CHAPTER 21

ANGLO-SAXON FIELDS

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The problem that lies at the heart of this chapter is how and when the small, rectilinear or irregular fields of Roman Britain were transformed into the open and common fields of medieval England.[1] Open fields were found throughout the country (Fig. 21.1), characterized by irregularity of layout, arable management, and the patterns of tenure within them; they were subdivided so that internal divisions were not sufficient to hamper access across them, and were internally organized into strips that were usually grouped into bundles called furlongs (e.g. Thirsk 1964: 3). By 1300, a specialized form of open field, here called 'common fields', had evolved across central England from Wiltshire to Yorkshire, in a region recently termed the 'Central Province' (Roberts and Wrathmell 2002: 124 and 144; see also Fig. 21.2). Common field systems were more regular in all aspects: the entire arable of each vill tended to lie in just two or three equal-sized fields, which were managed on a regular rotation, and between which holdings were evenly distributed; perhaps more importantly, fallowing was communally regulated across the whole system—unlike open fields where fallowing tended to be ordered by individual field or furlong (e.g. Fox 1981).

[1] The reasons for the introduction of open and common fields are equally obscure, and little is known about why they originated, or the processes which led to their formation. There is a complex historiography behind these questions, recently well summarized by Williamson (2003: 1–21; see also Oosthuizen 2007).

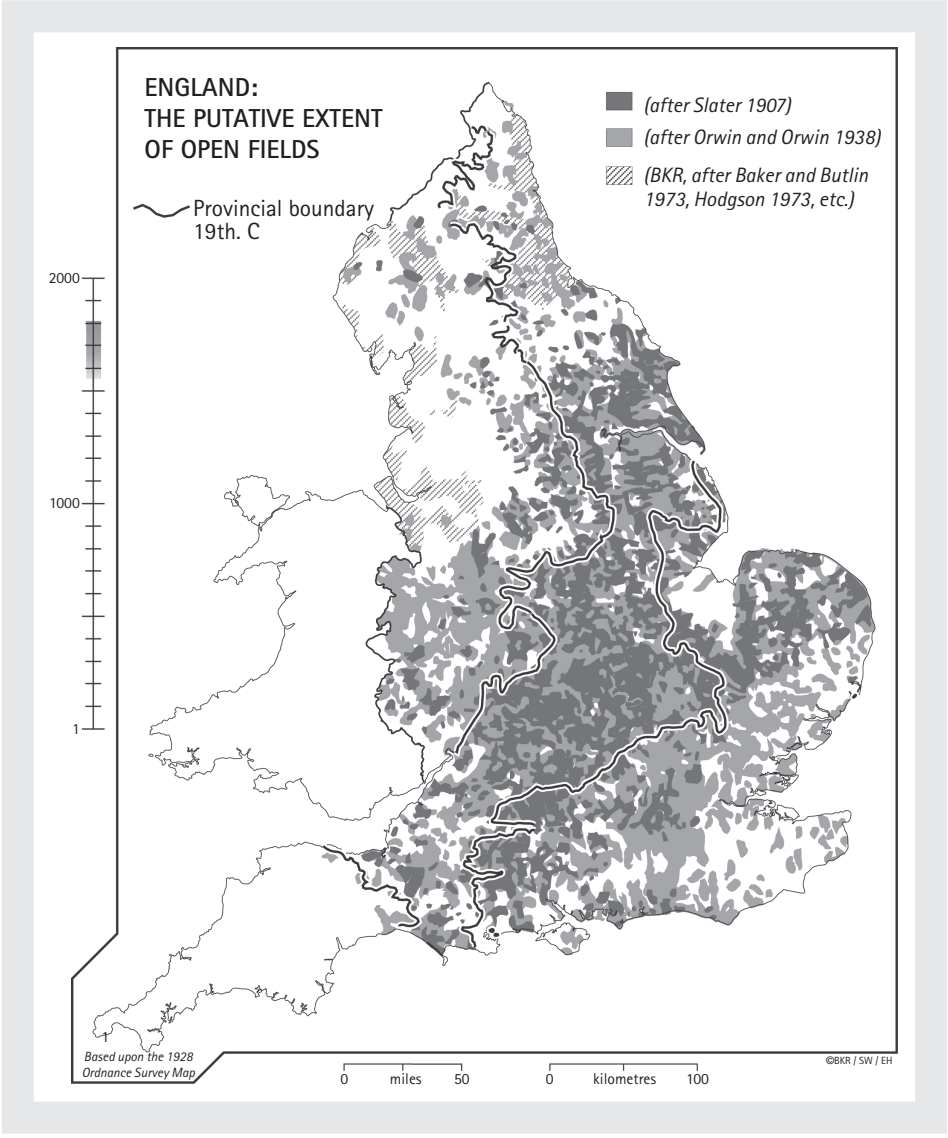

Figure 21.1 The putative extent of irregular open-field systems in England (Reproduced by kind permission from Roberts and S. Wrathmell 2002: fig. 5.10, q.v. for references in the key)

For much of the twentieth century it was generally accepted that open and common fields were an introduction that followed, directly or indirectly, the Anglo-Saxon migrations of the fifth and sixth centuries (e.g. Hoskins 1988: 45–7; Stenton 1971: 280). This interpretation assumed that Anglo-Saxon migrants, who (it was believed) had supplanted Romano-Britons over much of England by the

