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Early Planned Landscapes in South-East Essex

by Stephen Rippon

This paper examines the origins and nature of the 'planned landscapes' which cover much of southern Essex. Firstly, the need for a rigorous methodology is stressed, and the processes by which such landscapes can evolve are discussed. Secondly, a multidisciplinary use of a wide range of data allows a greater understanding of the origins and context of several areas of planned landscape; a strong case is made that they are predominantly later Saxon, contrary to the widespread belief that they date to the late Iron Age or Roman period. Finally, some of the implications of such large scale reorganisation of the landscape are considered.

Introduction

Landscape study has a long tradition in Britain, but its main areas of interest are noticeably biased towards upstanding remains such as reaves, lynchets, and ridge and furrow. Hence, prehistoric and Roman 'celtic-fields', and medieval 'open-fields', have received considerable attention (e.g. Baker and Butlin 1973; Bowen and Fowler 1978; Rowley 1981), but land allotment in the intervening periods, and in particular the origins of non-open field landscapes, have not.

That large areas of lowland England never had the 'Midlands' style open-field, or 'Champion' landscape, is now accepted (Williamson and Bellamy 1987). Rackham (1986a:5) describes the pattern of small enclosed fields and dispersed settlement in counties including Essex, as 'Ancient' landscape, in contrast to the more recent 'Planned' countryside of the Midlands, which resulted from the enclosure of open-fields. However, recent work on certain areas of non-open field countryside, has shown that large tracts of land were planned out during the late Iron Age and Roman periods, long before the origins of open-fields elsewhere.

This reorganisation is represented by extensive areas of 'regularly' laid out roads and fields. On a relatively flat plain constrained by straight linear features, either natural or man-made, fields can develop through piecemeal assarting, but result in a regular pattern. This is very different to a planned system, which can be defined as a deliberate and conscious attempt to parcel-up land in an exact fashion, in contrast to the 'organic growth' of field systems, which occurs in a more gradual way. The results are 'cohesive' and 'agglomerative' field-systems respectively (Bradley and Richards 1978). 'Cohesive' has largely been superseded by the term 'coaxial' (Fleming 1987: 188), and applies to systems with a predominant orientation, consisting of parallel and perpendicular field-boundaries, which run great distances across country, largely oblivious to subtleties of the terrain. There are now over 30 examples spread over most of England, covering both uplands and lowlands, preserved as upstanding earthworks, cropmarks or extant field-boundaries, and ranging in date from the Neolithic to early medieval periods. Throughout this paper I take early medieval to mean post-Norman conquest, thus late eleventh to late thirteenth centuries.

Before examining one of these planned landscapes in greater detail, consideration must be given to methodology. Austin (1985) has identified three problems with morphologically based studies; an over-simplification of form, a lack of consideration given to the processes of change, and the poor quality of dating evidence. I would add a fourth problem, this being the failure to consider the implications of such large-scale landscape reorganisation. I hope to address most of these questions in this study.

Methodology

The early published examples of planned landscapes preserved in modern field-boundary patterns were very 'selective'; certain roads, field-boundaries, footpaths and cropmarks were plotted, with no indication given of what evidence was overlooked. Examples include the work of Rodwell (1978) and Rackham (1986b) in southern Essex, both of which cover the area to the south of Wickford, but visually appear very different, simply because Rackham included more boundaries (Fig. 1).

A more rigorous approach has been adopted by others, including Williamson (1987) who has published a detailed description of his methodology. This involves using a map showing all field-boundaries shown on the earliest available cartographic sources, then removing those which are demonstrably recent and post-date the laying-out of the regular landscape. These include boundaries resulting from the post-medieval enclosure of wastes and deer parks, and reclamation of marshes (e.g. Fig. 5). By illustrating this stage of the methodology, the reader can see what the author has selected in plotting the final 'planned landscape', and what he has chosen to leave out (e.g. Fig. 6). I regard the 'major elements' of such landscapes as features that form the boundary of at least three fields; in many cases they run for over a kilometre. Though this rigorous methodology was used, it should be stressed that the regularity in these relict planned landscapes is really self-evident. The *existence* of such regularity cannot be denied; it is the *interpretation* placed upon it that remains problematical.

Landscape Evolution

In landscape archaeology, it is important to understand the mechanisms of change. Certain aspects of this are discussed below, to provide a conceptual framework for the rest of this study.

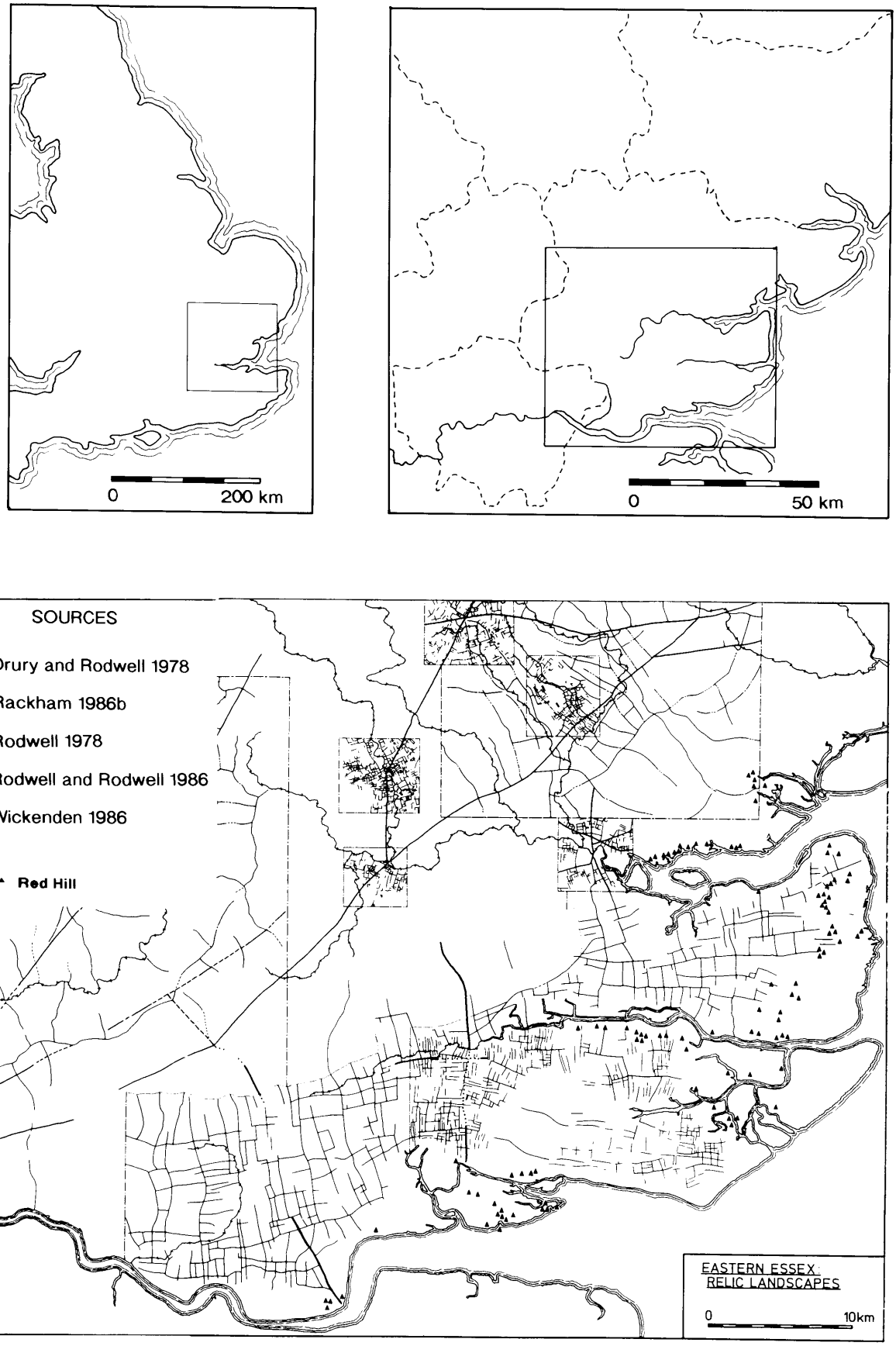

Fig. 1 Relic landscapes in south-east Essex.

