece to the Roman fortress, in particular for the fact that it is split in two by substantial defences which were in all probability standing until robbed by the builders of the Norman castle, thereby forming two distinct units, one intra-mural and the other extra-mural. It has already been suggested that this topographical division is also a functional division, and that the extra-mural part is a market area, indicated by the presence of an otherwise unexplained market cross at a later date, and the intra-mural part in the reeve's hall of the pre-Conquest burh. Thirdly, if this 'ancient Lordship' centred on Castle Hill predates the formation of the royal vill of Chesterton in the tenth century, then it becomes nothing more than an ordinary manor, without any particular royal connections. This in itself contradicts the common, if not universal, royal interest in Roman towns at an early date, and the development around them of royal estates, a development already argued for sub-Roman Cambridge. In relation to Cambridge in particular, it would in addition deny any special significance to the unusual concentration of Saxon settlements around the Roman town, which is so marked a feature of its development.

The alternative to this hypothesis is to see this 'ancient Lordship' as that of the King, whose *villa regalis* must have been situated at Chesterton from early in the Saxon period. With the suggested formation of the burh by Offa on the north bank, the immediate Lordship would have been that of the King's reeve or ealdorman, whose hall would have lain in that area of land, the Sale Piece, so carefully included within the lands belonging to the burh.

The hypothesis of the separation of the western and eastern fields of Cambridge from a pre-existing royal estate in the eighth and tenth centuries respectively provides an explanation for the fact that St. Clement's parish to the south of the river was joined with the churches of the western fields for its tithing arrangements. This is readily understood if this parish (including that of the area of St. Sepulchre's) was in existence as a land unit before the formation of the southern burh.<sup>39</sup> That the Danish burh was part of the northern, formerly Mercian, burh (Gray 1905,5) would have followed naturally from the fact that it was the northern burh which the Danish army occupied in 875, and which was merely extended with the formation of a ditched enclosure of their own across the river by a process of organic development - a process quite dissimilar to the separate creation by the Saxon kings of both the northern and southern burhs and their fields.

It is possible that the dual origin of both the town fields and burhs so clearly demonstrable at Cambridge can also be recognised at Bedford (Haslam 1984b).<sup>40</sup> The municipal boundary of Bedford

encloses two unequal areas to the north and south of the river (Figure 4). Together these fields form a fairly regular oval around the town, with the division between the fields attached to the northern and southern burhs running along the river between them, as at Cambridge. The development of this pattern can be interpreted in the same way as that at Cambridge: the fields belonging to the northern burh were attached to it on its foundation in the late eighth century by a similar process of royal endowment, and similarly those belonging to the southern burh by the same process in the early tenth century. The fact that the town fields of other single burhs of Saxon origin (for instance London, Huntingdon, Northampton and Tamworth) appear as a rule to be confined to the same side of the river as the burh suggests that in the case of Bedford, as with Cambridge, the southern part is an addition to the earlier northern burh.

### Conclusions

The arguments presented above have attempted to demonstrate two main conclusions. Firstly, the development of the Saxon town of Cambridge falls into three clearly definable stages, each of which is marked by the construction of a fortified burh on sites moving successively from north to south of the river crossing: the first Mercian, in the late eighth century; the second Danish, in the period 875-917; and the third of Edward the Elder, soon after his recapture of the town in 917. This sequence explains many features both of the topography and of the subsequent historical development of the town. Secondly, each of these burhs was constructed in response to historical forces which were both strategic and economic: all three are both fortresses and fortified trading centres. Both the eighth and tenth century burhs were, furthermore, royal foundations, endowed with their own fields at the time of their formation, which but for the decisive intervention of Offa and Edward respectively would not otherwise have developed so successfully. All three burhs show several urban characteristics, and the topographical details of all three can best be understood by suggesting that each burh served as an important meeting point of water and land communications, and that each functioned in its time as an inland port for North Sea trade.