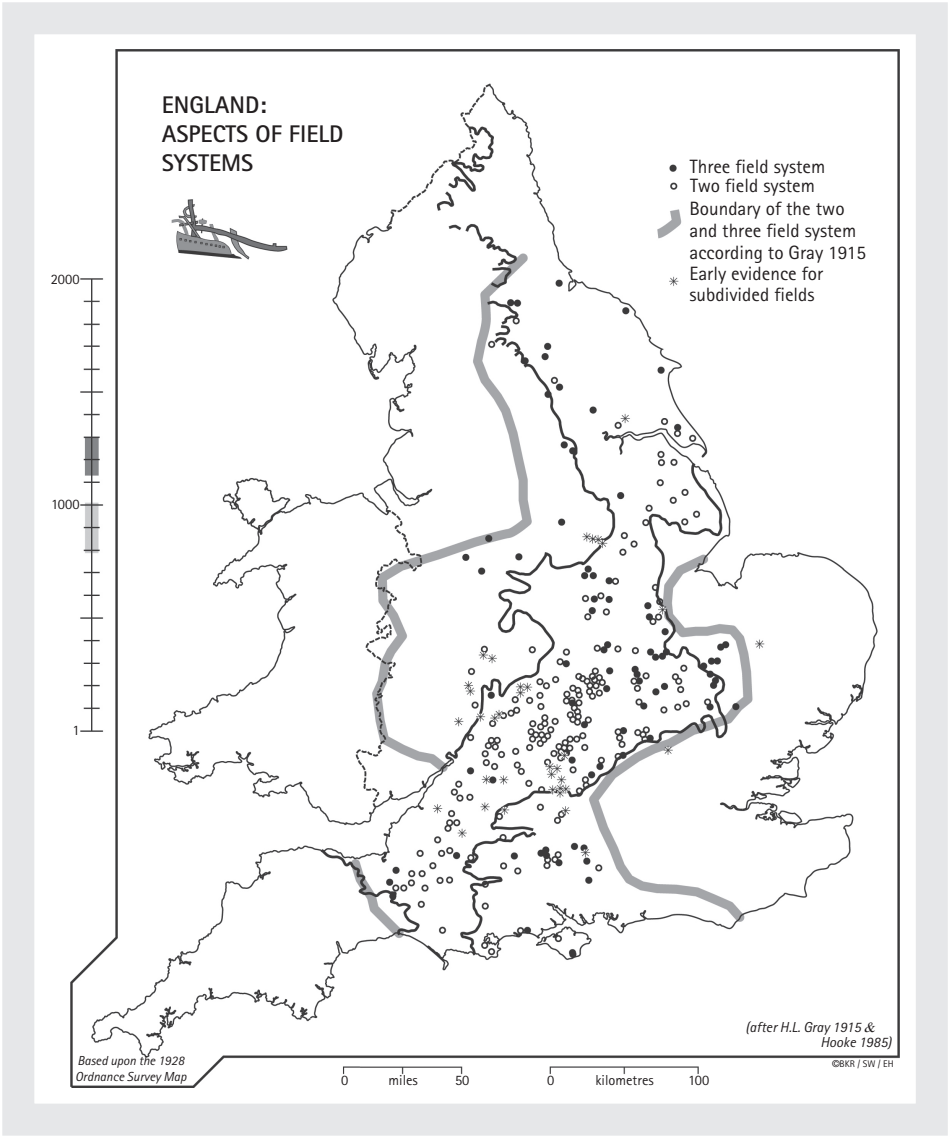

Figure 21.2 The distribution of common-field systems in England (Reproduced by kind permission from Roberts and S. Wrathmell 2002: fig. 5.4)

early seventh century, imposed new cultural forms—of which field systems were just one—on all aspects of southern British life and thereby erased all evidence of the past, just as the English language all but obliterated Brittonic.

The past thirty years have seen the emergence of new archaeological evidence which indicates that Anglo-Saxon England demonstrated significant continuities

with its Roman and prehistoric predecessors in the patterns of settlement, population, material culture, local administration, and landscape that characterized prehistoric and Roman Britain (Taylor 1983; Williamson 1987; Bassett 1989; Härke 1997; Henig 2002; Loveluck and Laing, this volume). There were, however, also important discontinuities, especially in political and economic structures (Esmonde Cleary 2000). As a result, the problem of the transformation of field systems between about 400 and 1100 should be re-assessed to explore the extent to which Romano-British traditions of land division and arable management disappeared under, or were adapted to, new patterns of cultivation. The method adopted here follows that of Finberg: 'to clear our mind of preconceptions, to work forwards from the beginning, and to examine the admittedly inadequate evidence as it comes' (1972: 401).

This chapter examines the sparse and often unsatisfactory physical indicators of continuities and discontinuities in the layout and management of arable fields during the Anglo-Saxon centuries. Questions of tenure and organization are difficult to determine as they rely on documents which are usually inexplicit in their references to fields and therefore susceptible to a range of interpretations. Nonetheless, Taylor's reminder remains pertinent that archaeologists should never 'forget . . . that without historical evidence ridge-and-furrow, for example, would be totally meaningless beyond the certainty that it was formed from a technique of ploughing. [Archaeologists] would never realize the complex pattern of landholding, communal cultivation and social organization just from the physical remains themselves' (1981: 16).

Early Anglo-Saxon fields and farming

By the late fourth century AD the English rural landscape was largely cleared, generally occupied by dispersed farms and hamlets, each surrounded by its own fields but often sharing other resources in common (e.g. Taylor 1983: 83–106). Such fields, whether of prehistoric or Roman origin, fall into two very general types, found both separately and together: irregular layouts, in which one field after another had been added to an arable hub over many centuries; and regular rectilinear layouts, often roughly following the local topography, that had resulted from the large-scale division of considerable areas of land. Evidence of differential manuring probably indicates an infield-outfield basis, the core arable (the infield) being cultivated continuously without a fallow period, and therefore needing annual manuring (e.g. Williamson 1984). Fields and grassland lying further away (the outfield) were cultivated for just a few years at a time, before returning to grass, often for long periods.

Such stability was reversed within a few decades of 400 as early Anglo-Saxon farmers, affected both by the collapse of Roman Britain and a climatic deterioration which reached its nadir around 500, concentrated on subsistence, converting to pasture large areas of previously ploughed land (Payne 2007). At Yarnton, Oxfordshire, for example, fields on the heavy clays were converted to grass in the fifth and sixth centuries, and only the low-lying lighter soils in the flood-plain of the Thames were cultivated (Hey 2004: 40–1). Similar evidence for a reduction in the area of ploughed land has been found at places like Haddon and other sites near Peterborough, Cambridgeshire; Mucking and Springfield Lyons, both Essex; Barton Bendish, Witton, and Hales and Loddon, all Norfolk; and West Stow, Suffolk (Lawson 1983: 75; Davison 1990: 18–19; P. Murphy 1994: 37; Rogerson *et al.* 1997: 20 and 23; Upex 2002: 89).