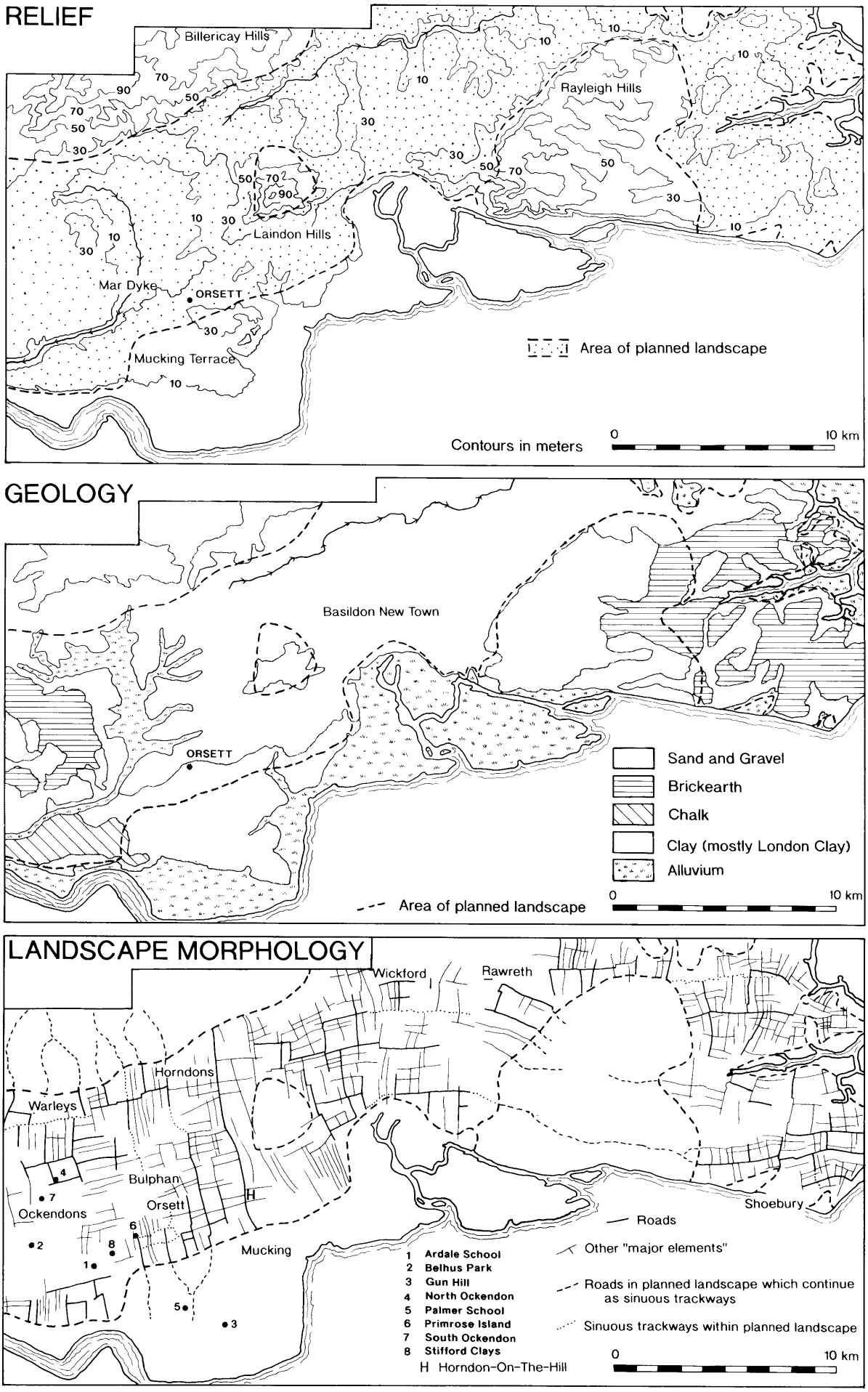

Fig. 2 South-east Essex; relief, geology and landscape morphology.

What do these landscapes represent?

As the early work of Rodwell and Rackham shows, there has been a tendency towards oversimplification with regards to the actual nature of these landscapes; 'it is very easy to make simpler patterns from the complex, but difficult to reconstruct the complex' (Austin 1985:20). One problem is a failure to emphasise what the published plans are intended to represent. Williamson (1987:426) has dealt adequately with this in his work on Suffolk landscapes, which do not claim to show every individual Iron Age field. Certain elements may indeed be survivals from the original episode of planning, but this cannot be said for all of them. Landscapes are a palimpsest; a simple comparison of a seventeenth-century estate map, nineteenth-century tithe map, and later Ordnance Survey Six Inch Maps, all of the same area, will show the extent to which individual field-boundaries are mobile, though the same exercise will also illustrate the stability of many major elements (Rippon 1989, Figs 6 and 18). Therefore, landscape topography should merely *enhance* regularity present in a modern landscape, which may reflect an earlier planned field-system only surviving in a fragmentary state.

Morphology and Processes

It should be emphasised that planned landscapes are deliberately laid out in a regular fashion; the use of exact straight lines and right angles testifies to this, as does the fact that changes in relief and drainage may be ignored. However, there are several scales at which this planning could have occurred. Firstly, the whole area covered by the 'regular' landscape may have resulted from a single episode of 'planning'. However, in south-east Essex, a close examination of the morphology shows this not to be the case (note the distinction between 'regular' and 'planned'). The same appears to be true of other published examples, including Goltho in Lincolnshire (Bassett 1985; Fleming 1987:190).

Therefore, that part of south-east Essex with a regular landscape can be divided into smaller blocks, isolated on the basis of topographical homogeneity, with a constant orientation and individual major elements traversing most if not all of its width (Figs 2 and 6). These 'morphological zones' are an analytical tool to aid the characterisation of the landscape, but may also correspond to past territorial units. For example, some zones correspond closely to groups of several medieval manors or parishes, such as the Shoebury system (Fig. 6), and those parts of the Warley and Horndon parishes on the Clay (Fig. 2).

Alternatively, adjacent zones with slightly different orientations may reflect stages by which a cultivated area expanded. Thus, chronological variation in the episodes of planning can also occur. The following hypothetical example serves to illustrate this. The core of an estate was planned-out, forming a distinct 'morphological zone', with a regular grid of roads forming the major elements, but possibly based upon pre-existing trackways which were straightened in the process (this appears to be the case in Thurrock, see Fig. 2, and elsewhere in the country, for example Nottinghamshire, Branigan 1989: 162). As population increased, there was a need to expand onto the surrounding waste; this area of intake forms the second 'morphological zone', and may be of a slightly different orientation to the first. There followed a period of contraction, and fields in this second zone were abandoned, with only the roads and earthworks of some boundaries surviving. In subsequent periods of expansion, this area was recolonised, with new fields laid out, occasionally following the earthworks of earlier features. These later fields need not have been planned in a deliberate fashion; rather they could have developed through piecemeal assarting. This would still have resulted in a regular pattern because of the constraints of the surrounding grid of roads. Over time, the roads shifted, as lanes skirted around fields to link up new farms, giving a distinctive 'stepped' appearance (e.g. Fig. 4, road besides Orsett Cock and Loft Hall enclosures). Therefore, the network of roads can be of altogether different date to the planned layout of individual fields. This illustrates just how complex an apparently simple regular landscape can be.