### NOTES

1. This paper is a considerably shortened version of the essay which won the John Nichols Prize, Department of English Local History at Leicester University in 1979. I am grateful to Mrs. Mary Lobel and Dr. John Alexander for reading the typescript of this essay and offering valuable comments prior to the preparation of this version. (The paper has been further shortened for publication by the Editor.)
2. F.W. Maitland (1898) was the first to examine Cambridge's history as an example of a national pattern. (Earlier histories have not been used in this paper.) This work was extended by his contemporary, Arthur Gray (1898, 1905, 1910) who was among the first to treat topographical information relating to any English town as real historical evidence; Professor McKenny Hughes (1898, 1907, 1908) was similarly using geological and archaeological evidence. Archaeological evidence from the region, in particular that from Saxon cemeteries, was examined by Sir Cyril Fox (1923). A theoretical model of Cambridge's development was proposed by Carl Stephenson (1933), but unfavourably reviewed in particular by Helen Cam (1933), James Tait (1936) and Mary Lobel (1974). Cam's paper in particular has been described as 'a milestone in the study of urban archaeology in this country' (Addyman and Biddle 1965, 90). Previous information was summarised, with the addition of new evidence and ideas, by Cam (1959) and by the RCHM (1959). Subsequently Peter Addyman and Martin Biddle examined the archaeological evidence for the town's development (1965) and Mrs. Lobel has made a detailed survey of the topographical and historical evidence (1974) and has in addition provided for the first time detailed plans of the town with much new topographical information. The latter two works include full references.
3. Such a defensive strategy is implied in the documentary evidence discussed by Brooks (1971, 72). This paper is part of an overall attempt to identify and examine the evidence relating to these sites. It is suggested that other burhs in this series include Hereford, Oxford, Northampton, London, Godmanchester, Stamford, Nottingham, Lincoln, Chester, Tamworth and possibly Worcester.
4. One of the purposes of this fortress has been described by Dr. Alexander as 'part of a provincial defensive scheme intended to protect the inner margin of the fens, and the entry to the Cam valley...'
5. *Granta caestir* Bede c. 690; *castellum* near the Granta, Felix of Crowland c. 730; *Granta Brycge*, Anglo-Saxon Chronicle for 875 (Lobel 1974, 3 and notes 21-23).
6. Winchester: Biddle 1973, 241; Biddle 1976b, 256-8. Silchester: Biddle 1976c, 334-5. Gloucester: Heighway 1980, 217-220. Cirencester: Slater 1976, 81-89. Dorchester: Keen 1984 (See note 8 below). The existence of discrete territories surrounding these towns, and preserved in later parish and other boundaries, can be taken back at least to the seventh century. The suggestion that these represented territories in existence in the Roman period is strengthened by a growing body of evidence for continuity in the preservation of such boundaries from a very early period in England (e.g. Finberg 1959) and by comparable evidence on the continent (e.g. Lombard-Jourdan 1972).