Only rarely, however, were arable fields completely abandoned, as in Rockingham Forest or the more marginal uplands of Exmoor, where Romano-British fields have been found under regenerated woodland (Foard 2001; Rippon *et al.* 2006: 49; see also Rackham 1986: 74). There is a growing consensus that few 'large tracts of countryside reverted to woodland . . . in the post-Roman period, though on a local level some regeneration no doubt occurred' (P. Murphy 1994: 37). Pollen records from Devon and west Somerset show little change in ground cover between the fourth and sixth centuries, indicating 'continuity in an essentially pastoral landscape' (Rippon *et al.* 2006: 49). The landscapes at Yarnton and Barton Court, both Oxfordshire, Micklemere and Pakenham, both Suffolk, and Colchester and Springfield Lyons, both Essex, all remained open perhaps because much former arable continued to be grazed (Hey 2004: 40–1; Miles 1984: 25; P. Murphy 1994: 25–7 and 37). The timescales of such changes might, furthermore, be attenuated—arable land at Biddlesden in Whittlewood was abandoned to mixed woodland during the fourth century AD, well before the end of Roman administration in Britain, while in parts of Northamptonshire, woodland regeneration did not even begin until the sixth century (Jones and Page 2006: 56; Taylor 1983: 121).

Open landscapes might not, however, necessarily preserve earlier field boundaries. On Salisbury Plain in Wiltshire, for example, at least some prehistoric and Roman hedges, ditches, or earthworks had already sufficiently disappeared by the seventh century to be ignored by tithing boundaries of that date (McOmish *et al.* 2002: 111). Prehistoric and Roman field systems in parishes ranging from Berkshire to Northamptonshire, Nottinghamshire, and Derbyshire are similarly ignored by medieval parish boundaries established from the eighth century onwards (Hooke 1988a: 130; Hooke 1998: 64; Hall 1982: 54–5; Unwin 1983: 344). At Faxton, Northamptonshire; Maxey, Cambridgeshire; and in west Cambridge and south-east Essex, medieval open fields were laid out on completely new alignments across the abandoned remains of earlier settlements and fields (Brown and Foard 1998: 74; Addyman 1964: 24; Hall and Ravensdale 1974; Rippon 1991).

On the other hand, evidence across southern and central England increasingly shows the persistence of prehistoric and Roman field layouts into and, in some cases, throughout the Anglo-Saxon period, whether or not such fields were continuously ploughed. Landscapes at Yarnton, Oxfordshire, and Mucking, Essex, remained unchanged throughout the fifth century, while at Barton Court, Oxfordshire, the 'grid of ditched paddocks or closes' of a Roman villa estate formed a general framework for the Anglo-Saxon settlement there (Hey 2004: 37–9; Hamerow 1993: 94; Miles 1984: 14, 16). Similar evidence has been found at Sutton Courtenay, Berkshire (Hamerow *et al.* 2007: 115). The Romano-British fields at Church Down in Chalton and Catherington, both in Hampshire, Bow Brickhill, Buckinghamshire, and Havering, Essex, were all ploughed into the seventh century (Cunliffe 1973: 183–8; Lewis *et al.* 1997: 92; Bradley *et al.* 1999: 251; Gaimster and Bradley 2003: 242). The mid Saxon settlement at Catholme, Staffordshire, was built on the northern part of Romano-British farmland which may either have 'passed entire into Anglo-Saxon hands' or simply have continued to be held by 'a local British population which had never gone away' (Losco-Bradley and Wheeler 1984: 105; Hamerow 2002a: 128). 'Part of a system older than the common fields, into which the furlongs were fitted and from which the layout of the common fields emerged' may have survived in some parts of Northamptonshire, such as Castle Ashby and Walgrave (RCHME 1979: lxii). Topographical evidence suggests that a pre-Roman field system at Caxton, Cambridgeshire, was simply absorbed into a later common-field layout, and earlier ditches consistently underlie medieval headlands or strip boundaries at Wharram Percy, Yorkshire, and Caldecote, Hardwick, Teversham, and Duxford, all Cambridgeshire (Oosthuizen 1998; Beresford and Hurst 1979: 82; Taylor and Fowler 1978: 159; Oosthuizen 2006: 81–3).

Physical continuity could be extensive. In Wiltshire, the ridges of medieval cultivation at West Chisenbury and Fyfield Down fit into 'the framework of much older lynchets that had fossilized patterns of Roman fields modifying prehistoric ones', while Romano-British field boundaries at Wylye survived in medieval parish boundaries (McOmish *et al.* 2002: 111; Fowler 2000: 235–7; Hooke 1988b: 131). A rectilinear field layout at Strettington, Sussex, follows the alignments of a prehistoric dyke on one side and of a Roman road on the other; its fields are respected by, and probably pre-date, parish boundaries, some of which were almost certainly in place by the seventh century (Nash 1982: 42). At Wylye, Wiltshire; Sutton Walls, Herefordshire; Compton Beauchamp, Oxfordshire: Burton Lazars, Leicestershire; Lichfield, Staffordshire; and Goltho, Lincolnshire, medieval field layouts appear to have been created simply by the adaptation and modification of existing prehistoric or Roman fields (Hooke 1988a: 123–5; Sheppard 1979: 33; Brown 1996: 43; Bassett 1980–1: 93-121; Bassett 1985). At Haddon, Orton Longueville, Elton, and Warmington near Peterborough, all in Cambridgeshire, and Grantham, Lincolnshire, earlier field systems continued to be cultivated throughout the Anglo-Saxon period, simply being incorporated into medieval

field layouts (Upex 2002: 87–94; Gaimster and Bradley 2001: 294–5). Rectilinear—probably Iron Age—field systems survive in many medieval fields in Buckinghamshire, in central, western, and southern Hertfordshire, Cambridgeshire, and the Elmhams and Ilketshalls in Suffolk, while the Royal Commission on Historic Monuments suggested that 'an early date can be inferred' for a rectilinear field layout at Tadlow, Cambridgeshire (Bull 1993: 16; Williamson 2000: 144–52; Taylor and Fowler 1978: 159; Warner 1996: 44–53; Rackham 1986: 158; RCHME 1968: xxx). Continuous post-Roman agricultural usage is believed to explain the persistence of large-scale landscapes like the 'system of sinuous and roughly parallel lands and boundaries' at Scole and Dickleborough, both Norfolk, and in prehistoric alignments fossilized in medieval furlong boundaries in the Bourn Valley, Cambridgeshire (Williamson 1987; Oosthuizen 2006: 68–90).