Continuity

Relatively few field-boundaries will remain stable after their initial laying out, through to the present day; only some major elements are likely to do so. However, what are the implications of the survival of early planned landscapes, on the question of continuity in land-use?

At North Shoebury, the alignment of the late Iron Age field system was maintained through the Roman period, suggesting continual use of the land (Wymer and Brown forthcoming; Brown pers. comm.). However, in other cases there may be a hiatus in use; for example, at Gun Hill, late Iron Age, Roman and medieval ditches all run parallel and within five metres of each other, but there is no evidence of recutting to fill the chronological gap representing the Saxon period (Drury and Rodwell 1973). Does this imply discontinuity of landuse?

It has been assumed that the survival of early planned landscapes implies their continued exploitation (e.g. Drury 1976:121). It has even been stated that a reversion from arable to pasture will result in the loss of that landscape (Drury and Rodwell 1978:148). The 'hypothetical example' given above shows this assumption to be wrong. In the case of Gun Hill, there is no need to suggest continued use of the area, rather, a period of abandonment or at least decreased intensity of activity, during which the Roman ditch and bank survived as an earthwork to influence the location of the medieval field-boundary.

Origins and Dating

Various methods of dating the origin of a planned landscape can be used, though many of these have theoretical and methodological weaknesses. A major assumption of Rodwell's is that as medieval churches occupy nodal locations, they 'fit into', and so post-date, the planned landscape. However, if we work through the possible mechanisms by which the landscape could have evolved, then the field-systems could equally have been planned around the pre-existing churches. Another variable to consider is the chronology of church development. Most churches appear

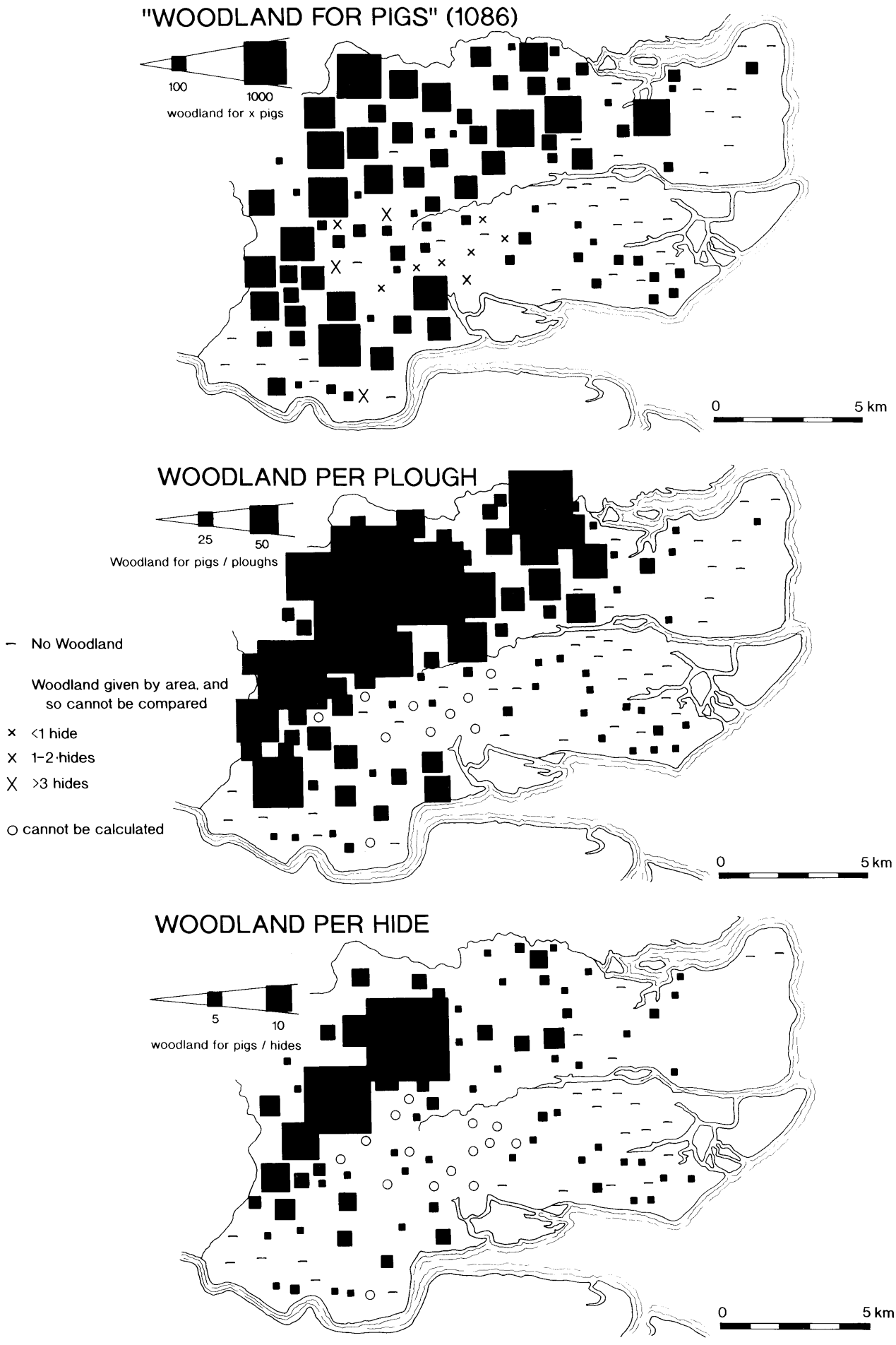

Fig. 3 South-east Essex; Domesday woodland.