7. This is perhaps reflected in the archaeological evidence, which suggests that the Roman town decayed and was probably deserted, a thick layer of dark loam overlying the Roman levels. (I am grateful to Dr. John Alexander for supplying me with this and other relevant archaeological information.) This situation also reflects Bede's description of late seventh century Cambridge as *civitatum quendam desolatam* (quoted in Lobel 1973, 3 and note 21).
8. A remarkable parallel can be seen at Dorchester (Dorset), where the Roman town is completely surrounded by the parish of Fordington, from which the town parishes, almost entirely intra-mural, are carved out apparently at a relatively late date. There are grounds for suggesting that Fordington, which lies only a little to the east of the town, became the seat of royal authority, the *villa regalis*, probably in direct succession to that focussed on the Roman town. Other examples of such a process from Wiltshire are discussed by the writer (Haslam 1980; 1984a). Examples of places including the prefix *ceaster* and which refer to Roman towns a short distance away, are noted by Mrs. Gelling (1978, 151-3). Although this has no particular significance as far as dating is concerned, instances are known from the sixth century in which *ceaster* appears as a suffix (*ibid*, 151) and Cambridge is of course described as *Granta Caestir* by Bede.
9. The evidence for the later existence of river-based international trade centred on Cambridge is clearly not proof of its existence at this early period; it is, however, an indication both of the physical possibility of such trade and of its potential economic importance for the prosperity of the region. It has been noted (Parkhouse 1977) that the finds of Mayen lava querns imported to England in the seventh and eighth centuries come with only a few exceptions from the Midlands and East Anglia (*ibid*, 36 and 40); he notes (*ibid*, 39) a particular concentration (in the later Saxon period) on sites near the Ouse at the Bedfordshire-Cambridgeshire borders. This distribution can only have been affected by means of river-borne trade, which in the early period was probably conducted by Frisian merchants, facilitated by the interchangeability of Frisian and English coins.
10. Shown by Lobel 1974, map 2. See also Figure 1. Its position is discussed in Gray 1898, 64-5.
11. This anomaly has caused all commentators on the history of Cambridge previous to Mrs. Lobel's work to draw the lines of the northern corner of the Roman fortifications to coincide with this boundary, giving its plan a curious trapezoid shape (Cam 1933, 40; RCHM 1959, lxi; Addyman and Biddle 1965, 95). The anomaly has only become apparent in Lobel's plans of the Roman town (1974, maps 4 and 6). (Dr. Alexander has pointed out to the writer, however, that the plan of the defences of the eastern half of the Roman town is still conjectural.) The area is part of the larger area called the Sael or Sale Piece, which is suggested below as being the site of the King's reeve or ealdorman.
12. The writer has already argued (Haslam 1984b) for the existence of a market place immediately outside the northern gate of Bedford, associated with a church (St. Peter's) which is dateable on architectural grounds to the tenth century. A market place (described as *populis platea*) outside the west gate of Winchester was certainly in existence by the time a church associated with was dedicated in 934 x 9 (Biddle 1976b, 265, 330 note 1).
13. The anomalous position of this boundary is further emphasised by the fact that the road from Histon, to the north of Cambridge (see Fig. 3) joins the road into the burh from the north-west at a point 50 m outside (i.e. north-west of) the north gate, immediately to the north of the point where the liberty boundary joins the same road (see Fig. 1). If there had been no feature such as the postulated market place outside the gate when the course of this road became established, it would be expected to have headed straight for the gate itself. That it clearly does not strengthens the case for the primary status of the liberty boundary at this point, and thus for the existence of this extra-mural market place as an original element in the topography of the burh.
14. Gray (1905, 14) was somewhat puzzled by the existence of separate markets on the northern and southern sides of the river. His observation that their existence can be explained by supposing either that the northern market moved to the southern side of the river, or that both existed together, is still a point at issue. Gray preferred the second alternative, which fitted in with his hypothesis of the dual origin of Cambridge.
15. Lobel (1974, 5 note 43) suggests a Danish origin for this fortified area, and Addyman and Biddle (1965, 93) suggest an origin contemporary with the construction of the King's Ditch in the early tenth century. In view of the eighth century origin of the northern burh, an origin at this time of *Armeswerch* is not an impossibility. (See also Addyman and Biddle 1965, 93 notes 7 and 8). The probable Danish use of the area is discussed further below.
16. Several similar instances, including St. Mary Huntingdon, in which 'late Saxon collegiate minsters were ... used by their Norman owners for the foundation of family priories', are noted by Hart (1966, 108-9 and note 1, 109).
17. With the exception of small areas comprising St. Peter's parish, which topographical considerations suggest were carved out of St. Giles. See Lobel 1974, map 6; and Figure 3 above.
18. This is suggested by Lobel's observation (1974, 9 note 80) that several field names in the west fields 'marked the site of open-air meetings of the burh's portmoot'.
19. These features were associated probably at an even earlier date in the City of London. The identity of Aldermanbury with the urban estate attached to the Hall of the King's reeve, certainly present in London in the seventh century (Brooke and Keir 1975, 194, note 4; Biddle and Hudson 1973, 20) is suggested both by Biddle and Hudson (*ibid*), and by the recent work of Tony Dyson (1984). The portmoot near St. Paul's was in existence by the early seventh century (Brooke and Keir 1975, 249) and the markets of Eastcheap and Westcheap were also a feature of the early city (Biddle and Hudson 1973, 20-21).
20. The robbing of this stone wall can probably be ascribed to the building of the Norman castle.
21. It is not impossible that the alignment of the main street from the north gate to the bridge, as well as the position of the bridge itself, could have been drastically altered at the time of the insertion of the Norman castle. If a minster church was obliterated, a mere street full of houses would have been no obstacle.
22. Their occupation of the northern burh is suggested by the find of Danish coins from a pit in the northern part of this area (Addyman and Biddle 1965, 97).
23. This course is that shown by the RCHM (1959, xlvii plan).
24. It is shown in Gray 1898, 71, plan 1 and in Gray 1910, 134 (plan) and in part in Addyman and Biddle 1965, Figs 12 and 13, but neither by the RCHM 1959, xlvii, map of 1280 (even though this shows the Cambridge Ditch), nor in Lobel 1974, Map 4. There is thus some uncertainty over its precise course. The course shown Figure 1 is based on Gray's suggestion. Hall and Ravensdale suggest (1974-5, 80-81) that this ditch was the original course of the Bin Brook.