Continuity in the early Anglo-Saxon period of infield-outfield agriculture is implied by increased densities of pottery scattered during manuring that appear to favour some arable areas over others at, for example, Barnsley Park, Gloucestershire; Raunds, Northamptonshire; Barton Bendish, Witton, and Hales and Loddon, Norfolk (Webster 1967; Fowler 1975; Parry 2006: 93; Rogerson *et al.* 1997: 20; Lawson 1983: 73-5; Davison 1990: 18–19). An early or mid Saxon infield has been proposed for Higham Ferrers, Northamptonshire (Brown and Foard 1998: 78). Early Anglo-Saxon outfields have been identified at Chalton, Hampshire; Raunds, Northamptonshire; and Eton Rowing Lake and Dorney, both in Berkshire, even though they make their first documentary appearance only in the tenth-century 'Heath Fields' recorded at places like Chieveley and Donnington, Berkshire (Cunliffe 1973: 185; Parry 2006: 93; Hiller *et al.* 2002: 65; Hooke 1981a: 206–10).

In conclusion, where arable cultivation continued in early Anglo-Saxon England, there seems to have been considerable continuity with the Roman period in both field layout and arable practices, although we do not know whether there were also changes to patterns of tenure or the regulation of cultivation (see also Hamerow 2002b: 152). The greatest perceptible alterations in land usage between about 400 and 600 are therefore in the proportions of the land of each community that lay under grass or the plough, rather than in changes to the layout or management of arable fields.

Mid Saxon arable agriculture: overview

The period between the mid seventh century and the end of the ninth appears to have been one of considerable innovation. The area of land under the plough expanded rapidly: at Witton, Norfolk, for example, its extent doubled from about

100 to 200 acres—and doubled again by the eleventh century (Lawson 1983: 74–5). Pollen evidence from lowland Devon and from Yarnton, Oxfordshire, shows a marked extension and intensification of cereal growing in the seventh and eighth centuries (Rippon *et al.* 2006: 49–53; Hey 2004: 48–9). The area under arable cultivation was extended at Chellington, Bedfordshire, in the same period (Brown and Taylor 1993: 109). On the other hand, the onset of alluviation resulting from more intensive ploughing came later at Yarnton, Oxfordshire, and in Whittlewood and other places in Northamptonshire, beginning only in the mid ninth century (Brown and Foard 1998: 82; Hey 2004: 54 and 265; Jones and Page 2006: 93).

Although the expansion of arable cultivation sometimes occurred within the framework of earlier prehistoric and Romano-British field boundaries, this was not the only way: the creation of mid Saxon arable layouts by substantial modification of existing fields has been suggested at Dorchester and Sherborne, both Dorset, and in the Bourn Valley, Cambridgeshire, while at Chalton, Hampshire, older field systems were abandoned in favour of an entirely new arrangement (Keen 1984; Oosthuizen 2005; Cunliffe 1973: 183–8). It is difficult to evaluate the significance of such shifts in cultivation, which have been a persistent characteristic of the English landscape for millennia (Taylor 1983). Were they just part of the long-term ebb and flow of human activity across the landscape, or were they something entirely new? If so, how might that change be characterized?

Whether field layouts were unchanged, converted, or new, infield-outfield cultivation seems to have remained the dominant form of arable management in the mid Saxon centuries. Raunds, Northamptonshire, for example, lay divided between a number of small settlements, each with its own infield ranging from about 100 to 200 acres set within a wider area of apparently uncultivated land (Parry 2006: 93 and 96). Differential manuring supporting more intensive cultivation of the infield is a common feature of mid Saxon landscapes, like those at Shapwick, Somerset; Chellington, Bedfordshire; Peterborough, Cambridgeshire; or in Norfolk at Barton Bendish, Witton, and Hales and Loddon (Aston 1999: 27; Brown and Taylor 1993: 106; Upex 2002: 84 and 90–4; Rogerson *et al.* 1997: 19–20; Lawson 1983: 75–7; Davison 1990: 18–19).

Relatively new research indicates that the expansion of ploughed land was linked to specialization in and intensification of crop production between about 600 and 900 (e.g. Hamerow 2002b: 152–5). It is highly significant that this process was contemporary with the emergence of kingdom-states: Mercian kings oversaw the rapid expansion of regional and international trade in central southern England, undertook economic management that included the issue and standardization of coinage, and granted very large estates to monasteries and minsters, to whose abbots and abbesses they were often closely related (Moreland 2000; Oosthuizen 2007).

The connection between arable cultivation, the emergence of large estates, and burgeoning regional and international trade is nicely illustrated in the proliferation

of watermills in this period, some with more than one wheel (Meeson and Rahtz 1992: 156; *British Archaeology* 1995: 5). They appear to have been constructed for the large-scale processing of far more grain than was required for subsistence, perhaps with the aim of trading surpluses to generate capital for investment or for luxury goods (Moreland 2000: 103; Fowler 2002: 176; Blair 2005: 253 and 256). Archaeological evidence for specialized production of grain has been found at Yarnton, Oxfordshire, where crops were threshed, winnowed, and probably fine-sieved before they were stored (Hey 2004: 361). Centres of such directed arable production may also be identified in place-names like Barley ('barley clearing'), Lincolnshire; Reydon ('rye hill'), Suffolk; or Waddington ('wheat hill'), London (Gelling 1984: 260, 306, and 319; Faith 1997: 47–8).

Demands for increased arable productivity could not be met solely by extending the area under the plough: the introduction of new, higher-yielding crops, innovations in ploughing technology, and a managed approach to manuring, may each have contributed both to improving and maintaining increased arable outputs. Bread wheat (*triticum aestivum*) and barley (*hordeum* sp.) became dominant in the mid Saxon period over spelt (*triticum spelta*) and emmer (*triticum dicoccon*), the lower-yielding wheats of prehistoric and Roman Britain (see Moffatt, this volume). Rye was cultivated separately for the first time (rather than mixed with other grains), and legumes were also more widely planted, perhaps as a 'green manure'. Flax and hemp were grown on a scale that could support the industrialized production of linen at places like Barton Court and Yarnton, both Oxfordshire; Flixborough, Lincolnshire; and Brandon, Suffolk (Miles 1984: 25; Hamerow 2002b: 153; Hey 2004: 48; Bradley and Gaimster 2000: 299; Carr *et al.* 1988: 375; P. Murphy 1994: 34–5).