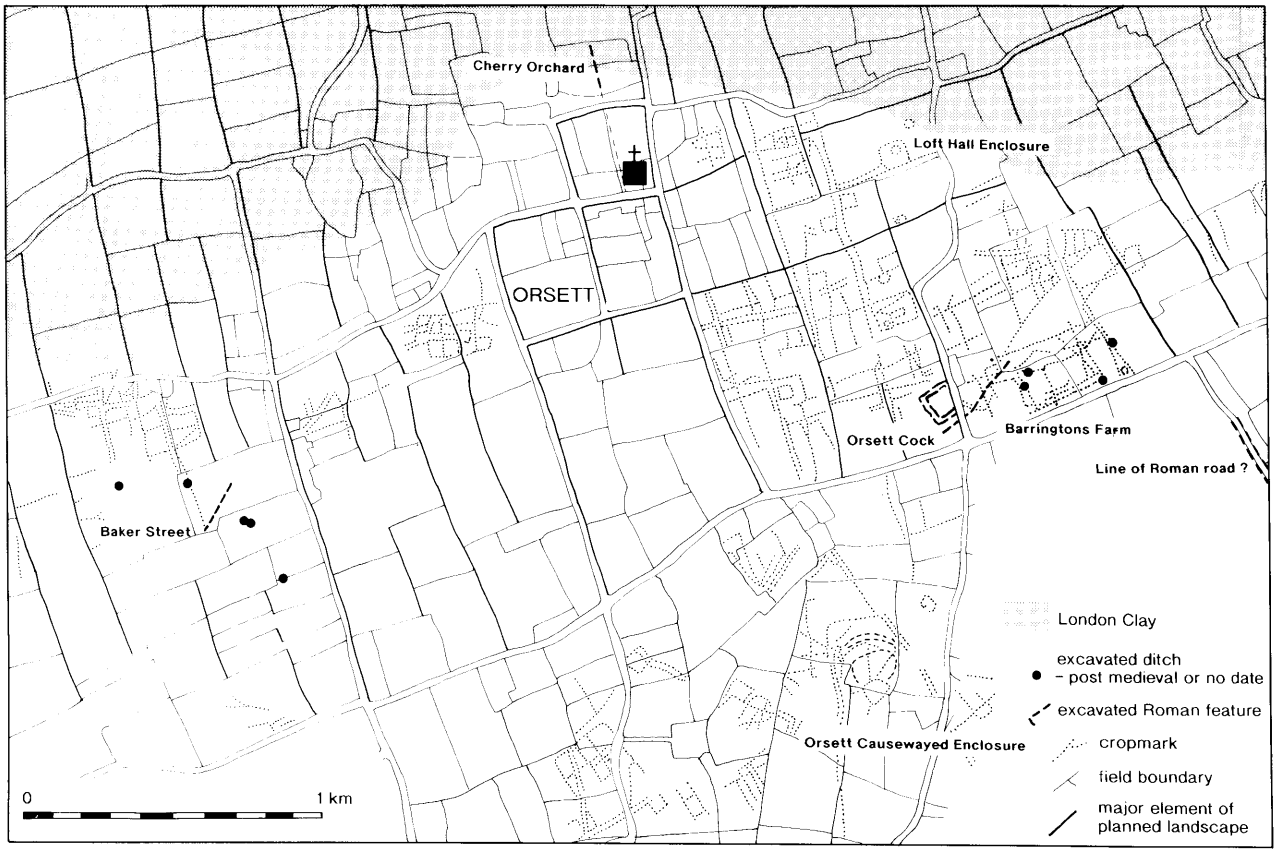

Fig. 4 Orsett; landscape elements, cropmarks and major excavated features.

to have been founded from the 10th or 11th century, such as at Rivenhall (Rodwell and Rodwell 1986:79-93).

Better evidence comes from 'horizontal stratigraphy', for example when a Roman road cuts across a planned landscape (e.g. Williamson 1987:420). In exceptional cases, churches appear to overlie an element in a planned landscape, though excavation is required to determine the chronology, as was possible at Asheldham (Drury and Rodwell 1978).

The excavation of individual field-boundaries is unlikely to provide good dating evidence, due to their mobility and disturbance through continual recutting. Also, pottery can only ever provide a *terminus post quem* for infilling, as it is washed into ditches from the ploughsoil, being derived from manuring. However, if that practice stops, or there follows an aceramic period, then only pottery from earlier times will continue to find its way into ditches. Even when sectioning the more stable 'major elements', care must be taken that these are not survivals from an earlier phase of occupation of the area, around which any planning was based.

Case-study: Rodwell's Roman Planned Landscape in Southern Essex

'A Landscape Revisited'

Essex has numerous examples of planned landscapes preserved in modern field-boundary patterns. Most are 'coaxial', and several can be dated to the pre-Roman period through their stratigraphical relationship to Roman roads (Fig. 1). In 1978 Rodwell published the plan of a morphologically different example, claimed to represent an early Roman Imperial Estate, covering the Thurrock and Dengie areas of south-east Essex (Rodwell 1978). This 'relict' field-system apparently extended into the Southend area, but was never published (Rodwell pers. comm.). However, in 1986 this omission was rectified by Rackham (1986b), who published a plan for the remaining area, but postulating a late prehistoric date.

Though this regularity in the landscape was first recognised by Laver (1895), Christie (1921, 1922, 1923), and Coles (1934, 1939), it was Rodwell's work that brought widespread recognition to the phenomenon. For many years his hypothesis was accepted uncritically both by local authors such as Wright (1981:5), and renowned scholars such as Applebaum (1981), Williamson (1986a:245) and Branigan (1989:161). However, doubts were expressed by several local archaeologists (Toller 1980:41, Eddy 1984-5:20), and by the mid-1980s excavations had contradicted the Roman date (Toller 1980; Milton 1987). Wilkinson (1988:126-8) went as far as to suggest an early medieval origin, meaning post-Norman conquest.

The increase in excavated evidence since the work of Rodwell, and further work on planned landscapes elsewhere in the country, provided the context for the following re-assessment of the south-east Essex example, although time prevented a similar examination of the Dengie Peninsula.

For the Southend area, field-boundary data was provided by the *c.* 1840 Tithe Maps, and roughly 100 earlier estate maps in the Essex Records Office and elsewhere (listed in Rippon 1989:91-3). Time prevented such detailed analysis for the Thurrock area, where the basic data was provided by Wilkinson 1988: Fig. 96, and the O.S. First Edition Six Inch maps.

Physical Background (Fig. 2)
Regular landscapes cover most of the lowlying London Clay basin in southern Essex, though only the area to the south of the River Crouch is considered here. The area is bounded by lighter soils, with the Bagshot gravels to the north, the Mucking Terrace chalkland and terrace gravels to the south, and extensive drift deposits of fertile brickearth to the west of Mar Dyke and east of the Rayleigh Hills. Two outcrops of lighter soils occur within the clayland, namely the Rayleigh and Laindon Hills.

The London Clay is heavy but fertile, whereas the gravel soils are lighter but of poorer quality. The 1894 Pringle Report into agriculture, described the London Clay as 'three horse land', whereas the Boulder Clay of north Essex was only 'two horse land', and the gravel soils required just one horse (Coles 1936-7:23; Collins 1965:13). Indeed, London Clay was the first land to be abandoned during the agricultural depression of the late nineteenth-century (Collins 1978). Only the brickearths can be regarded as good arable; it is significant that the planned landscapes are found here too, as it shows that they are not just confined to more marginal areas.

Settlement History (based on Wilkinson 1988:115-21, and data in the Essex and Southend Museum S.M.R.s).
A settlement history of the various soils provides the context into which the episodes of landscape planning can be fitted. Most evidence comes from unstratified finds, presented on distribution maps (Buckley 1980; Dunnett 1975; Wilkinson 1988: Figs 93-4). There are important problems with this data, especially collection biases due to the activities of nineteenth-century antiquarians, mineral extraction, variable intensity of agriculture, and the identification of sites through crop-marks leading to the bulk of recent rescue excavations being on the lighter soils.

In comparison, the London Clay has received relatively little archaeological attention. Unfortunately, Basildon New Town (Fig. 2) was built without any proper archaeological supervision, and so the lack of material produced during its development cannot be used as negative evidence that there was little pre-medieval activity on the clay. However, it is interesting that though chance finds of Bronze Age metalwork were made (Nigel Brown pers. comm.), there were no coins or burials of the Roman period, which are relatively conspicuous, and abundant elsewhere.

The lighter soils show a long history of exploitation, broadly continuous from the Neolithic onwards, with an increased number of sites evident from the Iron Age. The Mucking Terrace, the most intensively investigated area, saw occupation into the Iron Age, but then a period of less intensive use, suggesting a shift to heavier soils in the late Iron Age. The early Saxon Period saw its reoccupation. In contrast, the brickearths do not appear to have seen widespread abandonment at any stage, even in the early Saxon period.