25. Thus constituting a boundary between the northern and southern towns.
26. This is not inconsistent with the dating evidence for the St. John's Ditch: it was certainly filled by the time of the foundation of St. John's hospital in c. 1200, but near All Saints church was open during the eleventh century, since it was observed to have contained human bones, presumably from the churchyard (Addyman and Biddle 1965, 93, note 7).
27. Mrs. Lobel (1974, 5 and note 43) has also suggested that the area called *Armeswerch* was a fortified harbour of Danish origin. The germ of some of these ideas has already been expressed by Cam (1933, 42-3) and the RCHM (1959, xli). Both point to some of these Danish elements in the topography, but neither is precise about which of them were likely to have been in existence at what time, and neither draws the conclusion of the existence of a fortified Danish burh.
28. Lobel also remarks (1974, 3 note 25) on the marked Danish element in the population of Cambridge at a later date.
29. This is described as the 'central depression' by Lobel (1974, map 2).
30. Addyman and Biddle (1965, 91) have put forward but rejected as unlikely the possibility that the King's Ditch delimits an area smaller than the extent of settlement at the time of its construction.
31. See Cam (1933, 41). The *Liber Eliensis* (ed. E.O. Blade, 1962) records Irish merchants in Cambridge in the early tenth century (which Gray has suggested were Danes from Dublin or Wexford) in a context which implies not only extensive sea trade to and from Cambridge, but also the existence of a market there.
32. Maitland has pointed out that a mill, like a church, was a source of revenue to its owner: 'he banned his dependents to the one and to the other' (1898, 177). If the King's mill, like the King's Ditch, belongs to the period of burh formation, it must have been established to serve the urban tenants of the fields attached to the town at the same time.
33. This suggestion has already been made by Gray (1905, 19).
34. The area which lay to the south of the parish of All Saints - see above figures 1 and 2.
35. Lobel suggests (1974, 5) that it is through traffic along Trumpington Street which is the cause of the early development in that quarter, and in particular of the siting of the Saxon churches along it. The present suggestion is, however, that its importance derives rather from its proximity to the favoured trading settlement along the river. The traffic is a consequence rather than a cause of this development.
36. A very similar process of de-urbanisation, with the subsequent growth of the University, is postulated for Oxford by Professor Davis (1973, 267).
37. This view was first put forward by Hughes (1906, 423) repeated by Gray (1925, 19) and most firmly stated by the RCHM (1959, xlv-xlv), but has since been effectively demonstrated as mistaken by Addyman and Biddle (1965, 100-103). The arguments put forward here are in direct contradiction to the suggestion of the RCHM (1959, xlv) who imply that the development of Milne Street is contemporary with the first mention of the Church of St. John Zachary in the early thirteenth century. It must be said that nothing could be further from the truth.
38. See also Maitland 1898, 54-5; Lobel 1974, map 3 (inset).
39. A point appreciated, as were so many others, by Gray (1905, 18).
40. Shown in plan in *British Parliamentary Papers (Municipal Corporation Boundaries 1, pt. 1) 1837*. Virtually the same area is shown on the first edition of the OS 1:10560 (6 inch to 1 mile) map of 1887.

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