Such improvements were supported by technological investment. The mouldboard plough, last generally in use in the Roman centuries, appears to have become widespread once more, and made possible the cultivation of heavy clay soils, more difficult to till, but also more fertile than the lighter soils of the valleys and river floors. Its benefits were that it both cut *and* turned the soil, replacing the ard or scratch-plough which, as its name suggests, simply scored the land. Jones has suggested that new crops are a 'direct record of the ecological impact of the transition from ard cultivation to deep ploughing' (quoted in Fowler 2002: 213–14). At Yarnton, Oxfordshire, for example, the use of the mouldboard plough enabled the return of arable cultivation to the claylands on higher ground, in a process which was at its most intense in the eighth and ninth centuries (Hey 2004: 48–9 and 362–4). It has been suggested that the heavy plough was also responsible for the aratral curve of some of the trackways around the mid Saxon settlement at Catholme, Staffordshire (Losco-Bradley and Kinsley 2002: 29).

The third agricultural innovation of the period seems to have been the development of more structured methods for fertilizing the infields, often on a considerable scale. The maintenance of soil fertility through intensive manuring had been

an integral part of the farming regime since before the Roman period, but the extension of arable fields over a greater area, coupled with demands for increased yields, meant that the production of manure now required more formal management in order to produce predictable, and sufficient, quantities of grain. In addition to the 'green manures' mentioned above, three other strategies for fertilizing arable fields may also have been adopted.

First, it has been argued that the introduction of managed hay meadows at Yarnton, Oxfordshire, between about 650 and 850 was as much for the production of manure by stalled animals as for overwintering stock. The manure was stored in middens until it was spread on the fields before ploughing, and explains a substantial increase in the pollen of henbane, a weed specific to middens (Hey 2004: 49). Evidence for such meadows is still unusual, but another has been identified at Dorney and Eton Rowing Lake, Berkshire, while a late Anglo-Saxon example has been recognized at West Cotton, Northamptonshire (Hiller *et al.* 2002: 57; Campbell 1994: 76).

A second potential innovation for improving soil fertility is suggested by the structure of a mid Saxon field system across the lower northern slopes of the Bourn Valley, Cambridgeshire. There, parallel furlongs were separated by long strips of common pasture up to 54 yards wide. The integration of these grassy commons into the arable layout, it has been argued, meant that sheep which grazed on them by day added fresh nutrients to the soil when they were folded on the stubbles at night, rather than simply recycling the remnants of the previous crop (Oosthuizen 2006: 108).

A third possible innovation is the introduction of regular fallowing into crop rotations on the infield, suggested by the replacement in the pollen record of perennial by annual weeds at Yarnton, Oxfordshire, in the mid Saxon period, and at West Cotton and Raunds, both Northamptonshire, in the late (Hey 2004: 48 and 362; Campbell 1994: 77–81; Parry 2006: 35–6). The interpretation of this evidence as fallowing depends, however, on the assumption that previously the whole of each infield had been cultivated each year, and that fallowing was a technique used only on the outfields. This is difficult to prove either way, although it should be noted that, in medieval Breckland for example, parts of the infield were allowed to lie fallow on a flexible basis (Postgate 1962: 88–96; Postgate 1973: 300–3).

Mid Saxon agricultural innovation therefore seems to have included an increase in the area under cultivation, and the introduction of new crops, new technologies, and new approaches to maintaining the fertility of the soil, within the familiar structures of infield-outfield cultivation which remained the basis of arable management (e.g. Aston 1988: 97; Rippon *et al.* 2006: 58-64). To what extent did field layouts in this period reflect a similar process of agricultural innovation within existing frameworks?

Mid Saxon field layouts

Mid Saxon field layouts appear to be divided into two very general types, enclosed and unenclosed (as settlements also appear to have been: Reynolds 2003).

Enclosed field layouts

There is consistent evidence throughout the Anglo-Saxon period for the introduction of enclosed arable fields laid out in an irregular circle, oval, or rounded rectangle, and enclosed by a substantial hedge, bank, and/or ditch. Such fields were frequently subdivided, but their internal divisions did not provide physical barriers to movement from one subdivision to another, and the fields therefore lay 'open' (Atkin 1985; Roberts and Wrathmell 2002: 96–115; Rippon *et al.* 2006: 66–7). They have been identified within and outside the Central Province as far apart as Brent, Cutcombe, and Withy, all Somerset; Higham Ferrers, Northamptonshire; Walpole St Andrew and West Walton, both Norfolk; Crosby Ravensworth, Cumberland; and Cockfield, County Durham, as well as at other sites discussed below (Rippon 1994: 243-5; Shaw 1991: 16–17; Silvester 1988: 69 and 95; Roberts 1996: 26; Roberts 1981: 145–61). Pollen evidence indicating the expansion of cereal cultivation in Somerset in the seventh and eighth centuries coincides closely with an early grant of existing arable land at Brent to Glastonbury Abbey in 693, where one of these irregular ovals still exists (Rippon 1994: 243–5; ASCP: Sawyer 238).

Enclosed fields ranged in area from about thirty acres in Somerset to as many as 200 acres in Suffolk, and appear to fall into two groups—those shared between a (generally small) number of cultivators, and those containing the demesne land of an estate centre (Rippon 1994: 244; Warner 1987: 30 and 33).

Surviving oval fields divided between a relatively small number of men have been identified across England, especially but not exclusively outside the Central Province. Historical research demonstrates that, in the medieval period and after, a single open field bounded by enormous banks at Cutcombe, Somerset, for example, was divided between the five farms of the parish, and at Tunley, Lancashire, an arable oval was shared by four cultivators (Aston 1988: 94–5; Atkin 1985; Roberts and Wrathmell 2002: 96–116). In other places, although such fields appear to have been partitioned, there is little or no evidence to show whether their divisions were related to tenure and, if so, how.