The London Clay only appears to have been occupied from the late Iron Age or Roman period. Archaeological evidence is very limited, probably due at least in part to collection biases outlined above, but allowing for this, the sparsity of elsewhere relatively ubiquitous Roman coins and burials may suggest the area was genuinely less intensively exploited. Both the Orsett Cock (Geoff. Carter pers. comm.) and Rawreth (Drury 1977) enclosures, on or near the clay, are interpreted as being predominantly for stock management during the Roman period, though a significant area of arable land around Wickford is suggested by a corn drier and large storage pit (Rodwell 1970).

Environmental evidence from the lower course of the Mar Dyke shows the steady clearance of woodland from the later Bronze Age, *c.* 1000 BC, peaking in the late Iron Age and Roman periods. The late Roman and early Saxon periods possibly show a slight increase in woodland, with the growth of birch, beech and ash (Wilkinson 1988:109-14 and Fig. 98).

Analogies elsewhere support the view that heavy claylands were abandoned at the end of the Roman period, for example around Goltho in Lincolnshire (Beresford 1987:20), in Northamptonshire (Hall 1988:100) and Norfolk (Warner 1987:10). The closest analogy to the study area is the north-west Essex Boulder Clay plateau (Williamson 1986b, 1988), where the more extensive, heavy interfluves saw little occupation even in the late Iron Age and Roman periods, when only limited arable is postulated (Williamson 1986b:125). There was a general post-Roman abandonment, with reoccupation only in the later Saxon period (Williamson 1986b:127).

If Wilkinson is correct, and the planned landscapes of southern Essex have an early medieval origin, then they would have been superimposed upon an intensively exploited landscape. However, if the replanning occurred somewhat earlier, say from the eighth century when settlements on the lighter soils were abandoned, then on the London clay, new landscapes were probably set out on an unenclosed area used largely for pasture. Only on the continually occupied brickearths would a dislocation of settlement have occurred.

Similar issues have been discussed with regard to the origins of open-fields. While Thirsk has argued that major change in the landscape is likely only when population reaches a very high level, Campbell suggests such transformations are more likely with a population, which though rising, thus providing the incentive for change, is still relatively low, making logistics of resource redistribution easier (Campbell 1981:115-29).

Domesday Woodland
A key aspect of Wilkinson's argument, that the planned landscapes of south-east Essex date from the early medieval period, is his interpretation of the woodland as recorded in Domesday. He noted the high values in parishes located entirely on the clay, and so concluded they were heavily wooded (Wilkinson 1988:118-121). He argued that post-Roman afforestation would lessen the likelihood of a Roman

landscape surviving, and that the existence of large tracts of woodland during the Roman period would render the existence of a rectilinear landscape unlikely at that date.

However, there are major flaws in his arguments. There seems no reason why substantial tracts of woodland should not be included in a planned landscape, especially if the woodland was managed. Even if a planned landscape became afforested, it would only need a grid of roads to survive, and once the area is recolonised a regular, though not necessarily planned, landscape would reappear. However, it is the interpretation of the actual woodland density at Domesday which is most problematical.

The references to woodland are difficult to interpret, especially as the convention used over most of the study area, 'woodland for x swine' refers only to pannage, not to managed woodland (Rackham 1980a:119; Warner 1987:20). However, the values given are very precise, not rounded-up estimates, suggesting a fair degree of reliability.

Previous attempts at studying Domesday woodland, have simply compared absolute values (e.g. Wilkinson 1988: Table XIII, pp 118, 126-8). However, this ignores the size of area over which the woodland was spread. When the area of woodland for each manor is divided by the total area of that estate, then the proportion of woodland on the claylands and brickearths is in fact relatively low. The same analysis shows the proportion of ploughs to be very high, in exactly the same areas as the planned landscapes. This is best demonstrated by calculating the amount of woodland for each plough (Fig. 3). However, anomalies remain, not least the lack of woodland recorded on the Rayleigh Hills. The most likely explanation is that Domesday does not state whether, for example, the pasture for 500 swine belonging to Bulphan, a parish entirely on the clayland, was physically within the bounds of that parish as they survived to be mapped in the post-medieval period. Rather, the woodland may well have been located in a detached part of that parish on the gravel hills, for this 'enclaving' is well documented in the medieval period, and there is no reason why it should not have existed in the eleventh century.

Other woodland indicators support the conclusion that the claylands were relativley free from woodland at least by the late Saxon period. 'Leah' place-names, generally accepted as indicating woodland, cluster on the Rayleigh, Billericay and Laindon Hills (Reaney 1935, Wright 1981). It has also been suggested that medieval deer parks were located in well-wooded areas. Where emparking licences record former land-use, woodland usually constitutes over half (Rackham 1980a:191). The distribution of deer parks in southern Essex is the same as the 'leah' place names, and neither are found on the Clay. Therefore, even if there was a slight late/post-Roman afforestation, as the Mar Dyke sequence suggests, it was clearly gone by the late Saxon period.

Eleventh-Century Landholding

The pattern of landholding in the late Saxon period can be reconstructed from the Domesday Book. This records predominantly small manors, often the only possession of their lord; 81% of landholders had just a single holding (Round 1903; Boyden 1986).

Sometimes, a manor was part of a larger estate, the components of which were either nucleated or dispersed over large areas. The estates belonging to Swein were concentrated in south-east Essex, but individual holdings were widely scattered. Interestingly, the only large continuous territory is around Shoebury, roughly coterminous with the planned landscape there. The five Domesday manors of Shoebury and Wakering constituted nearly 18 hides, of which Swein held 16½. In 1066 all five holdings were in different hands; thus the fragmentation of estates called 'Shoebury' and 'Wakering' must have occurred before this time. Swein obtained the manors between 1066 and 1086, and they were fragemented after 1154 (Helliwell and Macleod 1980:2-6). Apart from this one case, each morphological zone of the regular landscape was held by a multiplicity of lords by the late eleventh century.

Even land held by individual manors could be dispersed. A charter of *c.* 1080 describes the disposition of holdings belonging to Stifford; thirty acres were to the north of the Brook, twelve acres to the south and thirty acres 'at the Stone' (Hart 1971:15-17). Clearly, in this areas as a whole, numerous landowners, and probably hundreds of tenants in several communities, would have been forced to co-operate if the planned landscape had originated in the eleventh century or later.

It has been seen that the London Clay, occupied by many of these planned landscapes, was of a relatively marginal nature in terms of arable agriculture, and was the first to be abandoned at a time of difficulty. This suggests that its extensive exploitation and division into regular plots took place during a period of land shortage and economic growth, climatic improvement, or the introduction of new technology. There is no evidence of widespread occupation of the clay until at least the late Iron Age and there is good reason to assume it was deserted in the immediate post-Roman period. Woodland appears to have been extensively cleared by the Roman period, and by Domesday, landholding had become so fragmented that it would have been impractical for such large-scale planning to have occured. Therefore, either a late Iron Age/Roman or middle to late Saxon date is the most likely context for the planning of these landscapes, both generally regarded as periods of settlement expansion.

The Thurrock Area

Rodwell's work represents an oversimplification of the planned landscape in this area. Firstly, he shows it as one entity spreading over the Mucking Terrace and Laindon Hills (Fig. 1), but an examination of all field-boundaries and roads shows that the regular landscape does not extend far off the London Clay and brickearths (Figs 2 and 4).

Secondly, though there is clearly an unusual degree of regularity over the whole area, it lacks overall uniformity. The orientation is not constant, a notable break occurring at a line roughly between Bulphan and Langdon Hills of about 8° (Fig. 2). There is no grid of roads or major alignments extending over the whole regular landscape. The only roads that do traverse the entire area, run north-south through Horndon-on-the-Hill and Ockendon, and clearly

illustrate the change in orientation mentioned above. They usually continue beyond the area of the planned landscape as sinuous trackways. Thirdly, the nature of field morphology varies throughout the regular landscape, with very straight, narrow fields in the north, more sinuous strip-fields in the south, and simple rectangular fields around the Ockendons (Fig. 2) and Bulphans.

I have suggested above that a regular landscape could be a complex palimpsest, representing several episodes of planning, reoccupation or reorganisation, with elements preserved from earlier periods. Therefore, in trying to understand the origin of this landscape, particular attention has been paid to the suitable 'contexts' for the colonization of such extensive areas, as well as the dating of specific elements.

Settlement History: Either the late Iron Age/Roman period or middle to late Saxon period seem the most likely contexts for expansion onto the clay. Both relate to periods when the lighter terrace soils were used less intensively. The fragmented nature of landholding by the eleventh century suggests a *terminus ante quem* for the extensive re-planning of the landscape.

Place names: The predominance of topographic names, notably '-don', on the clayland has been noted by Gelling (1975; 1978:119-123). That one name element is so dominant suggests they relate to a single phase of colonization. Gelling suggests that topographic names are either very early or very late Saxon. As this area was probably abandoned in the post-Roman period, it seems the settlements on or near the clay acquired their names relatively late.

Morphology: The dating of field-systems by morphology is fraught with difficulty (Branigan 1989:161-2; Ford, Bowden, Mees and Gaffney 1988). However, the shape of the fields may provide some clues as to their origin. The reversed-S profile of fields in the southern part of the regular landscape (Fig. 2), and far smaller strip-fields at Orsett (Fig. 4) and Horndon-on-the-Hill are suggestive of medieval forms. However, the strip-fields with straight axes in that part of the Warleys and Horndons on the London Clay (Fig. 2) are more difficult to attribute to a particular period, as both the Roman and medieval periods are possible.

Though the best known form of Roman planned landscape is a grid system or 'centuriation' (Dilke 1971), strip-fields were also used, for example, in the Fens (Hallam 1971), on the Berkshire Downs (Ford, Bowden, Mees and Gaffney 1988) and in Nottinghamshire (Branigan 1989; Riley 1980:11-26). However, long straight strip-fields without a reversed-S profile can be post-Roman; for example, those of the Cambridgeshire silt Fens date to the thirteenth century (Hall 1981), and Harvey (1980) argues the Holderness field-systems are post-ninth century.

Relationship to Roman Roads: None have been identified as crossing the area of the regular landscape, though several occur in areas to the north and south, stopping when they reach the clayland (Fig. 1; Rodwell 1975: Drury and Rodwell 1980:fig 22). This suggests that the planned landscapes may post-date and so have obliterated the Roman roads.

Cropmarks: The majority of ditches correspond to the regular landscape (Fig. 4). One intriguing site to the north of the Orsett Cock remains undated; a rectangular enclosure containing a large ring-ditch/circular structure is associated with a trackway, all features suggestive of a late prehistoric date and on the same orientation as the planned landscape (Fig. 4: Loft Hall Enclosure). In contrast, the late Iron Age enclosure at the Orsett Cock has a totally different orientation.

Another interesting cropmark is the trackway just to the east of the Orsett Causewayed Enclosure, which is outside the planned landscape. However, it continues northwards on the same orientation as the planned system; is this an example of an earlier trackway incorporated into the new planned landscape, and straightened as a result?

Excavations: Unfortunately, no large scale excavations have occurred in the interior of the planned landscape, only on its southern periphery. The evidence is summarised below; see Figs 2 and 4 for locations.

Evidence for an early Roman *terminus post quem*:

At *Barrington's Farm*, Orsett, a ditch at variance to the regular landscape contained first and second century pottery, with one 'possibly intrusive' late Roman sherd. Other ditches, aligned with the planned landscape contained only post-medieval pottery (Mi¹ton 1987).

At *South Ockendon*, a ditch containing first century AD pottery was on a different orientation to the surrounding landscape (Chaplin and Brookes 1966).

At *Palmer School*, several Roman ditches were on the same alignment as the planned landscape to the north, though others were not (Rodwell, K. 1983).

Possible evidence for a Roman date:

At *Cherry Orchard*, Orsett, a gravel road was on a slightly different orientation to the surrounding field-boundaries, though Bannister observes that it is continued by the line of a path west of Orsett church. It contained late Roman material in its make-up, and overlies a ditch containing similar material (Bannister 1965).

At *Belhus Park*, possibly three Roman ditches were on the same alignment as the planned landscape (Wilkinson 1988:62-3). These may be part of an isolated enclosure.

At *Primrose Island*, Stifford Clays, a Roman enclosure is on the same alignment as the planned landscape (Wilkinson 1988:17-19).

At *Stifford Clays* two Roman ditches appeared to be of a similar orientation to the planned landscape, though interestingly, a medieval ditch was not (Wilkinson 1988:19-24). However, the dating is very poor, and this site is on the very edge of the planned landscape, where present field-boundaries are not particularly regular.

At *Ardale School*, early Saxon burials were aligned upon the ditches of a Roman enclosure on a similar alignment to the planned landscape, which here includes the 'medieval' style reversed-S profile strip fields. Excavation of one of these boundaries yielded Victorian material, showing it was open until the nineteenth century; there were no signs of earlier recuts (Wilkinson 1988:24-59). Once again this is on the very edge of the regular landscape.

Evidence for a post-Roman date:

(See also Cherry Orchard, Palmer School and Barrington's Farm, above).

At *Baker Street*, Orsett, a ditch at variance to the planned landscape contained abraded Roman material; cropmarks show this continuing for around a kilometre towards Orsett village. Ditches forming part of the strip-field system contained little datable material except one, which yielded late Iron Age to Roman material including one very abraded late Roman sherd (Wilkinson 1988:13-17).

The *Orsett Cock Enclosure* was occupied into the early Saxon period, with both the Iron Age enclosure and Saxon sunken featured buildings on different alignments to elements of the overlying planned landscape (Milton 1987; Toller 1980; Geoff. Carter pers. comm.). However, this does not

necessarily imply a post-early Saxon date for the whole regular landscape around Orsett. A field system may have been laid out to the north in the Roman period (hence the Cherry Orchard site), which was later extended south, to include the now deserted enclosure. Thus, only that part of the regular landscape south of the village is *certainly* later Saxon.

Evidence for a pre-twelfth century date:

At *North Ockendon*, a ditch forming the continuation of a field-boundary which was shown on the tithe map and formed part of the regular landscape; it contained twelfth- and thirteenth-century pottery (Wilkinson 1988:65-8).

Therefore, little evidence exists for the nature of the Roman landscape in this area, but some Roman features are orientated with present field-boundaries at least in peripheral parts of the regular landscape. Thus, it does appear as if some Roman enclosures in particular, could have survived as earthworks to influence the orientation of the later landscape. Further work is required to investigate the extent of this Roman legacy, especially where the evidence is strongest, around Orsett.