Examples of arable demesne also laid out in rough oval or rounded rectangular shapes have been found across England, including the Central Province. At Aston Magna, Gloucestershire, for example, 'all the demesne land is surrounded by a dyke outside' by 904, and has been identified on topographical grounds with a small oval

enclosure of between twenty and thirty acres (Faith 1997: 171–2). The mid Saxon demesnes at Kislingbury, Hardingstone Hall, Raunds, Higham Ferrers, and Wollaston, all in Northamptonshire, each consisted of a compact block, that at Wollaston including the sites of a Roman villa and an early Anglo-Saxon settlement (Hall 1984: 51–2; Hall 1988: 114–15; Hall 1983: 117–19). Similar examples have been identified at Daventry in Northamptonshire; Whaddon, Litlington, and Balsham, all Cambridgeshire; Grewelthorpe, Yorkshire; and at Wenhaston Old Hall and Hinton Hall, both Suffolk, where a 'long, curving ring-fence boundary . . . which forms the nucleus of the manorial demesne' enclosed areas of 200 acres or more (Brown 1991: 78; Oosthuizen 1993: 95–7; Oosthuizen 2002; Oosthuizen 1996: 28; Roberts 1985: 25; Warner 1987: 30 and 33). Such landscapes might offer a physical context for the demesne at Tredington, Warwickshire, which in the tenth century lay 'in addition' to the rest of the estate (Hooke 1981a: 207). Costen and Faith have suggested that place-names including the element 'worthy', found from Devon to Lancashire, might record a subset of such oval enclosures (Costen 1992; Faith 2006: 9; see also Faith 1998). The possibility of an earlier origin for such demesnes is suggested by provision in the late seventh-century laws of King Ine of Wessex for the enclosure of the arable land of single farmsteads (possibly demesne, and sometimes identified as 'inland') (Finberg 1972: 416; Faith 1997: 170–4; Yorke 1995: 268).

Although large curvilinear fields may appear to be original in a mid Saxon context, they had a prehistoric and Roman ancestry. Examples—apparently for arable—have been identified at Iron Age sites like Park Brow, Sussex; Grateley South, Hampshire; and Alrewas, Staffordshire; and at the Roman farmstead at Royston Grange, Derbyshire; and High Knowes, Northumberland (Drewett *et al.* 1988: 135; Cunliffe 1993: 221; Smith 1978-9: 12; Hodges 1991: 84; Topping 2008: 343-8). It has been suggested that the large ovals at Tunley and Wrightington, Lancashire, which survive in the modern landscape, may also have had prehistoric origins (Atkin 1985: 179).[2] Such forms were used not only for arable fields, but also for settlements, pastures, defended sites, and places of ritual (e.g. Drewett *et al.* 1988: 135, 149–51; Cunliffe 1993: 93–5, 141–4, and 168–82; see also Stoertz 1997: 57). They seem more likely to represent continuity of a traditional vocabulary of landscape layout than an Anglo-Saxon innovation.

[2] Oval enclosures for arable continued to be laid out in and outside central, southern England throughout the late Anglo-Saxon period and into the later Middle Ages, with well-known examples at South Radworthy (Devon), Tetsworth (Oxon), Hathersage (Derbys.), Hunsterson in Wybunbury (Cheshire), Wheldrake (Yorks.), Cockfield (Co. Durham), Waitby (Westmoreland), and Puxton (Somerset) (Riley and Wilson-North 2001: 97; Bond 1985: 115; Roberts and Wrathmell 2002: 98–9; Atkin 1985; Sheppard 1966; Roberts 1981: 149; Roberts 1993: Rippon 2007).

Unenclosed fields

Other new mid Saxon field layouts took the form of unenclosed fields created on a roughly geometric layout heavily influenced by the local topography. Examples can be found as far apart as Berkshire, Oxfordshire, and Yorkshire (Harvey 1980; 1983; 1984; 1985; Hooke 1988a; Pocock 1968; Powlesland 1986: 165). At Dorchester, Dorset, a large, open-field system, possibly created in the eighth century, was so 'extensive and regular that it is clear that it results from a deliberate act of planning' (Keen 1984: 236). It was made up of long, slightly wany, parallel field divisions running from east to west, that pre-date the medieval open fields. A mid Saxon, perhaps eighth-century, date is proposed for a similar, and equally large, field system at Sherborne (ibid.: 210, 221, and 230). Those at Dorchester and Sherborne are very like an enormous open field set out south-west of Cambridge perhaps between about 700 and 850, modifying and adapting earlier field layouts. It extended over seven square miles across four parishes, and was subdivided into long, parallel furlongs running from west to east along the valley contours (Oosthuizen 2006: 91–113). Seminal work in Northamptonshire suggested that many common-field layouts there, with a regular or sub-regular structure, were laid out from the eighth century onwards, and a similar date has been suggested for the boundaries and ditches that formed the framework of a regular field system at Kempston, Bedfordshire (Hall 1982: 46; Gaimster and Bradley 2003: 221).

Such field systems sometimes incorporated and/or adapted earlier rectilinear layouts like those already noted at Wylye, Wiltshire; Compton Beauchamp, Oxfordshire; Burton Lazars, Leicestershire; Lichfield, Staffordshire; and Goltho, Lincolnshire (Hooke 1988a: 123–5; Brown 1996: 43; Bassett 1983: 93–121; Bassett 1985: 32–4). What they fossilized was the underlying framework of the fields, rather than every hedge and ditch, as existing fields were adapted to changing patterns of arable management. Such large-scale preservation of prehistoric and Roman field systems has been found across England where, as Williamson has commented of Norfolk, 'centuries of piecemeal alteration have preserved the essential orientation of field layout but not in every case the original boundaries' (1987: 425).

Landscape division on an approximately rectilinear basis was not new in England in the Anglo-Saxon period. Considerable areas had been divided into long, narrow units often about 200 metres wide in successive phases of landscape planning in the prehistoric and Roman centuries (it was internal subdivisions of these units which resulted in the network of small rectangular fields that are now so familiar to landscape historians), often influenced by local topography and drainage. Early Anglo-Saxon cultivators had ploughed such ancestral fields each year. As with ovals and circles, new rectilinear layouts in the mid Saxon period and later may represent continued use of a familiar form rather than an introduction. One way to address this issue is to consider in turn each of the components making up the internal structure of open fields.