In other areas the Roman landscape was on a different orientation to modern field boundaries and the relationship to Roman roads suggests that extensive areas of the planned landscape post-date the Roman period. The field-morphology certainly appears to be at least partly Saxon or medieval in character. Place-names support analogies elsewhere for a middle or later Saxon date for the re-occupation of this area, and a *terminus ante quem* for the planning is provided by the fragmented nature of landholding at Domesday.

It would appear, therefore, that the following conclusions can be reached. Firstly, the regular landscape is not all one entity; there are numerous morphologically distinct landscapes in this area, with a generally similar orientation perhaps due to a framework of earlier trackways. Secondly, individual morphological zones were deliberately planned out. Thirdly, the landscape as it exists is a palimpsest, including both Roman and Saxon/medieval elements, though most of the regularity evident in the modern landscape probably dates to the middle or later Saxon period.

The Southend Area

It has already been indicated that the work of Rackham was inadequate in characterising the nature of the planned landscape of this area. The result of a more detailed analysis is to identify a series of clearly defined morphological zones (Figs 5 and 6). The clearest are radial systems in Southchurch, Shoebury, and Stambridge. In contrast, to the south of Wickford are the fragmentary remains of a very rectilinear system. Other areas within the regular landscape do not show such clear signs of 'planning', and were not investigated as thoroughly.

The area can be divided into four environments; marshland, brickearth soils overlying lighter soils of a river terrace, older gravels of the Rayleigh Hills, and the heavy London Clay (Fig. 2). The regular landscapes are restricted to the brickearths/recent terrace deposits and London Clay. Their settlement histories, outlined already, show continuous occupation on the fertile brickearths, and only limited occupation of the London Clay even in the Roman period. By the time of Domesday, both areas were extensively cleared. In the case of the Stambridge system, Domesday also shows a highly fragmented pattern of landholding, with virtually all the manors in different hands. This is in sharp contrast to the Shoebury system, the majority of which was held by Swein, having been acquired after 1066; the estates were dispersed in the mid-twelfth century.

The best dating evidence for the origins of the 'radial' planned landscapes comes from Shoebury. Excavations at North Shoebury revealed an extensive late Iron Age/Roman field-system, on a different orientation to the overlying planned landscape (Wymer and Brown forthcoming; Nigel Brown pers. comm.). The upper fills of late Roman ditches contained early Saxon sherds, so providing a *terminus post quem* of the fifth or sixth century for the planned landscape. At excavations in Great Wakering, the late Iron Age and Roman period is not well represented, but several ditches, including one containing a few sherds of early Saxon pottery, are again on a different orientation to the planned landscape (Crowe forthcoming).

The Great Wakering/North Shoebury parish boundary is also of great relevance. This field-boundary has a continuous straight course for over 4 km, with the curving roads of the planned landscape bearing no relationship to it. In fact, its exact line can be continued west another 9 km, as far as Scrub Lane in Hadleigh (Figs 5 and 6). A feature so straight and long may well be a Roman road, an example of how redundant earthworks can be fossilized in later landscapes.

The excavations at North Shoebury also revealed a large rectangular enclosure aligned with the churchyard and a road to the west which formed part of the radial planned landscape. Thirteenth-century pottery came from the secondary silts of the enclosure ditch, with twelfth/thirteenth-century, and a few eleventh-century sherds from lower levels (Wymer and Brown forthcoming; Nigel Brown pers. comm.), providing a *terminus ante quem* for the planning. This could be pushed back to the tenth century on the basis of the possible Danish camp at Shoebury (Spurrell 1890), which fits into the radial pattern of roads, suggesting it post-dates the original planning. One road, Rampard Street, appears to have been overlain by the fort, and was forced to skirt around the defences (Figs 5 and 6; Spurrell 1890:50).

Therefore, two possible dates for the episode of planning can be suggested; firstly, the middle to late Saxon period, before the fragmentation of landholding and secondly, the late-eleventh to mid-twelfth centuries during the area's control by Swein and his family.

Support for the earlier date comes from the morphological similarity with the Stambridge system, for which the fragmented nature of eleventh-century landholding suggests a pre-eleventh-century date. The intensive exploitation of this whole area is reflected in the number of ploughs per hide at Domesday; following Campbell's (1981, 115-29) hypothesis, this would also support the earlier date, as the lower population would have meant less upheaval for the tenant population. There is no evidence of disruption comparable to the 'Harrying of the North', to provide a suitable post-conquest context. Thus, a pre-eleventh century date is

Fig. 5 Southend area; landscape elements.

suggested for at least the Shoebury system, and possibly the morphologically similar Southchurch and Stambridge areas.

The highly rectilinear pattern to the south of Wickford is enigmatic (Figs 5 and 6). Roman centuriation has never been convincingly identified in Britain (Dilke 1971). However, an analysis of Six Inch maps shows that many of the parallel and perpendicular boundaries south of Wickford correspond exactly to divisions of two 'centuriae' (Fig. 6; Rippon 1989: Fig. 29). In 1965, a feature continuing the line of one of these boundaries was excavated, and proved to be a Roman road (Rodwell 1966). Maybe this is very fragmentary centuriation, or more likely, an example of 'a land assignation made in multiples of *actus* by someone with at least a vague notion of Roman surveying' (Dilke 1971:193, discussing Ripe in Sussex).

Discussion and General Conclusions

Two groups of problems can be identified in previous work on planned landscapes; methodology, and the failure to consider the implications of such large scale reorganisation. The former is dealt with above, but I now wish to turn to the latter. It must be remembered that we are studying the use of a block of land, which did not exist in isolation, but within a settlement pattern, a tenurial framework, and a wider landscape, not all of which was planned.

A Late Saxon Landscape

Both case-studies show the regular landscapes of southern Essex to be complex in both their physical form and chronology. At both Thurrock and Southend, features survive from the Roman period, though there is no evidence of an extensive planned landscape of this date. It is interesting that recent excavations to the south of Maldon have produced evidence for Roman ditches on the same alignment as the Dengie planned landscape (Gilman 1989:154). However, both marginal clay and fertile brickearths appear to have seen a major reorganisation of the landscape, certainly between the fifth and twelfth centuries. A middle Saxon date, say between the eighth and the tenth centuries, is the most likely context, after the early Saxon contraction, and before the late Saxon fragmentation of landholding.

The evidence for widespread reorganisation of the landscape, based upon large estates in the middle to late Saxon period, is now widespread (Unwin 1988:29). Planned landscapes of this date, but coaxial in nature, are being identified in East Anglia (Williamson 1987:428-9). In the Midlands, the open-field system and nucleated villages may have been emerging at this time (Fox 1981:70; Hall 1988:36; Unwin 1988). However, an important point to emphasise is that while reorganisation was widespread, its nature was not uniform; southern Essex never saw the development of nucleated villages and open-fields.

The expansion onto the marginal London Clay, and reorganisation of resources there and on the brickearths, occurred within large estates illustrating the strip-parish principle, with a territory crossing a series of zones of different landuse potential. Settlements which utilized the planned landscapes had access to a wide range of resources with the estate centres, represented by Church-Hall complexes, located on the edges of ecological zones (e.g. Orsett, Fig. 4). The problem of where the actual settlements were located remains to be resolved.