Evidence for open fields, block demesnes, furlongs, and strips in mid Saxon England

The irregular open-field layouts of later medieval England were characterized by three distinctive features: their open aspect across internal subdivisions; the tendency for demesne land to lie in one or more blocks outside the open fields; and their internal subdivision into furlongs and strips. Do such features occur in mid Saxon field layouts and, if so, to what extent might they be regarded as innovative?

The earliest known documentary reference to open fields seems to be those described in the well-known clause in the laws of Ine of Wessex:

> If husbandmen have a common meadow or other share-land to enclose, and some have enclosed their share and others have not, and if cattle eat up their common crops or grass, then let those to whom the gap is due go and make amends to the others who have enclosed their share
>
> (trans. Finberg 1972: 416)

The 'common . . . share-land' of the clause was interpreted by both Finberg and, later, Fox as a field in shared ownership which was bounded by a single hedge, perhaps like the enclosed ovals described above (Finberg 1972: 416–17; Fox 1981: 87–8). Fox argued convincingly that the field described in the clause was open. Only this, he suggested, would explain the damage that a stray cow might make to common crops of corn or grass (Fox 1981: 87). The same kind of landscape may have been described in charters like that for Ardington, Berkshire, where 'the arable is common' in the tenth century, or that for Tidenham, Gloucestershire, in 956, whose tenants contributed to the 'acre fencing' which separated open arable from pasture (Fox 1981: 84; Roberts and Wrathmell 2002: 131). (There is an early reference to common land at Cofton Hackett, Worcestershire, in 849, but it might describe either arable or uncultivated ground: Hooke 1981b: 58.)

It seems very probable that open fields were present in mid Saxon contexts. There are no other early references to common land with which to compare Ine's clause, nor does archaeological evidence at present elucidate whether he was addressing the problems of compensation and culpability within such layouts because they were perennial, or because they were new.

Block demesnes have already been discussed, with examples cited from Gloucestershire, Warwickshire, Northamptonshire, Yorkshire, Cambridgeshire, and Suffolk (Faith 1997: 171–2; Hooke 1981a: 207; Hall 1984: 51–2; Hall 1988: 114–15; Hall 1983: 117–19; Roberts 1985: 25; Oosthuizen 1993; Oosthuizen 2002; Oosthuizen 1996: 28; Warner 1987: 29–33). They were present all across England, including the Central Province, in the mid Saxon period, only to disappear from the Central Province by about 1300 while persisting elsewhere. Given the evidence for the antiquity of this type of enclosure, there must at least be some doubt about whether it can be claimed as an Anglo-Saxon innovation.

Furlongs appear frequently in documents by the mid tenth century. The earliest known are those at Hordwell, Hampshire, and Water Eaton, Oxfordshire, recorded in charters of 903 and 904 respectively, and therefore established features by those dates (Seebohm 1883: 107–8; Hooke 1988a: 126; Hooke 1981a: 190–1). However, furlongs at Dorchester and Sherborne, both Dorset, and in the Bourn Valley, Cambridgeshire, appear to have been an integral part of the structure of the field layouts for which an eighth-century date is proposed (above: Keen 1984; Oosthuizen 2005). Furlongs certainly appear to have existed by the late ninth century and may have been present in at least some new unenclosed mid Saxon fields from the outset. In other places, they appear to have been derived from modifications of existing rectilinear field patterns—creating larger units by retaining those earlier field boundaries that were useful and grubbing up those that were not: the common-field furlongs at Lichfield, Staffordshire; Burton Lazars, Leicestershire; Goltho, Lincolnshire; and Orton Longueville and Caxton, both Cambridgeshire, are not obviously different in layout from any other medieval field patterns, yet each of these field systems is structured, to a greater or lesser extent, on prehistoric or Roman fields (Bassett 1980–1; Brown 1996; Bassett 1985; Upex 2002; Oosthuizen 1998; see for comparison, for example, Hartley 1983; 1984; 1989). The layout of furlongs appears to be derived from the modification or adaptation of existing landscapes to (possibly new) systems of cropping or tenure, about which we know almost nothing in this period.

Like furlongs, strips are well represented in tenth-century documents (e.g. Hooke 1981a: 206–7; Hooke 1981b: 58; Hooke 1988a: 123; Hooke 1998: 206; Dr C. R. Hart, pers. comm.), but they may have been widespread much earlier: Hall suggested that they were the earliest form of mid Saxon field division in Northamptonshire, predating furlongs (Hall 1982: 48–9), and the same has been argued on topographical grounds for Holderness, Yorkshire (Harvey 1980: 185). Small rectilinear fields in Somerset, probably dating from the seventh and eighth centuries, appear to have been subdivided by low banks into 'long, narrow, curving, strip-like subdivisions', as were eighth- or ninth-century fields at West Walton and Walpole St Andrew, Norfolk (Rippon *et al.* 2006: 59 and 66; Silvester 1988: 95 and 69). There are indications that strips were an intrinsic part of the structure of the large mid Saxon field system in the Bourn Valley, Cambridgeshire, since they were respected by a parish and hundred boundary which was in place by the early tenth century (Oosthuizen 2006: 99–107). The most enigmatic evidence of all comes from Milfield, Northumberland, where evidence for eighth- or ninth-century arable cultivation has been found in close association with traces of undated ridge and furrow (Bradley and Gaimster 2000: 299).

The division of arable land into strips had, however, even earlier antecedents: prehistoric examples have been identified on St David's Head, Pembrokeshire, and in Northumberland (K. Murphy 2001: 94; Topping 1989; 2008). Iron Age examples

have been excavated at Sawtry, Cambridgeshire (Richard Newman, pers. comm.). The Roman arable field at Roystone Grange, Derbyshire, was divided into strips about 40 metres wide, and Roman strip fields have also been identified at King's Worthy, Hampshire; Great Wymondley, Hertfordshire; in Somerset, Dorset, Nottinghamshire, and Lincolnshire, and perhaps at Burnham Market, Norfolk (Hodges 1991: 79; Applebaum 1972: 90–5; Arnold 1984: 57; Williamson 2003: 81). At Frocester, Gloucestershire, excavation revealed early post-Roman strip cultivation on a different alignment from the ridge and furrow of later medieval fields (Price 2000: 242).