These estate centres often lie beside long sinuous trackways, running to the wooded hills and in some cases as far as the Thameside marshes (Fig. 2). In the medieval period, large areas of coastal marsh were 'enclaved' to inland

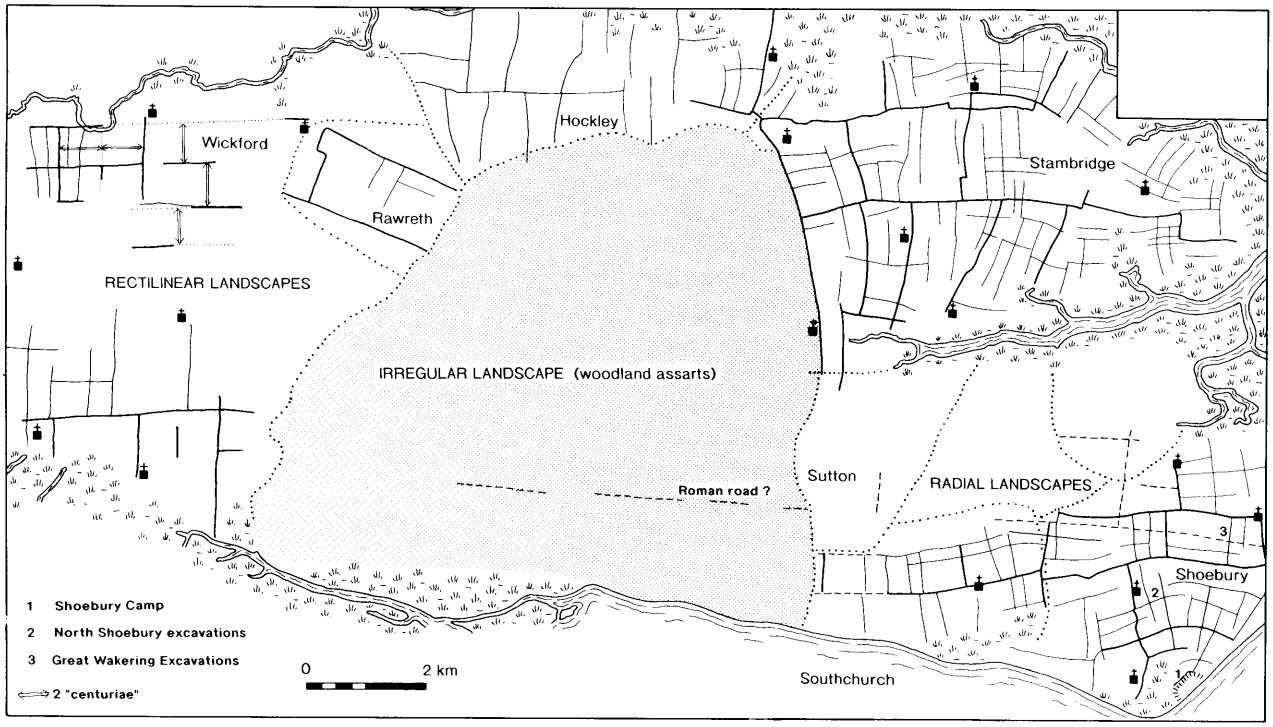

Fig. 6 Shoebury; landscape elements.

manors, especially along the north bank of the Thames (Cracknell 1959; Round 1903:369-70). A good example is the marsh around Corringham, enclaved to Fobbing, Mucking, Dunton and even Little Warley, which is 15 km to the north-west. One of the derivations of the place-name 'Wick', which are abundant on the marshes, is as an appendage to larger estates situated elsewhere (Britnell 1988:161-2).

Documentary evidence also illustrates the enclaving of woodland, on the Rayleigh Hills (Rackham 1986b:14-16, fig. 14). It may not be a coincidence that it is the gravel hills, Mucking Terrace, and inland marshes of the Mar Dyke Fens and Rawreth Shot that saw the only common land to survive into the post-medieval period (Chapman and Andre's Map of Essex 1777). It seems likely that this pattern of enclaving, and the surviving fragments of common land, are the remnants of large inter-manorial commons, such as Tiptree Heath in central Essex, which was shared between seventeen parishes in the medieval period (Rackham 1980b:105). All this evidence suggests that the middle Saxon countryside of southern Essex was divided between numerous large estates occupying the areas of several parishes, covering a range of resources and with access to both upland and lowland distant pastures. During the late Saxon period they began to fragment, into the multiplicity of manors recorded in Domesday.

Landuse and Exploitation

A major question is how the planned landscapes were exploited. Southern Essex constitutes an area typical of Rackham's 'Ancient Countryside', with dispersed settlement and enclosed fields held in severalty (Rackham 1986:4-5). Documentary evidence and estate maps show the existence of this predominantly enclosed landscape from at least the sixteenth century (Britnell 1983, 1988; Farrell 1969; Poos 1983). However, there is both historical and physical evidence to suggest the existence of small patches of common-field in the medieval period, though it is difficult to determine how widespread this form of agriculture was (Roden 1973, 340).

The occurrence of long narrow fields has been noted in south-west Essex (Erith 1948) and at Mucking (Astor 1979). It should be noted that these are considerably smaller than the strip-fields in the southen part of the Thurrock regular landscape. These are approximately one furlong wide, and up to twelve furlongs in length, comparable in scale to the early phases of the midland open-fields identified by Hall (1988), and the Holderness planned landscapes (Harvey 1980). To the south of Baker Street, there survive divisions perpendicular to these long sinuous boundaries, suggesting that originally these large fields consisted of numerous narrow strips approximately one furlong in length (Fig. 4).

These strip-fields suggest cultivation of an arable core, surrounded by grazing land in those parts of the planned landscape with simple rectangular fields, as well as on the marshes, such as Mar Dyke, and lighter but less fertile soils, such as the Mucking Terrace. These were areas into which arable cultivation expanded at times of land hunger. Such an expansion may take the form of an extension of the regular landscape, as was the case when the Mar Dyke was drained, or through piecemeal assarting which created irregular fields, as excavated at the Orsett Causewayed Enclosure (Hedges and Buckley 1985). The latter provides an example of expansion into marginal areas in the thirteenth century.

Social Organisation

In recent years, there has been some discussion of the social organisation behind planned landscapes, particularly in the prehistoric (Fleming 1984, 1985) and medieval (Harvey 1989) periods. There is insufficient space here to give this subject the attention it deserves, but I feel it is important to make several observations.

Discussion centres on whether a community or powerful individual was responsible for such extensive acts of planning. Though evidence for the initiative of a community in regulating open-fields is impressive, I would observe that the *regulation* of *existing* arrangements requires very different authority to that needed to *re-plan completely* a whole landscape. Besides, southern Essex never had full open-field agriculture in the medieval period, nor a strong tradition of nucleated settlement, with its associated high level of communal co-operation. Thus, I would argue that there was unlikely to have been sufficient social cohesion for the numerous communities involved to have co-operated and carried out these acts of planning themselves; a powerful elite must have been responsible.

Conclusion

Rodwell's pioneering work in the 1970s must be given full acknowledgement for focussing attention on these planned landscapes. However, I would suggest that early methodologies have given a misleading impression of their nature. To overcome this, firstly, the selection of major elements in a planned landscape should be rigorous, and the data used made explicit and illustrated where possible. Topographic analysis should merely enhance regular patterns, not create them. Secondly, the emphasis needs to be shifted from simply presenting the earliest recognisable phase of a planned landscape, to studying how landscapes evolve. A lack of consideration into this has led to an over-simplification of the multiplicity of processes by which landscapes change. Thirdly, it should be made clear that there is more to landscape topography than simply identifying planned landscapes; this case-study shows that such areas must be placed in their context of landuse and social organisation. As wide a range of evidence as possible should be used, including documentary sources, archaeology, place names, and environmental analysis. If this can be achieved, then we will be able to gain a far greater insight into the origins of our countryside.

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