The evidence surveyed so far seems therefore to suggest that large, open, arable fields subdivided into strips were present in, if not before, the mid Saxon period; there were some significant continuities with prehistoric and Roman systems of field layout and of infield-outfield cultivation; block demesnes and furlongs may each have evolved from traditional forms of dividing and managing land. About the management of cropping (was it communal?) and tenure (how was it distributed?), almost nothing is known (cf. Oosthuizen 2007). None of the mid Saxon fields considered above could be described as an open- or common-field *system*, yet it is clear that some of the *characteristics* of such field systems were already visible in that period even if they had not yet coalesced into open- or common-field arrangements (cf. Oosthuizen 2007).

It is possible that at some point between about 600 and 950, familiar forms of layout and arable cultivation may have been combined with new, more communal systems of tenure to form irregular open fields. Yet this revolution is only inferred from later evidence, and the question of its relationship with the fission of the large estates of the mid Saxon period into the townships and parishes of the later Middle Ages is virtually unresearched. Still to be investigated is how and when further changes were introduced in the Central Province in the development of regular common fields.

Later Anglo-Saxon field layout

The overall layouts and arable management that seem to have characterized early and mid Saxon fields appear in many cases to have persisted through the period after 900, suggesting that the transformation of irregular open fields into regular common fields across the English Midlands may not have occurred until after the Anglo-Saxon period.

Only one detailed, large-scale archaeological investigation of the origins of a late Anglo-Saxon open- or common-field layout has taken place: at Raunds,

Northamptonshire, where pottery scatters from late Anglo-Saxon manuring (perhaps of the late ninth or early tenth centuries) lie contained within the boundaries of medieval common-field furlongs (Hall 1982; Parry 2006: 133). Nor were such scatters evenly distributed across the arable fields; instead, they indicate that intensive manuring of selected areas continued to be practised in the late Anglo-Saxon period. What is particularly interesting is that the late Anglo-Saxon furlongs which were most intensively manured were frequently laid out across mid Saxon infields (Parry 2006: 93, 133, and 276). If the same areas were being continuously manured in the middle and in the late Anglo-Saxon periods, was this activity undertaken within the same field boundaries in both periods, or were new fields established over existing arable from about 900 onwards?

An important conclusion from Raunds is that the patterns of manuring show the variation in intensity which indicates that infield-outfield cultivation was still being undertaken there in the later Anglo-Saxon period—that is, the fields and furlongs of Raunds were still being cultivated as an open field at that time, and not as a common field (Parry 2006: 133 and 276). Evidence for late Anglo-Saxon differential manuring has also been observed at Whittlewood, Northamptonshire, and Whittlesford, Cambridgeshire (Jones and Page 2006: 93; Taylor and Arbon 2007: 38). Perhaps most significantly, Raunds, Whittlewood, and Whittlesford all lie within the Central Province in which common, not open, fields were characteristic by 1300; the Vale of Pickering is another example (Allerston 1970: 104).

The conclusion that common fields had not yet emerged in the later Anglo-Saxon landscape is supported by two observations, both drawn from documentary evidence and analysis. First, as Thirsk pointed out as long ago as 1964, in a point elaborated upon by Fox in 1981, there is no evidence before the Norman Conquest for the *communal regulation* of fallowing, which both regarded as the key indicator of common-field cultivation (Thirsk 1964: 5–7; Fox 1981). And second, recent analysis of arable land recorded in Domesday Book suggests that the proportion of land in each vill that lay under the plough had by no means yet reached its maximum by the eleventh century. As late as 1086, only between 30 and 40 per cent of the available land seems to have been cultivated in most Midland and East Anglian parishes (Hesse 2000; Roberts and Wrathmell 2002: 187; Oosthuizen 2006: 44). Both points are important because, if there were sufficient pasture for the community livestock outside the open fields, then there would be no requirement for half or a third of the arable to lie fallow each year, and no requirement for the communal regulation of fallowing. While open fields may have been unexceptional between about 900 and 1100, it seems that fully-developed common-field cultivation had yet to develop.

Conclusion

The old view that completely new forms of field system came with the Anglo-Saxon migrants has been revised in the light of evidence for the adaptation and modification of existing layouts. Infield-outfield agriculture, practised in Britain for centuries before the Anglo-Saxon period, continued in many places to form the basis of cultivation into the Middle Ages and later (cf. Winchester 1987: 74–6), and the open fields which emerged by the seventh century may also have evolved from traditional forms of arable layout and cultivation in England. Most Anglo-Saxons seem either to have cultivated existing fields, or to have created new open arable enclosures, long rectilinear land divisions, and strips, the former directly taken over, the latter adapted, from the practices of their Roman (or prehistoric) predecessors. Whether such apparently inherited similarities in form reflected similarities in patterns of tenure and communality of land management also passed down across the centuries is still unknown. The fact that mature common fields, those specialized regular forms of irregular open-field systems, were restricted to the Central Province and are not visible before about 1100 at the earliest does not help to answer this question. One of the central questions which this raises is the extent to which some or all of the tenurial and managerial features of both open and common fields may be identifiable in the early and mid Saxon periods, before or at the same time as the physical field systems began to form.

The chronology outlined above, bedevilled by sparsity of evidence, suggests that the process of the transformation of ancient into medieval fields may have been more attenuated than previously supposed. If open fields were already a feature of the mid Saxon period, and if common fields are only visible from around 1100, then the period of arable transformation in which open and common fields successively appeared may have spanned at the very least five or six hundred years and been comprised of at least two phases.

What is known about common-field systems is still vastly outweighed by what is unknown, despite over a century of scholarship. Collaborative research between archaeologists, both by excavation and by topographical surveys, and historians, for the reasons outlined by Christopher Taylor and quoted at the beginning of this chapter, is required. The origins of evenly distributed and intermingled tenure and of community regulation of fallowing and cropping are issues that still resonate because common-field systems formed a framework for agricultural management, landholding, and social relations that persisted in many places across the Central Province until modern times, creating political, social, and economic structures and attitudes that endure into the twenty-first century.

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